Fourth Supervisorial District Bikeways Strategy

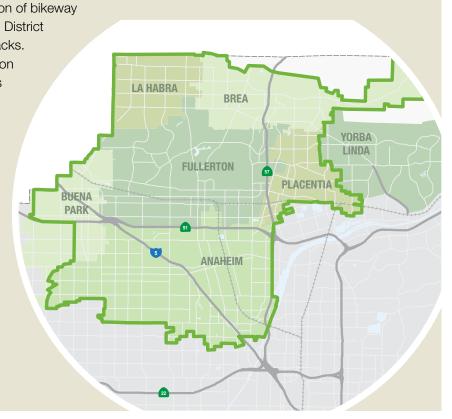


This report summarizes the results of a study effort focused on the identification of potential regional bikeways within the Fourth Supervisorial District in Orange County.

The Fourth District Bikeways Collaborative (Collaborative) effort was facilitated by the Orange County Transportation Authority (OCTA) and completed under the leadership of Orange County Supervisor and OCTA Board Member Shawn Nelson. Many agencies participated in the Collaborative, including the County of Orange, and the cities of Anaheim, Brea, Buena Park, Fullerton, La Habra, Placentia, and Yorba Linda. The effort was focused on the identification and prioritization of regional bikeways that would serve commuter and recreational cyclists throughout the Fourth Supervisorial District.

The objective of this study was to coordinate with cities, stakeholders, and the County of Orange to develop a list of ten regional bikeway corridors to pursue for implementation. Within the ten regional corridors, the Collaborative participants have identified three "focus corridors" that will be prioritized for near-term implementation. The remaining seven corridors are organized into separate tiers for future implementation.

Progress towards implementation of bikeway improvements within the Fourth District is proposed to occur on two tracks. One would be the implementation of "potential near-term" projects that would be relatively easy to construct. The other would involve jointly pursuing grant funding opportunities for the implementation of larger, and potentially more costly, improvements along the three focus corridors. Together, these two efforts are intended to lead to the coordinated implementation of regionally beneficial bikeway projects within the Fourth District.



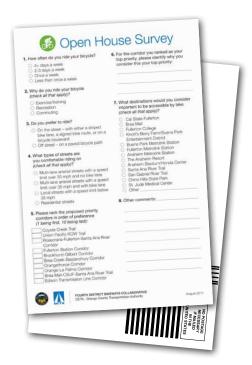




Facilitation Efforts

Communication between local agencies, bicycle advocates, and the general public was an integral part in developing the bikeways strategy. The primary elements of the Fourth District Bikeways Collaborative included the following:

- Technical Meetings OCTA held three technical meetings with city and county staff to discuss the study process and recommendations. These meetings were supplemented with a series of focus area meetings involving two to three cities each to discuss technical issues and opportunities associated with specific bikeway corridors.
- Bikeway Summits Three Bikeway Summits were conducted during the course of the study effort. These Summits were chaired by Supervisor Nelson, and brought together public agencies and bicycle advocates in an open forum to discuss the study efforts, progress, and recommendations.
- Stakeholder Roundtable The roundtable session was conducted on Wednesday, July 20, 2011 at the Anaheim Sunkist Branch Library. Over 30 people, including members of the public, bicycle advocates, and city and county staff attended to learn about the collaborative process and to discuss key needs and opportunities for bikeway improvements within the Fourth District.
- Open House OCTA conducted an Open House on Saturday, August 27, 2011 in Downtown Fullerton, timed to coincide with the Team Velocity group cycle ride, a regular cycling event that typically involves 100 to 150 participants. This open house was advertised to the cycling group and the general public. Attendees were provided the opportunity to review and comment on the proposed regional bikeway corridors and express support for their preferred corridors.
- Online Survey Following the Open House, an online survey was posted on OCTA's website and made available to the public for three weeks. Between the Open House and the online survey, 108 responses were received.













