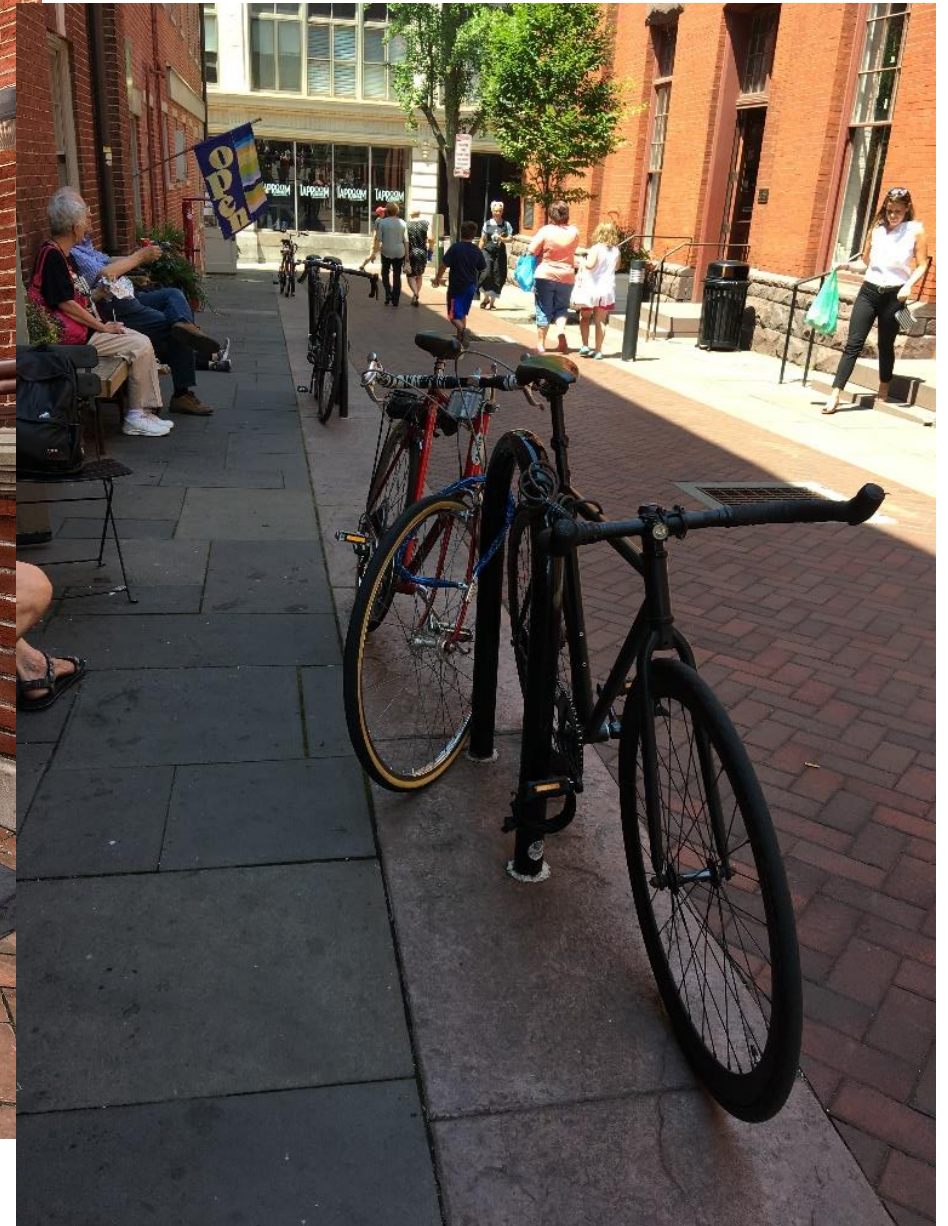


Building an Urban Bike Network in Lancaster

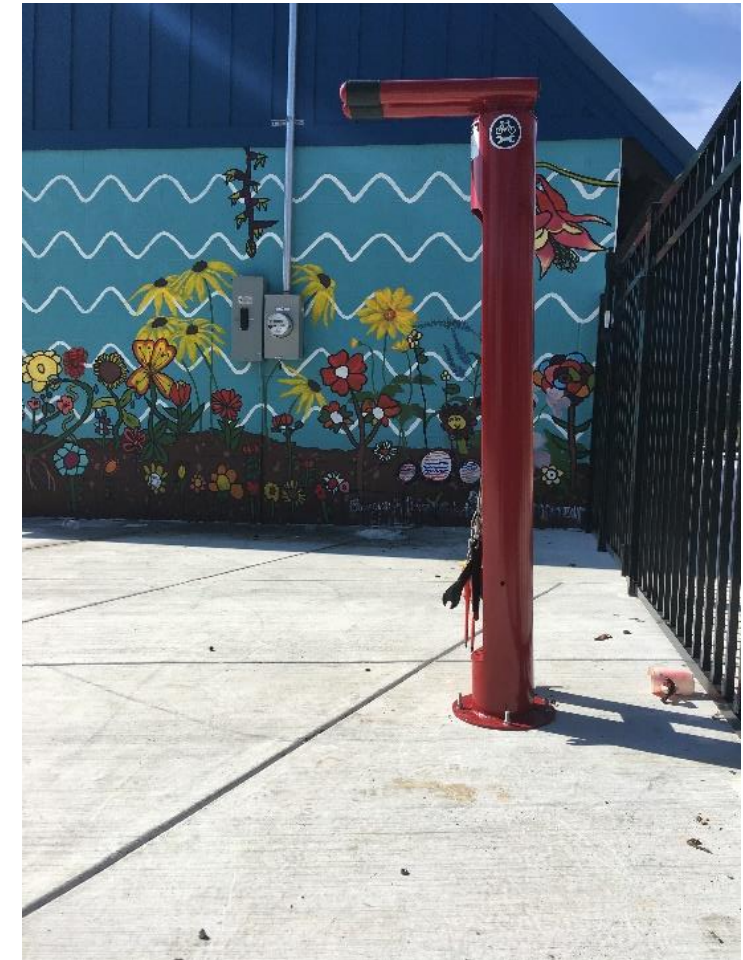
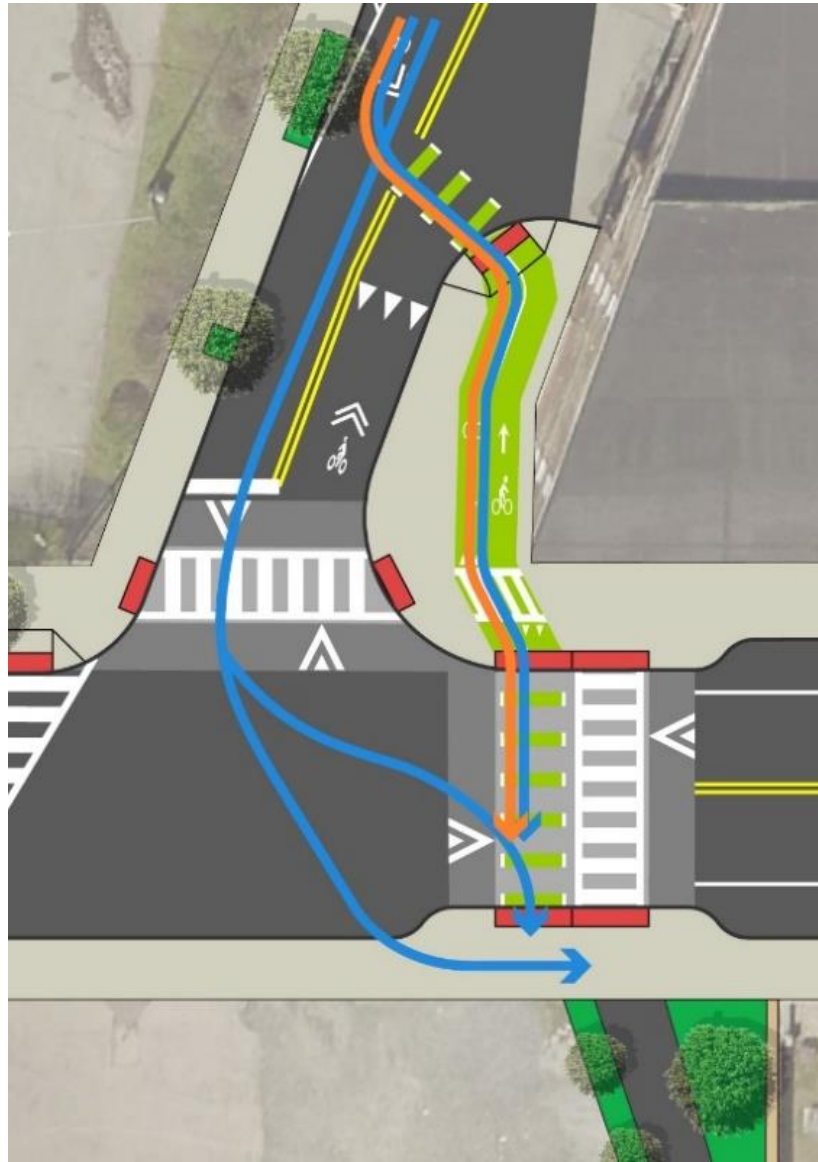
Tour Stop #1 – Penn Square and Lancaster Visitors Center

The center of downtown Lancaster is a the center of all things Lancaster. Penn Square, Central Market and the Conveention Center are all here. It is a truly multimodal area, with two state highways intersecting, two bus routes, a bike share station and a walk score of 99.



Tour Stop #2 - Water Street Bike Boulevard (Culliton Park at Conestoga St)

The Water Street Bicycle Boulevard creates a north-south route through the city that is safe, comfortable, and convenient for pedestrians and bicyclist of all ages and abilities as well as cars and trucks. Bicycle boulevards are low-volume and low-speed streets that have been optimized for bicycle travel through treatments such as traffic calming and traffic reduction, signage and pavement markings, and intersection crossing treatments. These treatments allow through movements for cyclists while discouraging similar through trips by non-local motorized traffic. Motor vehicle access to properties along the route is maintained.



