

## GAP ANALYSIS

A gap analysis was performed to help identify missing links in both bicycle and pedestrian networks. This analysis examined each network as a whole to identify segments that lack existing infrastructure or previously proposed infrastructure from the General Plan or CIP list. Remaining segments were then analyzed further for project viability.

The bicycle network gap analysis resulted in identification of almost exclusively local streets. This finding indicates that the main connectors throughout Goleta are already slated to become bicycle infrastructure, if they are not already. The main focus of recommendations on these already developed corridors therefore assessed whether existing or proposed infrastructure needed to be upgraded in condition or class.

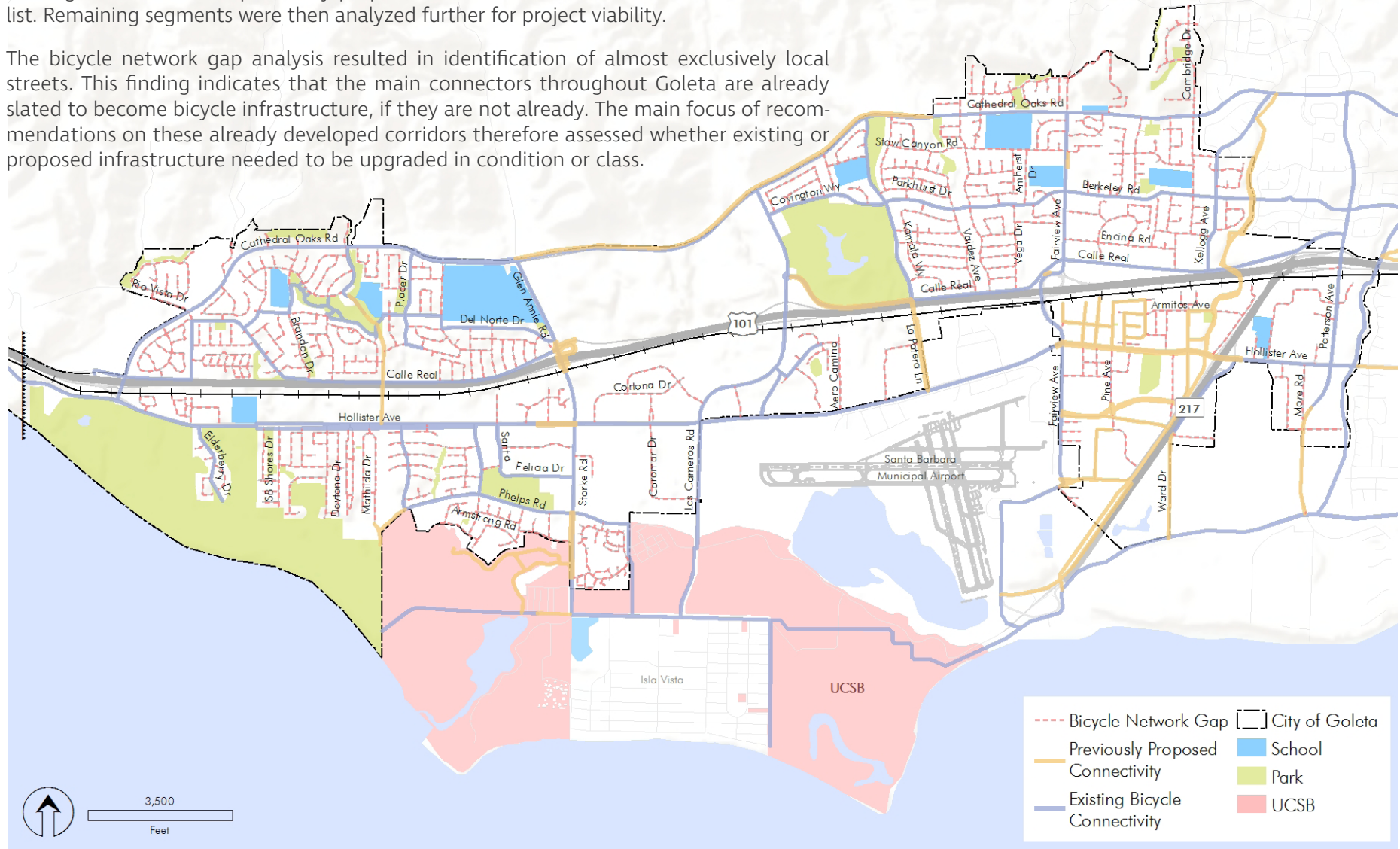


Figure 2-18: Bicycle Gap Analysis

Pedestrian gap analysis revealed a well-connected pedestrian network on both major and minor roadways. Planned improvements are slated to address some of the larger gaps, leaving only a few pockets of local roadways without sufficient pedestrian infrastructure. Additional factors impacting pedestrian mobility, such as missing curbs ramps and missing crossings, are addressed in more detail in the previous School Zone Infrastructure Assessment.