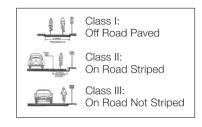
Regional Bikeway Corridors

The strategy focuses on ten regional bikeway corridors that would help to improve bikeways connectivity in the Fourth Supervisorial District. The Collaborative's process for identifying and defining the regional corridors included the following objectives:

- Coordinate plans at jurisdictional boundaries A key element of regional bikeway planning is ensuring that cyclists can travel between cities conveniently and safely. By bringing several jurisdictions together in this Collaborative process, OCTA was able to facilitate discussions on improving links between jurisdictions, as well as coordinate planning and implementation efforts.
- Identify existing bikeways and low-hanging fruit Related to the coordination of plans across jurisdictional boundaries, identification of "potential near-term" or easy to implement projects was a focus of this effort. These projects are considered to be those that can be implemented quickly with a lower capital investment, closing gaps in the regional bikeway network, and providing a high level of benefit for cyclists.
- Improve links to existing regional facilities Orange County has several excellent existing regional bikeways, highlighted by the Santa Ana River Trail. A key interest expressed by stakeholders, bicycle advocates, and members of the public was to improve connectivity to and between these regional corridors in order to expand cyclist access to and enjoyment of the corridors.
- Provide access to key destinations Having an integrated bikeway network that provides safe and direct access to major activity centers and destinations is important to encourage the use of cycling as an alternative to driving. Focus was placed on identifying and improving links to transit centers, employment centers, and schools (including colleges and universities).
- Close gaps in the existing bikeway network There are several examples of gaps or missing segments along regional bikeway facilities. While some of these gaps are caused by significant safety or construction constraints, others have occurred for reasons that could be relatively easy to overcome (lack of funding, need for increased agency coordination) with a targeted implementation effort. Closing these gaps is an excellent opportunity to increase regional bikeway connectivity through the completion of smaller and potentially less expensive projects.

The ten regional corridors combine existing bikeway facilities with new proposed segments. Many of these corridors build on existing and proposed bikeways identified in the 2009 OCTA Commuter Bikeways Strategic Plan (CBSP). The corridors include the following:

Brea Creek - Bastanchury - This east-west corridor would run along Brea Creek from Coyote Creek to Bastanchury Road, then turn and follow Bastanchury Road through Fullerton and Placentia to Carbon Creek and the Yorba Linda City Limit.



- Brea Mall Cal State Fullerton Santa Ana River This north-south corridor would have two northern branches, a western branch that would start at the Brea Mall area and an eastern branch that would connect to the Union Pacific Trail near Birch Street and Associated Road. The corridor would follow Associated Road to Cal State Fullerton, transitioning to an existing Class I bikeway through the campus. A crossing of the State Route 57 freeway would be accomplished via a pedestrian bridge at Madison Avenue or by widening the Chapman Avenue undercrossing. The corridor would then follow surface streets in Placentia and Anaheim to connect to the Anaheim Canyon Metrolink station and the Santa Ana River near Tustin Avenue.
- Brookhurst Gilbert This north-south corridor would be all Class II on-street bike lanes, following the Brookhurst Street corridor through Anaheim from south of Cerritos Avenue to Fullerton. Within Fullerton





and La Habra, the corridor would follow Gilbert Avenue, Sunny Ridge Drive, and Idaho Street, to a northern terminus at the Union Pacific Right-of-Way corridor.

- Coyote Creek This north-south Class I bikeway corridor would follow the Coyote Creek corridor from its current terminus at Hillsborough Drive south to the southern segment of the existing Coyote Creek bikeway near Valley View Avenue. The corridor is located along the OC-LA county line and traverses between counties.
- Edison Transmission This east-west corridor would follow an existing Southern California Edison transmission line through Buena Park and West Anaheim to Ball Road, using Ball Road, Walnut Street and Santa Ana Street to connect with the Fullerton Station corridor on Anaheim Boulevard.
- Fullerton Station This north-south corridor transitions from on-street to off-street and back to onstreet, using Euclid Street, the Juanita Cooke Trail right-of-way, Harbor Boulevard, Lemon Street, Anaheim Boulevard, and Cerritos Avenue to connect La Habra, Fullerton, and Downtown Anaheim to the Platinum Triangle and the Santa Ana River. A connection to The Anaheim Resort area is also provided via Anaheim Boulevard and Disney Way.
- Orange La Palma This east-west corridor primarily consists of on-street Class II bike lanes along Orange Avenue and La Palma Avenue between Holder Street and Acacia Avenue. There is a short proposed Class I segment along Carbon Creek in West Anaheim.
- Orangethorpe The east-west Orangethorpe corridor would be a Class II on-street bike lane between Valley View in the west and Melrose Street in the east. The corridor includes a spur along Stanton Avenue in Buena Park to connect to the Buena Park Metrolink Station and the Edison Transmission corridor.
- Santa Ana River to Coyote Creek This east-west on-street bikeway would utilize Rosecrans Avenue, Sunny Ridge Drive, Malvern Avenue, Wilshire Avenue, Acacia Street, La Palma Avenue, and Frontera Street to connect Coyote Creek with the Santa Ana River Trail through Buena Park, Fullerton, and Anaheim. A bicycle boulevard is proposed along Wilshire Avenue in Fullerton.
- Union Pacific Right-of-Way This east-west corridor is a proposed Class I off-street bikeway that would extend from the western city limits of La Habra along the Union Pacific right-of-way to the eastern city limits of Brea. The corridor provides connections to a planned Class I bikeway in Whittier on the west and an existing Class I bikeway in Yorba Linda to the east.

