

Project Title:	CTH KE – CTH E Intersection	Project #:	202520
Department:	Public Works - Highways	Project Type:	Intersection
Phase:	Preliminary Design	Road Name:	Maple Ave & North Shore Dr
Budget Action:	C - \$ Update C - Rev Update	Manager:	Allison Bussler, DPW Director
Date:	June 2, 2025	Map/Image:	Click Here

CAPITAL BUDGET SUMMARY						
Year	2025	2026	2027	2028	2029	Total
Project Phase	Design	Design/Land		Const		Project
Expenditure Budget	\$195,000	\$155,000	\$0	\$1,059,000	\$0	\$1,409,000
Revenue Budget	\$0	\$0	\$0	\$847,000	\$0	\$847,000
Net Costs After Revenues Applied	\$195,000	\$100,000	\$0	\$1,521,000	\$0	\$562,000
COST DOCUMENTATION			REVENUE			
Design		\$250,000	Federal CRP (Construction)			\$847,000
Land Acquisition		\$100,000				
Construction		\$921,000				
Construction Management		\$92,000				
Contingency		\$46,000				
Total Project Cost		\$1,409,000	Total Revenue			\$847,000
EXPENDITURE BUDGET		\$1,409,000	REVENUE BUDGET			\$847,000

Project Scope & Description

The purpose of this project is to build a single-lane compact roundabout at the intersection of CTH KE (North Shore Drive) and CTH E (Maple Avenue). This change to the existing CTH KE and CTH E intersection will provide safer traffic control, reduce collisions, improve visibility for turning vehicles, and reduce delays for the traveling public. Improvements would include:

- Build a central island with a diameter between 80 feet & 100 feet and a height of 4 to 10 inches with a traversable curb
- Build a lane width of 16 feet
- Build splitter islands on each approach with a traversable curb
- Add pedestrian accommodations
- Add 4-quadrant street lighting

DPW received Federal Carbon Reduction Program (CRP) funding for construction for the compact roundabout. Federal CRP funding is not available for design or land acquisition. The CRP federal funding revenue is \$369,800 lower than previously anticipated and construction cost was reduced to reflect better understanding of compact roundabout design requirements and to match an 80%/20% federal/county cost share. Design costs are increased by \$55,000 based on federalized design process and negotiated contract. Overall net county expenditure has been reduced by \$37,200.

Locations

Village of Hartland and Town of Delafield

Analysis of Need

The intersection is in a well-developed area with a mix of residential and commercial uses. On CTH KE (North Shore Drive) the intersection is uphill for both eastbound and west traffic. The residents use this area for exercise and some children walk across the intersection to reach school. The commercial uses attract heavy vehicle traffic that is often unfamiliar with the intersection. Being unfamiliar with the area, and approaching the intersection uphill, they often do not see the stop signs and run through the intersection.

Over the five-year period from January 2019 and December 2023 there have been 14 crashes at the intersection. At least 7 of these crashes could have been mitigated with the installation of a compact roundabout.

Alternatives

Leave the existing all way stop traffic control at the intersection in place.

Ongoing Operating Costs

Maintenance costs for the roundabout should be lower than for the existing all way stop. Some additional operational costs will be associated with street lighting utility cost.

Previous Action

Approved as a new project in the 2025-2029 capital plan.