



## Authorization to Submit Recommended Design Alternative to MnDOT for the County Road 50/5 Interchange with I-35 in Lakeville

Dakota County Board  
January 21, 2025  
Doug Abere, Senior Project Manager

## Presentation Outline



- Review and Update on Project Alternatives
- Factors for the design recommendation
  - Two alternatives presented to public: Dec 19, 2024
  - Reviews with MnDOT and City of Lakeville
  - Traffic mobility/safety; local impacts and costs
  - Schedule: regulatory and funding-program deadlines
- Discussion & County Board Action

# Review and Update - Project Alternatives



Example Layout	Interchange Concept	Traffic Mobility	Traffic Safety	Safety for people walking and biking	Property Impacts	Construction Cost
	Alt 1 - Modernized Diamond with SE Loop	▲▲	▲▲	▲▲	19 parcels impacted 2 relocations	\$\$\$\$\$
	Alt 2 - Modernized Diamond	▲▲	▲▲	▲▲	19 parcels impacted 2 relocations	\$\$\$
	Alt 3 - Diverging Diamond	▲▲▲	▲▲▲	▲▲	19 parcels impacted 1 relocation	\$\$\$
	Alt 4 - Peanut Roundabout	▲	▲	▲▲	20 parcels impacted 1 relocation	\$\$\$
	Alt 5 - Diamond with SW Loop	▲▲	▲▲	▲▲	20 parcels impacted 2 relocations (highest risks)	\$\$\$\$

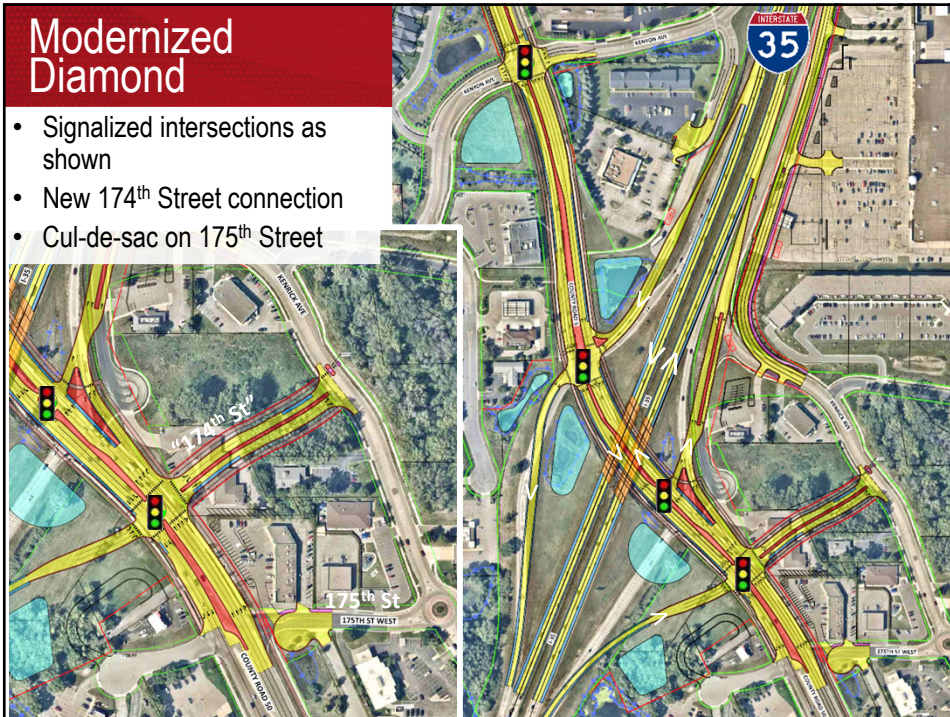
**Two alternatives presented to the public on Dec 19, 2024:**

- Modernized Diamond
- Diverging Diamond



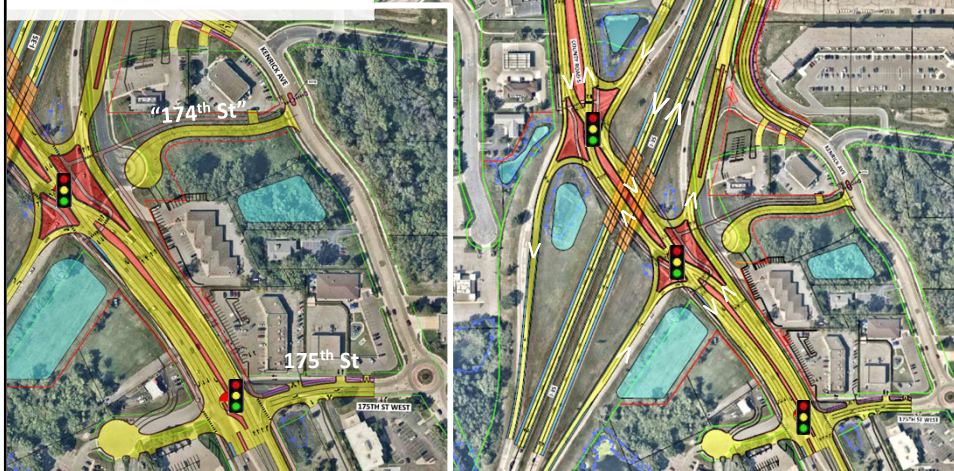
## Modernized Diamond

- Signalized intersections as shown
- New 174<sup>th</sup> Street connection
- Cul-de-sac on 175<sup>th</sup> Street



## Diverging Diamond

- Unique intersections w/signals; “crossovers” help move traffic
- 175<sup>th</sup> Street connection with signal added



## Technical Reviews with MnDOT and City



### • Traffic and safety

- Traffic mobility/congestion: alternatives are similar, with most traffic connecting with I-35 (60% - 80%)
- Diverging diamond expected to reduce crashes vs. typical diamonds (80 similar designs in 24 states):
  - 44% fewer fatal & injury crashes
  - 8% fewer property damage crashes
  - Similar findings for completed Minnesota projects

- **Pedestrians/bicyclist safety, local impacts, costs – alternatives are similar**

## Recommendation and Updated Cost Estimate



- **Diverging Diamond is the recommended design**
  - Best fit to primary traffic needs – connect with I-35
  - Significantly better long-term traffic safety
  - Details can be addressed for pedestrians and bicyclists
- **Updated construction estimate for funding applications**  
(specific design elements and inflation per guidance to 2028)
  - \$40.8M State Trunk Hwy (I-35 bridges, ramps, auxiliary lane)
  - \$10.8M County Road 50/5
  - \$10.9M County & City matching
  - \$62.5M Total Construction (not including design & right-of-way)

## Schedule Objectives



### January 2025

- Submit recommended design to MnDOT as a *study layout* on Jan 27  
(Feb 1 deadline per MN Greenhouse Gas Reg., regarding highway expansion)
- Federal RAISE grant submittal – due Friday, Jan 31

### Additional 2025 Schedule Goals

- State Funding Opportunities
  - State Bonding in legislative session
  - Corridors of Commerce, summer-fall 2025
- Design reviews/refinement, environmental documentation, business community and public outreach (with open house no. 3)

- Discussion
- **Action:** Authorization To Submit Recommended Design Alternative To Minnesota Department Of Transportation For Interchange Improvements At County State Aid Highway 50/5 And Interstate 35 In City Of Lakeville, County Project 50-33