



Agenda Item C.1
DISCUSSION/ACTION ITEM
Meeting Date: February 20, 2024

TO: Mayor and Councilmembers

SUBMITTED BY: Charlie Ebeling, Public Works Director

PREPARED BY: Derek Rapp, Contract Traffic Engineer

SUBJECT: Progress Report on Bicycle and Pedestrian Master Plan and Goleta Traffic Safety Study and Adoption of Resolution in Support of Vision Zero Efforts to Eliminate Fatal and Severe Transportation Related Collisions

RECOMMENDATION:

- A. Receive a report on progress with the performance measures and improvements projects included in the Bicycle and Pedestrian Master Plan and Goleta Traffic Safety Study and next steps in achieving Vision Zero goals; and
- B. Adopt Resolution No. 24-__ entitled, "A Resolution of the City Council of the City of Goleta, California, in Support of Vision Zero Efforts to Eliminate Fatal and Severe Transportation Related Collisions."

BACKGROUND:

The City of Goleta (City) has taken considerable steps in improving traffic safety, implementing many improvements, including complete streets initiatives, intersection improvements, and improvements to the bicycle and pedestrian networks. In 2018, the City of Goleta finalized the Bicycle and Pedestrian Master Plan (BPMP), a transportation planning document that included community engagement and comprehensive analyses to identify and remove barriers to bicycling and walking. In addition, input from the public informed the emphasis areas of the 2022 Goleta Traffic Safety Study (GTSS). The GTSS analyzed crash data to identify high-risk roadway characteristics and develop prioritized traffic safety countermeasures on major corridors and intersections.

Multi-modal projects were identified in both the BPMP and GTSS. A consolidated list of these projects is included in Attachment 1. Public Works staff has made considerable progress in the five years since adoption of the BPMP, by implementing improvements as a part of pavement maintenance projects, through conditions of approval on development projects, and the City's Capital Improvement Program (CIP) projects. As a

part of staff's current efforts, approximately 45% of the identified multi-modal projects have been completed or are in the project development process.

The City has seen a gradual decline in bicycle and pedestrian-related severe injuries and deaths, but there is more work to be done. According to the most recent available data from the California Office of Traffic Safety, for the years 2017 to 2020, Goleta had more fatal and injury collisions than approximately 80% of similar-sized agencies in California.

The Vision Zero approach to governance maintains the philosophy that serious collisions on public roadways are preventable and that society should not accept that any person should be killed or seriously injured while using the transportation system. Vision Zero policies promote building more safety and livability into a city's roadway system, to better protect its users.

Vision Zero originated in Sweden in 1997. As of 2020, the number of traffic-related deaths in Sweden has been reduced by over 65%. In 2020, Sweden had 204 traffic-related fatalities, a record-breaking low, and a decrease from 772 deaths in 1990, even while the number of miles driven during the same period had grown.

The Vision Zero approach acknowledges that collisions cannot be avoided altogether; but focuses on avoiding deaths and serious injuries. A person who is hit by a vehicle is more likely to be seriously or fatally wounded if the vehicle is traveling over 20 mph. Consequently, engineering solutions tend to focus on a combination of speed reduction and stronger separation of people who are biking, walking, and driving.

Over 45 U.S. cities have adopted Vision Zero programs to reduce the number of fatal crashes occurring on their roads. California cities lead the way, with Alameda, Berkeley, Fremont, La Mesa, Los Angeles, Monterey, Sacramento, San Diego, San Francisco, San Jose, San Luis Obispo, Santa Barbara, and Watsonville having adopted Vision Zero strategies, and others are actively considering adoption.

DISCUSSION:

It is important to note that substantial groundwork has already been established to enhance multi-modal traffic safety in Goleta.

Bicycle and Pedestrian Master Plan (BPMP)

The BPMP forms a long-term vision for Goleta's bicycle and pedestrian network, supported by a variety of implementation measures. Its recommendations support an active transportation system better connected with regional systems linking Goleta with adjacent Santa Barbara County, the City of Santa Barbara, and the University of California Santa Barbara campus. This travel network, coupled with education, enforcement, and promotional programs, works to create a more bicycle- and walking-friendly City. The BPMP provides a framework for Goleta's active transportation network development, as well as supports eligibility for regional, state, and federal active transportation project funding. The BPMP identifies safety improvements through

prioritized bicycle and pedestrian infrastructure projects, associated incentive programs, and policy recommendations. It sets the foundation for decisions and identifies a blueprint for future bicycle and walking development by helping to ensure that opportunities are not missed when decisions are being made about related infrastructure, land use, and development. The list of recommended improvements from the BPMP is included in Attachment 2. This list addresses the physical improvements component of a comprehensive suite of recommendations from the BPMP to help improve Goleta's bicycling and walking environment.

The BPMP also established implementation performance measures, including:

- Complete the 2018 Capital Improvement Program (CIP) list of bicycle and pedestrian projects by 2035.
 - Twenty-eight (28) bicycle and pedestrian projects were included in the 2018 CIP. Thirteen (13) of these projects have been completed. Six (6) projects are in the design or construction phase. At the current pace, Public Works is currently on target to complete the 2018 CIP bicycle and pedestrian projects by 2035. However, some of the remaining projects are complex, expensive, and substantially underfunded.
- Increase walking and bicycling mode share to 15% by 2025.
 - This measure has been met. According to data obtained from the Santa Barbara County Association of Governments (SBCAG), the combined walking and biking mode share in 2022 was 15.9%.
- Reduce driving-alone commuter percentage to 60% by 2030.
 - This measure has been met. According to 2022 SBCAG data, driving alone made up 57.8% of all trips.
- Achieve a PeopleForBikes City Ranking of "3" by 2025.
 - PeopleForBikes is a coalition of 1.4 million cycling advocates whose goal is to reduce barriers to bicycling and promote the construction of safe bicycle facilities. This organization has changed its ranking scale since 2018, from 0 to 5 to 0 to 100, so it is difficult to draw comparisons and measure progress. Goleta's 2018 score was 1.5 out of 5. The current average network score for all cities is 27/100. Goleta's score is currently 33/100, placing it in the 70th percentile of 1,733 cities evaluated across the nation.
- Implement a variety of infrastructure improvements by 2025.
 - Thirteen (13) bicycle and pedestrian improvement projects have been completed since 2018.

- Increase the percentage of school-aged children walking and bicycling to 13% by 2030.
 - 2022 data provided by SBCAG indicates over 40% of school-aged children are walking or biking to and from school; however, SBCAG reports that the uncertainty surrounding the accuracy of this data is higher given the smaller sample size of these commuters. Staff will continue to monitor this statistic and seek out other data sources to verify the percentage of school-aged children walking and biking to and from school.

Goleta Traffic Safety Study (GTSS)

The GTSS analyzed crash data to identify high-risk roadway characteristics as well as mitigations to improve the safety of all road users (drivers, bicyclists, and pedestrians), and identified mitigation measures, forming systemic improvements to Goleta's roadway network. The GTSS also prioritized traffic safety countermeasures along major corridors and intersections, including:

Street Segments:

- Cathedral Oaks Road from Glen Annie Road to Los Carneros Road
- Patterson Avenue from Hollister Avenue to Debbie Lane
- Ellwood Beach Drive from Strehle Lane to Entrance Road
- Calle Real from Encina Lane to Kingston Avenue
- Alondra Drive from Nectarine Avenue to Mallard Avenue

Intersections:

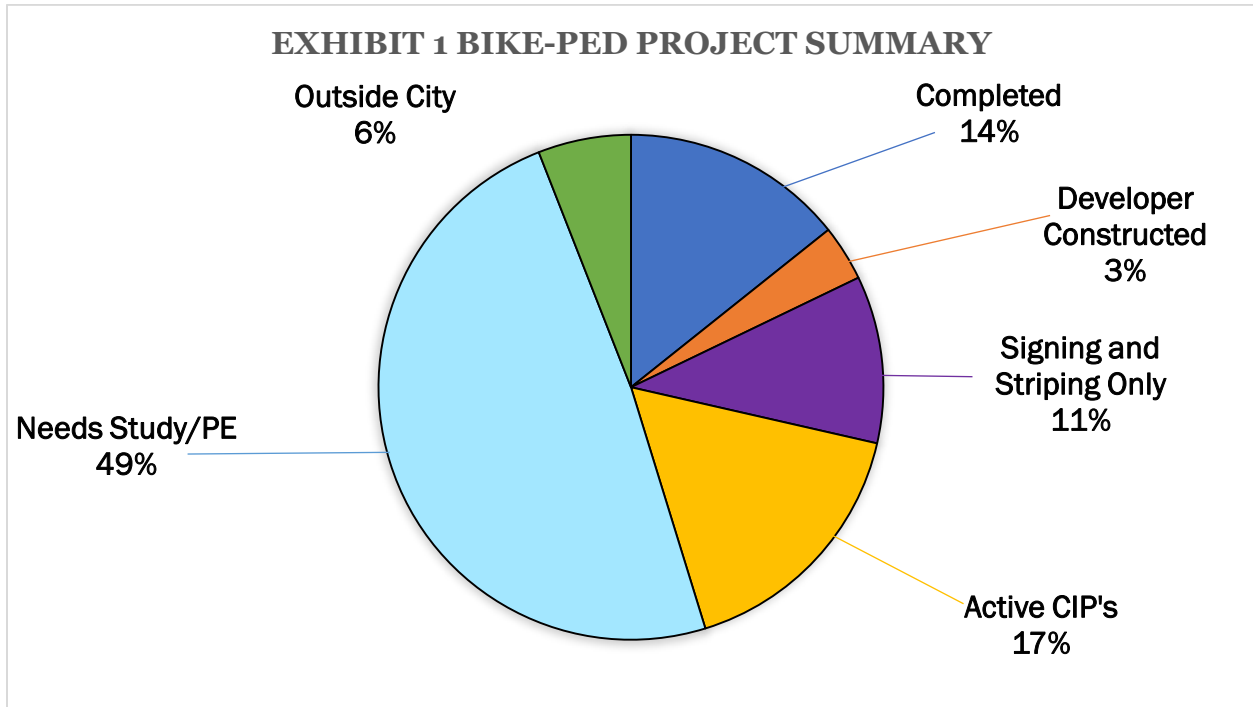
- Hollister Avenue and Storke Road
- Fairview Avenue and Calle Real
- Storke Road and Marketplace Drive
- Cathedral Oaks Road and Glen Annie Road
- Calle Real and Encina Lane
- Cathedral Oaks and Fairview Avenue
- Los Carneros Avenue and Calle Koral
- Cathedral Oaks Rd and Los Carneros Road

Specifics regarding the proposed improvements are included in Attachment 3.

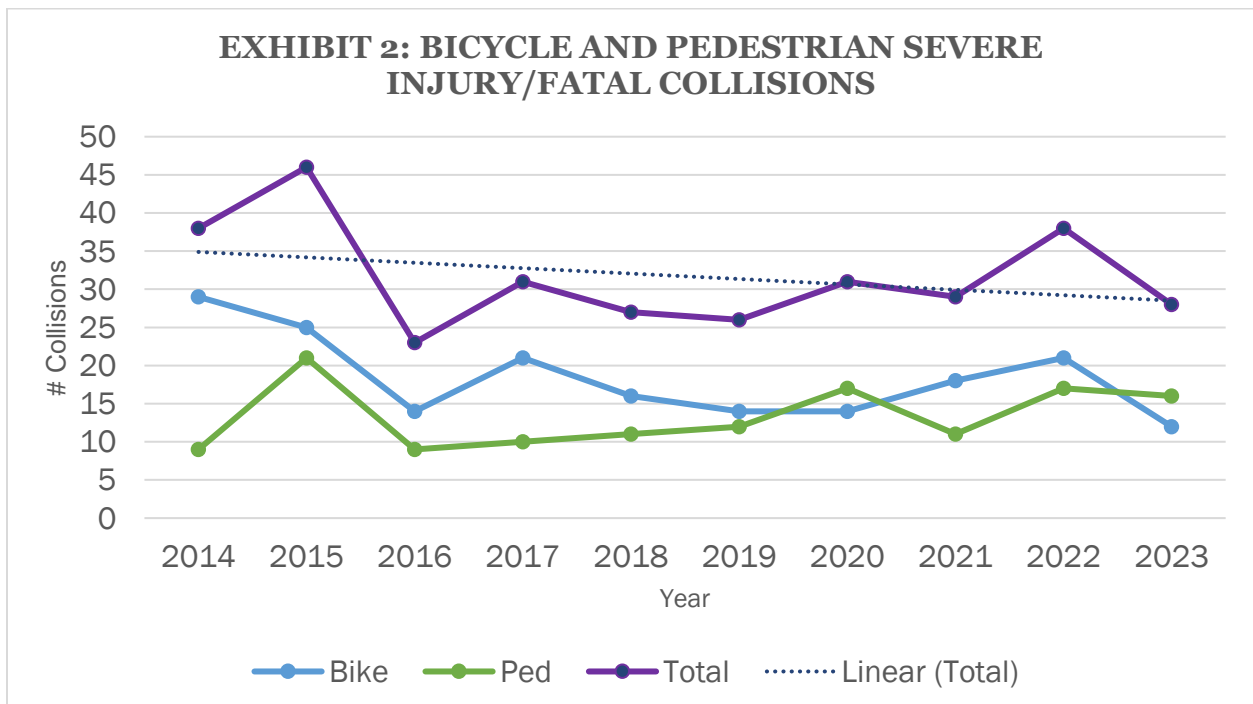
Bicycle-Pedestrian Project Implementation Progress

Exhibit 1 below summarizes the status of the 84 improvement projects identified in the BPMP and GTSS. Approximately one-third (34%) of these projects are completed or are currently being designed or constructed. Eleven percent of these projects require only striping and signage improvements. These are typically implemented concurrently with pavement maintenance but could also be stand-alone projects. Six percent of the projects rely significantly on surrounding agencies (Caltrans, City/County of Santa Barbara, MOVE Santa Barbara County, etc.) and further study and discussion are required to determine who would be the lead agency. Approximately half of the bicycle and pedestrian projects

still require preliminary analysis and design, to accurately scope and estimate the project costs, before adding them to the capital improvement program.



Not enough time has passed since the completion of the BPMP and GTSS to be able to fully assess the benefits of the recent emphasis on bicycle and pedestrian improvements. However, Exhibit 2 below does indicate a gradual downward trend of fatal and severe collisions involving bicycles and pedestrians in Goleta over the past 10 years.



