

# Public Agency Showcase

In Recognition of  
Infrastructure Week

As part of ITE's recognition of Infrastructure Week, we reached out to our public agency members to find out what projects are taking place in our communities. Much like last year, we had an overwhelming response! The following are some of the submissions we received. Stay tuned for more projects in future editions of *ITE Journal*, and thanks to all our public agency members who participated.

## AUSTIN, TX, USA

### "Black Austin Matters"

Austin Transportation Department (ATD) in **Austin, TX, USA** facilitated a community-driven effort in June 2020 to paint street murals supporting calls to address racial injustice in our city. In a fast-moving environment, ATD's Engineering and Signs and Markings teams provided technical and operational support for the murals led by local organization Capitol View Arts.

Downtown, artists painted "Black Austin Matters" on Congress Avenue, sometimes called "The Main Street of Texas." Through the historically Black commercial district on East 11th Street, artists also painted "Black Austin Matters." ATD's Traffic Engineering Division designed precise layouts for the messages to ensure legibility and fit with existing lanes. Signs and Markings provided its standard roadway paint and application expertise for the artists. The department also closed the roads to ensure safety for the artists and interested participants. ATD is proud to have supported this community-led project acknowledging the importance of Black Lives.



## CALGARY, ALBERTA, CANADA

### Laycock Park Pedestrian Bridge



The Laycock Park Pedestrian Bridge in **Calgary, Alberta, Canada** re-establishes Calgary's North-South regional pathway connection and restores access to adjacent communities that were once compromised by the partial washout of an existing bridge during Calgary's 2013 floods.

This new bridge was designed by a local team and features durable cedar 37-meter (121 foot) glulam girders, pushing the limits of design and fabrication possibilities to avoid in-stream work. It also features a pedestrian and environmentally-friendly coating system and an innovative glass-fiber-reinforced-polymer wrapped glulam deck. Harvested from regional renewable resources, cedar provides the required strength, stability, and service-life for the bridge and demonstrates the usability of timber as a sustainable, efficient, and elegant alternative material for the bridge.

The new Laycock Bridges is one of its kind in Calgary, and is not only helping to preserve the community culture and natural environment, but is already helping to promote active transportation and recreation around the city.

## BURNABY, BRITISH COLUMBIA, CANADA

### Willingdon Linear Park

The Willingdon Linear Park in **Burnaby, British Columbia, Canada** was identified by the city council as a high priority project to link the Brentwood Town Centre with the Hastings Neighborhood and community amenities within Burnaby. The project spans 1.73 kilometers (1.07 miles) along one of Burnaby's main north/south connectors (Willingdon Avenue). The scope included road rehabilitation, traffic safety improvements, utility upgrades, and a multi-use trail and green park space corridor fitted with street furniture, water features, and public art installations. Design and public engagement began in 2016, and construction commenced in 2017 and was completed in late 2018. The city worked with Eurovia British Columbia and ISL Engineering to deliver this project, which received the 2018 Silver Envision Award for Sustainable Infrastructure. The total project value is \$13 million.



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## CARY, NC, USA

### Crossing the Triangle in North Carolina Via Greenway



The final segment of the White Oak Creek Greenway has been in the works for more than 20 years in **Cary, NC, USA**. It was completed this year via a 916-foot boardwalk and a 104-foot pedestrian tunnel under the CSX rail line. This long-awaited segment is one of the last needed to complete a 15-mile connection in Cary from Umstead State Park to the American Tobacco Trail.

The lead consultant was Kimley-Horn and this project completed a critical missing gap in the Triangle and a portion of the East Coast Greenway. This connection allows users to travel across four counties on off-road trails (70 miles). They were not able to do a typical ribbon cutting due to COVID-19 pandemic, but it was highlighted on the statewide public television (UNC-TV) in a story on its "NC Weekend" show.



