

Project Title:	CTH T – CTH JJ Intersection	Project #:	202305
Department:	Public Works - Highways	Project Type:	Intersection
Phase:	Preliminary Design	Road Name:	Main Street
Budget Action:	C - \$ Update C - Rev Update Delay	Manager:	Allison Bussler, DPW Director
Date:	July 8, 2024	Map / Image:	Click Here

CAPITAL BUDGET SUMMARY					
Year	2024	2025	2026	2027	Total
Project Phase	Design	Land		Construction	Project
Expenditure Budget	\$16,000	\$75,000	\$0	\$94,100	\$185,100
Revenue Budget	\$0	\$0	\$0	\$0	\$0
Net Costs After Revenues Applied	\$16,000	\$75,000	\$0	\$94,100	\$185,100
COST DOCUMENTATION			REVENUE		
Design		\$135,000	Federal Highway Safety Improvement		
WisDOT design Review		\$25,000	Program (HSIP) Funding		
Land Acquisition		\$75,000	Design		\$144,000
Construction		\$843,700	Construction		\$846,600
Construction Management		\$54,000			
Contingency		\$43,000			
Total Project Cost		\$1,175,700	Total Revenue		\$990,600
EXPENDITURE BUDGET		\$185,100	REVENUE BUDGET		\$0

Project Scope & Description

The purpose of this project is to improve the traffic signal equipment and geometry of the intersection of CTH T (N Grandview Boulevard) and CTH JJ (Bluemound Road). Changes to the existing CTH T and CTH JJ intersection will provide safer traffic signal control, reduce collisions, and improve visibility for turning vehicles. Improvements include:

- Realign CTH T left turn lanes to improve visibility of opposing traffic.
- Replace all existing traffic signal equipment, installing monotubes and adding retroreflective backplates over each approach lane.
- Replace induction loops with new video detection.
- Reconfigure medians, corner islands, and curve radii to accommodate lane realignment if warranted.
- Conduct a traffic study to determine any appropriate modifications to turning bay capacity and signal timing and to determine if upgrading street lighting would improve the safety of the intersection.

Waukesha County received HSIP funding for the intersection improvements. Costs and revenues have been updated to reflect the signed SMA. The county share for expenses is reduced by \$45,600. Construction is delayed from 2026 to 2027 to better accommodate design and land acquisition schedules.

Location: City and Village of Pewaukee

Analysis of Need

Of the intersections reviewed in a 2022 safety screening study, the intersection of CTH T and CTH JJ had the second highest crash rate with respect to its volume. Thirty-seven (37) crashes have occurred over a 5-year period with southbound vehicles turning left onto CTH JJ accounting for twelve (12) of them. The existing lane alignment of CTH T restricts visibility of oncoming traffic. Complete replacement of traffic signal equipment is warranted. A significant number of accidents occurred in the night-time and under slippery conditions, indicating that a study into improving visibility with improved street lighting is warranted.

Alternatives: The do nothing alternative does not address an identified high crash rate intersection.

Ongoing Operating Costs: It is anticipated that improvements to signal equipment would result in a minor operational cost increase.

Previous Action: Approved as a new project in the 2023-2027 capital plan. Approved accelerated with a cost and revenue update in the 2024-2028 capital plan.