Tour Stop #3 – Strawberry & Vine Asphalt Art

This project funded through the Bloomberg Foundation's Asphalt Art Initiative that creates street murals and other creative interventions to improve pedestrian safety and enhance public spaces. The five-way intersection of West Strawberry Street, West Vine Street, and South Mulberry Street in Cabbage Hill was a confusing space integral to the neighborhood and city-wide traffic circulation. Installation by the artist team of Fern Danner and Two Dudes Painting occurred in September 2021.



Photo: Chris Fravel/The Drone Geek

Tour Stop #4 - Race Street and Walnut Street Protected Bike Lane

This parking separated bike lane runs for nearly 2 miles from N Broad St at the eastern boundary of the City to College Ave on the west side. This is the westbound alignment of the Lancaster Heritage pathway. The PSBL reduces the two west bound travel lanes to 10.5 feet wide from more than 14 feet wide allowing the installation of the 5-foot wide bike lane adjacent the southern curb. The bike lane is separated from moving vehicles by parked cars and a 3-foot wide painted buffer between the bike lane and parked cars.



A creative solution was needed to connect to the eastbound alignment on Buchanan Avenue and Lemon Street. Extensive use of pavement markings, signage and green paint at Race Street and again at Buchanan Avenue, allow cyclist to safely transition between the two alignments, or when complete, continue traveling westward. All improvements are consistent with nationally recognized standards of the Federal Highway Administration (FHWA) as well as National Association of City transportation Officials (NACTO).