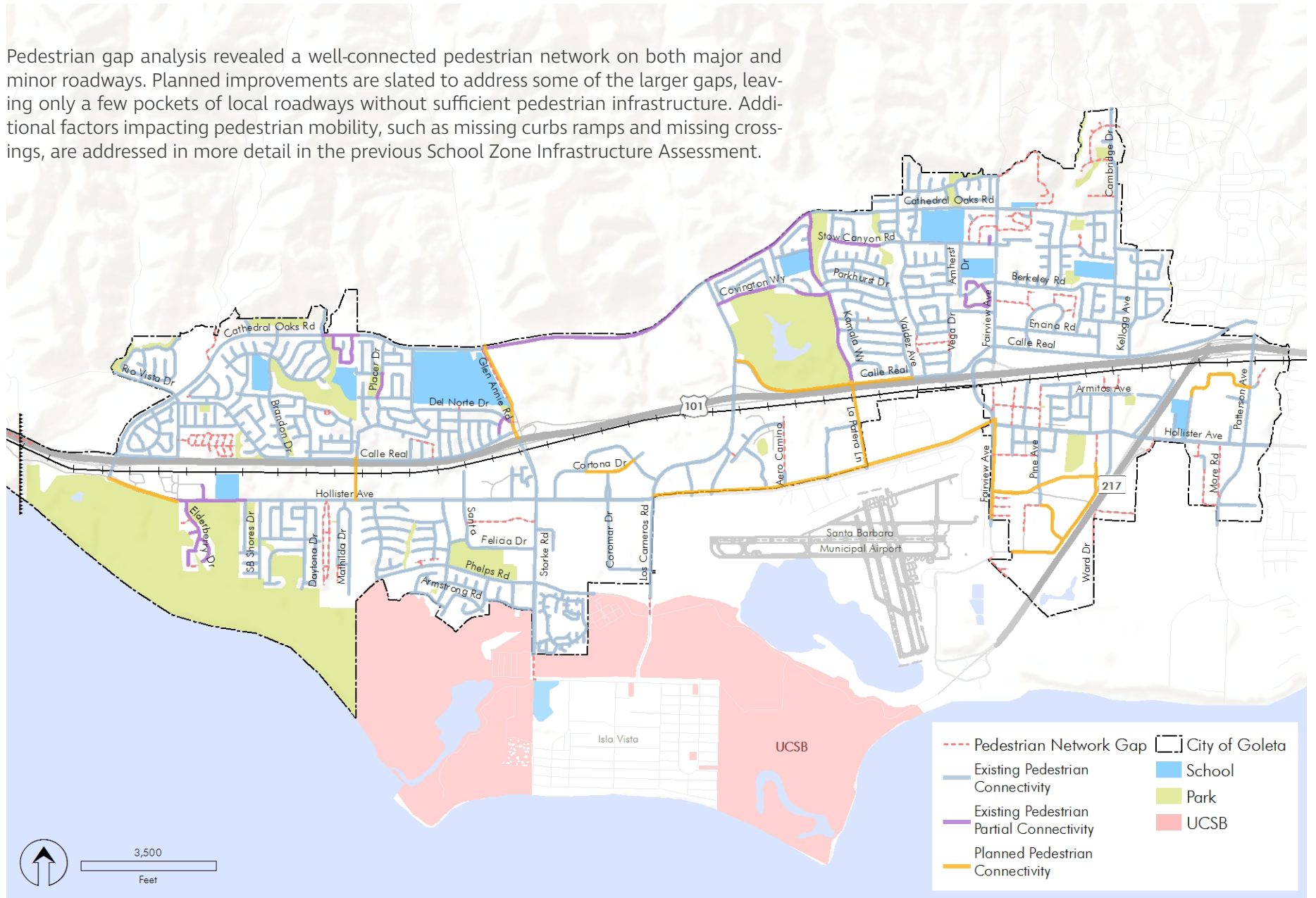


Figure 2-19: Pedestrian Gap Analysis

## TRANSIT ROUTES

The Santa Barbara Metropolitan Transit District (MTD) services Goleta with several bus routes providing commuters with options to UCSB via Hollister Avenue, Fairview Avenue, and Storke Road. Most routes follow major arterials.

