Broad Street Road Diet

Public Informational Meeting

Date: December 19, 2023

Presented to



Designer





Proposed Improvements

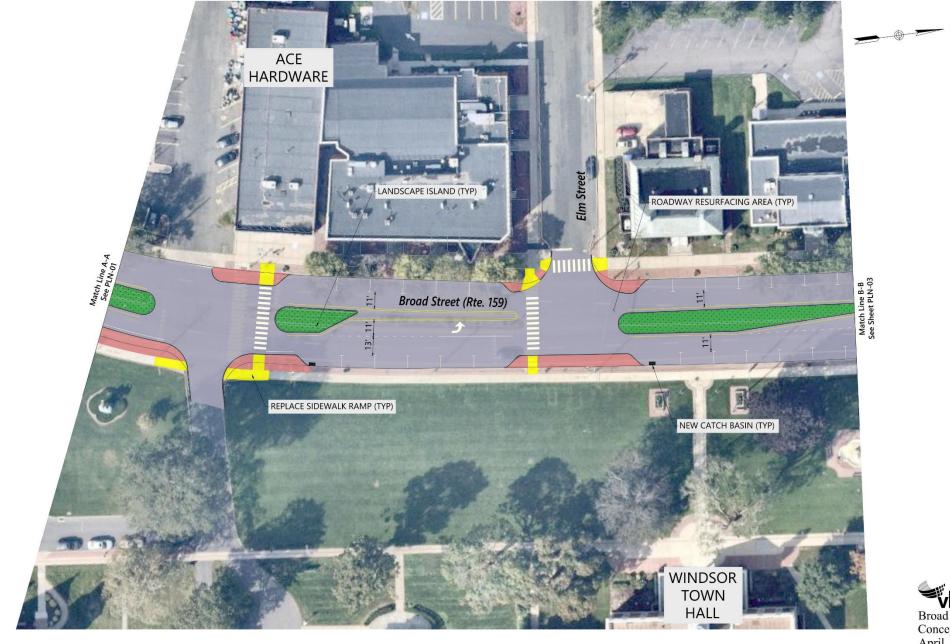
- Bump outs to reduce pedestrian crossing distance
- On-street parking to provide convenient access to local businesses
- Single through and left turn lanes
- Landscaped medians
- Replace 3 traffic signals (Batchelder Road, Maple Avenue, and Poquonock Avenue/Palisado Avenue)







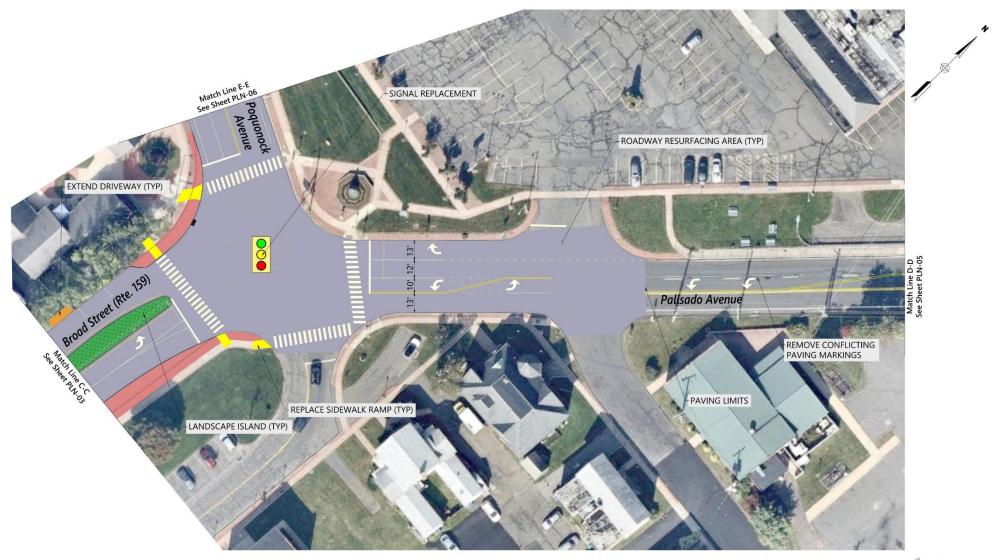




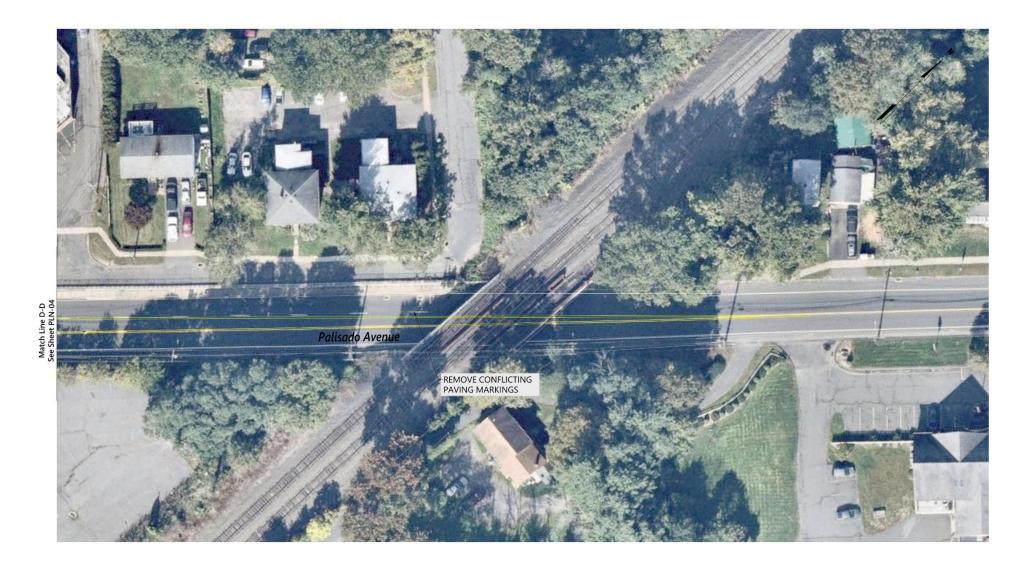
Broad Street-PLN-02 Concept Layout April, 2022 Windsor, CT



