



WELCOME

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**U.S. 50/Meridian Road Interchange
Improvements and Bridge Replacement**
Southwest Newton



Project Background & Need

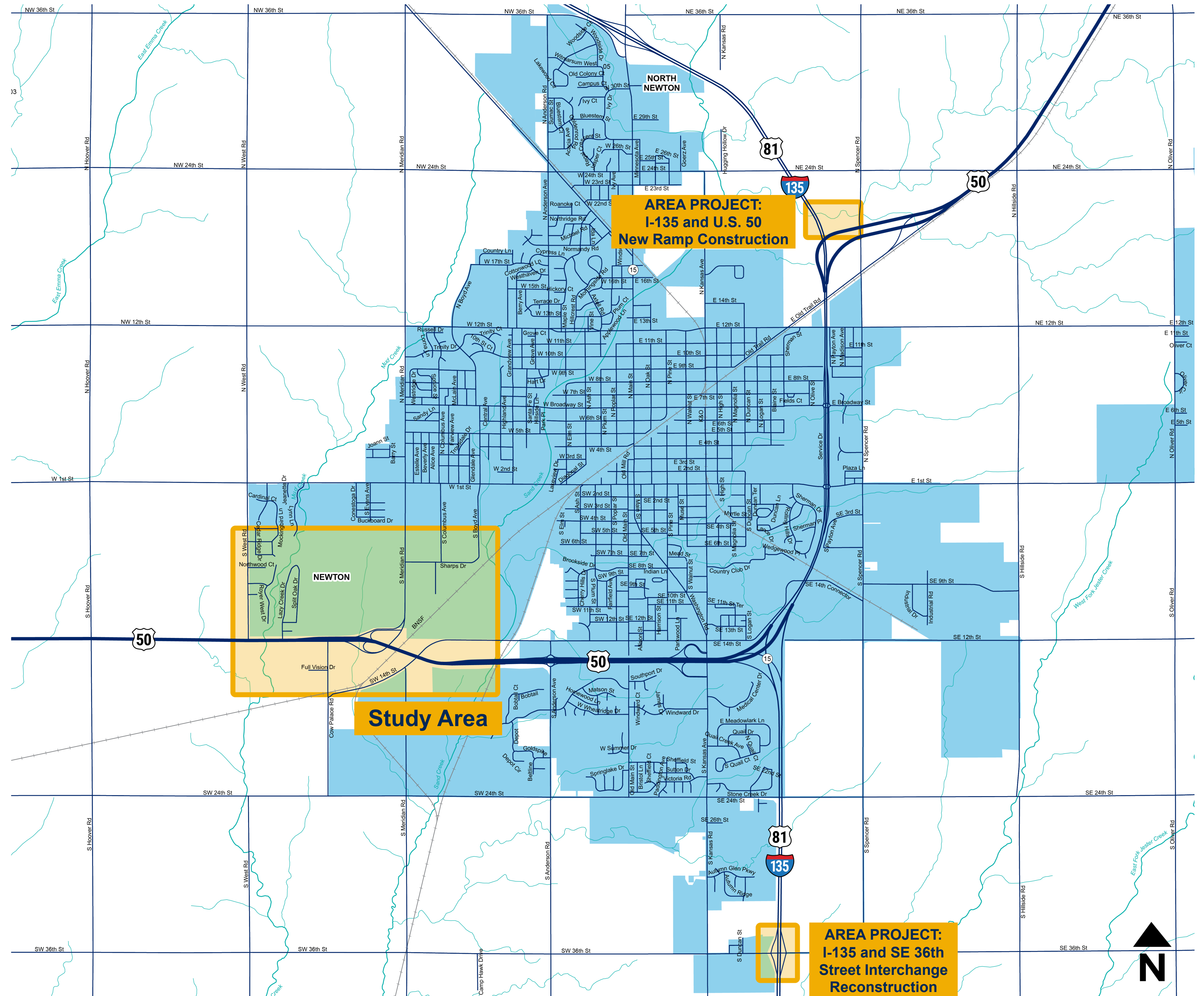


PURPOSE AND NEED

This project was identified as a top regional priority during Local Consult community meetings in the fall of 2023.