An AMTRAK platform is also located in Goleta, providing travel options train north and south of Goleta via the Pacific Surfliner or the Coast Starlight routes. The City has identified a location for a new multi-modal platform that would replace the current platform with newer, safer amenities.



Figure 2-20: Pedestrian Gap Analysis

## BICYCLE AND PEDESTRIAN PROPENSITY

To help define study focus areas, a Geographic Information Systems (GIS) model was created to reveal relationships between the many data layers analyzed. A Bicycle-Pedestrian Propensity Model (BPPM) was developed, considering all of the previously discussed analysis inputs, to establish where bicyclists and pedestrians are most likely to be, either currently or if improvements were to be made. The BPPM is comprised of three submodels: Attractor, Generator and Barrier Models. These three sub-models are then combined to create the composite Bicycle-Pedestrian Priority Model.

Attractors are essentially activity centers known to attract bicyclists and pedestrians. Examples are schools, transit stops and shopping centers. Generators are developed from demographic data and address potential pedestrian and bicyclist volume based on how many people live and work within the study area. Examples of generators are population density, employment density, primary mode of transportation to work and vehicle ownership. Barriers are features likely to discourage or detract people from bicycling or walking. These are generally physical limitations, such as areas with high numbers of bicycle-related collisions, high vehicle volumes and speeds, and missing sidewalks.

The resulting map shown in Figure 2-20 was employed to develop general recommendations and to select priority projects described in the following chapter. When comparing input from public workshops, stakeholders, and project surveys, there was correlation between the high propensity areas for bicycling and walking with input provided.