## CEDAR RAPIDS, IA, USA

### Fighting Floods with Sustainable Solutions

Since 2000, the Cedar River in **Cedar Rapids, IA, USA** has reached flood stage 15 times. While the city has become adept at flood fighting, the long-term goal is a permanent system that increases our resiliency against environmental hazards. The city's flood control system incorporates environmentally and socially conscious engineering to not only reduce the risk of flooding, but provide for recreational amenities and spur economic growth. In 2019, the Institute for Sustainable Infrastructure (ISI) awarded the Cedar Rapids' flood control system with the Envision Bronze rating for sustainable infrastructure. The project, which included a levee, pump station, and detention basin, turned otherwise unusable land into a public asset, complete with stormwater best management practices and recreational amenities, including a 12-foot walking trail. This area is just one example of a system that incorporates environmental, recreational, and cultural amenities. Learn more about Cedar Rapids' flood control at [www.cedar-rapids.org.floodcontrol](http://www.cedar-rapids.org.floodcontrol).



*Cedar Rapids' Flood Control System has been recognized for its sustainable infrastructure, including the use of stormwater best management practices.*

## DES MOINES, IA, USA

### Sidewalks for School and High Priority Routes

Regardless of how they get around, residents of **Des Moines, IA, USA** want transportation that is safe and connected for everyone. Streets without sidewalks can present major barriers to walking, especially for those with mobility restrictions, and may also create safety hazards if people choose to walk in the street.

Des Moines' transportation master plan, adopted in 2018, found only 57 percent of citizens satisfied with access to sidewalks; inventoried sidewalk gaps across 40 percent of property frontages; and prioritized infill based on proximity to schools, transit, commercial nodes, and neighborhood connectivity.

The city council programmed \$3 million annually to eliminate high priority gaps over 20 years. With younger students shifting to a 7:30 a.m. school day start, there was a concerted effort to separate children walking from motorized traffic during the dark winter months and morning commute. This investment in neighborhoods helps create a safe and connected transportation network for all ages and capabilities, promote equitable and sustainable transportation, and encourage healthy lifestyles.



BEFORE



AFTER



BEFORE



AFTER

## FREMONT, CA, USA

### Walnut Avenue Bikeway Project

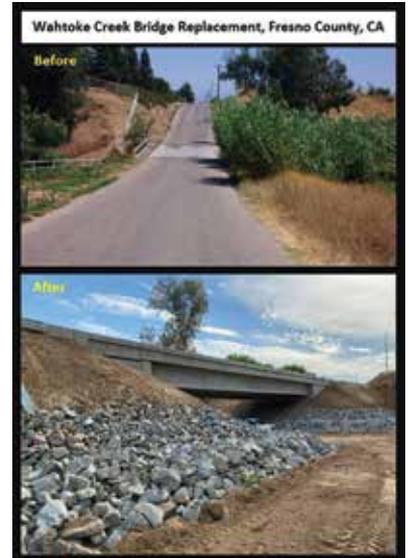
In June 2020, the **City of Fremont, CA, USA** completed construction of the Walnut Avenue Bikeway project, extending for 1.2 miles from Mission Boulevard to Paseo Padre Parkway. The project scope includes a raised cycle track and four protected intersections. The Walnut Avenue corridor has one of the highest levels of biking in the city and connects to destinations including the Fremont BART station, housing, schools and local businesses. Project construction was funded by a \$5 million grant from the Alameda County Transportation Commission as a demonstration of best practices in bicycle facility design. The project aligns with Fremont's Bicycle Master Plan, which has the goal of significantly increasing bicycle travel by creating a network of bikeways that appeal to people of all ages and abilities. Streetsblog San Francisco recently named the project as the "Best Bikeway in the Bay Area" (June 23, 2020). More information about the project is available at <https://fremont.gov/3274/Walnut-Ave-Bikeway-Improvements>.



## FRESNO COUNTY, CA, USA

### Biola Sidewalk Project

Biola is a small, disadvantaged community located in **Fresno County, CA, USA** approximately 5 mile west of the City of Fresno, CA. The county constructed new sidewalks, curb and gutter, ADA curb ramps, crosswalks, and widened road shoulders on "G" Street between 5th Street and 7th Street. The improvements were badly needed for overall pedestrian safety and ADA accessibility, as well



as flood management for the rainy winter months. The project was awarded the 2020 American Society of Civil Engineers Fresno Chapter Award for Outstanding Small Project.

Every October, Biola hosts their annual Raisin Festival, consisting of live entertainment for the community. The current improvements will enhance the festival and help to showcase their expanding area to surrounding communities. To assist Biola with their ambitions for improving their downtown area, the County of Fresno is committed to pursuing future projects in cooperation with the community in order to lay a solid foundation for future expansion.