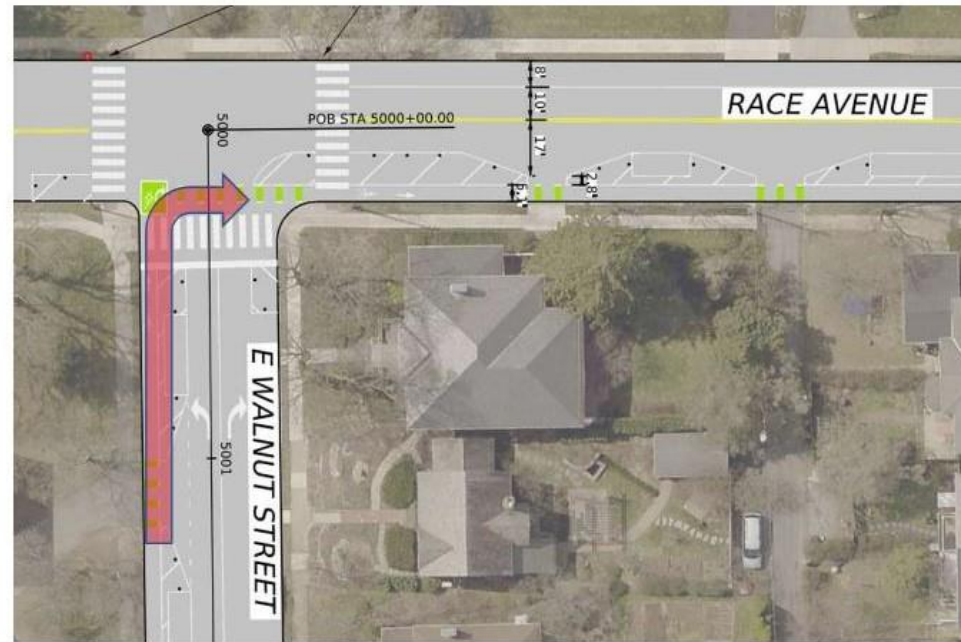


CITY OF
LANCASTER

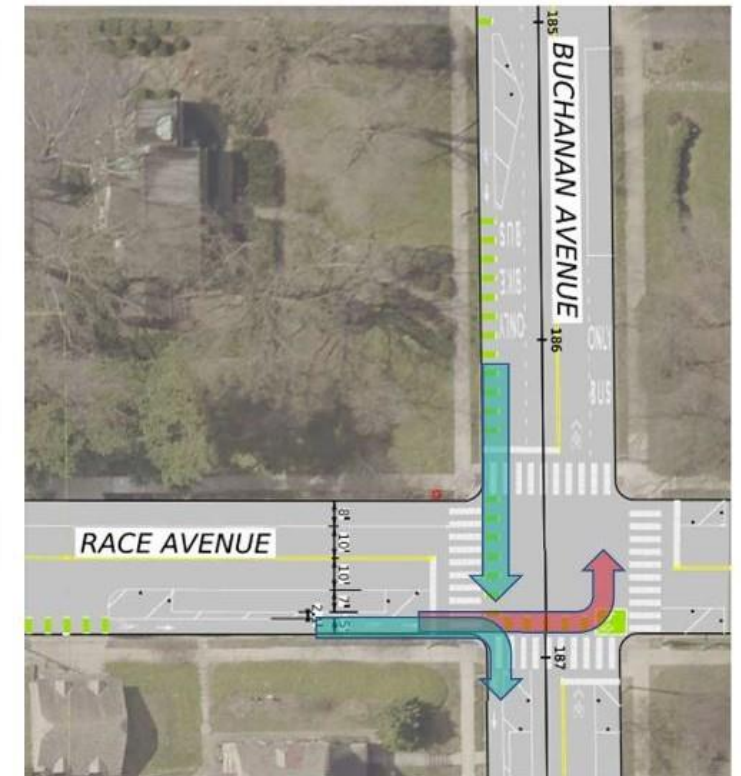
LANCASTER EASTBOUND CONNECTOR

State Street to Reservoir Street

CONNECTIONS



K KITTELSON
& ASSOCIATES



Tour Stop # 5 – Lemon St. (Eastbound Connector) at Charlotte St.

In 2018, seven blocks of Charlotte Street was restored to two-way traffic similar to the two-way conversion of Mulberry St. in 2016. These parallel north-south streets were redesigned and reconstructed as a green complete street that integrate green stormwater infrastructure and design elements that make the street safe and convenient for people of all ages and abilities regardless of their mode of transport. Green infrastructure improvements include permeable paver parking lanes, vegetated curb extensions, new trees). The transportation and pedestrian safety improvements consist of bike lanes and shared lane markings, ADA compliant ramps, audible signals, crosswalks).



Like the complimenting nature of Charlotte and Mulberry Streets, Lemon Street has been redesigned to provide the eastbound route of the Lancaster Heritage Pathway through the City.