Project Connect, 2023 Pavement Rehabilitation, San Jose Creek Bike Path, and Citywide Traffic Signal Improvements are all active CIP projects that include a significant number of bicycle, pedestrian, and safety improvements to be implemented in the next several years.

Vision Zero Commitment

Supporting Vision Zero efforts would prioritize more coordinated work efforts designed to eliminate traffic deaths and severe collisions in Goleta.

Engineering

The engineering approach focuses on transportation system design modifications to make capital improvements resulting in increased safety. The Public Works Department currently prioritizes roadway safety by reviewing locations with a demonstrated collision history and implementing incremental roadway improvements over time. Safety-oriented planning documents, such as the BPMP and GTSS, guide the development of CIP projects that emphasize safety enhancements. An example of this is the series of CIP projects along Calle Real and Cathedral Oaks, where Pedestrian Hybrid Beacons, Rectangular Rapid Flashing Beacons and/or buffered bike lanes have been installed in response to high concentrations of collisions.

Enforcement

The enforcement approach increases safe travel behavior through targeted enforcement of the rules of the road. The Sheriff's Department successfully applies for grants from the Office of Traffic Safety (OTS) to conduct targeted enforcement. The grant money is used for overtime police shifts to conduct these operations. For example, because of the high number of pedestrian and bicycle-related collisions, OTS grants have been awarded for this type of enforcement where people making illegal movements while walking or cycling are ticketed. Another example is the pedestrian sting operation where a staff member crosses a street at a high pedestrian collision location. Motorists are cited when not legally yielding. Enforcement of Driving under the Influence (DUI)'s are also sometimes funded by OTS grants.

Education

The educational approach to implementing Vision Zero is designed to increase the public's awareness of potential safety issues, thereby resulting in safer behaviors on the street. The City's current education approach is limited to the Safe Routes to Schools Program, which does not directly target adults. Implementation of a Vision Zero policy would require significantly more resources and funds toward adult education, public service announcements, and greater awareness of how citizens can safely travel in Goleta.

Public Works staff has developed a resolution (Attachment 4). In addition, this report discusses various actions that the City can take in furtherance of Vision Zero goals. The resolution sets a goal to eliminate transportation-related fatalities and serious injuries.

Reaching this goal will require increasing engineering, enforcement, and education practices and managing these resources in a more coordinated manner. The City will need to prepare a planning strategy and implement a corridor-level approach to engineer, enforce, and educate in locations where collisions are most likely to occur. It will require full staffing of the Traffic Enforcement Unit of the Sheriff's Department so that targeted enforcement can consistently be applied to the corridors of most concern. At a time when transportation resources are strained, it will require grant funding as well as prioritizing safety improvements over other transportation capital needs to increase our effectiveness at reaching the Vision Zero goal.

Next Steps

In addition to immediately incorporating Vision Zero goals as a guiding principle for transportation planning, design of streets and sidewalks, and maintenance of public rights of way, staff are currently working on two projects that will further Vision Zero goals.

Traffic Calming Policy

High traffic speeds and volumes, as well as inappropriate behavior of motorists, can adversely impact neighborhoods and have a negative effect on pedestrians and bicyclists, particularly near schools, community centers, and parks. Public Works staff are developing a traffic calming policy to establish the qualifying conditions, whereby residents can request this City service, and define the implementation process. This draft policy will be presented to the City Council in the summer of 2024.

Speed Limit Laws

California has recently changed the laws concerning the setting of speed limits. Historically, speeds were set at the nearest 5 mph increment to the prevailing speed of traffic (85 percentile), unless it could be demonstrated via an engineering study (Engineering and Traffic Survey) that the prevailing speed is unsafe.

In 2022, some minor changes to the laws were made that gave agencies additional flexibility in maintaining existing speed limits in areas where speeds may have increased and allowed consideration of the presence of vulnerable pedestrian groups (children and seniors) in setting speed limits.

Beginning June 30, 2024, two additional law changes will allow local agencies to reduce existing speed limits by an additional 5 miles per hour, for a total reduction of up to 10 mph.

1. Safety Corridors – Up to 20% of a city's street network may be classified as Safety Corridors, defined as the roadway segments where the highest number of serious injuries and fatal collisions occur.

2. High Concentrations of Bicycles or Pedestrians - Roadway segments within one-quarter mile of areas that generate high concentrations of bicycles or pedestrians, as detailed in Table 1 below.

Table 1: Requirements to Determine Land or Facility that Generates High Concentrations of Bicyclists or Pedestrians

Category	Generator
Land Uses	Employment Centers
	Retail
	Parks, trails, and recreational destinations
	Schools
	Senior Centers
	Cultural/entertainment areas or areas of community significance
	Religious facilities
	Health/medical facilities
Transit Factors	Transit stops
	Transit oriented developments
Pedestrian/Bicyclist Infrastructure	Sidewalk
	Crosswalks
	Bikeways
	Bicycles/scooters
Demographic Factors	Presence of children, seniors, persons with disabilities, and the unhoused
	Disadvantaged community status
	Presence of students
Local Data	Need identified in road safety audit or local road safety plan

Public Works staff will return to the City Council in the summer of 2024 to recommend lowered speed limits for streets according to these new laws.

City staff will be establishing an internal traffic commission to support the development of Vision Zero Policy initiatives, encompassing traffic calming measures, data collection, project prioritization, and street speed limit regulations. This will be developed by the summer of 2024.

FISCAL IMPACTS:

There are no fiscal impacts with this item in the City's incorporation of Vision Zero goals into current transportation planning, design of streets and sidewalks, and maintenance of public rights of way. If the City progresses with the development and execution of a more

targeted Vision Zero implementation plan, the estimated annual cost will range from \$250,000 to \$1,000,000.

GOLETA STRATEGIC PLAN:

This work effort meets the following City Strategic Goals:

Strategic Goals:

- 5.1 - Strengthen Citywide infrastructure including roads and traffic circulation, including bicycle lanes, paths, and sidewalks
- 5.2 - Encourage use of alternative transportation methods that reduce vehicle miles traveled
- 5.6 - Incorporate Vision Zero plans into transportation project design

LEGAL REVIEW BY: Megan Garibaldi, City Attorney

APPROVED BY: Robert Nisbet, City Manager

ATTACHMENTS:

1. Consolidated List of Identified Bicycle and Pedestrian Improvements
2. City of Goleta Bicycle and Pedestrian Master Plan Project List
3. Goleta Traffic Safety Study Project List
4. Resolution No. 24-__ entitled, "A Resolution of the City Council of the City of Goleta, California, in Support of Vision Zero Efforts to Eliminate Fatal and Severe Transportation Related Collisions"
5. Presentation: Progress Report on Bicycle/Pedestrian Master Plan, Goleta Traffic Safety Study and Adoption of a Resolution in Support of Vision Zero Efforts

ATTACHMENT 1

Consolidated List of Identified Bike and Pedestrian Improvements

Bicycle and Pedestrian - Potential Improvements List

Source	Segment	From	To	Description	Weighted Avg. Composite Score	Prioritization Analysis Ranking	Safety Related Benefit/Cost
BPMP	Cathedral Oaks Rd	Glen Annie Road	Los Carneros Rd	Install bike lane, chevrons, centerline rumble strips, guardrail, center raised median			4.5
SSAR	Glen Annie Rd	Cathedral Oaks Rd	101 Overpass	Buffer bike lanes where possible, intersection crossing markings, bike boxes, modify signal timing, enhanced crosswalks	90	5	
BPMP	Cathedral Oaks Rd	San Pedro Creek	Eastern City Limit	Class 2 lanes exist.	79	10	
BPMP	Fairview Ave	Cathedral Oaks Rd	Calle Real	CIP 9060 to add sidewalk and Class 2 through parts of this section.	77	13	
BPMP	Los Carneros Rd	Hollister Ave	Coast Route	Enhanced crosswalks, crossing markings southbound to intersection, reduce curb radii, buffer bike lane, modify signal timing. GTIP improvements include bike	75	15	
BPMP	Kellogg Ave	Armitos Ave	Kellogg Wy	General Plan TE.	86	6	
BPMP	Cortona Rd	Hollister Ave	Los Carneros Rd	Bike lanes as E/W route	55	30	
BPMP	Mendocino Dr	Dos Pueblos HS	Calle Real	Already residential area. Evaluate most used routes to schools for students.	53	32	
BPMP	Alondra Drive	Nectarine Avenue	Mallard Avenue	Curve warning signs, red curb on inside of Nectarine/Alondra curve, review lighting levels			196
BPMP	Patterson Ave	Hollister Avenue	Debbie Road	Install signs to prohibit left turns out of post office parking lot and create directional left turn lanes on Patterson			54
BPMP	Ellwood Beach	Entrance Road	Strehle Lane	Install speed humps, remove centerline stripe along Ellwood Beach Dr, implement permitted parking, extend red curb near driveways			16
BPMP	Encina Rd	Fairview Ave	Moreton Bay Ln	Buffer bike lanes, narrow lanes, enhanced crosswalks, decrease curb radii on north side. Corresponds with road resurfacing.	96	3	
BPMP	Hollister Ave	Cathedral Oaks Rd	Elderberry Dr	Upgrade bike lane to multi-use path. Install curb ramps, enhanced crosswalks. Long-term vision plan for Hollister Avenue.	99	2	
BPMP	Fairview Ave	Calle Real	Hollister Ave	Conduct feasibility study to closely analyze corridor. Corridor requires complete street improvements.	101	1	
BPMP	Hollister Ave	Pacific Oaks Rs	Eastern City Limit	Coordinate with Complete Streets Project.	91	4	
BPMP	Fairview Ave	Hollister Ave	Sandspit Rd	Potential joint grant application/project between all three agencies and possibly UCSB.	83	8	
BPMP	Calle Real	Fairview Ave	Kellogg Ave	Reduce curb radii, install curb extensions, enhanced crosswalks, modify signal timing. Corresponds with road resurfacing projects.	78	12	
BPMP	Cathedral Oaks Rd	Paseo Del Piñon	King Daniel Ln	Buffer bike lanes, or convert to Class 1 or 4 facility.	70	18	
BPMP	Univ Village Park /Flood Control	Hollister Ave	Ellwood Mesa Open Space	PWD identified and public comments to connect Hollister Class 1 to Open Space and UCSB multipurpose trail system.	69	19	
BPMP	Evergreen Acres Park	Brandon Elementary School	Waldorf School	General Plan TE.	67	24	
BPMP	Ellwood Station Rd	San Blanco Dr	Calle Real	General Plan TE.	67	24	
BPMP	San Milano Dr	Evergreen Park Trailhead	San Blanco	General Plan TE.	64	26	
BPMP	Sperline Preserve - Northeast Edge	Ellwood Beach Dr	Cannon Green Dr	General Plan TE.	61	27	
BPMP	Calle Real	Los Carneros Rd	Eastern City Limit	Class 2 already. City is restriping east of Fairview. Coordinate eastern end with County.	59	28	
BPMP	Barling Terrace	Stow Canyon Rd	Covington Way/ Berkeley Rd Bridge	Private street within HOA.	53	32	

Bicycle and Pedestrian - Potential Improvements List

Source	Segment	From	To	Description	Weighted Avg. Composite Score	Prioritization Analysis Ranking	Safety Related Benefit/Cost
BPMP	Lindmar Rd	Robin Hill Rd	La Patera	Connection identified goes through private property (Raytheon).	52	34	
BPMP	Campus Glen Open Space/Butterfly	Santa Barbara Shores Dr	Ellwood Beach Dr	Class 1 path through open space or trail project.	50	35	
BPMP	Mathilda Dr	Entrance Road	Strehle Lane	Install speed humps, remove centerline stripe along			16
BPMP	Calle Real	Encina Lane	Kingston Ave	Implement consistent speed limit on both sides of road if possible, center raised medians with back to back left turn pockets, install Class IV bike lanes, consider complete streets			5.5
BPMP	Storke Road	US 101 SB Ramps	Hollister Ave	???			
BPMP	Cathedral Oaks Rd	Hollister Ave	Eastern City Limit	Install street lighting			
BPMP	Fairview Avenue	US 101 NB Off-Ramp	US 101 SB Off-Ramp	???			
BPMP	Los Carneros Rd	Cremona Dr	Storz Dr	???			
BPMP	Hollister Avenue	Lowell Way	Pacific Oaks Road	???			
BPMP	Patterson Ave	More Rd	Coast Route	Potential asphalt curb and re-striping - Coordinate with County.	75	15	
BPMP	Carlo Dr	Cathedral Oaks Rd	Calle Real	Potential for SBBike to add wayfinding signage as part of overall South Coast Wayfinding Program.	69	19	
BPMP	Santa Barbara Shores Dr	Hollister Ave	Trailhead to Ellwood Beach	Install wayfinding signage and sharrows. Potential for SBBike to add wayfinding signage as part of overall South Coast Wayfinding Program.	59	28	
BPMP	Convington Way/Berkeley Rd	Los Carneros Rd	Eastern City Limit	Potential for SBBike to add wayfinding signage as part of overall South Coast Wayfinding Program.	50	35	
BPMP	Calle Real	Maravilla Drive	Patterson Avenue	??? In County R/W			
Potential Improvements Identified in Capital Improvement Program (CIPs)							
9088	Cathedral Oaks Rd	Multiple Intersections		Rectangular Rapid Flashing Beacon (RRFB) Improvements at School Crossings.			
9058	Calle Real	Kingston Ave	Kingston Ave	PHB on mast arms over travel lanes			
9058	Hollister Ave	Chapel St	Chapel St	RRFB on mast arms over travel lanes.			
9060	Fairview Ave	Goleta Library	Stow Canyon Rd	Add northbound travel lane, bike lane, and new sidewalk.			
9070	Fairview Ave	Hwy 101	Calle Real	Reconstruct 160 feet of sidewalk on north side of S. Fairview, close existing bicycle and pedestrian ramp leading to Calle Real.			
9001	Hollister Ave	Fairview Ave	Hwy 217	Hollister Complete Streets Corridor Plan, Hollister Avenue Bridge Replacement Project, and Future Hollister Construction Project.			
9002	Ekwill St	Fairview Ave	Hwy 217	Ekwill Street Extension.			
9006	San Jose Creek Path	Cathedral Oaks	Coast Route	San Jose Creek Bike Path - South Segment.			
9007	San Jose Creek Path	Cathedral Oaks	Coast Route	San Jose Creek Bike Path - Middle Segment.			
9031	School Bus Ln/Technology Dr	Pine Ave	School Bus Ln/Kellogg Ave	New road project; partially Old Town Sidewalk Improvements Project and Ekwill Street Extension Project.			
9033	Hollister Ave	Fairview Ave	Hwy 217	Hollister Complete Streets Corridor Plan, Hollister Avenue Bridge Replacement Project, and Future Hollister Construction Project.			
9092	Fowler Road	Existing Fowler	Technology Dr	Fowler Road Extension.			
9073	La Patera Ln	Hwy 101 (Amtrak Station)	Hollister Ave	Class 2 bike lanes and sidewalk infill.			
9042	Storke Rd	Camino Real Marketplace Entrance	Southern City Limit	Class 2 bike lanes part of Storke Road Widening, Phelps Road to City Limits, and future Class 1 or 4 project.			
9012	Armitos Avenue	Kellogg Ave	San Jose Creek Path	Armitos Avenue Bridge; One traffic lane each direction, and pedestrian and bicycle facilities.			