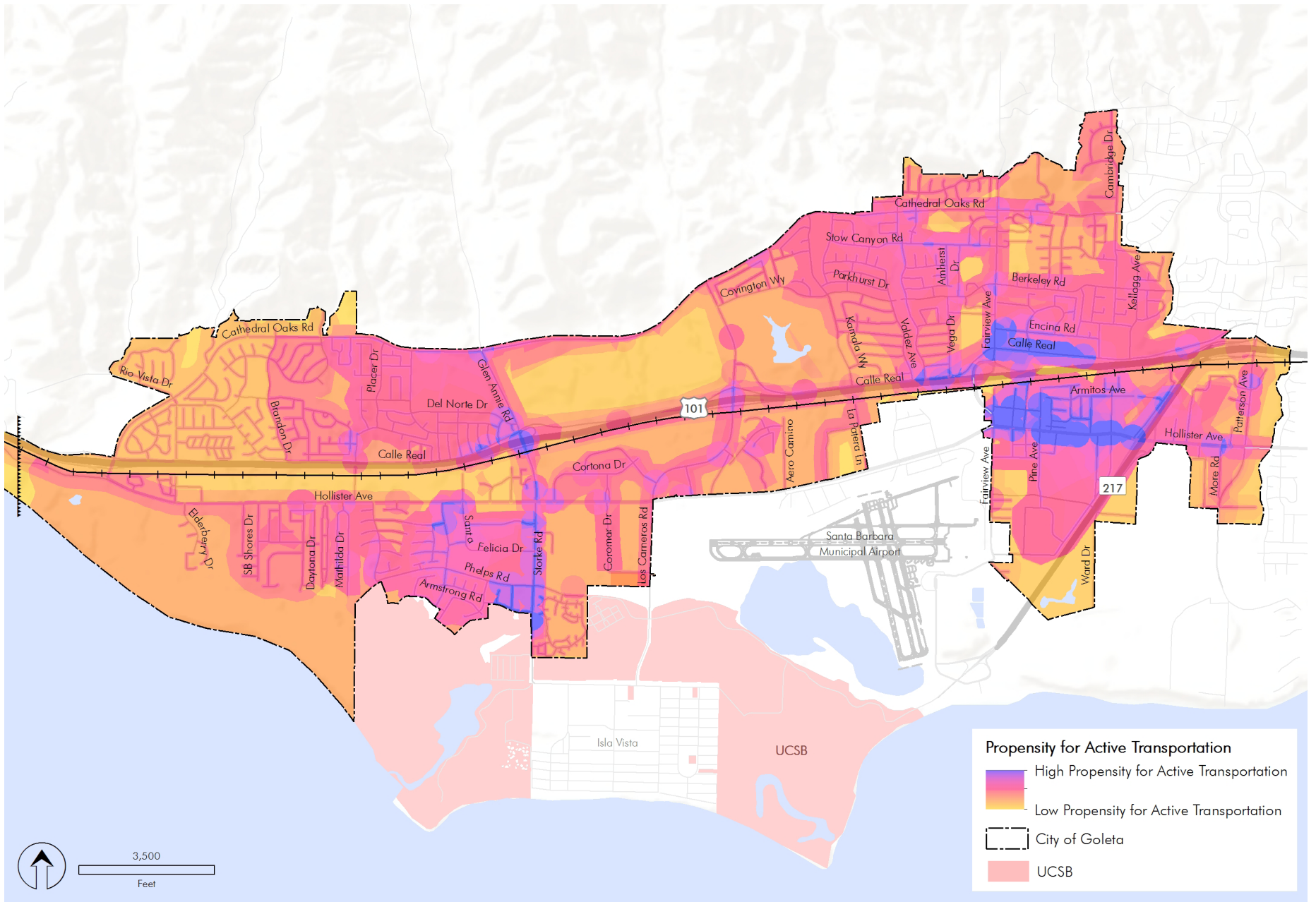
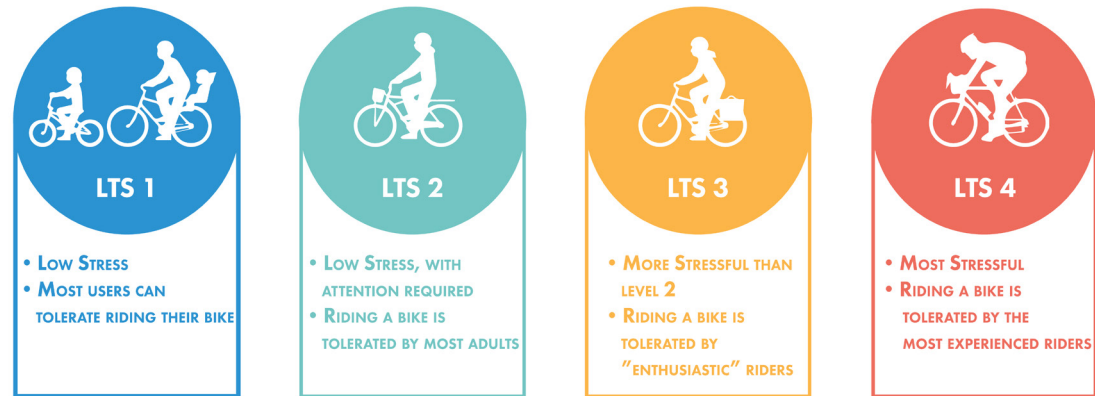


Figure 2-21: Bicycle and Pedestrian Propensity

## BICYCLE LEVEL OF TRAFFIC STRESS

The Bicycling Level of Traffic Stress analysis assesses the perceived safety and comfort related to vehicle traffic speeds and volumes, the number of vehicle travel lanes, and the presence or absence of bicycle infrastructure. The higher the traffic stress, the less likely that a person will choose or bicycle (or walk) to their destination. Stress increases with traffic speed and volume, number of lanes and lack of bicycle infrastructure. LTS scores can range from 1 (lowest stress) to 4 (highest stress). Goleta's streets were ranked into the categories shown in the graphic at the right using the values in the table below the graphic.



The bicycling level of stress analysis results can help to highlight corridors that would benefit from infrastructure improvements so bicyclists (and walkers) can feel safer and more comfortable traveling along those corridors. Conversely, the results can also highlight which corridors should simply be avoided, as well as help to determine where alternative less stressful parallel routes should be provided.