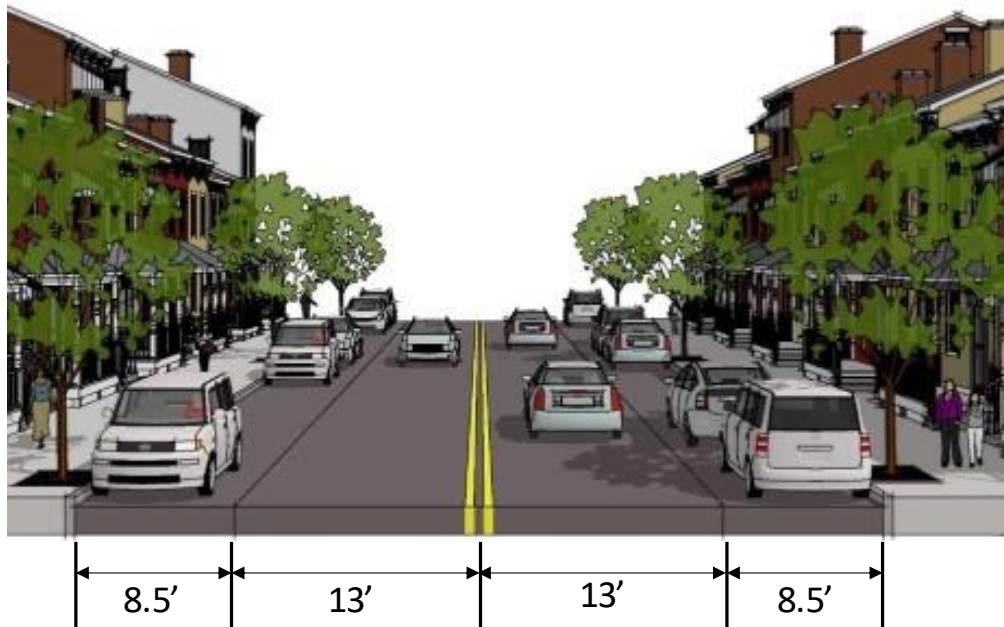


LANCASTER EASTBOUND CONNECTOR
State Street to Reservoir Street

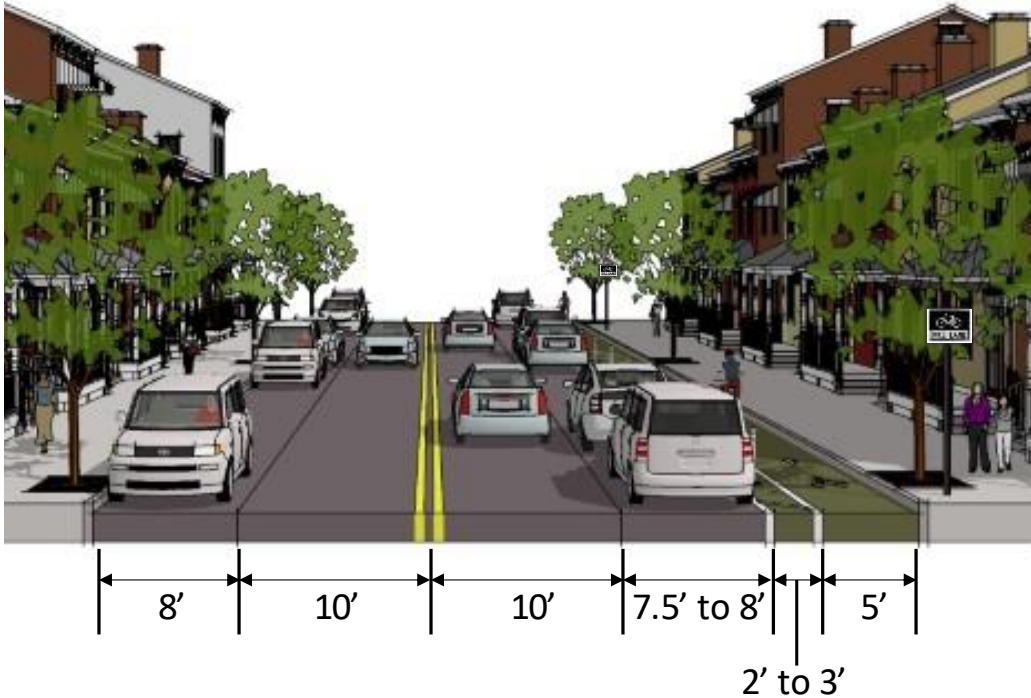
LEMON STREET



Existing Street Section



Proposed Street Section – Eastbound PSBL





DESIGN OVERVIEW

Design Toolkit



SHARED BIKE LANE



BIKE LANE



BUFFERED
BIKE LANE



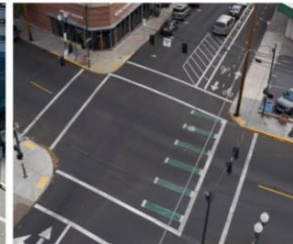
PARKING SEPARATED
BIKE LANE



DIRECTIONAL SIGNAGE



DAYLIGHTING



CONFLICT
MARKINGS



BIKE BOX



RECTANGULAR RAPID
FLASHING BEACON



DIRECTIONAL SIGNAGE



FLEXIBLE
DELINEATOR POSTS



ARMADILLOS



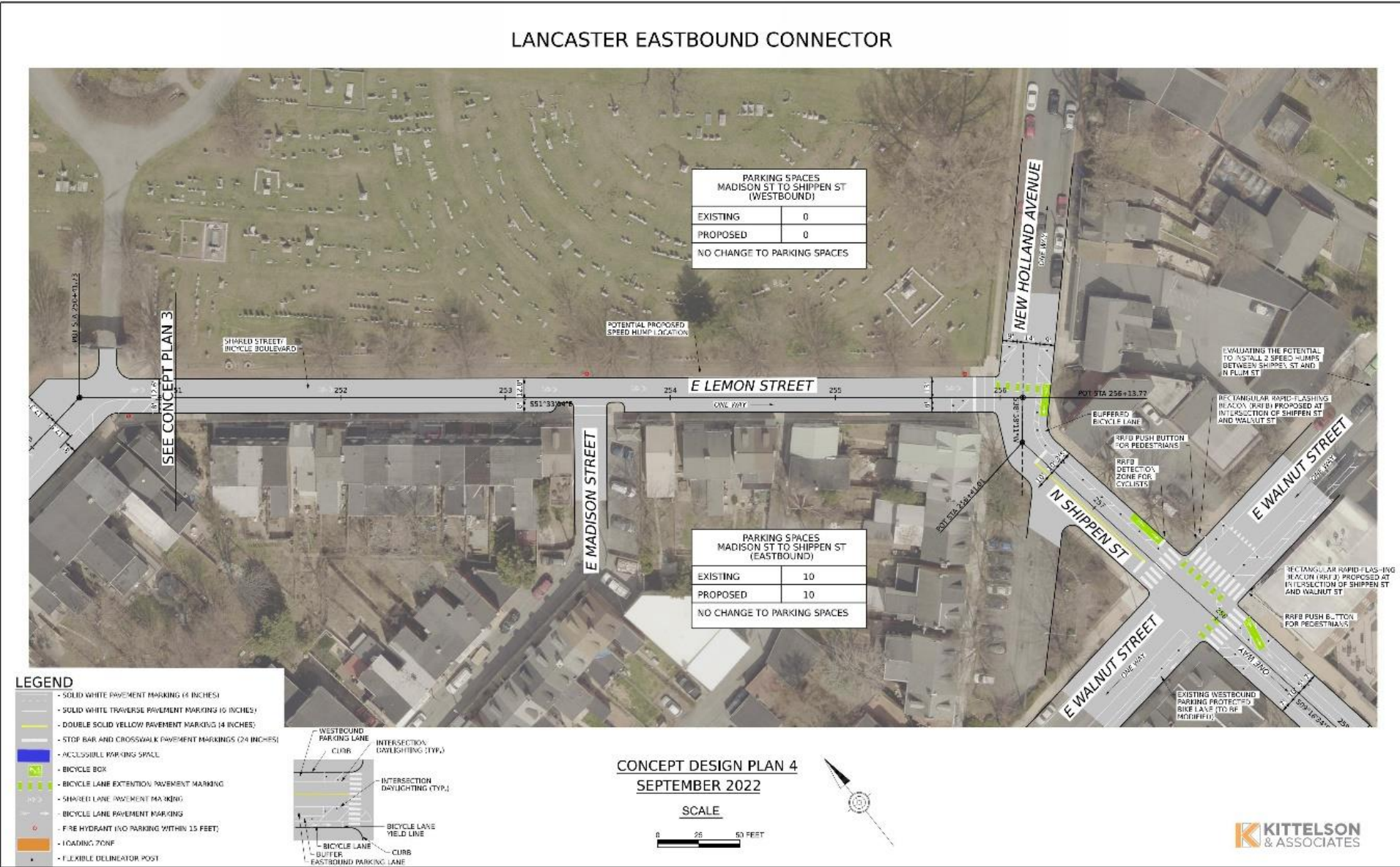
PARKING STOPS



SLOW TURN WEDGE

**Tour Stop #6 – Triangle
Park: Walnut and
Shippen Streets**

Connectivity is the cornerstone of a network that is useful and convenient to a variety of users. The intersection of N. Shippen St and E Walnut Street connects the east and west alignments of the Lancaster Heritage