As a result, a concept study is exploring the following:

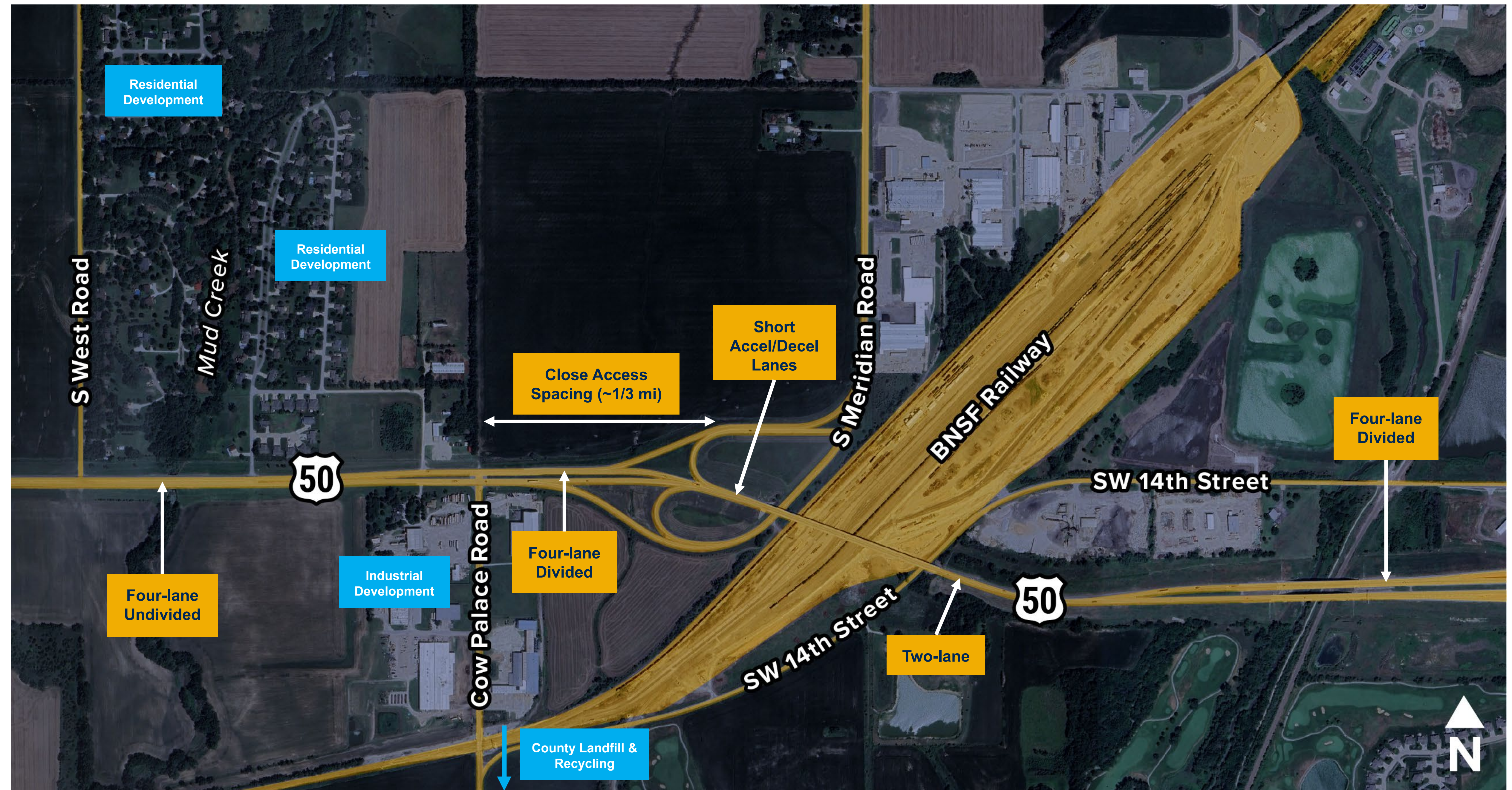
- U.S. 50 bridge replacement
- Meridian Road interchange replacement
- Connection to a possible future four-lane expansion of U.S. 50 to the west
- Consideration of how improvements could accommodate area economic development opportunities



Existing Conditions & Constraints



- Railroad coordination and requirements
- Maintaining access to Cow Palace Road, residential property north of U.S. 50, and Meridian Road
- Meet new highway design criteria for a four-lane freeway (e.g., access limited to interchanges)