## KNOXVILLE, TN, USA

### Magnolia Avenue Streetscapes

Across several **Knoxville, TN, USA** mayoral administrations, revitalization efforts were established for East Knoxville's Magnolia Avenue Corridor. Public engagement was initiated in 2009 and rebooted again, resulting in the city making a \$7 million public investment for streetscape improvements on a model block section in hopes to trigger reinvestment and improve the quality of life for area residents.



Magnolia Avenue, state highway (US 11W) is situated in a predominately African American community east of the city's downtown core. The area is an important gateway linking downtown Knoxville to several adjacent and (most importantly) engaged citizens in the Parkridge, Chilhowee, and Burlington communities.

Presently a complete street, Magnolia Avenue accommodates all transportation users: pedestrians, bicyclists, motorists, and transit riders. However, these new improvements (landscaped center medians, stamped crosswalks, traffic and pedestrian signal upgrades, street trees, wider sidewalks, buffered bike lanes, benches, and bus shelters) now provide a safer and more accessible street network for both neighborhood residents and visitors to the area.



# Public Agency Showcase

## MANATEE COUNTY, FL, USA

### Fort Hamer Bridge

In 2017, **Manatee County, FL, USA** opened the Fort Hamer Bridge spanning the Manatee River between two of the fastest growing communities in the state; Lakewood Ranch and Parrish. Construction began in 2015, culminating more than 100 years of visioning by county leaders to address the need for a connection between two quickly growing regions of Manatee County. The new bridge also completes an additional north-south connection for citizens living in northern portions of Manatee County to nearby Sarasota County to the south.

A bridge over Manatee River was first proposed by the Manatee County Board of Commissioners on September 9, 1909. It was not until 1989 that the bridge was formally added to the county's comprehensive plan. The bridge opened to vehicular traffic on October 18, 2017 after it was temporarily open a month prior as an evacuation route for Hurricane Irma. The addition of another hurricane evacuation route is another example of why this critical project was so important.



## MEMPHIS, TN, USA

### "The Hampline" Pedestrian Corridor

After nearly 10 years of community engagement, planning, and design work, the **City of Memphis, TN, USA** completed the Hampline in 2020. The project is a nearly two-mile long all-ages-and-abilities bicycle and pedestrian corridor that features raised medians separating a two-way cycle track from motor vehicles, enhanced on-street pedestrian crossings, landscaping, and the city's first bicycle-specific traffic signals. In an outpouring of support, Memphians even crowdsourced \$75,000 to aid in completion of the project. The Hampline connects Memphis' arguably two most popular parks, most used greenway, and passes through a neighborhood that had long witnessed disinvestment and neglect.



## MONROE COUNTY, NY, USA

### Repurposed Bridge Panels



The **Monroe County** Department of Transportation in Rochester, NY, USA is currently working on a bridge reconstruction project on Salt Road in Webster, NY, which re-purposes three precast concrete bridge deck panels from the old Tappan Zee Bridge in the Hudson Valley Region of New York State. The panels had been used on the Tappan Zee Bridge since 2008. In 2019, panels were offered by the New York State Thruway Authority to local municipalities throughout New York State free of charge as part of the New NY Bridge Project, later renamed the Governor Mario M. Cuomo Bridge. Monroe County accepted delivery of 31 bridge panels in June 2019, and this is the first project where they are being installed. The three bridge panels are being installed on new integral concrete abutments, and an epoxy deck overlay will be installed to cover the original striping. As of press time, the Salt Road Bridge was expected to open to traffic on or around August 14, 2020.

## MONTEREY, CA, USA

### Bike and Pedestrian Access and Safety Improvements

The **City of Monterey, CA, USA** recently completed construction on the region's first signalized Class IV Cycle Track in the median. In addition to the Class IV facilities, the North Fremont Bike and Pedestrian Access and Safety Improvements Project included stormwater improvements, traffic signal improvements, ADA signals and curb ramps, shorter crosswalks, safety lighting, and bulb outs. This was a major infrastructure project for the city, and was developed out of the North Fremont Specific Plan to improve mobility and revitalize business activity along the corridor. This innovative project was designed by Kimley-Horn with construction management by Harris



ERIC PALMER, CITY OF MONTEREY

& Associates and construction by Granite Construction.