The improvements proposed along the ten corridors include implementing new bikeway facilities and upgrading existing facilities to provide enhanced striping, signage, or safety features for cyclists. Class I off-street, paved bikeways are proposed along off-street sections of the corridors (typically along flood control channels, through parks, or within railroad rights-of-way). On-street segments are proposed to include Class II on-street bike lanes where street, bridge, and right-of-way widths permit. In constrained locations, Class III bikeways may be provided. Selected on-street segments along lower traffic volume and lower speed streets (below 35 miles per hour) may also be candidates for bicycle boulevards. The ten regional bikeway corridors are illustrated in Figure E.1.

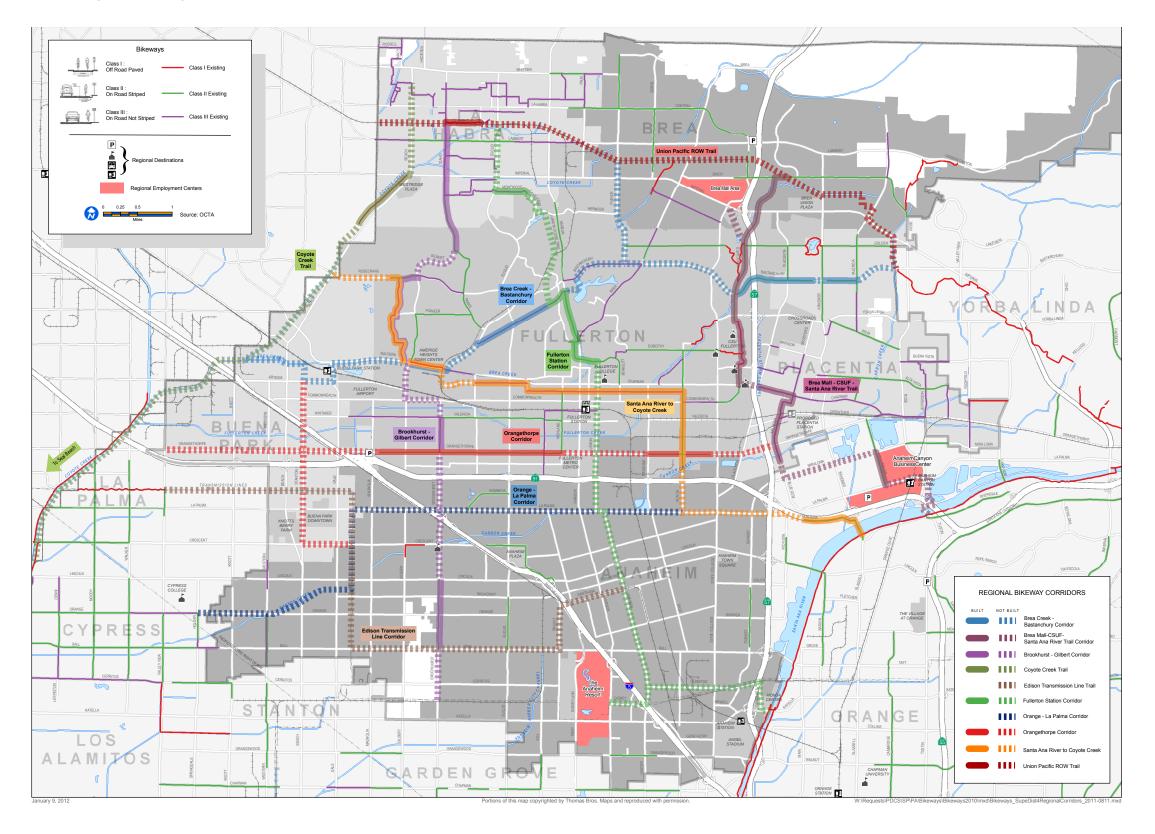








Figure E.1 – Fourth Supervisorial District Regional Bikeway Corridors







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Proposed Tiers

Each of the ten regional priority bikeway corridors was evaluated using a set of criteria that are consistent with OCTA's 2009 CBSP and the goals of the Fourth District Collaborative. The criteria summarized below are intended to account for a range of opportunities, constraints, and others factors that could influence the implementation of each bikeway corridor, as well as the potential benefit each bikeway corridor would provide for cyclists. The criteria are listed below:

- Bikeway Priority Index Ranking (BPIR)
- Public Support
- Linkages to Existing Bikeways
- Improving Bikeway Connectivity
- **Physical Constraints**
- Agency Support
- Safety (Bike Collisions)
- Safety (High Traffic Volumes)

Following the completion of the evaluation, the ten regional corridors were organized into four tiers to help guide OCTA, the County, and cities in the pursuit of funding opportunities and the implementation of bikeway improvements. The first tier of projects includes three regional corridors, which have been designated as the "focus corridors" for implementation and inclusion in grant funding applications. The evaluation process determined that these corridors would provide the greatest potential benefit to cyclists in terms of regional connectivity and access to key destinations, while also possessing significant agency support and limited physical or jurisdictional constraints that could hinder implementation. The remaining three tiers of projects include corridors that have constraints that may necessitate additional coordination and time.





Tables E-1, E-2, E-3, and E-4 summarize the evaluation process, the project tiers, and the proposed focus corridors.

Table E-1 - Proposed "Focus Corridors"

TIER 1					
Corridor	Brea Mall - CSUF - Santa Ana River (Brea, Fullerton, Placentia, Anaheim)	Santa Ana River to Coyote Creek (Anaheim, Fullerton, Buena Park)	Union Pacific ROW (La Habra, Brea, Yorba Linda)		
Bikeway Priority Index	+3	+2	+3		
Public Input	+3	+3	+2		
Bikeway Linkages	+3	+2	+3		
Ease of Implementation	+3	+3	+1		
Physical Constraints	+1	+2	+3		
Agency Support	+3	+3	+3		
Safety - Collisions	+3	+3	+2		
Safety - Traffic Volume	+2	+2	+3		
Total	+21	+20	+20		
Length (miles)	9.9	11.3	8.8		
Estimated Construction Cost (millions)	\$3.30 - \$4.94	\$1.36	\$7.17		
Key Opportunities	 Connections to Brea Mall, Cal State Fullerton, Anaheim Cyn Metrolink, Santa Ana River Significant portions of corridor bikeways already in place Focus on filling in gaps/ branding corridor 	 Links Downtown Fullerton, Fullerton College, Santa Ana River, Coyote Creek Connects to existing Class II bikeway in La Mirada Opportunity for "First in OC" Bicycle Boulevard on Wilshire Ave 	 Connects to Coyote Creek and Class I trail in Yorba Linda Good east-west route in northern part of Fourth District 		
Key Constraints	 Need for safe SR-57 crossing – this crossing accounts for significant portion of corridor cost Need for safe connection to Santa Ana River from La Palma Ave 	 Existing bikeway on Acacia to be temporarily removed for State College Grade Separation Narrow sections on La Palma near SR-57 Narrow roadway, on-street parking along Malvern Avenue segment 	 Union Pacific acceptance of bikeway along active portions of rail right-of- way Numerous at-grade roadway crossings 		





Table E-2 - Proposed Tier 2

TIER 2					
Corridor	Brookhurst – Gilbert (La Habra, Fullerton, Anaheim)	Brea Creek – Bastanchury (Buena Park, Fullerton, Brea, Placentia)	Coyote Creek (La Habra, Fullerton, La Mirada, Buena Park)	Fullerton Station (La Habra, Fullerton, Anaheim)	
Bikeway Priority Index	+2	+1	+1	+3	
Public Input	+1	+3	+3	+3	
Bikeway Linkages	+3	+3	+2	+3	
Ease of Implementation	+3	+2	+2	+1	
Physical Constraints	+1	+2	+1	+1	
Agency Support	+3	+3	+3	+2	
Safety - Collisions	+3	+2	+3	+2	
Safety - Traffic Volume	+3	+2	+3	+3	
Total	+19	+18	+18	+18	
Length (miles)	9.9	12.5	9.6	13.0	
Estimated Construction Cost (millions)	\$0.83	\$2.47	\$6.5	\$1.73	
Key Opportunities	Significant portions of bikeways along the corridor are already existing	 Connects to Buena Park Metrolink station and St. Jude Hospital Good east-west route in central portion of Fourth District 	 Corridor studied extensively in the past County of Orange Flood Control open to making service roads available for bikeways Cities in both counties supportive 	Connects to Downtown Fullerton, Fullerton Metrolink, Downtown Anaheim, Anaheim Resort, Santa Ana River, and Platinum Triangle	
Key Constraints	 Need for safe crossing at I-5/ Brookhurst interchange Roadway narrows at BNSF rail corridor grade separation 	 Significant grades in section near State College Boulevard Narrow roadway, on-street parking along Malvern Avenue segment 	 Cities must take on maintenance/ liability responsibility BNSF rail corridor crossing 	 SR-91 crossing on Lemon Street has high traffic volumes Juanita Cooke Trail segment backs to residential properties, need to maintain existing riding trail 	