Possible Interchange Types



Typical Diamond Interchange

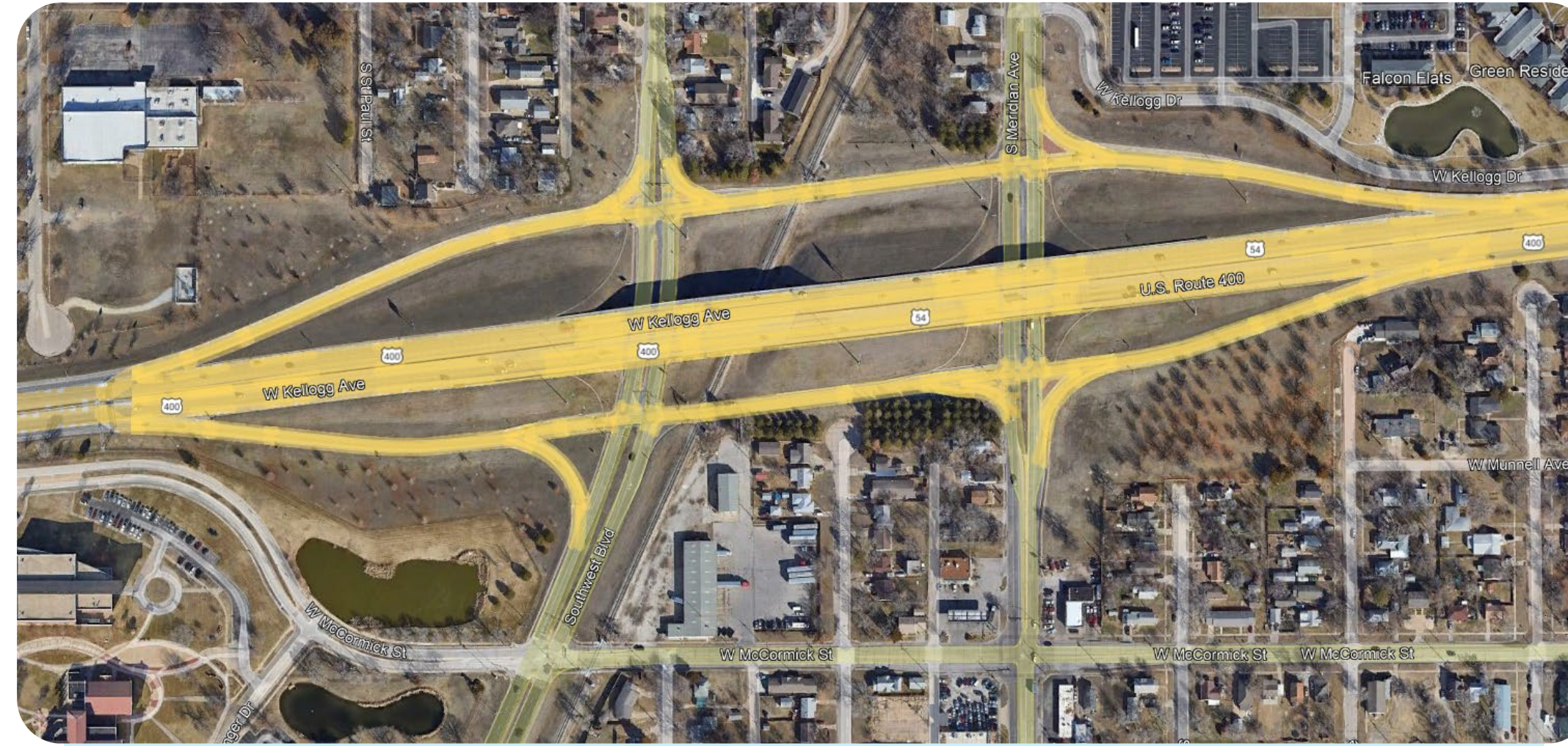
(Similar to I-135 and K-15 in Newton)

ADVANTAGES:

- Driver familiarity
- Ramp intersections close to highway

DISADVANTAGES:

- More distance along highway needed between sideroads to allow for acceleration and deceleration lanes
- Intersections along the sideroad need more distance from the highway
- Increased bridge costs over BNSF