Bicycle and Pedestrian - Potential Improvements List

Source	Segment	From	To	Description	Weighted Avg. Composite Score	Prioritization Analysis Ranking	Safety Related Benefit/Cost
9027	Ellwood Station Rd	Hwy 101	Hollister Ave	101 Overpass Project; vehicular, pedestrian and bicycle overpass.			
9044	Hollister Ave	Storke Rd	280' west of Glen Annie	Hollister Widening			
9061	Cathedral Oaks Rd	Glen Annie Rd	San Pedro Creek	Class 1 on north side of Cathedral Oaks Road.			
9062	Marketplace Dr	Storke Road		Enhance crosswalks, modify signal timing. Partial component of 9062.			
9072	La Patera at Hwy 101	Goleta Amtrak Depot	La Patera	La Patera Road Overcrossing/Undercrossing.			
9091	Calle Real	La Patera	Los Carneros Rd	Construction approx. 3,190 feet of sidewalk.			
9095	Storke/Glen Annie	Hwy 101		Storke/Glen Annie Interchange Analysis.			
Signalized Intersections							
SSAR	Cathedral Oaks	Alameda Ave		Enhanced crosswalks, curb extensions .	69	19	
BPMP	Hollister Ave	Pacific Oaks Rd		Install bike signal on westbound Hollister Avenue			
BPMP	Fairview Ave	Berkeley Road		Install/replace bike detectors			
SSAR	Calle Real	Encina Lane		Retroreflective backplates, add N/S mast arms, add dual curb ramps and extensions and align crosswalks with ramps			
SSAR	Hollister Avenue	Storke Road		Implement LPI , High visibility crosswalks, move bus stops away from intersection, install "watch for slow traffic" on NBR lane, median adjustments and lane restriping on Storke Rd, right turn lane on NB Storke onto Hollister, install retroreflective backplates on signal heads, convert to roundabout , install Class I bicycle lanes along Storke			54
SSAR	Los Carneros	Calle Koral		Evaluate yellow/all red timing, retroreflective backplates, signal ahead signage on Los Carneros, extend SB left turn by 150'. Add E/W protected left turns			49
SSAR	Cathedral Oaks Blvd.	Glen Annie Road		Advanced signal warning signage, protected NB left turn, future roundabout .			
SSAR	Calle Real	Fairview Avenue		Install lane assignment and freeway directional signage/markings, split phase E/W movements, future			101
SSAR	Fairview Ave	Cathedral Oaks		Add retroreflective backplates , enhanced crosswalks, modify signal timing for pedestrians, add protected left turn phasing for N/S	72	17	93
SSAR	Marketplace Drive	Storke Road		Enhance crosswalks, modify signal timing, change NB/SB LT from protected permissive to protected, install green paint along bike lanes, convert to roundabout			3
SSAR	Fairview Avenue	Hollister Avenue		Install signage so drivers know which lane they should be in, operate split phasing along E/W movements, install enhanced freeway markings for LT lanes, install signage clarifying LT lanes for US 101, convert intersection to roundabout			1.3
Unsignalized Intersections							
SSAR	Covington Way	San Pedro Creek		Add 4-way stop signs on streets at both ends of bridge. Replace with wider bridge.	68	23	
SSAR	Hollister Avenue	Tecolote Avenue					
SSAR	Hollister Avenue	Magnolia Avenue					
SSAR	Hollister Avenue	Santa Felicia Dr		Move stop bar on EB approach further up, move median on Hollister Ave further up, install green paint on bike lanes			76
SSAR	Berkeley Rd	Kellogg Ave		Improve crosswalks, signage and striping.	79	10	
SSAR	Los Carneros Rd	Calle Real		Install yield sharks teeth, signage that lets cyclists know they can ride on sidewalk around the traffic calming circle, green-backed sharrows through	50	35	

Bicycle and Pedestrian - Potential Improvements List

Source	Segment	From	To	Description	Weighted Avg. Composite Score	Prioritization Analysis Ranking	Safety Related Benefit/Cost
SSAR	Dos Pueblos High School	Cathedral Oaks Rd		Install RRFB or PHB at road/driveway between Alameda Ave and Glen Annie Rd.	80	9	
SSAR	Hollister Ave	Palo Alto Dr		Install mid-block crossing with PHB and enhanced crosswalk. May be reduced need with new Class 1. Re-evaluate following Class 1 installation.	77	13	
SSAR	Calle Real	Valdez Avenue		???			
SSAR	Calle Real	Calaveras Avenue		???			
SSAR	Storke Road	Bollay Drive		???			
SSAR	Cathedral Oaks Blvd	Los Carneros Road		Future roundabout			1

ATTACHMENT 2

City of Goleta Bicycle and Pedestrian Master Plan Project List

TABLE 4-1: POTENTIAL PROJECT LIST

Rank	Type	Project Name	Segment	Between		Infrastructure Type	Notes
1	Bike/ Ped	Class I Multi-Use Path Fairview Avenue	Fairview Ave	Calle Real	Hollister Ave	Class I	Add Class I Multi-purpose path to separate pedestrians from vehicular traffic. Conduct feasibility study to closely analyze corridor. Corridor requires complete street type improvements.
2	Bike/ Ped	Class I Multi-Use Path along Hollister Avenue – Western End	Hollister Ave	Cathedral Oaks Rd	Elderberry Dr	Class I or IV	Difficult to cross at Cathedral Oaks and Hollister. Install multi-use path (continuous). Install curb ramps and high-visibility crosswalks. Part of the long-term vision plan for Hollister Avenue.
3	Bike/ Ped	Bike Lane Improvements Encina Road	Encina Rd	Fairview Ave	Moreton Bay Ln	Class II	Install buffered bicycle lanes, narrow the travel lanes, high-visibility crosswalks, and decrease curb radii on north side. Corresponds with road resurfacing work.
4	Bike	Class I Multi-Use Path along Hollister Avenue – Old Town	Hollister Ave	Fairview Rd	Eastern City Limit	Class I or IV	Coordinate with Complete Streets Project. Construct a multi-use path along Hollister Avenue between Fairview Avenue and SR 217.
5	Bike/ Ped	Bike Lane Improvements Glen Annie Road	Glenn Annie Rd	Cathedral Oaks Rd	US 101 Overpass	Buffered Class II	Lots of students ride/walk through here. Install buffered bicycle lanes (where possible), intersection crossing markings, bike boxes, signal timing modifications, and high-visibility crosswalks.
6	Bike	Bike Lane Improvements Kellogg Avenue	Kellogg Ave	Armitos Ave	Kellogg Way	Class II	Install Class II bike lanes on Kellogg Avenue, intersection and signal modifications. General Plan TE item.
7	Bike/ Ped	Intersection Crossing Improvements – Storke and Hollister	Storke Rd at Hollister Ave	Hollister Ave	----	Crossing Improvements	Insufficient crossing time. Construct high-visibility crosswalks and modify signal timing.
8	Bike	Class I Multi-Use Path along Fairview Avenue South	Fairview Ave	Hollister Ave	Sandspit Rd	Class I	Potential joint grant application/project between all three agencies and possibly UCSB. Construct a multi-use path along Fairview Avenue between Hollister Avenue and Sandspit Road.
9	Ped	Crossing Improvements – Cathedral Oaks Road & Dos Pueblos High	Dos Pueblos High School	Cathedral Oaks Rd	----	RRFB or PHB	Install Rectangular Rapid Flashing Beacons (RRFB) or Pedestrian Hybrid Beacon (PHB) at road/driveway between Alameda Avenue and Glen Annie Road.
10	Bike	Class I Multi-Use Path Cathedral Oaks Road – San Pedro Creek to Eastern City Limit	Cathedral Oaks Rd	San Pedro Creek	Eastern City Limit	Class I or IV	Class II lanes exist. Construct a multi-use path along Cathedral Oaks Road between San Pedro Creek and the eastern City limit near Cambridge Drive.

TABLE 4-1: POTENTIAL PROJECT LIST (CONT.)

Rank	Type	Project Name	Segment	Between		Infrastructure Type	Notes
11	Ped	Crossing Improvements – Berkeley Road at Kellogg Avenue	Berkeley Rd at Kellogg Ave	Kellogg Ave	-----	Crossing Improvements	Install high-visibility crosswalks on Berkeley Road at Kellogg Avenue.
12	Ped	Crossing Improvements – Calle Real/ Fairview Avenue to Kellogg Avenue	Calle Real	Fairview Ave	Kellogg Ave	Crossing Improvements	Reduce curb radii, install curb extensions, high-visibility crosswalks, modify signal timing on Calle Real from Fairview Avenue to Kellogg Avenue. Corresponds with road resurfacing projects.
13	Bike	Class I Multi-Use Path along Fairview Avenue North	Fairview Ave	Cathedral Oaks Rd	Calle Real	Class I or IV	CIP 9060 project will construct sidewalk and Class II bicycle lanes through parts of this section. Construct a multi-use path along the rest of Fairview Avenue from Calle Real north to Cathedral Oaks Road.
14	Bike/ Ped	Crossing Improvements - Hollister Avenue at Palo Alto Drive	Hollister Ave at Palo Alto Dr	Palo Alto Dr	-----	Mid-block Crossing	Install crosswalk with a Pedestrian Hybrid Beacon (PHB) and high-visibility striping. May have reduced need with new Class I multi-use path; Re-evaluate following Class I multi-use path installation.
15	Bike/ Ped	Bike Lane Improvements Los Carneros Road and Hollister Avenue	Los Carneros Rd	Hollister Ave	City limit at south	Class II	Install bicycle lanes on southbound Los Carneros at intersection, high-visibility crosswalks, bicycle crossing markings southbound to intersection, reduce curb radii, and modify signal timing. GTIP improvements include bicycle lanes.
16	Bike	Bike Lane Improvements Patterson Avenue South	Patterson Ave	More Rd	City limit	Class II	Potential asphalt curb and re-striping to add Class II bike lanes on Patterson Avenue south from More Road (Cottage Valley Hospital) and the Coast Route. Coordinate with County on scope of work and distance.
17	Ped	Crossing Improvements – Fairview Avenue at Cathedral Oaks	Fairview Ave at Cathedral Oaks	Cathedral Oaks Rd	-----	Crossing Improvements	Pedestrian crossing improvements for students are requested. Construct enhanced crosswalks, modify signal timing for pedestrians, re-locate utility poles in sidewalk, trim hedges, and signage and striping.
18	Bike	Bike Lane Improvements Cathedral Oaks Road – West Connection	Cathedral Oaks Rd	Paseo Del Piñon	King Daniel Ln	Class II	Construct buffered bicycle lanes or convert to Class I multi-use or IV bike paths.

TABLE 4-1: POTENTIAL PROJECT LIST (CONT.)

Rank	Type	Project Name	Segment	Between		Infrastructure Type	Notes
19	Bike/ Ped	Class I Multi-Use Path Overcrossing US 101/ Mendocino Drive	Mendocino Dr at US 101	----	----	Overcrossing	Bike/ped bridge overcrossing. Not a selected alternative in 101 Crossing Project analysis. Construct a multi-use path overcrossing at Mendocino Drive.
20	Bike	Bike Lane Improvements Carlo Drive	Carlo Dr	Cathedral Oaks Rd	Calle Real	Class III	Install sharrows, add wayfinding signage, and striping. Potential for SBBike to add wayfinding signage as part of overall South Coast Wayfinding Program.
21	Bike/ Ped	Intersection Crossing Improvements – Cathedral Oaks at Alameda Avenue	Cathedral Oaks at Alameda Ave	Alameda Ave	----	Crossing Improvements	Safer crossing desired. Install enhanced crosswalks, curb extensions, signage, and striping.
22	Bike/ Ped	Class I Multi-Use Path along Phelps Ditch	Univ Village Park /Flood Control	Hollister Ave	Ellwood Mesa Open Space	Class I	Construct a multi-use path along Phelps Ditch to connect to other Class I paths and trails. Public Works identified scope and public comments recommend connecting Hollister Class I to the Open Space and UCSB multipurpose trail system.
23	Bike/ Ped	Covington Way Class I Multi-Use Path Bridge Replacement	Convington Way at San Pedro Creek	San Pedro Creek	----	Bridge and Signage	Add 4-way stop signs on streets at both ends of bridge. Replace with wider bridge to accommodate a multi-use path crossing San Pedro Creek.
24	Bike/ Ped	Class I Multi-Use Path in Evergreen Park	Evergreen Acres Park	Brandon Elementary School	Waldorf School	Class I	Construct a multi-use path through Evergreen Park to connect schools, park, and residences. General Plan TE.
25	Bike	Bike Lane Improvements Ellwood Station Road	Ellwood Station Rd	San Blanco Dr	Calle Real	Class II	Construct Class II bike lanes on Ellwood Station Road between Calle Real and San Blanco Drive. General Plan TE item.
26	Bike	Bike Lane Improvements San Milano Drive	San Milano Dr	Evergreen Park Trailhead	San Blanco	Class II	Construct Class II bike lanes on San Milano Drive between Evergreen Park and San Blanco Drive. General Plan TE item.
27	Bike/ Ped	Class I Multi-Use Path Sperling Preserve	Sperling Preserve - Northeast Edge	Ellwood Beach Dr	Cannon Green Dr	Class I	Construct a Class I multi-use path on Ellwood Mesa/Sperling Preserve to coincide with the currently proposed Coast Route and Juan De Fuca trails.
28	Bike	Class I Multi-Use Path Calle Real/Los Carneros East	Calle Real	Los Carneros Rd	Eastern City Limit	Class I or IV	Existing Class II. City is restriping east of Fairview Avenue. Coordinate eastern end with County. Construct a multi-use path along Calle Real between Los Carneros Road and the eastern City limits.

