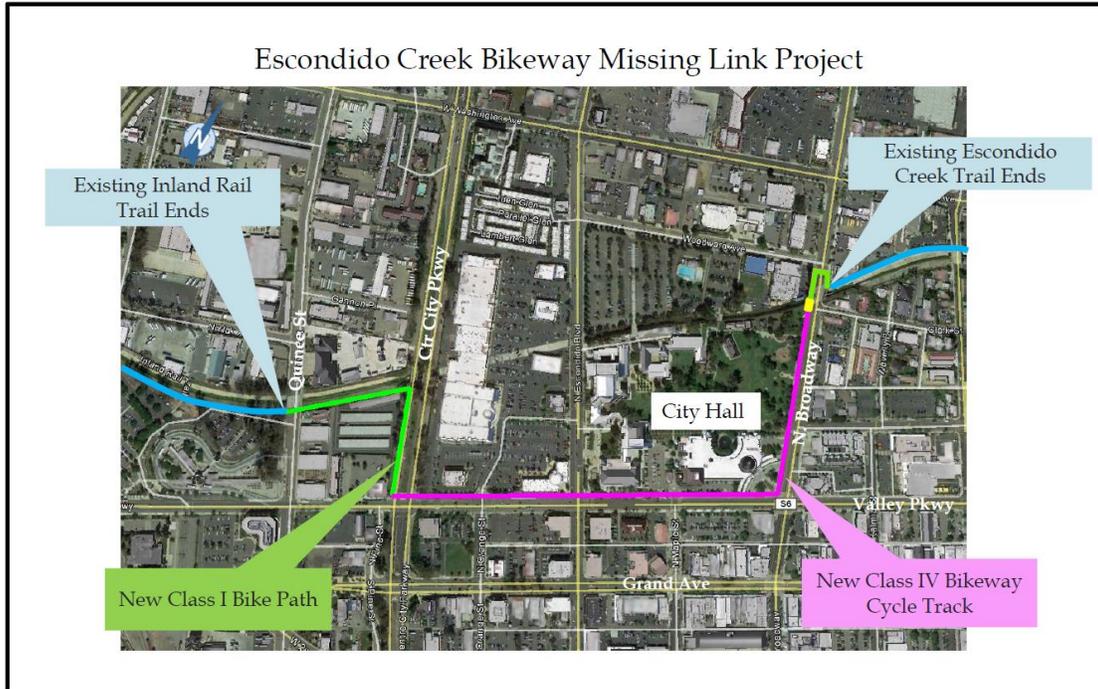


ITE Award

Lead Agency: City of Escondido, CA

## Project Nomination: Escondido Creek Bikeway Missing Link Project



### Project Description

The Escondido Creek Bikeway Missing Link Project filled a one-mile gap of the existing Escondido Creek Trail through the city core with Class I Bike Path and the first Class IV Two-way Cycle Track in San Diego County. Bridging this gap completes the Escondido Creek Trail, which provides a continuous bike facility that connects Escondido regionally to the coast. The project also provided a vital mobility connection in the region for biking and walking to major landmarks in the city including the Escondido Transit Center, Civic Center, downtown district, and Grape Day Park. The iconic Class IV Two-Way Cycle Track through the city core is the first such facility being constructed in San Diego County by re-purposing portion of the existing roadway to dedicated bike facility.

The project introduced innovative cost-effective solutions to accommodate all modes of transportation (bikes, pedestrians, transit, and vehicles) on two Collector roadways, N. Broadway and West Valley Parkway, while preserving the existing roadway functionality. Some special features of the project included new bus stop platforms at bikeway, bike and pedestrian crossovers, bike crossing at new and existing traffic signals, and aesthetically pleasing flexible bollards as bikeway/roadway separation. This project received the 2019 Project of the Year award from ITE San Diego Chapter.



## **Background**

The existing Escondido Creek Trail is a seven-mile long dedicated bike trail which includes the Escondido Creek Trail and the eastern end of the Inland Rail Trail, connecting Escondido regionally to the coast. The trail connects the Escondido Transit Center with the Center for the Arts, Civic Center, Maple Street Plaza, and Grape Day Park. This trail has been constructed except for a “Missing Link” – an approximately one-mile long segment of the trail was the last to be constructed because this section required the trail or bikeway to be constructed away from the Escondido Creek where it is channeled underground near downtown and beneath a fully developed shopping center.

This “Missing Link” and bridging the gap with a two-way bikeway cycle track were adopted in the City of Escondido Bicycle Master Plan in 2012 prior to the State adopted the new Class IV Bikeway Cycle Track in 2014. The City successfully obtained an Active Transportation Program Grant of \$1.1 Million for the design and construction of this innovative “Missing Link” project in 2015.

## **Project Highlights**

### **Class IV Two-Way Cycle Tracks**

The Escondido Creek Bikeway Missing Link project introduced new Class IV Two-Way Cycle Track along N. Broadway and West Valley Parkway and a new Class I bike path west of Centre City Parkway and south of the Escondido creek to connect the existing Escondido Creek Trail to Inland Rail Trail through the city urban core. North Broadway is a two-way Collector roadway with diagonal on-street parking. Adjacent to N. Broadway are Grape Day Park, major city park, Boys and Girls Club, a Charter High School, and the San Diego Children Museum. W. Valley Parkway is a one-way three-to four-lane Collector roadway with parallel on-street parking. Escondido Civic Center, Centre for the Arts, and Escondido Transit Center are located along this one-way thoroughfare.