Pathway as well as popular north-south route on a low-volume street. Safety is paramount in designing in-street bicycle facilities, especially at challenging intersections like this.



Finding the most appropriate route for the Eastbound Connector has challenged City staff and its consultants. Alternatives were evaluated and the current Lemon Street/Fulton Street alignment was selected as offering both safety and convenience. While Lemon Street will be mostly a PSBL, Fulton Street will be another bicycle boulevard.



LANCASTER EASTBOUND CONNECTOR Shippen Street to Ranck Avenue

FULTON STREET FROM SHIPPEN STREET TO RESERVOIR STREET



Bike Boulevard

- Bicycle sharrow markings
- "Bikes Use Full Lane" signage
- Speed humps
- Intersection daylighting
- Consider curb extensions and green stormwater infrastructure



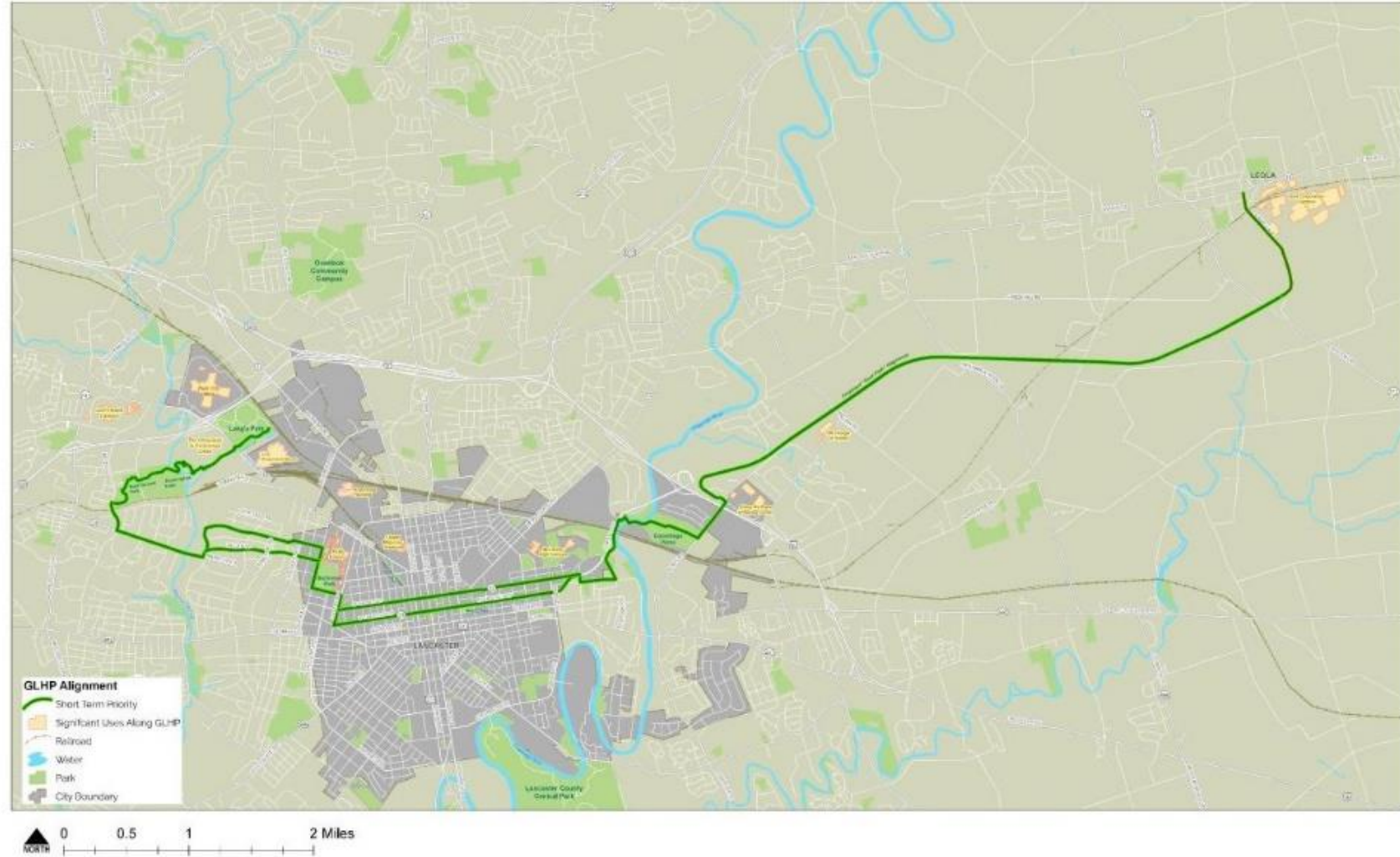
Tour Stop #7 – Chestnut Street and Ranck Mill Road