TABLE 4-1: POTENTIAL PROJECT LIST (CONT.)

Rank	Type	Project Name	Segment	Between		Infrastructure Type	Notes
29	Bike	Bike Lane Improvements at Santa Barbara Shores Drive/Hollister Avenue	Santa Barbara Shores Dr	Hollister Ave	Trailhead to Ellwood Beach	Class III	Better connection to Ellwood Beach. Install way-finding signage and sharrows. Potential for SBBike to add wayfinding signage as part of overall South Coast Wayfinding Program.
30	Bike	Bike Lane Improvements at Cortona Road/Hollister Avenue	Cortona Rd	Hollister Ave	Los Carneros Rd	Class II	Potential improved bike connection through business park on Cortona Avenue between Hollister Avenue /Marketplace across Los Carneros Road and continuing toward the Goleta Train Depot (Amtrak).
31	Ped	Intersection Crossing Improvements – Marketplace Drive/Storke Road	Marketplace Dr at Storke Rd	----	----	Crossing Improvements	Install enhanced crosswalks, modify signal timing, and striping. Partial component of CIP 9062.
32	Bike	Bike Lane Improvements Barling Terrace/Stow Canyon	Barling Terrace	Stow Canyon Rd	Covington Way/Berkeley Rd Bridge	Class III	Install bicycle route signage and wayfinding to make clear this is a bicycle route for students. Private street within HOA.
33	Bike	Bike Lane Improvements Mendocino Drive/Dos Pueblos High	Mendocino Dr	Dos Pueblos HS	Calle Real	Class II or III	Install Class II or III features, install bicycle signal at Calle Real. Already residential area. Evaluate most used routes to schools for students.
34	Bike	Bike Lane Improvements Lindmar Road/Robin Hill Road	Lindmar Rd	Robin Hill Rd	La Patera	Class II	Bike connection to Goleta Train Depot (Amtrak) station. Connection goes through private property (Raytheon).
35	Bike/Ped	Roundabout Signage and Striping Improvements – Los Carneros	Los Carneros Rd at Calle Real	----	----	Markings and Signage	Add signage to let bicyclists know they can ride on sidewalk. Install yield sharks teeth striping and signage around the traffic calming circle and green-backed sharrows through roundabout.
36	Bike	Signage and Wayfinding Improvements – Covington Way/Berkeley Road	Covington Way/Berkeley Rd	Los Carneros Rd	Eastern City Limit	Class IIIB - Bike Boulevard	Add signage to brand as a bicycle boulevard. Potential for SBBike to add wayfinding signage as part of overall South Coast Wayfinding Program.
37	Bike	Bike Lane Improvements Hollister Avenue/Storke Road	Hollister Avenue	Storke Road	Los Carneros	Buffered Class II	Install buffered Class II bicycle lanes on Hollister Avenue from Storke Road to Los Carneros. Partner with City of Santa Barbara Airport to continue east on Hollister Avenue to Fairview Avenue.

ATTACHMENT 3

Goleta Traffic Safety Study Project List

Table 4 - City-Wide Safety Project Recommendations

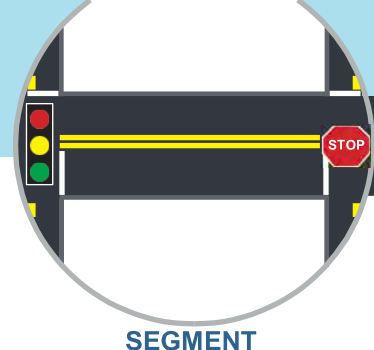
Category	Description	LRSM			Clearinghouse			Base	20-year Cost	20-year Benefit	Safety-Related B/C (HSIP estimate)
		ID	CRF	CMF	ID	CRF	CMF	CMF			
PEDESTRIAN	Install high-visibility crosswalk	-	-	-	4124	19%	0.81	-	\$130,000	\$2,690,843	21
	Implement Leading Pedestrian Interval (LPI)	-	-	-	9916	14%	0.86	-	\$162,500	\$1,982,727	12
BICYCLE	Install bike lanes	R36	35%	0.65	-	-	-	-	\$191,500	\$17,169,133	90
	Install green paint to bike lanes	-	-	-	-	-	-	0.95	\$95,250	\$2,452,733	26
REAR-END	Retroreflective backplates for signal heads	S2	15%	0.85	-	-	-	-	\$230,400	\$10,722,450	47
DARK	Add segment lighting	R1	35%	0.65	-	-	-	-	\$608,500	\$4,349,100	7
ALL*	Change from permissive only to protected only	S3	15%	0.85	-	-	-	-	\$2,520,000	\$30,570,250	12
	Install curb extensions	-	-	-	-	-	-	0.95	\$19,980,000	\$17,844,917	1
	Install center line rumble strips	R34	20%	0.8	-	-	-	-	\$253,018	\$9,694,267	38
	Install chevron signs on horizontal curves	R27	40%	0.6	-	-	-	-	\$71,880	\$19,388,533	270
	Install speed humps	-	-	-	132	40%	0.6		\$299,500	\$19,388,533	65
	Install raised median	R9	25%	0.75	-	-	-	-	\$9,488,160	\$12,117,833	1
	Improve signal timing (coordination, phases, red, yellow, or operations)	S3	15%	0.85	-	-	-	-	\$525,000	\$30,570,250	58

*Cost and benefit applied to all intersections/segments with collisions during study period



Project Template: Location #1 (Segment Project Type)

Project Name: Cathedral Oaks Rd Segment
Agency Name: City of Goleta
Contact Name: James Winslow
Email: JWinslow@cityofgoleta.org
Prepared by: Kimley-Horn
Checked by: Jason Melchor, P.E.
Date: December 2022

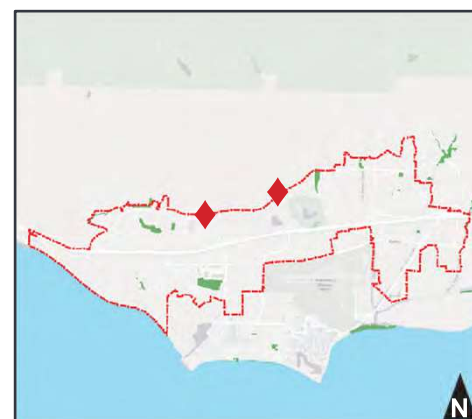


SEGMENT

Project Location Description & Maps:

Segment: Cathedral Oaks Road from Glen Annie Road to Los Carneros Road

Examples of Similar Segments: Calle Real from Brandon Dr to Glen Annie Rd; Cathedral Oaks Rd from Los Carneros Rd to Windsor Ave; Cathedral Oaks Rd from Ellwood Ridge Rd to Brandon Dr (locations of recent pedestrian fatalities)



Traffic and Geometric Data:

Collision Data	
Total Collisions (2014-2019)	8
Fatality and Injury Collisions	Fatal Injury - 0 Severe Injury - 2 Visible Injury - 5
Pedestrian Action (Percentage)	Crossing In Crosswalk (0%) Crossing Not in Crosswalk (0%)
Bicycle Factor (Percentage)	1 bicycle collision (12%)
Total Nighttime Collisions	0
Wet Surface Collisions	0
Drug and Alcohol Related Collisions	1
Number of Pedestrian/Cyclist under 15	0
Number of Pedestrian/Cyclist over 65	0

Traffic Data	
Number of Lanes	2
Pedestrian Activity	Low
Midblock Crossing	No
Lighting	None
Highest Posted Speed Limit	50 MPH
Raised Median	No
Proximity to School	1/2 mile
Proximity to Transit Stop	<1/2 mile
Proximity to Parks	1/2 mile

Collision Rate Per Million Vehicle Miles	
Expected	Actual
1.16	0.89

Collision Breakdown	
Veh vs. Ped	Veh vs. Bike
0	1



Countermeasure Evaluation

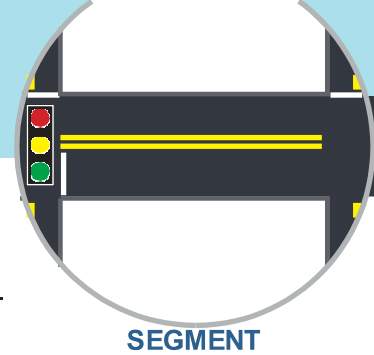
Primary Issues	Recommendation	Potential Countermeasures	CMF (Expected crash reduction factor)	20 Year Safety Benefit	Rough Estimated OPCC	Safety Related B/C
Bicycle	Install Class II bike lane on north side of road (striping only)	Install bike lanes	R36 (LRSM) 0.65	\$165,851	\$180,000	0.9
Bicycle	Install bike lane markings every 500'	-	0.95	\$23,693	\$24,000	1
All	Install center raised median	Install raised median	R9 (LRSM) 0.75	\$840,326	\$450,000	1.9
All	Add guardrail on north side of roadway segment	Install guardrail	R4 (LRSM) 0.75	\$840,326	\$225,000	3.7
All	Install chevrons along curve	Install chevron signs on horizontal curves	R27 (LRSM) 0.6	\$1,344,521	\$6,000	224.1
All	Centerline rumble strips	Install centerline rumble strips/ stripes	R34 (LRSM) 0.8	\$672,260	\$12,000	56



Project Template: Location #2 (Segment Project Type)

Project Name: Patterson Ave Segment
Agency Name: City of Goleta
Contact Name: James Winslow
Email: JWinslow@cityofgoleta.org

Prepared by: Kimley-Horn
Checked by: Jason Melchor, P.E.
Date: December 2022



SEGMENT

Project Location Description & Maps:

Segment: Patterson Avenue from Hollister Avenue to Debbie Rd

Examples of Similar Segments: Fairview Ave from Calle Real to Cathedral Oaks Rd; Hollister Ave from Pine Ave to Kellogg Ave



Traffic and Geometric Data:

Collision Data	
Total Collisions (2014-2019)	9
Fatality and Injury Collisions	Fatal Injury - 0 Severe Injury - 0 Visible Injury - 0
Pedestrian Action (Percentage)	Crossing In Crosswalk (0%) Crossing Not in Crosswalk (0%)
Bicycle Factor (Percentage)	No bicycle collisions
Total Nighttime Collisions	0
Wet Surface Collisions	0
Drug and Alcohol Related Collisions	0
Number of Pedestrian/Cyclist under 15	0
Number of Pedestrian/Cyclist over 65	0

Traffic Data	
Number of Lanes	5
Pedestrian Activity	Medium
Midblock Crossing	No
Lighting	Streelights present on E side of roadway (LED)
Highest Posted Speed Limit	45 MPH
Raised Median	No
Proximity to School	1/2 mile
Proximity to Transit Stop	<1/4 mile
Proximity to Parks	1/2 mile

Collision Rate Per Million Vehicle Miles	
Expected	Actual
1.48	1.26

Collision Breakdown	
Veh vs. Ped	Veh vs. Bike
0	0



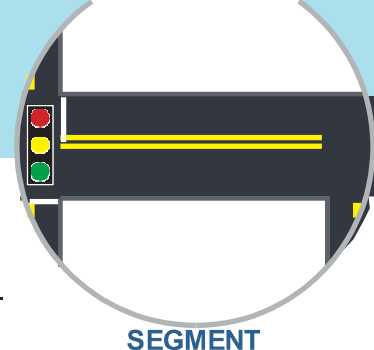
Countermeasure Evaluation

Primary Issues	Recommendations	Potential Countermeasures	CMF (Expected crash reduction factor)	20 Year Safety Benefit	Rough Estimated OPCC	Safety Related B/C
All	Install signage to prohibit left turns out of post office parking lot	-	0.95	\$105,844	\$2,000	53
All	Install hooded left into nursery	Create directional median openings to allow (and restrict) left-turns and u-turns (NS.I.)	0.5 NS13 (LRSM)	\$1,058,441	\$40,000	26



Project Template: Location #3 (Segment Project Type)

Project Name: Ellwood Beach Dr Segment
Agency Name: City of Goleta
Contact Name: James Winslow
Email: JWinslow@cityofgoleta.org
Prepared by: Kimley-Horn
Checked by: Jason Melchor, P.E.
Date: December 2022



SEGMENT

Project Location Description & Maps:

Segment: Ellwood Beach Drive from Strehle Lane to Entrance Road

Examples of Similar Segments: Mathilda Dr from Entrance Rd to Strehle Ln; Coronado Dr from Hollister Ave to Daytona Dr



Traffic and Geometric Data:

Collision Data	
Total Collisions (2014-2019)	12
Fatality and Injury Collisions	Fatal Injury - 0 Severe Injury - 0 Visible Injury - 1
Pedestrian Action (Percentage)	Crossing In Crosswalk (0%) Crossing Not in Crosswalk (0%)
Bicycle Factor (Percentage)	No bicycle collisions
Total Nighttime Collisions	4
Wet Surface Collisions	1
Drug and Alcohol Related Collisions	2
Number of Pedestrian/Cyclist under 15	0
Number of Pedestrian/Cyclist over 65	0

Traffic Data	
Number of Lanes	2
Pedestrian Activity	Low
Midblock Crossing	No
Lighting	Only on N side of street (LED)
Highest Posted Speed Limit	25 MPH
Raised Median	No
Proximity to School	1/2 mile
Proximity to Transit Stop	1/4 mile-
Proximity to Parks	1/2 mile

Collision Rate Per Million Vehicle Miles	
Expected	Actual
1.16	7.94

Collision Breakdown	
Veh vs. Ped	Veh vs. Bike
0	0



Countermeasure Evaluation

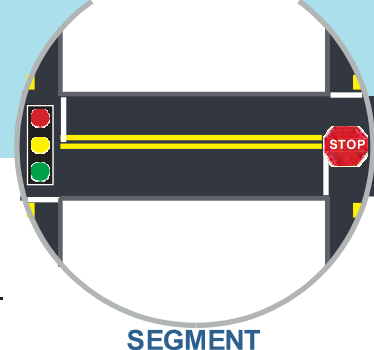
Primary Issues	Recommendations	Potential Countermeasures	CMF (Expected crash reduction factor)	20 Year Safety Benefit	Rough Estimated OPCC	Safety Related B/C
All	Speed feedback sign along curve	Install dynamic/variable speed warning signs	R30 (LRSM) 0.7	\$417,182	\$15,000	28
All	Speed humps, spaced 400 ft apart	Install speed humps	132 (CMFID) 0.6	\$556,243	\$13,125	42
All	Remove centerline along entire length of Ellwood Beach Dr	-	0.95	\$69,530	\$25,000	3
All	Implement permitted parking on street	-	0.95	\$69,530	\$10,000	7
All	Extend red curbs near driveways	-	0.95	\$69,530	\$6,000	12