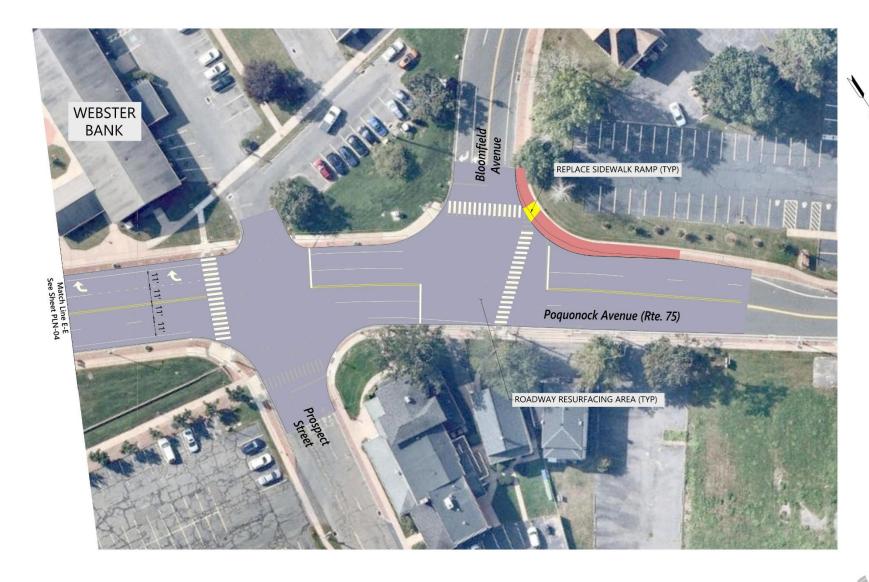
Broad Street-PLN-03 Concept Layout April, 2022 Windsor, CT













Traffic Operations

- Capacity analyses conducted using industry standard Synchro software
- Compared future traffic conditions with and without road diet during weekday AM & PM peak
- Intersections project to operate at overall LOS B or better during peak periods
- Road diet will have minimal impacts to traffic conditions

Overall Intersection Level of Service (LOS)				
	2030 Baseline		2030 Build (with Road Diet)	
	AM	PM	AM	PM
Broad St. (Route 159) at Poquonock Ave. (Route 75)	В	В	В	В
Broad St. (Route 159) at Maple Ave.	Α	Α	Α	Α
Broad St. (Route 159) at Batchelder Rd.	А	А	А	А



Proven Safety Countermeasures



Safety Benefits:

4-Lane to 3-Lane Road Diet Conversions

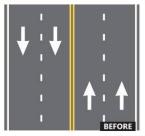
19-47%

reduction in total crashes.1

For more information on this and other FHWA Proven Safety Countermeasures, please visit https://highways.dot.gov/safety/proven-safety-counter measures and https://highways.dot.gov/safety/other/road-diets.

Road Diets (Roadway Reconfiguration)

A Road Diet, or roadway reconfiguration, can improve safety, calm traffic, provide better mobility and access for all road users, and enhance overall quality of life. A Road Diet typically involves converting an existing four-lane undivided roadway to a three-lane roadway consisting of two through lanes and a center two-way left-turn lane (TWLTL).





Before and after example of a Road Diet. Source: FHWA

Benefits of Road Diet installations may include:

- Reduction of rear-end and left-turn crashes due to the dedicated left-turn lane.
- Reduced right-angle crashes as side street motorists cross three versus four travel lanes.
- Fewer lanes for pedestrians to cross.
- Opportunity to install pedestrian refuge islands, bicycle lanes, on-street parking, or transit stops.
- Traffic calming and more consistent speeds.
- A more community-focused, Complete Streets environment that better accommodates the needs of all road users.

A Road Diet can be a low-cost safety solution when planned in conjunction with a simple pavement overlay, and the reconfiguration can be accomplished at no additional cost. Typically, a Road Diet is implemented on a roadway with a current and future average daily traffic of 25,000 or less.



Road Diet project in Honolulu, Hawaii. Source: Leidos

^{1 (}CMF ID: <u>5554-2841)</u> Evaluation of Lane Reduction "Road Diet" Measures on Crashes, FHWA-HRT-10-053, (2010).





Questions?

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