Table E-3 - Proposed Tier 3

TIER 3				
Corridor	Orangethorpe (Buena Park, Anaheim, Placentia)			
Bikeway Priority Index	+2			
Public Input	+2			
Bikeway Linkages	+2			
Ease of Implementation	+2			
Physical Constraints	+1			
Agency Support	+3			
Safety - Collisions	+1			
Safety - Traffic Volume	+3			
Total	+16			
Length (miles)	12.0			
Estimated Construction Cost (millions)	\$0.87			
Key Opportunities	 Available roadway width/right-of-way for most of corridor length Stanton Ave spur provides connection to Buena Park Metrolink and Entertainment District 			
Key Constraints	Rail corridor crossing has been a safety concern in the pastRoadway narrows at SR-57 interchange			

Table E-4 - Proposed Tier 4

TIER 4					
Corridor	Edison Transmission (Buena Park, Anaheim)	Orange - La Palma (Buena Park, Anaheim)			
Bikeway Priority Index	+1	+1			
Public Input	+1	+1			
Bikeway Linkages	+2	+1			
Ease of Implementation	+1	+1			
Physical Constraints	+1	+2			
Agency Support	+2	+3			
Safety - Collisions	+3	+2			
Safety - Traffic Volume	+3	+2			
Total	+14	+13			
Length (miles)	9.6	8.2			
Estimated Construction Cost (millions)	\$6.19	\$2.44			
Key Opportunities	 Connection to Anaheim Resort from West County Connection to existing Class I trail in La Palma and beyond to existing section of Coyote Creek Bikeway 	 Connects to existing bikeway in Cypress Connects to five other Fourth District priority corridors 			
Key Constraints	 Numerous at-grade roadway crossings Portions of Edison corridor are leased for other uses, need to gain access or find alternative path Pavement construction 	Need for safe crossing at I-5 freeway			





ACTION PLAN

The Action Plan for the Fourth District Bikeways Collaborative includes two near-term actions for cities and the County, with support from OCTA. These actions include the implementation of "potential near-term" projects and pursuit of funding.

Potential near-term projects are those with low construction costs that can be implemented in relatively short order as funds become available. Each jurisdiction would be responsible for the implementation of their respective projects and strategies for funding these projects. OCTA will assist local jurisdictions in their efforts through such things as letters of support, grant notifications and guidance, and design solutions (discussed in Chapters 4 and 5). Given the lower cost anticipated for implementing these potential near-term projects, this strategy recommends implementation of these improvements on all ten regional corridors in the near-term horizon.

Implement potential near-term projects along all ten corridors, for example:

- Designation of a Class I bikeway using existing trails through Craig Regional Park on the Brea Mall Cal State Fullerton - Santa Ana River corridor
- Striping a Class II bikeway along Rosecrans Avenue between Gilbert Avenue and the Orange County Line
- Closing the gap on Orangethorpe Avenue between Highland Avenue and Raymond Avenue
- Implementing additional Class II bike lanes on Brookhurst Street as part of future street resurfacing and reconstruction projects
- Designating Puente Street as a Class III bike route or a bicycle boulevard following the completion of the pedestrian bridge currently under construction across Brea Creek
- Converting portions of the existing paved maintenance road along Coyote Creek to a Class I bikeway between Hillsborough Drive and Stage Road

This strategy also recommends that jurisdictions work jointly on the design and construction of larger projects located along the three focus corridors.

Participate in follow-up efforts to prepare larger projects along the three focus corridors for construction that may include the following:

- Block-by-block analysis
- Detailed cost estimates
- Conceptual engineering
- Recommendations for further environmental studies
- Segments and phasing

Following funding and completion of these corridors, cities, the County, and OCTA will continue to work together to implement projects along the seven additional corridors that are classified in the three remaining tiers.