Project Template: Location #4 (Segment Project Type)

Project Name: Calle Real Segment
Agency Name: City of Goleta
Contact Name: James Winslow
Email: JWinslow@cityofgoleta.org

Prepared by: Kimley-Horn
Checked by: Jason Melchor, P.E.
Date: December 2022



SEGMENT

Project Location Description & Maps:

Segment: Calle Real from Encina Lane to Kingston Avenue

Examples of Similar Intersections: Hollister Ave from Fairview Ave to Kellogg Ave; Hollister Ave from Pacific Oaks Rd to Storke Rd



Traffic and Geometric Data:

Collision Data	
Total Collisions (2014-2019)	39
Fatality and Injury Collisions	Fatal Injury - 0 Severe Injury - 1 Visible Injury - 7
Pedestrian Action (Percentage)	Crossing In Crosswalk (0%) Crossing Not in Crosswalk (0%)
Bicycle Factor (Percentage)	2 bicycle collisions (5%)
Total Nighttime Collisions	10
Wet Surface Collisions	4
Drug and Alcohol Related Collisions	3
Number of Pedestrian/Cyclist under 15	0
Number of Pedestrian/Cyclist over 65	1

Traffic Data	
Number of Lanes	5
Pedestrian Activity	High
Midblock Crossing	Pedestrian Hybrid Beacon
Lighting	All sides (LED)
Highest Posted Speed Limit	35 MPH
Raised Median	No
Proximity to School	1/2 mile
Proximity to Transit Stop	<1/4 mile
Proximity to Parks	1/2 mile

Collision Rate Per Million Vehicle Miles	
Expected	Actual
1.24	2.96

Collision Breakdown	
Veh vs. Ped	Veh vs. Bike
1	1



Countermeasure Evaluation

Primary Issues	Recommendations	Potential Countermeasures	CMF (Expected crash reduction factor)	20 Year Safety Benefit	Rough Estimated OPCC	Safety Related B/C
All	Conduct speed study and implement consistent speed limit on N/S side of road if possible	-	0.95	\$408,541	\$20,000	20
Broadside	Evaluate consolidation of driveways and offsets to prevent broadside collisions	-	0.95	\$227,189	\$50,000	5
All	Center raised medians (2-4 ft wide) with back to back left turn pockets	Install raised median	0.75 (R08)	\$1,225,623	\$75,000	16
Bike & Ped	Install Class IV bicycle lanes	Install bicycle lanes	0.65 (R36)	\$331,701	\$255,600	1
All	Consider Complete Streets study along Calle Real					



Project Template: Location #5 (Segment Project Type)

Project Name: Alondra Dr Segment
Agency Name: City of Goleta
Contact Name: James Winslow
Email: JWinslow@cityofgoleta.org

Prepared by: Kimley-Horn
Checked by: Jason Melchor, P.E.
Date: December 2022

SEGMENT

Project Location Description & Maps:

Segment: Alondra Drive from Nectarine Avenue to Mallard Avenue

Examples of Similar Intersections: Mandarin Dr from Fairview Ave to Nectarine Ave; Stow Canyon Rd from Arundel Rd to Cambridge Dr



Traffic and Geometric Data:

Collision Data	
Total Collisions (2014-2019)	5
Fatality and Injury Collisions	Fatal Injury - 0 Severe Injury - 0 Visible Injury - 2
Pedestrian Action (Percentage)	Crossing In Crosswalk (0%) Crossing Not in Crosswalk (0%)
Bicycle Factor (Percentage)	No bicycle collisions
Total Nighttime Collisions	2
Wet Surface Collisions	0
Drug and Alcohol Related Collisions	0
Number of Pedestrian/Cyclist under 15	0
Number of Pedestrian/Cyclist over 65	0

Traffic Data	
Number of Lanes	2
Pedestrian Activity	Low
Midblock Crossing	No
Lighting	Only on N side of street (LED)
Highest Posted Speed Limit	25 mph
Raised Median	No
Proximity to School	1/2 mile
Proximity to Transit Stop	1/4 mile
Proximity to Parks	1/2 mile

Collision Rate Per Million Vehicle Miles	
Expected	Actual
1.16	18.64

Collision Breakdown	
Veh vs. Ped	Veh vs. Bike
0	0



Countermeasure Evaluation

Primary Issues	Recommendations	Potential Countermeasures	CMF (Expected crash reduction factor)	20 Year Safety Benefit	Rough Estimated OPCC	Safety Related B/C
All	Install curve warning signage	Install curve advance warning signs	R28 (LRSM) 0.75	\$270,390	\$1,200	225
All	Extend red curb one space beyond ECR onto Alondra Dr	-	0.95	\$54,078	\$500	108
Night	Lighting analysis to determine if more streetlights are necessary	Add segment lighting	R1 (LRSM) 0.65	\$363,030	\$2,500	145



Project Template: Location #6 (Intersection Project Type)

Project Name: Hollister Ave @ Storke Rd
Agency Name: City of Goleta
Contact Name: James Winslow
Email: JWinslow@cityofgoleta.org

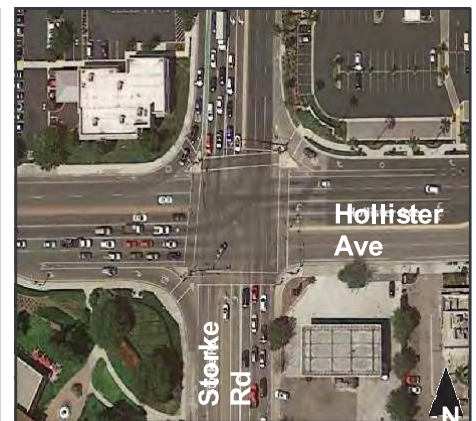
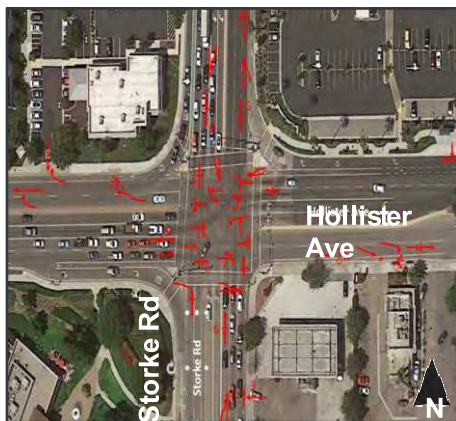
Prepared by: Kimley-Horn
Checked by: Jason Melchor, P.E.
Date: December 2022



Project Location Description & Maps:

Intersection: Hollister Avenue and Storke Road

Examples of Similar Intersections: Hollister Ave and Fairview Ave; Calle Real and Fairview Ave; Hollister Ave and Los Cameros Rd



Traffic and Geometric Data:

Collision Data	
Total Collisions (2014-2019)	76
Fatality and Injury Collisions	Fatal Injury - 1 Severe Injury - 1 Visible Injury - 12
Pedestrian Action (Percentage)	Crossing In Crosswalk (66%) Crossing Not in Crosswalk (30%)
Bicycle Factor (Percentage)	4 bicycle collisions (6%)
Total Nighttime Collisions	15
Wet Surface Collisions	5
Drug and Alcohol Related Collisions	2
Number of Pedestrian/Cyclist under 15	3
Number of Pedestrian/Cyclist over 65	1

Traffic Data	
Number of Approaches	4
Pedestrian Activity	High (54 AM/73PM)
Crosswalk Condition	Great
Control Type	Signalized
Lighting	All LED
Highest Posted Speed Limit	45
Raised Median	All Approaches
Proximity to School	1/2 mile
Proximity to Transit Stop	At intersection
Proximity to Parks	1/2 mile

Collision Breakdown	
Veh vs. Ped	Veh vs. Bike
3	4



Countermeasure Evaluation

Primary Issues	Recommendations	Potential Countermeasures	CMF (Expected crash reduction factor)	20 Year Safety Benefit	Rough Estimated OPCC	Safety Related B/C
Pedestrian	Implement LPI on all ped phases	Modify signal phasing to implement a Leading Pedestrian Interval (LPI)	S22 (LRSM) 0.86	\$18,601	\$12,500	1
Pedestrian	Crosswalk improvements at intersections	Install high-visibility crosswalk	4124 (CMF ID) 0.81	\$25,245	\$10,000	3
All	Evaluate moving bus stop to extend right receiving lane	-	0.95	\$1,175,074	\$15,000	78
All	Install "watch for slow traffic" signage on NBR lane	-	0.95	\$1,175,074	\$4,000	294
All	Median adjustments and lane restriping on Storke Rd	-	0.95	\$1,175,074	\$15,000	78
All	Install free right turn on NB Storke onto Hollister	Install right-turn lane	5650 (CMF ID) 0.7	\$7,050,443	\$112,000	63
All	Install retroreflective backplates on all signal heads	Improve signal hardware: lenses, back-plates with retroreflective borders, mounting, size, and number	S2 (LRSM) 0.85	\$3,525,221	\$9,400	375
All	Potential roundabout conversion	Convert intersection to roundabout (from signal)	S18 (LRSM) 0.756	\$5,734,360	\$4,000,000	1
Pedestrian & Bicycle	Install Class I bicycle lanes along Storke Rd from US-101 to Marketplace Dr	Install bike lanes	R36 (LRSM) 0.65	\$709,906	\$416,000	2

Additional Notes

- Planned Hollister and Storke corridor projects at this location



Project Template: Location #7 (Intersection Project Type)

Project Name: Fairview Ave @
Calle Real
Agency Name: City of Goleta
Contact Name: James Winslow
Email: JWinslow@cityofgoleta.org

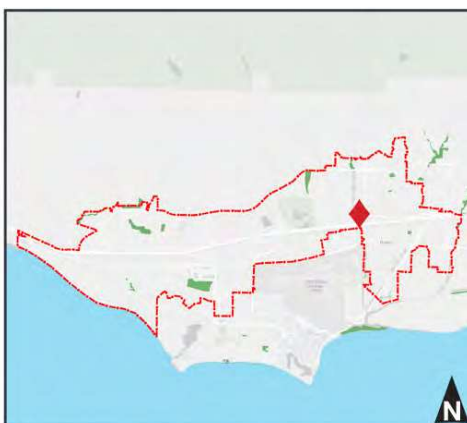
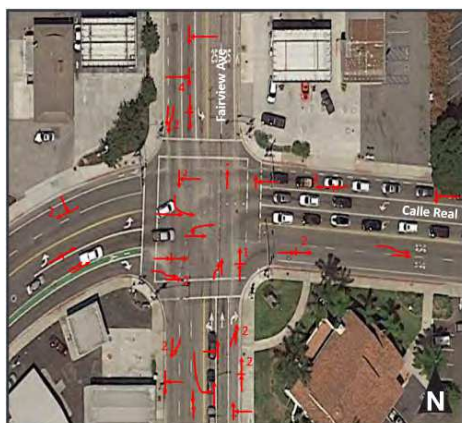
Prepared by: Kimley-Horn
Checked by: Jason Melchor, P.E.
Date: December 2022



Project Location Description & Maps:

Intersection: Fairview Avenue and Calle Real

Examples of Similar Intersections: Hollister Avenue and Fairview Avenue; Hollister Avenue and Patterson Avenue



Traffic and Geometric Data:

Collision Data	
Total Collisions	42
Fatality and Injury Collisions	Fatal Injury - 0 Severe Injury - 0 Visible Injury - 2
Pedestrian Action (Percentage)	Crossing In Crosswalk (0%) Crossing Not in Crosswalk (0%)
Bicycle Factor (Percentage)	1 bicycle collisions (2%)
Total Nighttime Collisions	10
Wet Surface Collisions	2
Drug and Alcohol Related Collisions	5
Number of Pedestrian/Cyclist under 15	0
Number of Pedestrian/Cyclist over 65	0

Traffic Data	
Number of Approaches	4
Pedestrian Activity	Medium (14 AM peak/ 27 AM peak)
Crosswalk Condition	Great
Control Type	Signalized
Lighting	All LED
Highest Posted Speed Limit	35 MPH
Raised Median	No
Proximity to School	1/4 mile
Proximity to Transit Stop	<1/4 mile
Proximity to Parks	1/2 mile

Collision Breakdown	
Veh vs. Ped	Veh vs. Bike
0	1



Countermeasure Evaluation:

Primary Issues	Recommendations	Potential Countermeasures	CMF (Expected crash reduction factor)	20 Year Safety Benefit	Rough Estimated OPCC	Safety Related B/C
All	Install signage to let drivers know which lane they should be in	-	0.95	\$200,399	\$6,000	33
All	Operate split phasing along E/W movements	Provide split phases	4119 (CMFID) 0.61	\$1,563,115	\$92,000	17
All	Install enhanced freeway lane markings for two LTlanes	-	0.95	\$200,399	\$15,000	13
All	Install signage clarifying LTlanes for US-101 N/S	-	0.95	\$200,399	\$6,000	33
All	Convert intersection to roundabout	Convert intersection to roundabout (from signal)	0.65 (S16)	\$1,685,040	\$2,500,000	0.67



Project Template: Location #8 (Intersection Project Type)

Project Name: Storke Road and Marketplace Drive
Agency Name: City of Goleta
Contact Name: James Winslow
Email: JWinslow@cityofgoleta.org

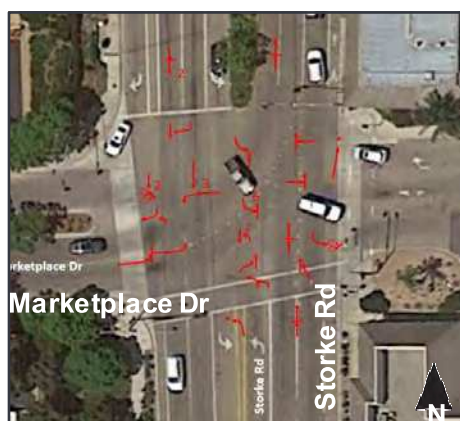
Prepared by: Kimley-Horn
Checked by: Jason Melchor, P.E.
Date: December 2022



Project Location Description & Maps:

Intersection: Storke Rd and Marketplace Dr

Examples of Similar Intersections: Hollister Ave and Village Way; Los Carneros Rd and Castillian Dr



Traffic and Geometric Data:

Collision Data	
Total Collisions	43
Fatality and Injury Collisions	Fatal Injury - 0 Severe Injury - 0 Visible Injury - 11
Pedestrian Action (Percentage)	Crossing In Crosswalk (0%) Crossing Not in Crosswalk (0%)
Bicycle Factor (Percentage)	1 bicycle collision (3%)
Total Nighttime Collisions	15
Wet Surface Collisions	3
Drug and Alcohol Related Collisions	1
Number of Pedestrian/Cyclist under 15	0
Number of Pedestrian/Cyclist over 65	0

Traffic Data	
Number of Approaches	4
Pedestrian Activity	Medium (30 AM peak/48 PM peak)
Crosswalk Condition	Great
Control Type	Signalized
Lighting	All LED
Highest Posted Speed Limit	45 MPH
Raised Median	On N approach
Proximity to School	1/4 mile
Proximity to Transit Stop	At intersection
Proximity to Parks	1/2 mile

Collision Breakdown	
Veh vs. Ped	Veh vs. Bike
0	1



Countermeasure Evaluation

Primary Issues	Recommendations	Potential Countermeasures	CMF (Expected crash reduction factor)	20 Year Safety Benefit	Rough Estimated OPCC	Safety Related B/C
All	Change NB/SB left turn from protected permissive to protected	Change from permitted-protected to protected on major approach	340 (CMF ID) 0.58	\$4,773,860	\$110,000	80
All	Potential conversion to roundabout	Convert intersection to roundabout (from signal)	9445 (CMF ID) 0.756	\$2,773,385	\$2,500,000	1
Pedestrian & Bicycle	Install green paint along bike lanes	Install bike lanes	R36 (LRSM) 0.65	\$166,017	\$6,000	28

Additional Notes

- This location is on Storke Rd corridor. Improvements would be in tandem with improvements at Hollister/Storke



Project Template: Location #9 (Intersection Project Type)

Project Name: Glen Annie Rd @ Cathedral Oaks Rd

Agency Name: City of Goleta

Contact Name: James Winslow

Email: JWinslow@cityofgoleta.org

Prepared by: Kimley-Horn

Checked by: Jason Melchor, P.E.