The Chestnut Street and Ranck Mill Road intersection provides key connection for the eastbound Heritage Pathway route through the City. The currently unmarked crossing is a few hundred feet east of a curve. As is often the case with trying retrofit intersections that were seemingly built for high-speed motor vehicle travel, additional evaluation will need to be done. This is a concept of one possible scenario.



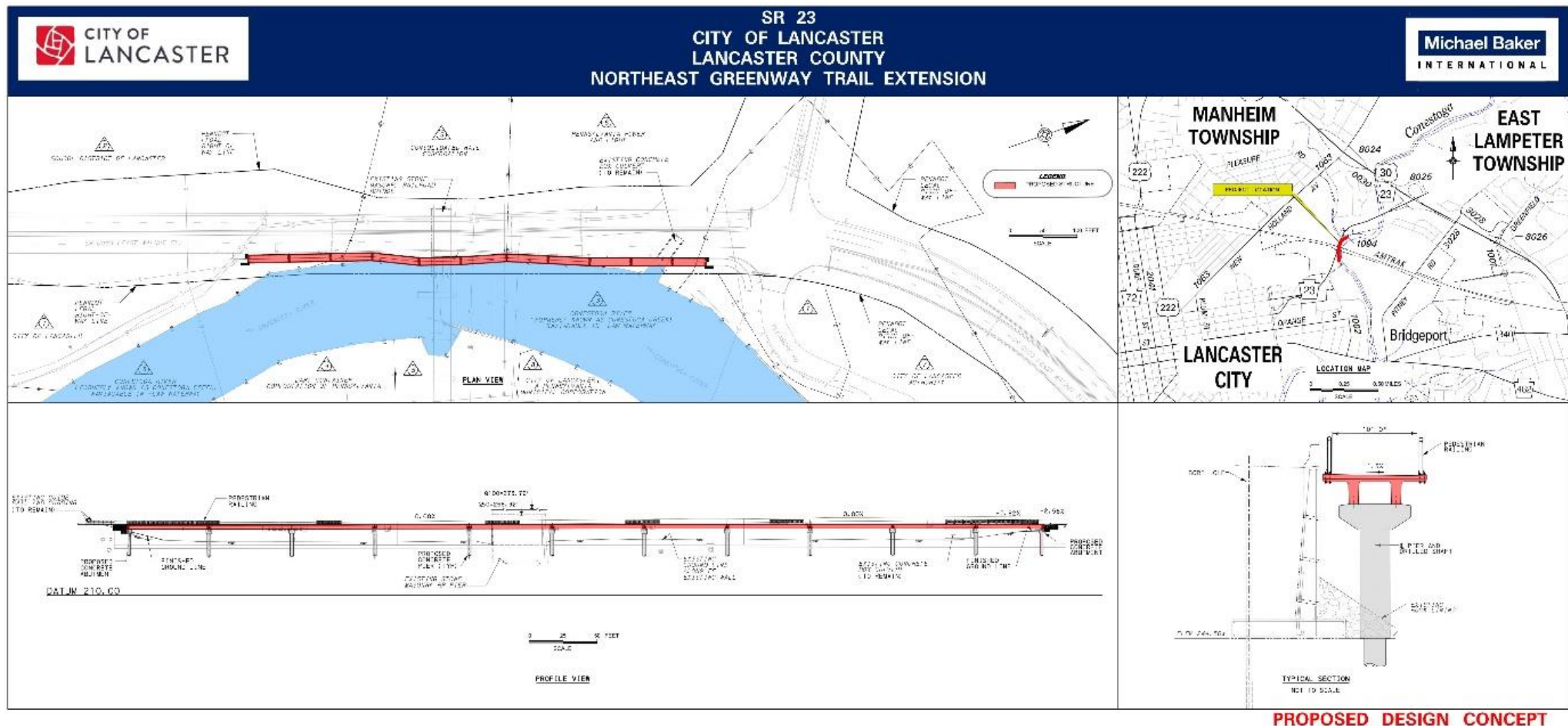
The Lancaster Heritage Pathway is a proposed 15-mile shared use trail that runs from Penn Medicine Lancaster General Health's Suburban Pavilion, west of the City, to Leola to the east.) As more fully described in the [Lancaster Active Transportation Plan](#), this trail would provide recreational and commuter opportunities to over 200,000 residents living in the Lancaster Metro area. The trail is a combination of on- and off-road active transportation facilities that will be developed incrementally. The alignment through the City would utilize parallel streets: Walnut Street as the westbound route and Lemon Street and Fulton Street eastbound.