The project was funded by Caltrans Active Transportation Program grant and was the highest ATP award in Northern/Central California in 2017. Future Plans for this facility include the connection to a more than 20-mile long planned trail network, the Fort Ord Regional Trail and Greenway.

## NORTH CAROLINA DOT

### The Impact of Multimodal Transportation



The North Carolina Department of Transportation highlighted the impact of multimodal projects on quality of life and economic growth with the second annual Mobi Awards. In 2020, the program received 68 nominations from 38 counties, and winners were chosen in five categories. Several projects exemplified the Mobis.

The Granite City Greenway in **Mount Airy, NC, USA** provides nonmotorized mobility and bicycle, pedestrian and transit connections through access to a park-and-ride lot. The redevelopment of Onslow County's Albert J. Ellis Airport terminal included an executive terminal, hangar complex and taxiways. The addition of a dedicated mass transit/commercial vehicle loading area improved access to the passenger terminal.

The Surf City Topsail Island Bridge Connector replaced an aging, 1950s-era steel truss drawbridge. The new bridge includes a multi-use path that creates a safe pedestrian route, connects the mainland to the beach, sidewalks and a park, and completes a link to the Mountains-to-Sea Trail.

## PORT MOODY, BRITISH COLUMBIA, CANADA

### Murray Street Corridor

The Murray Street corridor has always been a vibrant part of **Port Moody, British Columbia, Canada**, and is home to Rocky Point Park, Port Moody Station Museum, and Brewer's Row. But the area's popularity highlighted a lack of cycling facilities and pedestrian safety concerns.

The Murray Street Upgrades Project was completed in June 2020. The end result was a lively corridor through Port Moody that makes sustainable methods of transportation a safe, enjoyable, and convenient choice. A new multi-use path for pedestrians and cyclists delivers the missing link in the City's active transportation network, providing an off-street connection from the paths on Murray Street to the Moody Centre neighborhood and transit station.

Coordinated, pedestrian-activated crossings reduce drive times through this busy street during rush hour and—more importantly—improve visibility for crossing pedestrians and cyclists. The project also included upgraded street lighting, improvements to park access, and a rain garden to improve the area's stormwater management.



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## SAN LUIS OBISPO, CA, USA

### Pedestrian Hybrid Beacon



The **City of San Luis Obispo, CA, USA** completed construction of a pedestrian hybrid beacon at the intersection of Foothill Boulevard and Ferrini Road in December of 2019. As the highest ranking priority project in both the city's Safe Route to School and Anholm Neighborhood Greenway Plan, the foothill pedestrian hybrid beacon provides a safe and comfortable crossing for pedestrians and bicyclist to cross Foothill Boulevard—a high speed arterial with over 16,000 vehicles per day. The crossing provides a direct connection for residential neighborhoods to an elementary school and the Cal Poly University. Crossing volumes collected in January of 2020 showed a 300 percent increase of bicycle and pedestrian crossings during the AM peak hour. The pedestrian hybrid beacon is the first phase of the Anholm Neighborhood Greenway which will ultimately include 1.7 miles of separated bikeway connecting from Cal Poly into the downtown core.

## SNOHOMISH COUNTY, WA, USA

### Intersection Improvement with Trail Realignment

At the Machias Road S. and Machias Cutoff Intersection in **Snohomish County, WA, USA**, the existing all-way stop intersection had complicated geometry and a separate trail crossing 130 feet away. To improve operation of the intersection a traffic signal was installed with realigned approaches, turn lanes, shoulders and the trail crossing as a dedicated pedestrian phase. Project constraints included critical areas on all sides, replacement of a failing culvert with a 17-foot fish-passage concrete box culvert, and many existing utilities that converged at this intersection. The project required coordination with local tribes, permitting agencies, various County departments including Parks and Recreation, six nearby property owners, and seven utility franchises. The project was successfully constructed in one construction season by relocating conflicting utilities prior to construction, managing the traffic (10,000 ADT) with a temporary road, managing the high number of summer trail users with a temporary trail, and successful timing of the fish passage culvert replacement to fit in the limited in-water work window.