Date: December 2022

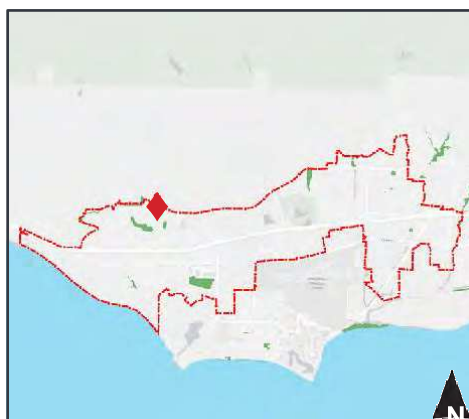


INTERSECTION

Project Location Description & Maps:

Intersection: Glen Annie Road and Cathedral Oaks Road

Examples of Similar Intersections: Cathedral Oaks Road and Los Cameros Road; Cathedral Oaks Road and Winchester Canyon Road



Traffic and Geometric Data:

Collision Data	
Total Collisions	19
Fatality and Injury Collisions	Fatal Injury - 0 Severe Injury - 0 Visible Injury - 10
Pedestrian Action (Percentage)	Crossing In Crosswalk (0%) Crossing Not in Crosswalk (0%)
Bicycle Factor (Percentage)	2 bicycle collisions (14%)
Total Nighttime Collisions	2
Wet Surface Collisions	1
Drug and Alcohol Related Collisions	1
Number of Pedestrian/Cyclist under 15	0
Number of Pedestrian/Cyclist over 65	0

Traffic Data	
Number of Approaches	4
Pedestrian Activity	Light (1 AM peak/0 PM peak)
Crosswalk Condition	Great
Control Type	Signalized
Lighting	All LED
Highest Posted Speed Limit	50 MPH
Raised Median	No
Proximity to School	1/4 mile
Proximity to Transit Stop	-
Proximity to Parks	> 1 mile

Collision Breakdown	
Veh vs. Ped	Veh vs. Bike
0	2



Countermeasure Evaluation

Primary Issues	Recommendations	Potential Countermeasures	CMF (Expected crash reduction factor)	20 Year Safety Benefit	Rough Estimated OPCC	Safety Related B/C
All	Install advanced signal warning signage	Install advance warning signs (positive guidance)	1684 (CMF ID) 0.7	\$1,950,317	\$10,000	195
All	Implement protected left-turn on NB movement	Change permissive left-turn phasing to protected only	4144 (CMF ID) 0.45	\$3,064,783	\$30,000	102.16
All	Conduct speed survey and lower speed limit if feasible	-	0.95	\$278,617	\$5,000	56
All	Install roundabout if feasible	Convert intersection to roundabout (from signal)	9445 (CMF ID) 0.76	\$1,359,649	\$2,000,000	0.68



Project Template: Location #10 (Intersection Project Type)

Project Name: Calle Real @
Encina Lane
Agency Name: City of Goleta
Contact Name: James Winslow
Email: JWinslow@cityofgoleta.org

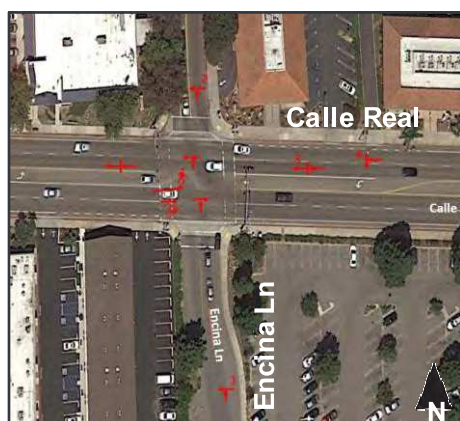
Prepared by: Kimley-Horn
Checked by: Jason Melchor, P.E.
Date: December 2022



Project Location Description & Maps:

Intersection: Calle Real and Encina Lane

Examples of Similar Intersections: Calle Real and Kingston Avenue; Hollister Avenue and Nectarine/Pine; Hollister Avenue and Kellogg Ave



Traffic and Geometric Data:

Collision Data	
Total Collisions (2014-2019)	15
Fatality and Injury Collisions	Fatal Injury - 0 Severe Injury - 0 Visible Injury - 3
Pedestrian Action (Percentage)	Crossing In Crosswalk (0%) Crossing Not in Crosswalk (0%)
Bicycle Factor (Percentage)	1 bicycle collision (7 %)
Total Nighttime Collisions	2
Wet Surface Collisions	1
Drug and Alcohol Related Collisions	0
Number of Pedestrian/Cyclist under 15	0
Number of Pedestrian/Cyclist over 65	1

Traffic Data	
Number of Approaches	4
Pedestrian Activity	Medium (18 AM peak/21 PM peak)-
Crosswalk Condition	Fair
Control Type	Signalized
Lighting	All LED
Highest Posted Speed Limit	35 MPH
Raised Median	No
Proximity to School	1/4 mile
Proximity to Transit Stop	At intersection
Proximity to Parks	1/2 mile

Collision Breakdown	
Veh vs. Ped	Veh vs. Bike
0	1



Site Visit Notes:

- No N/S mast-arm style vehicle heads
- Crosswalks are not aligned with curb ramps
- Dual curb ramps would provide shorter distance for those in wheelchairs
- Encina Lane is used as a bypass for Fairview Avenue

Countermeasure Evaluation

Primary Issues	Recommendations	Potential Countermeasures	CMF (Expected crash reduction factor)	20 Year Safety Benefit	Rough Estimated OPCC	Safety Related B/C
Pedestrian	Align curb ramps with crosswalks	Install high-visibility crosswalk	4124 (CMF ID) 0.81	\$8,415	\$10,000	0.84
Pedestrian	Install curb extensions	-	0.95	\$2,214	\$60,000	0.04
All	Install retroreflective backplates on signals	Improve signal hardware: lenses, back-plates with retroreflective borders, mounting, size, and number	S2 (LRSM) 0.85	\$486,263	\$8,500	57.21
All	Add mast arms on Encina Ln signals	Convert signal from pedestal-mounted to mast arm	1420 (CMFID) 0.51	\$1,588,460	\$80,000	19.86



Project Template: Location #11 (Intersection Project Type)

Project Name: Cathedral Oaks Rd @ Fairview Ave

Agency Name: City of Goleta

Contact Name: James Winslow

Email: JWinslow@cityofgoleta.org

Prepared by: Kimley-Horn

Checked by: Jason Melchor, P.E.

Date: December 2022

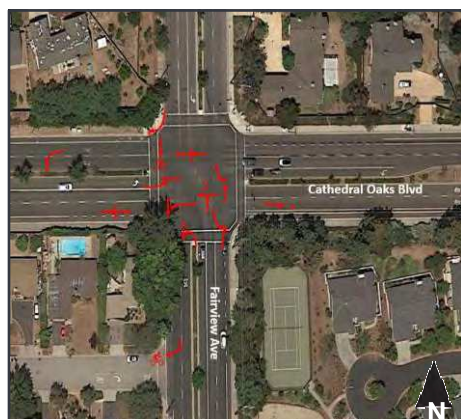


INTERSECTION

Project Location Description & Maps:

Intersection: Cathedral Oaks Road and Fairview Avenue

Examples of Similar Intersections: Cathedral Oaks Road and Fairview Avenue; Hollister Avenue and Fairview Avenue



Traffic and Geometric Data:

Collision Data	
Total Collisions (2014-2019)	14
Fatality and Injury Collisions	Fatal Injury - 0 Severe Injury - 0 Visible Injury - 6
Pedestrian Action (Percentage)	Crossing In Crosswalk (0%) Crossing Not in Crosswalk (0%)
Bicycle Factor (Percentage)	1 bicycle collision (8%)
Total Nighttime Collisions	7
Wet Surface Collisions	1
Drug and Alcohol Related Collisions	0
Number of Pedestrian/Cyclist under 15	1
Number of Pedestrian/Cyclist over 65	1

Traffic Data	
Number of Approaches	4
Pedestrian Activity	Medium (18 AM peak/21 PM peak)
Crosswalk Condition	Fair
Control Type	Signalized
Lighting	All LED
Highest Posted Speed Limit	35 MPH
Raised Median	No
Proximity to School	1/4 mile
Proximity to Transit Stop	At intersection
Proximity to Parks	1 mile

Collision Breakdown	
Veh vs. Ped	Veh vs. Bike
0	1



Countermeasure Evaluation

Primary Issues	Recommendations	Potential Countermeasures	CMF (Expected crash reduction factor)	20 Year Safety Benefit	Rough Estimated OPCC	Safety Related B/C
All	Implement protected phasing on N/S movements (may reduce broadside collisions by preventing conflicting movements)	Change permissive left-turn phasing to protected only	4144 (CMF ID) 0.45	\$2,231,133	\$30,000	74
All	Install retroreflective backplates on signals (may reduce collisions by increasing visibility of upcoming signals)	Improve signal hardware: lenses, back-plates with retroreflective borders, mounting, size, and number	S2 (LRSM) 0.85	\$608,491	\$7,600	80



Project Template: Location #12 (Intersection Project Type)

Project Name: Calle Koral @
Los Carneros Rd
Agency Name: City of Goleta
Contact Name: James Winslow
Email: JWinslow@cityofgoleta.org

Prepared by: Kimley-Horn
Checked by: Jason Melchor, P.E.
Date: December 2022



INTERSECTION

Project Location Description & Maps:

Intersection: Calle Koral and Los Carneros Rd

Examples of Similar Intersections: Hollister Ave and Calle Koral; Hollister Ave and Fairview Ave; Calle Real and Fairview Ave



Traffic and Geometric Data:

Collision Data	
Total Collisions (2014-2019)	17
Fatality and Injury Collisions	Fatal Injury - 0 Severe Injury - 0 Visible Injury - 3
Pedestrian Action (Percentage)	Crossing In Crosswalk (0%) Crossing Not in Crosswalk (0%)
Bicycle Factor (Percentage)	No bicycle collisions
Total Nighttime Collisions	4
Wet Surface Collisions	4
Drug and Alcohol Related Collisions	0
Number of Pedestrian/Cyclist under 15	0
Number of Pedestrian/Cyclist over 65	0

Traffic Data	
Number of Approaches	4
Pedestrian Activity	Low (6 AM peak/13 PM peak)
Crosswalk Condition	Great
Control Type	Signalized
Lighting	All LED
Highest Posted Speed Limit	45 MPH
Raised Median	On south approach
Proximity to School	1 mile
Proximity to Transit Stop	<1/4 mile
Proximity to Parks	1/2 mile

Collision Breakdown	
Veh vs. Ped	Veh vs. Bike
0	0



Countermeasure Evaluation

Primary Issues	Recommendations	Potential Countermeasures	CMF (Expected crash reduction factor)	20 Year Safety Benefit	Rough Estimated OPCC	Safety Related B/C
All	Re-evaluate yellow/all-red timing	Improve signal timing (coordination, phases, red, yellow, or operation)	S3 (LRSM) 0.85	\$757,974	\$12,500	61
All	Install retroreflective backplates on all signals	Improve signal hardware: lenses, back-plates with retroreflective borders, mounting, size, and number	S2 (LRSM) 0.85	\$757,974	\$9,400	81
All	Install signal ahead signage further back along Los Carneros Road	-	0.95	\$1,768,606	\$8,000	221
All	Extend left-turn bay striping by 150' on SB approach	-	0.95	\$252,658	\$20,000	13



Project Template: Location #13 (Intersection Project Type)

Project Name: Storke Rd @ Santa Felicia Dr
Agency Name: City of Goleta
Contact Name: James Winslow
Email: JWinslow@cityofgoleta.org
Prepared by: Kimley-Horn
Checked by: Jason Melchor, P.E.
Date: December 2022



INTERSECTION

Project Location Description & Maps:

Intersection: Storke Rd and Santa Felicia Dr

Examples of Similar Intersections: Hollister Ave and Cremona Dr; Hollister Ave and Orange Ave; Fairview Ave and Stow Canyon Rd



Traffic and Geometric Data:

Collision Data	
Total Collisions (2014-2019)	14
Fatality and Injury Collisions	Fatal Injury - 0 Severe Injury - 0 Visible Injury - 4
Pedestrian Action (Percentage)	Crossing In Crosswalk (0%) Crossing Not in Crosswalk (0%)
Bicycle Factor (Percentage)	3 bicycle collisions (21%)
Total Nighttime Collisions	1
Wet Surface Collisions	1
Drug and Alcohol Related Collisions	2
Number of Pedestrian/Cyclist under 15	1
Number of Pedestrian/Cyclist over 65	0

Traffic Data	
Number of Approaches	4
Pedestrian Activity	Medium (23 AM peak/36 PM peak)
Crosswalk Condition	None
Control Type	Signalized
Lighting	Only NE corner (LED)
Highest Posted Speed Limit	45 MPH
Raised Median	On N approach
Proximity to School	< 1/4 mile
Proximity to Transit Stop	At intersection
Proximity to Parks	< 1/4 mile

Collision Breakdown	
Veh vs. Ped	Veh vs. Bike
1	3



Countermeasure Evaluation

Primary Issues	Recommendations	Potential Countermeasures	CMF (Expected crash reduction factor)	20 Year Safety Benefit	Rough Estimated OPCC	Safety Related B/C
All	Move stop bar on EB approach further up	-	0.95	\$138,395	\$2,500	55
All	Move median on Storke Rd up further	Install raised median on approaches (S.I.)	S12 (LRSM) 0.75	\$691,974	\$5,750	120
Bicycle	Install green paint to bike lanes	-	0.95	\$94,772	\$4,000	24



Project Template: Location #14 (Intersection Project Type)

Project Name: Cathedral Oaks Rd & Los Carneros Rd

Agency Name: City of Goleta

Contact Name: James Winslow

Email: JWinslow@cityofgoleta.org

Prepared by: Kimley-Horn

Checked by: Jason Melchor, P.E.