Speed Limit	Traffic Volume	Class II Bike Lane			Class III Shared Lane
		Number of Lanes			
		2	3	4+	2
≤ 25	≤ 2k	1	1	1	1
	2-5k	1	1	1	2
	>5k	1	2	2	2
30	≤ 2k	1	2	2	2
	2-5k	2	2	2	3
	>5k	2	3	3	3
35	≤ 2k	2	3	3	3
	2-5k	2	3	3	3
	>5k	3	3	4	4
≥ 40	≤ 2k	3	4	4	4
	2-5k	4	4	4	4
	>5k	4	4	4	4

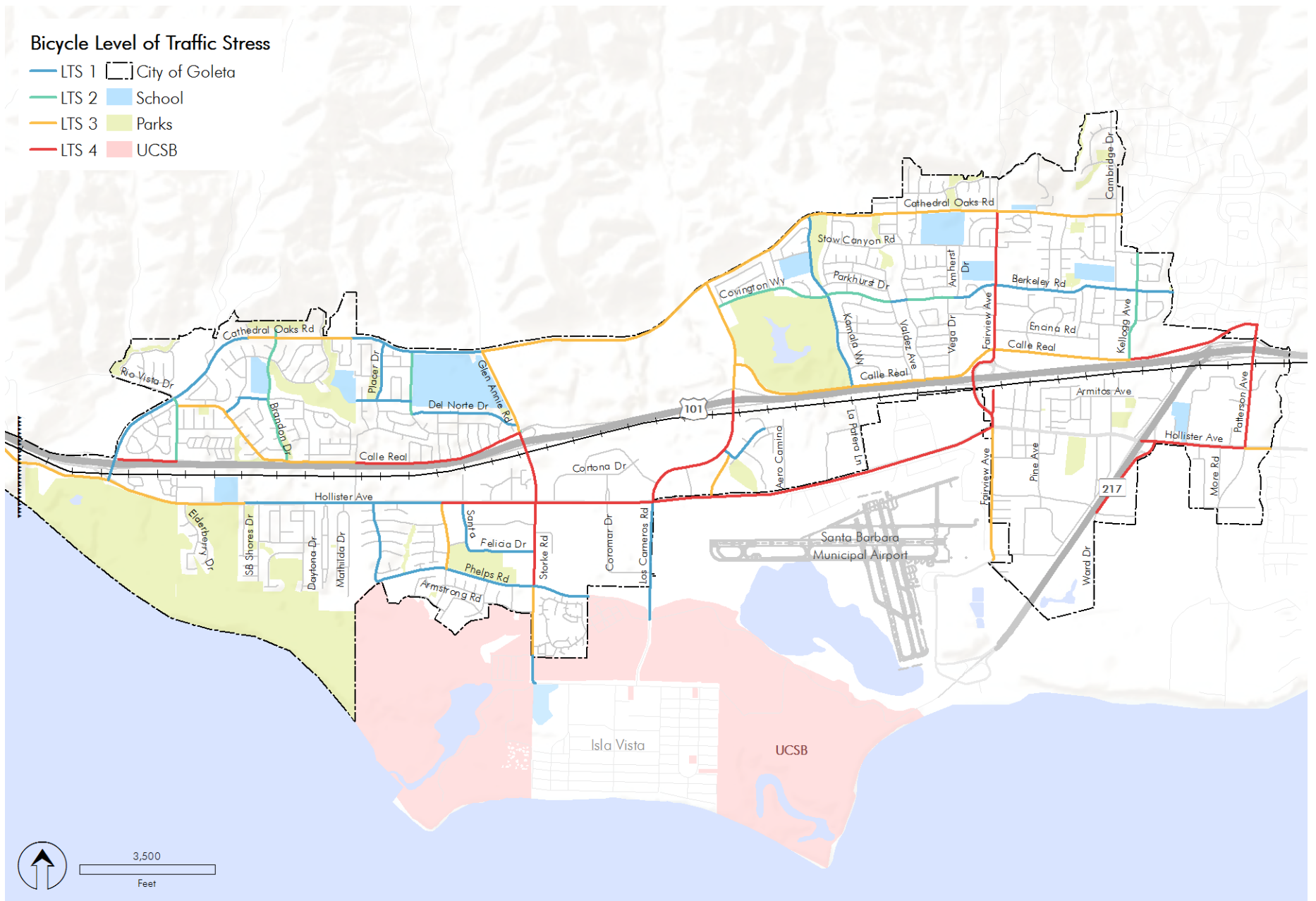


Figure 2-22: Bicycle Level of Traffic Stress



## EXISTING AND PREVIOUSLY PROPOSED BICYCLE PARKING AND \*SHOWER FACILITIES

Bicycle parking is located in several destinations throughout the City such as schools, parks, shopping centers, and other private businesses. The following schools have bike racks available for students and staff: Brandon Elementary School, Ellwood Elementary School, Kellogg Elementary School, La Patera Elementary School, Goleta Valley Junior High School, and Dos Pueblos High School. Additional locations include the Camino Real Marketplace, City Hall, Goleta Valley Community Center, and the Train Depot.