Lancaster Active Transportation Plan Proposed Alignment of the Greater Lancaster Heritage Pathway (GLHP)



Tour Stop #8 – City PubliC works Operations Center – Conestoga River Bridge

The City of Lancaster is planning the implementation of a 725-foot Boardwalk Walkway/Bikeway that will be a key connection in the planned Lancaster Heritage Pathway and will allow residents of the City to walk or bike to access the Conestoga River and the Waterworks and Conestoga Pines Park. The Boardwalk will be adjacent to Walnut St./State Route 23 and will connect trails at the City's Operations Center, located in Lancaster Township, with the Walnut Street Fishing Area – both sites are owned by the City of Lancaster.



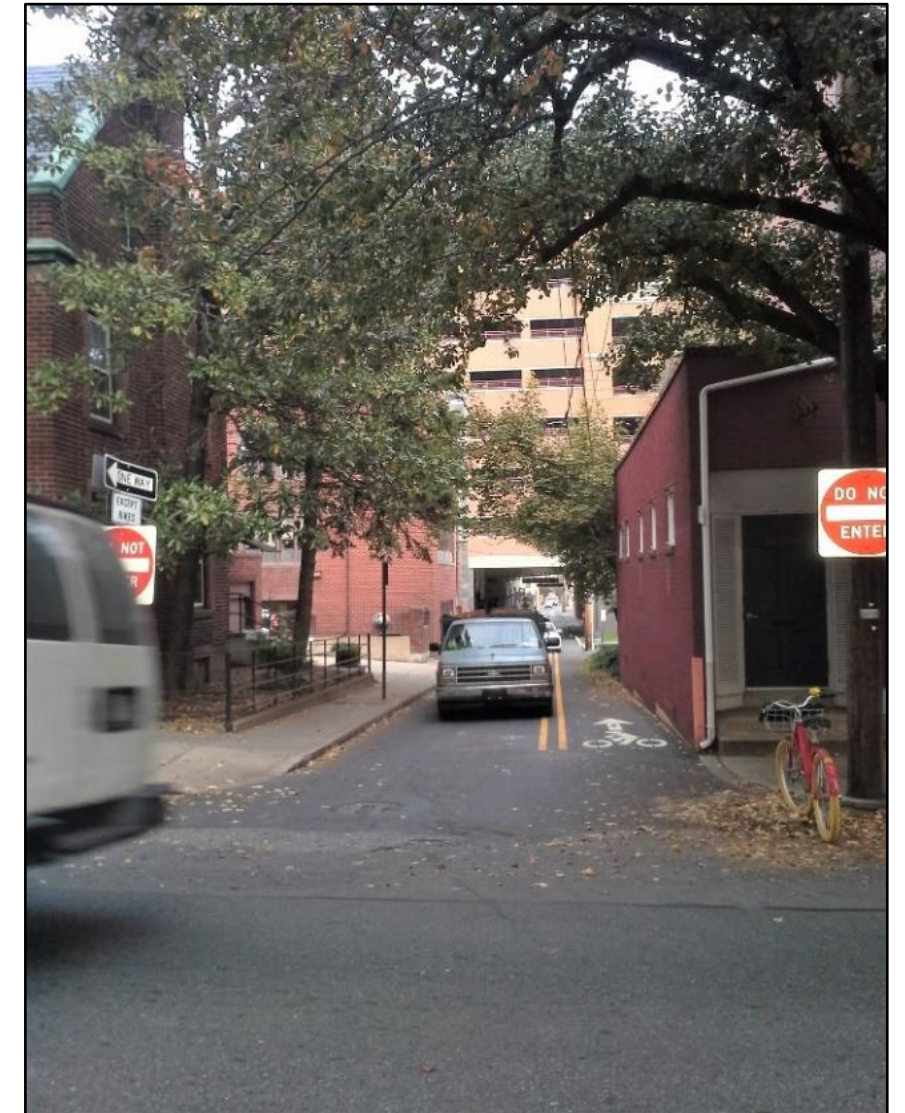
PROPOSED DESIGN CONCEPT

Tour Stop #9 - Christian Street Bicycle Boulevard

The first phase of the Christian Street Bike Boulevard between Amtrak and downtown was completed in 2020. A bike boulevard is a low-volume and low-speed street that has been enhanced for bicycling through treatments such as signage, pavement markings, and intersection crossing treatments that calms and discourages through trips by non-local motorized traffic. Pedestrian safety is also increased while maintaining motor vehicle access to properties along the route.



Features include patterned pavement markings throughout, upgraded crosswalks, and rectangular rapid flash beacons at several busy cross streets. A contra-flow bike lane was installed on one block with one-way traffic.



Tour Stop #10 – Amtrak

The 2nd busiest passenger rail station in Pennsylvania after Philadelphia's 30th Street Station.



Thank You



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