Date: December 2022



Project Location Description & Maps:

Intersection: Cathedral Oaks Rd & Los Carneros Rd

Examples of Similar Intersections: Cathedral Oaks Rd & Placer Dr; Cathedral Oaks Rd & Evergreen Dr



Traffic and Geometric Data:

Collision Data	
Total Collisions (2014-2019)	6
Fatality and Injury Collisions	Fatal Injury - 0 Severe Injury - 2 Visible Injury - 1
Pedestrian Action (Percentage)	Crossing In Crosswalk (0%) Crossing Not in Crosswalk (0%)
Bicycle Factor (Percentage)	2 bicycle collisions (40%)
Total Nighttime Collisions	0
Wet Surface Collisions	1
Drug and Alcohol Related Collisions	1
Number of Pedestrian/Cyclist under 15	0
Number of Pedestrian/Cyclist over 65	0

Traffic Data	
Number of Approaches	3
Pedestrian Activity	Medium (3 AM peak/1 PM peak)
Crosswalk Condition	None
Control Type	Unsignalized
Lighting	SE & SW corners (LED)
Highest Posted Speed Limit	50 MPH
Raised Median	None
Proximity to School	< 1/2 mile
Proximity to Transit Stop	<1/2 mile
Proximity to Parks	<1/4 mile

Collision Breakdown	
Veh vs. Ped	Veh vs. Bike
0	2



Countermeasure Evaluation

Primary Issues	Recommendations	Potential Countermeasures	CMF (Expected crash reduction factor)	20 Year Safety Benefit	Rough Estimated OPCC	Safety Related B/C
All	Convert intersection to roundabout	Convert intersection to roundabout (from 2-way stop or Yield control)	0.65 (NS05)	\$544,055	\$1,500,00	0.36
All	Install Signals	Install Signals	0.30 (NS03)	\$1,500,00	\$378,00	0.73

ATTACHMENT 4

Resolution No. 24-__ entitled, “A Resolution of the City Council of the City of Goleta, California, in Support of Vision Zero Efforts to Eliminate Fatal and Severe Transportation Related Collisions”

RESOLUTION NO. 24-____

**RESOLUTION OF THE CITY COUNCIL OF THE CITY OF
GOLETA, CALIFORNIA, IN SUPPORT OF VISION ZERO
EFFORTS TO ELIMINATE FATAL AND SEVERE
TRANSPORTATION RELATED COLLISIONS**

**THE CITY COUNCIL OF THE CITY OF GOLETA DOES HEREBY RESOLVE AS
FOLLOWS:**

WHEREAS, each year more than 30,000 people are killed on streets in the United States in traffic collisions and 23 were killed in Goleta during the 15-year period between 2007 and 2021 in over 160 severe collisions;

WHEREAS, traffic fatalities in America hit a sixteen-year high in 2021 and are estimated to have exceeded 42,000 people, with pedestrians and cyclists accounting for a disproportionate share;

WHEREAS, the Centers for Disease Control has indicated that between 2015 and 2019, America's traffic death rate was about double the average of peer nations;

WHEREAS, Vision Zero is a comprehensive strategy to eliminate all traffic fatalities and severe injuries using a multi-disciplinary approach, including education, enforcement, and engineering measures;

WHEREAS, a core principal of Vision Zero is that traffic deaths are preventable and unacceptable;

WHEREAS, cities across the world have adopted and implemented Vision Zero and successfully reduced traffic fatalities and severe injuries occurring on city streets by significant margins; and

WHEREAS, a safe, reliable, and efficient multi-modal transportation system is essential for a thriving Goleta.

**NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF GOLETA,
AS FOLLOWS:**

SECTION 1. Adopts the goal of eliminating traffic deaths and serious injuries and endorses comprehensive and holistic Vision Zero principles as a means to achieve this goal.

SECTION 2. Directs staff to (a) incorporate Vision Zero goals as a guiding principle for transportation planning, design of streets and sidewalks, and

maintenance of public rights of way and (b) develop additional implementation actions to realize Vision Zero goals.

SECTION 3. The City Clerk shall certify to the passage and adoption of this resolution and enter it into the book of original resolutions.

PASSED, APPROVED AND ADOPTED this 20th day of February, 2024.

PAULA PEROTTE, MAYOR

ATTEST:

APPROVED AS TO FORM:

DEBORAH LOPEZ
CITY CLERK

MEGAN GARIBALDI
CITY ATTORNEY

STATE OF CALIFORNIA)
COUNTY OF SANTA BARBARA) ss.
CITY OF GOLETA)

I, DEBORAH LOPEZ, City Clerk of the City of Goleta, California, DO HEREBY CERTIFY that the foregoing Resolution No. 24-____ was duly adopted by the City Council of the City of Goleta at a regular meeting held on the 20th day of February, 2024, by the following vote of the Council:

AYES: COUNCILMEMBERS

NOES: COUNCILMEMBERS

ABSENT: COUNCILMEMBERS

(SEAL)

DEBORAH LOPEZ
CITY CLERK

ATTACHMENT 5

Presentation: Progress Report on Bicycle/Pedestrian Master Plan, Goleta Traffic Safety Study and Adoption of a Resolution in Support of Vision Zero Efforts



Progress Report: Bicycle/Pedestrian Masterplan, Goleta Traffic Safety Study & Resolution in Support of Vision Zero Efforts

February 20, 2024

Agenda

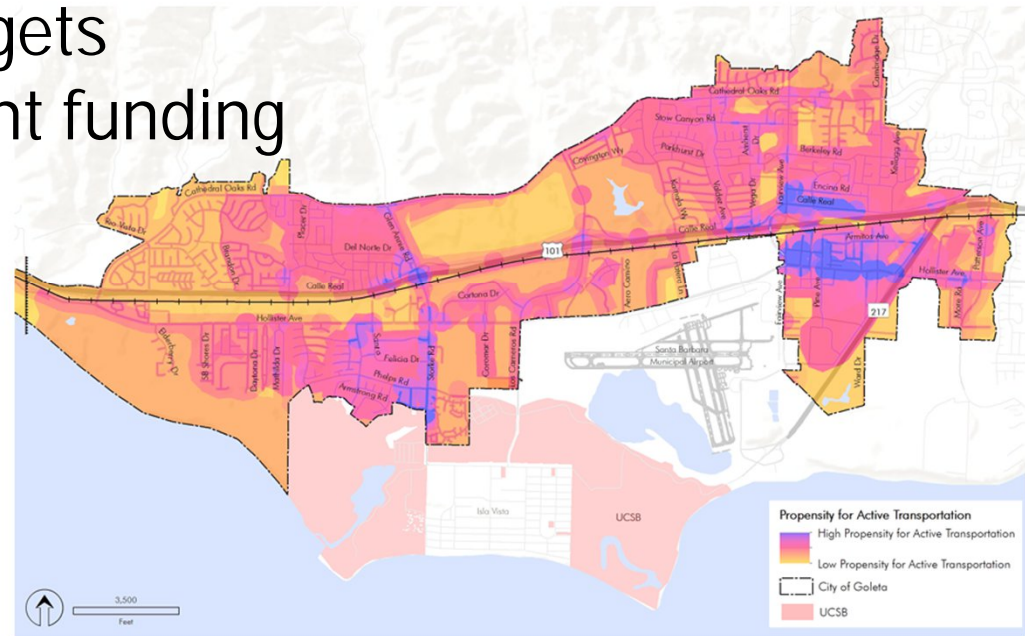
- Bicycle / Pedestrian Master Plan (BPMP)
- Goleta Traffic Safety Study (GTSS)
- Vision Zero
- Next Steps

Background: Past Traffic Safety Efforts

- 2018 - Bicycle / Pedestrian Master Plan (BPMP)
- 2022 – Goleta Traffic Safety Study (GTSS)

Bicycle and Pedestrian Master Plan (BPMP)

- Supports an active transportation system
- Recommends improvements
- Set performance targets
- Opens access to grant funding



BPMP Performance Measures



Complete the current list of Capital Improvement Program (CIP) bicycle and pedestrian projects by 2035



ON PACE



Increase walking and bicycling mode share to **15%** by 2025 and **20%** by 2030



MET (15.9%)



Reduce driving alone commute by **10%** (to 60%) by 2030



MET (57.8%)



Reach an "Overall Score" of "**3**" in the PlacesForBikes City Ranking by 2025



70th Percentile in U.S.



Ensure a variety of infrastructure improvements are implemented by 2025



MET (13 Projects)



Percentage of School-aged Children Walking & Bicycling to Schools – **13%** combined; **15%** increase by 2030

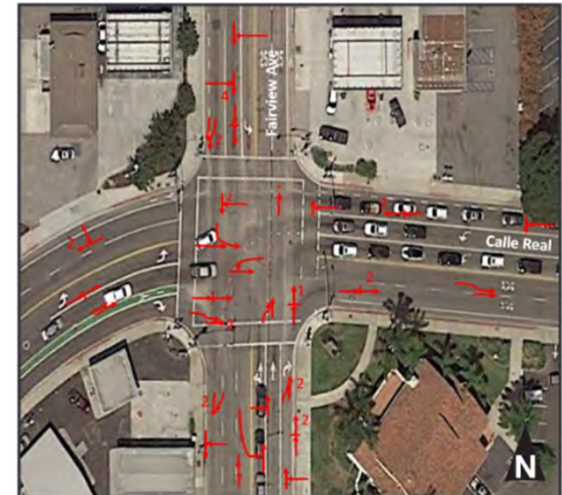
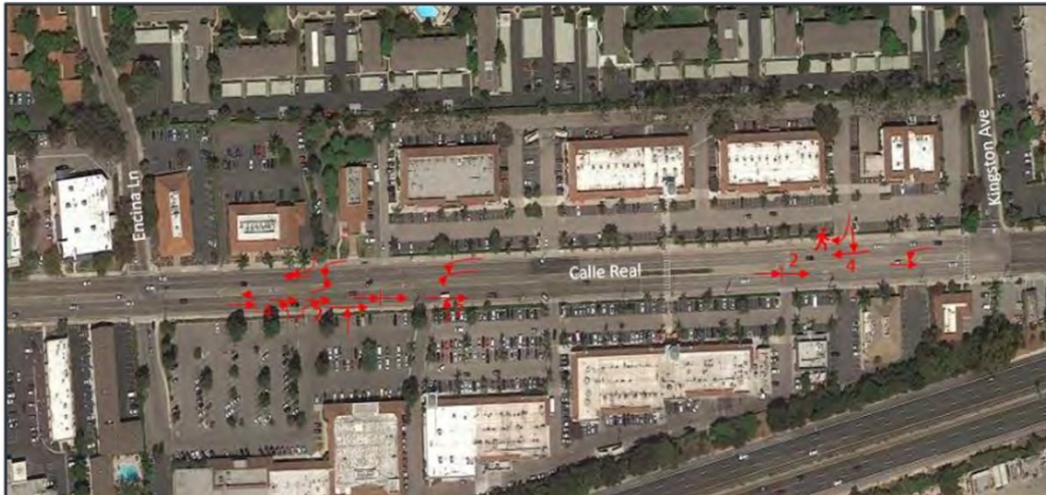


More Data Needed



Goleta Traffic Safety Study

- Reviews collision data
- Identifies high-risk roadway characteristics
- Prioritizes improvements on high collision concentration street segments and intersections



GTSS Recommended Improvements

Street Segments:

- Cathedral Oaks Rd.: Glen Annie Rd. to Los Carneros Rd.
- Patterson Ave.: Hollister Ave. to Debbie Ln.
- Ellwood Beach Dr.: Strehle Ln. to Entrance Rd.
- Calle Real: Encina Ln. to Kingston Ave.
- Alondra Dr.: Nectarine Ave. to Mallard Ave.