The 10-foot wide Class IV Two-Way Cycle Track with a 2- to 5-foot wide buffer was introduced on North Broadway by narrowing the existing travel lanes and converting the existing diagonal parking to parallel parking. The new parallel on-street parking also serves as a separation between the travel lanes and the new cycle track. The travel lanes on West Valley Parkway were also narrowed down to give room for the new 10-foot wide Class IV Two-Way Cycle Track with a 2- to 4-foot wide buffer.

The original concept was to construct raised median as the physical separation between the travel lane and the new cycle track. However, due to design challenges and budget constraints, value engineering and research on different bikeway separation options permitted by State guidelines revealed that the new green flexible bollards as the physical separation would be the most cost-effective option for the project. The Type K-72 green bollards are flexible delineators that can withstand physical impact multiple times by collapsing and reshaping itself upon each impact. Similar types of delineators have been used in other cities but this particular Type K-72 bollard with a more

aesthetically -pleasing look is a better fit in the City urban core area and as an iconic decorative element of the new bikeway.

Prior to installing the permanent K-72 flexible bollards and the introduction of the new Class IV two-way Cycle Track to the general public, a pilot period was implemented as a transition to gauge public's reaction to the new concept. This was done by installing new striping with temporary delineators along the temporary bike lane along the roadways. The pilot period was deemed successful to allow time for drivers to learn to drive and accommodate the new bike facility. The temporary delineators also provided a realistic guidance to the final placements of the permanent flexible bollards in terms of reducing conflicts with turning vehicles, especially at driveways and intersections.



**New Class IV Two-Way Cycle Tracks with flexible Bollards and parallel parking as separation**



**Diagonal Parking**



**Parallel Parking**

**Before and After on North Broadway**

### **Accommodating Transit and Pedestrians along the Bikeway**

The two existing bus stops received a new platform design to accommodate the new Class IV Two-Way Cycle Track. The new bus stop platforms were extended across the new cycle track, which allows the buses to load and unload passengers on the travel lane. Bikers on the Cycle Track would require yielding to passengers getting on and off the buses. Pedestrian crossing striping and warning signage were provided to bikers of the pedestrian crossing at the bus stops. The new platforms were designed to accommodate both wheelchair access and visual-impaired community. These were done by raising the cycle track to the same sidewalk grade and providing truncated domes leading person-in-need to bus loading and unloading zone.



**New Bus Stop Platform**

The new cycle track or bikeway intersects with the existing pedestrian sidewalk or pathway at a few locations. Special signing and striping was provided at these conflict points to alert bikers especially to yield to pedestrians crossing. Pedestrian and bike safety and connectivity in the area were also improved by introducing new protected and signalized crossing points at key junctions of the route.

### **Project Achievements**

The Escondido Creek Bikeway Missing Project utilized cost effective solutions to bridge an existing gap in the bike trail network in North San Diego County and providing a continuous bike facility connecting the city regionally to the coast. This project demonstrated that existing auto centric corridors could be transformed to accommodate all modes of transportation through cost-effective innovative solutions.

By repurposing existing roadways, the final alignment of the route allows construction to stay within existing public right-of-way, avoiding costs associated with purchasing land.

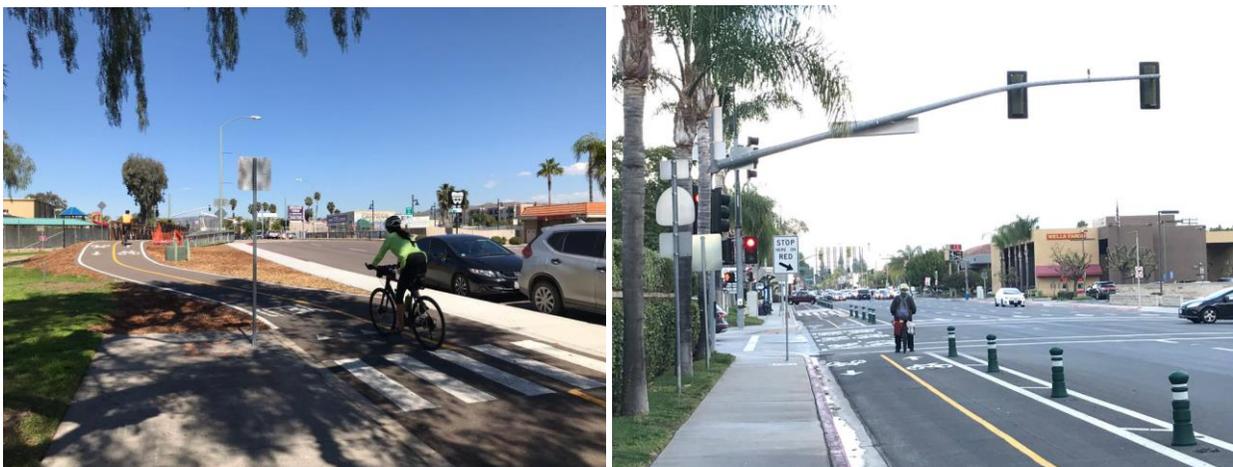
Through the narrowing the travel lanes and increasing friction along the roadways with the presence of other modes of travel, traffic calming along North Broadway and West Valley Parkway was achieved.

In addition to the mobility benefits, this project provides economic benefits, greenhouse gas reductions, and health benefits to the region by increasing active transportation as well as connection to city core and other major landmarks.

Since the completion of project, the city has seen an increase in bike activities on the bike trail through the city core. It is apparent that the new separated Class IV Cycle Track is more attractive to a wide range of bicyclists at all levels and ages than the typical Class II Bike Lanes on roadways.



**New Signalized Bike Crossing on North Broadway**



**Pictures of new Class I and Class IV Bike Facilities**