*\*No existing and proposed shower facilities in the public right-of-way*

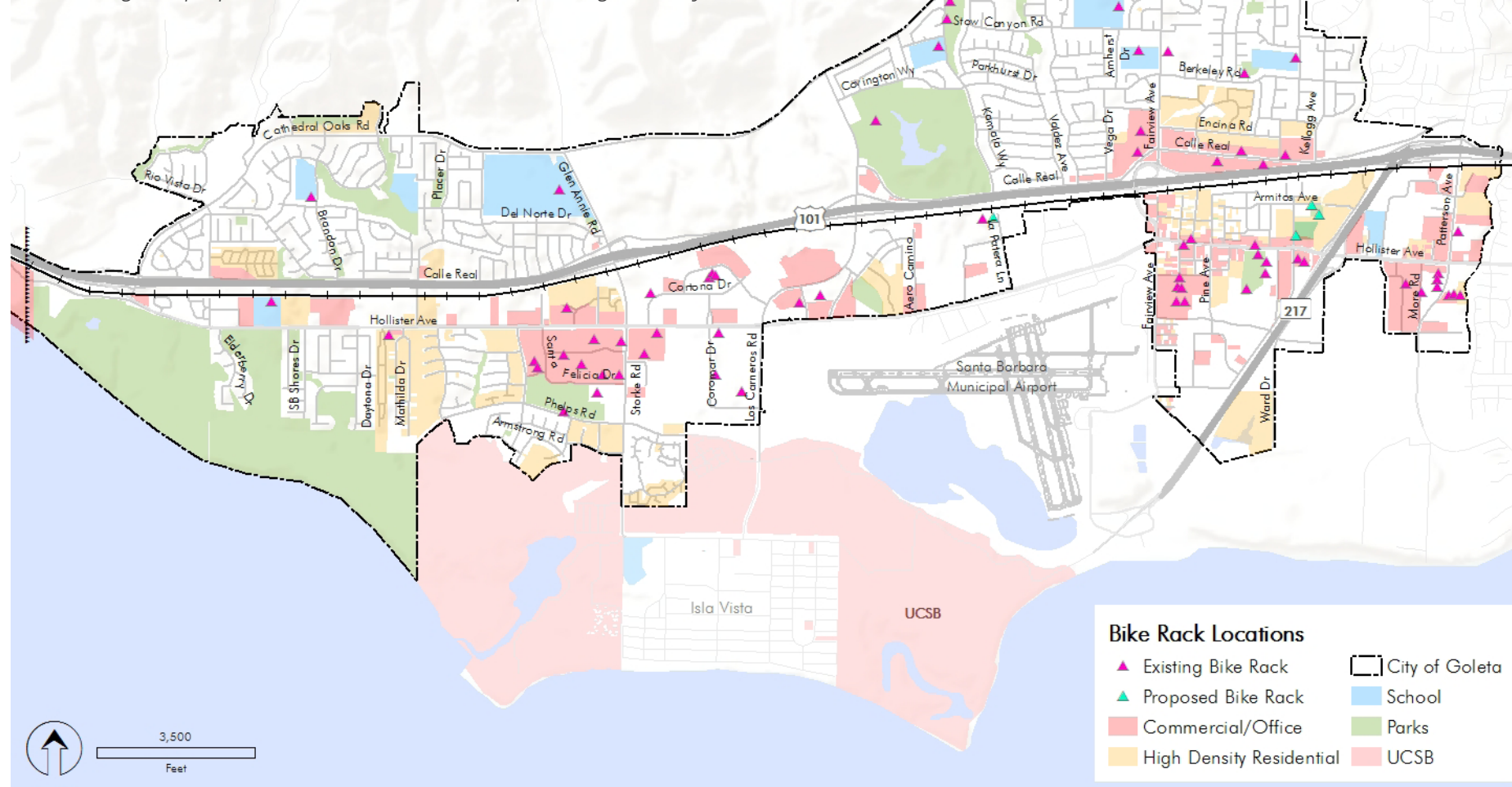


Figure 2-23: Bicycle Parking Locations