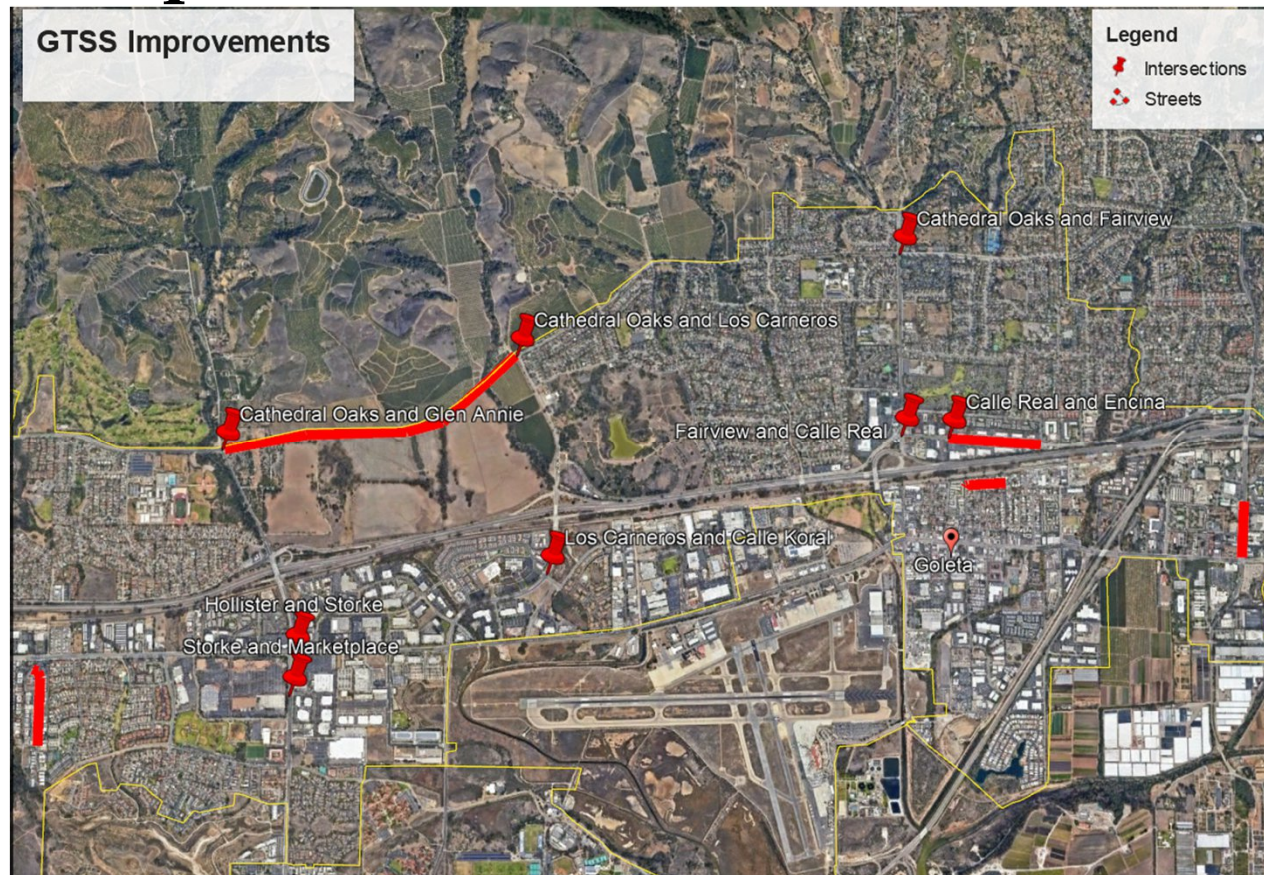
GTSS Recommended Improvements

Intersections

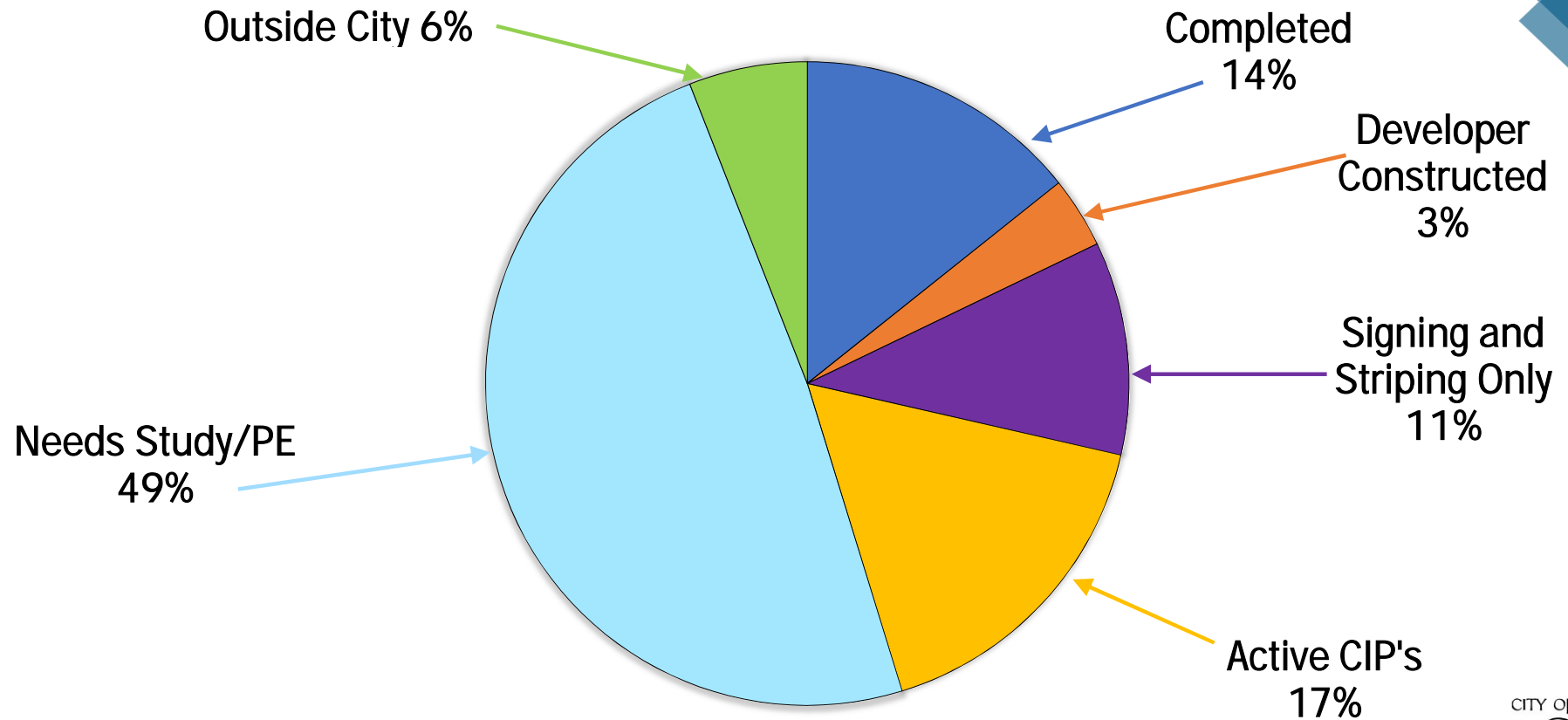
- Hollister Avenue and Storke Road
- Fairview Avenue and Calle Real
- Storke Road and Marketplace Drive
- Cathedral Oaks Road and Glen Annie Road
- Calle Real and Encina Lane
- Cathedral Oaks and Fairview Avenue
- Los Carneros Avenue and Calle Koral
- Cathedral Oaks Rd and Los Carneros Road



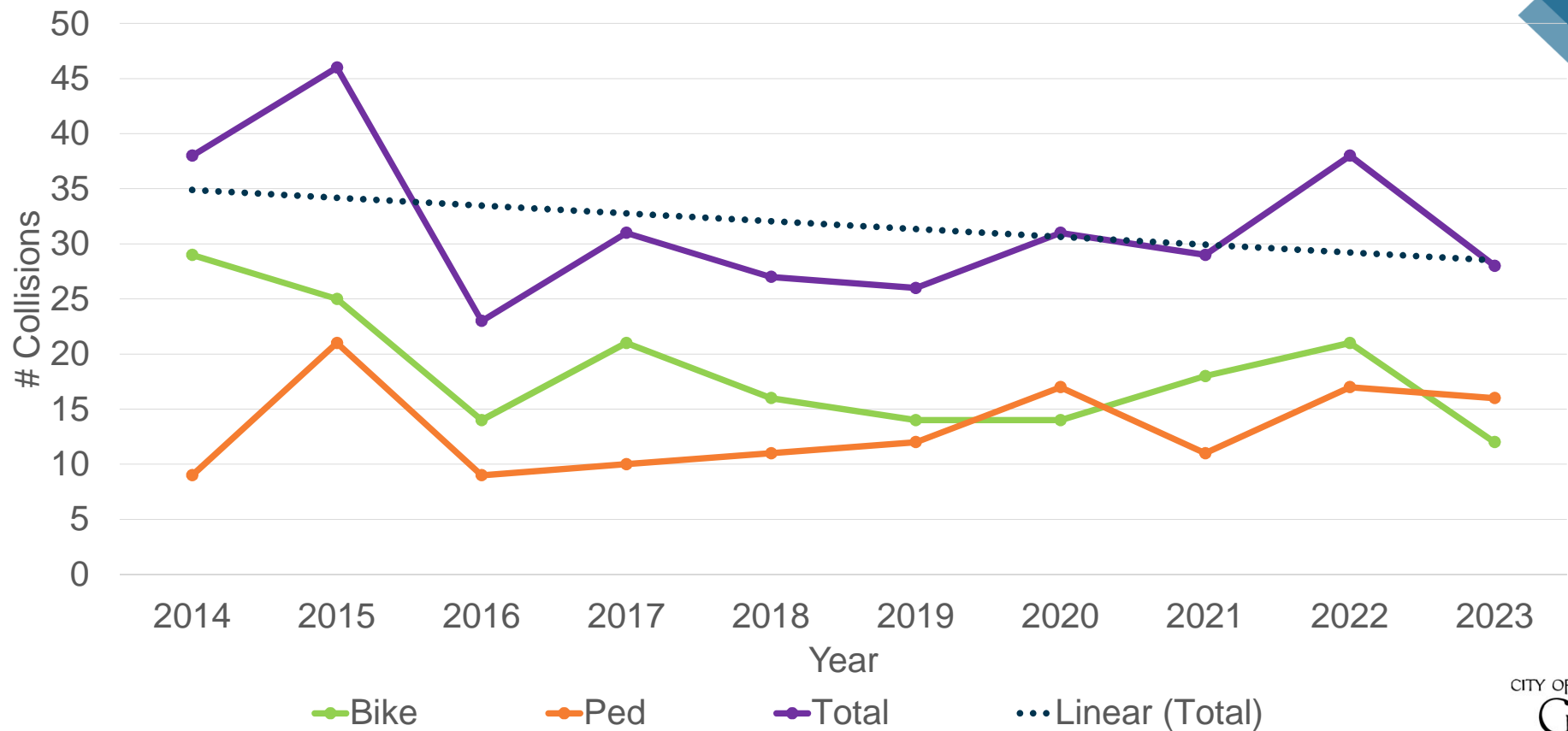
GTSS Improvements: Location Map



BPMP/GTSS Implementation Progress

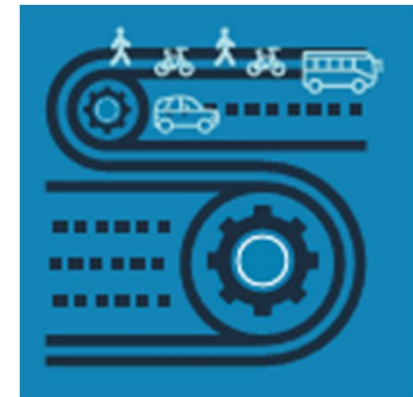


Bicycle and Pedestrian Serious Injury/Fatality Trend



Vision Zero

- Originated in Sweden (1997)
- Adopted by over 45 U.S. cities
- Coordinated system of Engineering, Education and Enforcement
- All collisions cannot be avoided
- Serious collisions are preventable via:
 - Speed reduction
 - Separation of bikes, pedestrians and vehicles



Vision Zero Resolution

Establishes the City of Goleta's commitment to programs, policies and initiatives that:

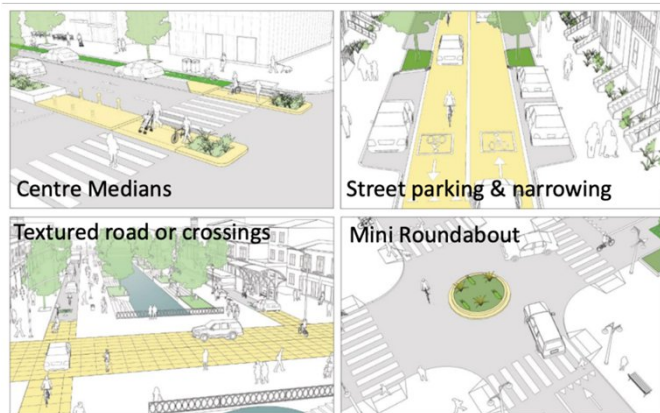
- Prioritize safety
- Eliminate severe injury and fatal collisions

Directs staff to incorporate Vision Zero goals as a guiding principle for transportation planning, design of streets and sidewalks, and maintenance of public rights of way.



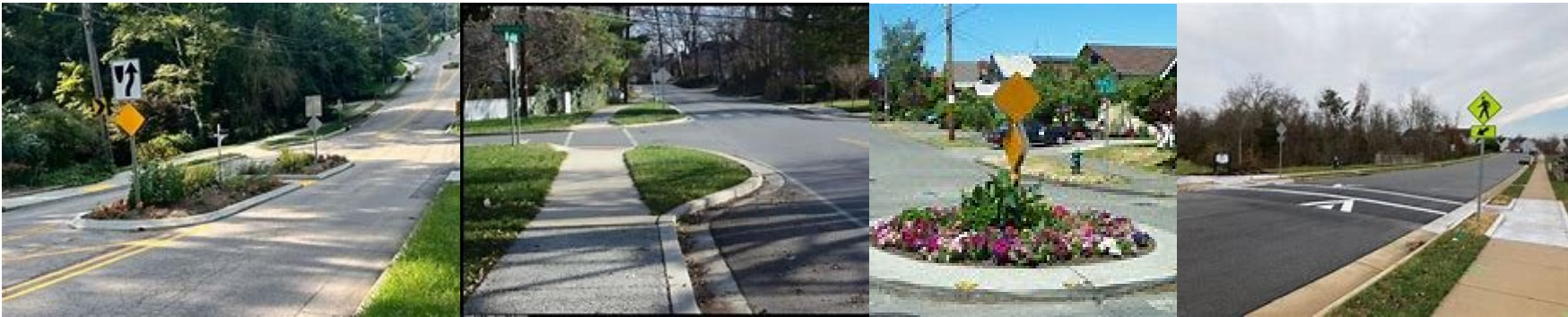
Next Steps

- Neighborhood Traffic Calming Policy
- Reduce Speed Limits (AB 43/1938)



Neighborhood Traffic Calming Policy

- Establishes complexity levels
- Defines eligible roadways
- Sets threshold criteria
- Creates annual budget
- Council review Summer 2024



Reduce Speed Limits (AB 43/1938)

- Context-sensitive, radar enforceable speed limits
- Extends validity period of speed surveys (14 years)
- Business Activity District – 20 or 25 mph
- Additional 5 mph reduction for:
 - Safety Corridors (20% of streets w/ high collision rates)
 - High Concentration of Pedestrians/Bikes
- 12.4mph maximum below 85th percentile speed
- Recommended lower speed limits in May 2024.



Questions?