## SUMTER COUNTY, FL, USA

### Parking Incorporated into Architecture

This project is a two-story precast concrete parking facility with parking for 328 vehicles to service **Sumter County, FL, USA's** historic courthouse, judicial building, property appraiser, and tax collector's office. The design intent was to maximize the number of parking spaces on



the site while complimenting the surrounding architecture without overpowering the historic courthouse. Existing site limitations forced the footprint of the parking facility to stand proud of the historic courthouse's front door, closer to N. Florida Street. Therefore, the team made efforts to minimize the height of the towers of the parking facility to be proud of, yet stand subservient to the historic courthouse. We used many of the same building materials and architectural features that are prominent on the historic courthouse to seamlessly connect the campus architecturally. The team heavily landscaped a meandering walkway that connects the parking facility to the historic courthouse and judicial building creating a naturalistic atmosphere of both new and preserved landscaping. New site lighting to match the existing architecture was added around the entire facility and connecting walking paths. A new accessible ramp in front of the historic courthouse with service to the existing parking lot on the west side of N. Florida Street was also integrated into this project.

## VANCOUVER, BRITISH COLUMBIA, CANADA

### Improved Passenger Communication Infrastructure

TransLink—the public transportation provider in **Vancouver, British Columbia, Canada**—is undertaking a challenging project to improve passenger communication infrastructure in 33 rapid transit stations. The project involves updates to the public address (PA), closed circuit television (CCTV) cameras, and platform displays. More than 2,800 devices will be installed. Work on this aging infrastructure was conducted in active stations, so contractors had to safely work around the travelling public. When complete, the displays will provide real time information, to improve the everyday customer experience by providing better information about train arrival times, which was not provided prior to the project. During service disruptions, the PIDS will provide important information to customers and the new PA will provide improved audibility of announcements. The improved CCTV cameras will help enhance security. Together the improved infrastructure will benefit passengers in normal times and during emergencies, and TransLink has already received excellent feedback from the public.

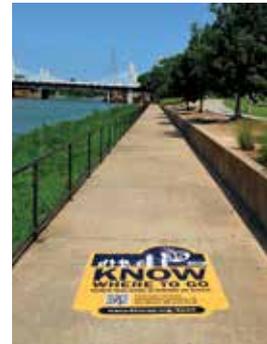


## WACO, TX, USA

### Unique Pedestrian Safety Campaign

The Texas Department of Transportation (TxDOT) has undertaken a massive \$342 million construction project in **Waco, TX, USA** on I-35, one of the state's most heavily traveled highways. The area also has a high number of pedestrians regularly crossing the highway to get to Baylor University, the Texas Ranger Museum, and athletic complexes on the east, and downtown, the convention center, hotels, and popular restaurants on the west. Safety is a top priority for TxDOT, and the agency has initiated a noteworthy and unique pedestrian campaign that includes:

- Facilitating a committee focused on pedestrian safety and comprised of local and advocacy group leaders,
- Launching a BE SAFE BE SEEN campaign focused on education and awareness highlighting “Stay Alive, Don’t Cross I-35,” Developing an online map resource highlighting pedestrian crossing locations and up-to-date adjustments to a constantly changing construction zone, and
- Installing pavement decals that share safety messages and link pedestrians to online maps and crossing diagrams.



## YORK REGION, ONTARIO, CANADA

### Vaughan BRT – Highway 7 West and Bathurst and Centre

New dedicated Bus Rapid Transit (BRT) lanes (rapidways) in **York Region, Ontario, Canada** have connected people and places across two urban growth centers in Vaughan and Richmond Hill. Project features include:



- **Faster rapid transit:** dedicated rapidway lanes allow for significant reduction in travel time.
- **An attractive, accessible streetscape:** wider, pedestrian-friendly boulevards and separated, raised bike lanes and shared-use path, giving people more active transportation choices.
- **Safe passage for people walking, jogging, or cycling over a major highway:** York Region's first median multi-use path along Highway 7 is protected by concrete barriers, with signalized intersections at each end that enable safe crossings.
- **Fast lanes for emergency services:** allows police, fire, and ambulance vehicles usage of rapidways for emergencies.
- **Upgraded utilities:** new water main, fiber optic cable, gas main, and storm sewers are installed during construction.

The vivaNext rapidway projects will benefit communities for years to come! [itej](http://itej.com)