Split Interchange

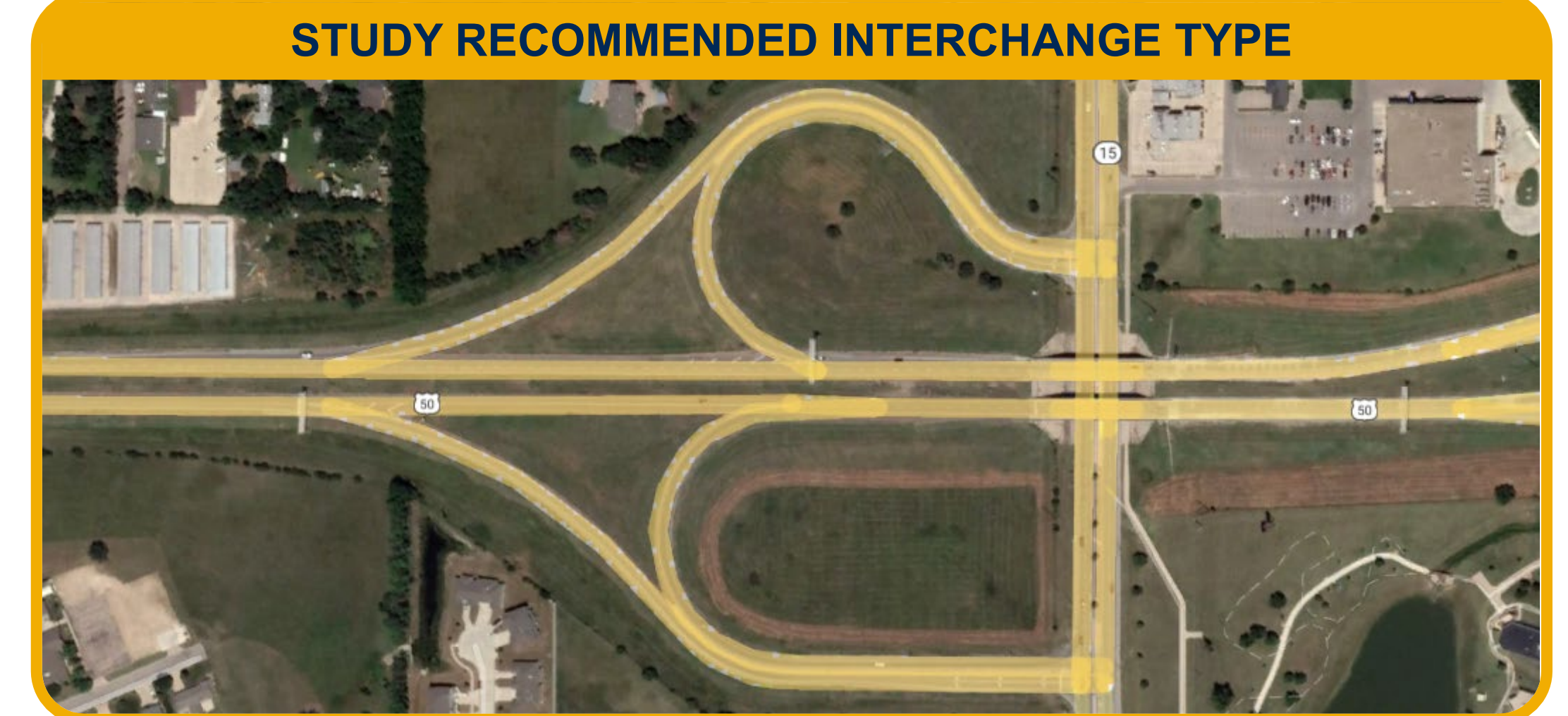
(Similar to U.S. 400 and Southwest Blvd./ Meridian Ave. in Wichita)

ADVANTAGES:

- Combines two closely spaced sideroad access points

DISADVANTAGES:

- Special signing needed to direct drivers
- Room needed for acceleration and deceleration ramps
- Increased bridge costs over BNSF



STUDY RECOMMENDED INTERCHANGE TYPE

Folded Diamond Interchange

(Similar to U.S. 50 and K-15 in Newton)

ADVANTAGES:

- Acceleration and deceleration lanes primarily on one side of the sideroad (away from BNSF bridge)
- Local road access could be directly across from interchange ramp intersections (e.g. Meridian Road or Cottonwood Hill Drive)
- Customizable to fit context of project

DISADVANTAGES:

- Space for loop ramps

Median Type (Wide vs. Narrow), All Interchange Types

- Wide median eliminates need for concrete safety barrier
- Wide median is easier to expand in the future

- Consistent with typical section east of the project

Alternative 1: Meridian Road Connection South of U.S. 50

#1

Key Takeaways:

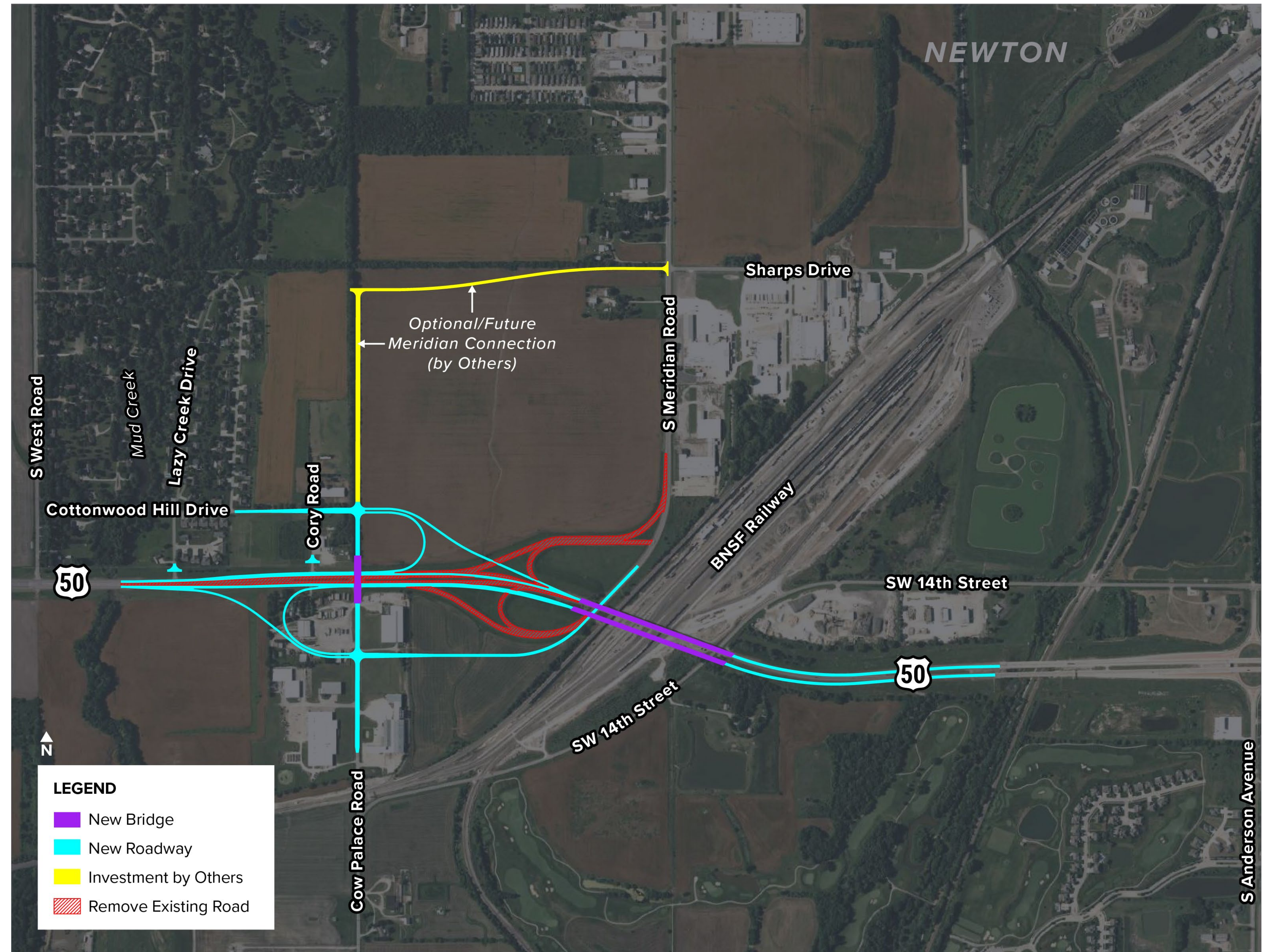
- High safety ratings
- High connectivity
- High future development accommodation
- Separates Meridian Road traffic from neighborhood traffic

Performance Measure	Performance
U.S. 50 Safety	●
Cow Palace Road Safety	●
Meridian Road Safety	●
Cow Palace/Meridian Connectivity	●
Future Development Accommodation	●
Construction Traffic Impacts	◐
Construction Cost	\$73.9M
Right of Way	◐
Environmental	◐

● Excellent
 ◐ Good
 ◑ Fair
 ◒ Poor
 ○ Very Poor

Overall Performance:

● Excellent



Alternative 2: Meridian Road Connection North of U.S. 50

#2

Key Takeaways:

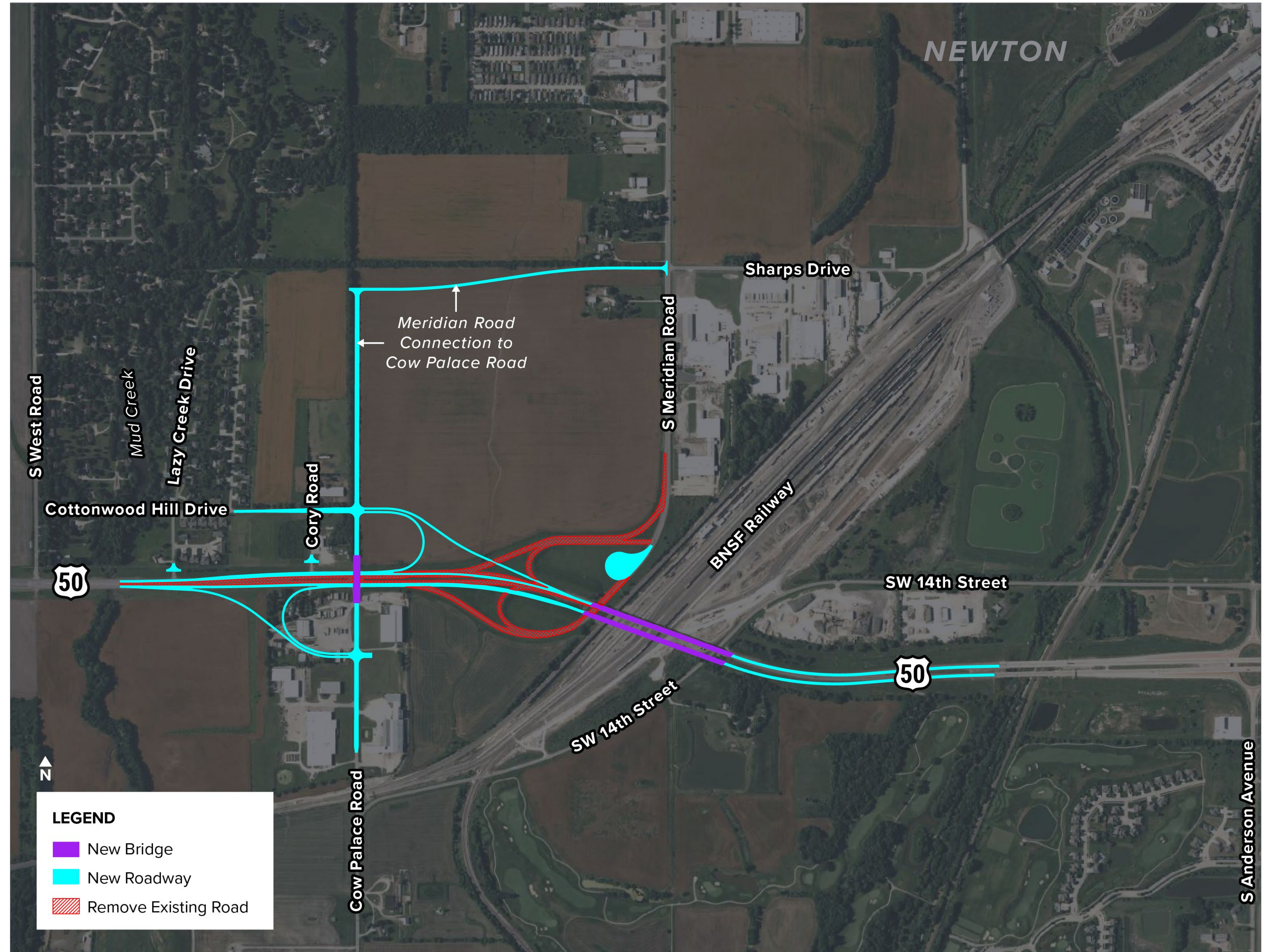
- Reduced railroad and field access south of U.S. 50
- Meridian Road traffic closer to neighborhood
- Shorter BNSF bridge, but more pavement

Performance Measure	Performance
U.S. 50 Safety	●
Cow Palace Road Safety	◐
Meridian Road Safety	◐
Cow Palace/Meridian Connectivity	◐
Future Development Accommodation	◐
Construction Traffic Impacts	◐
Construction Cost	\$74.9M
Right of Way	◐
Environmental	◐

● Excellent ◐ Good ◐ Fair ◐ Poor ○ Very Poor

Overall Performance:

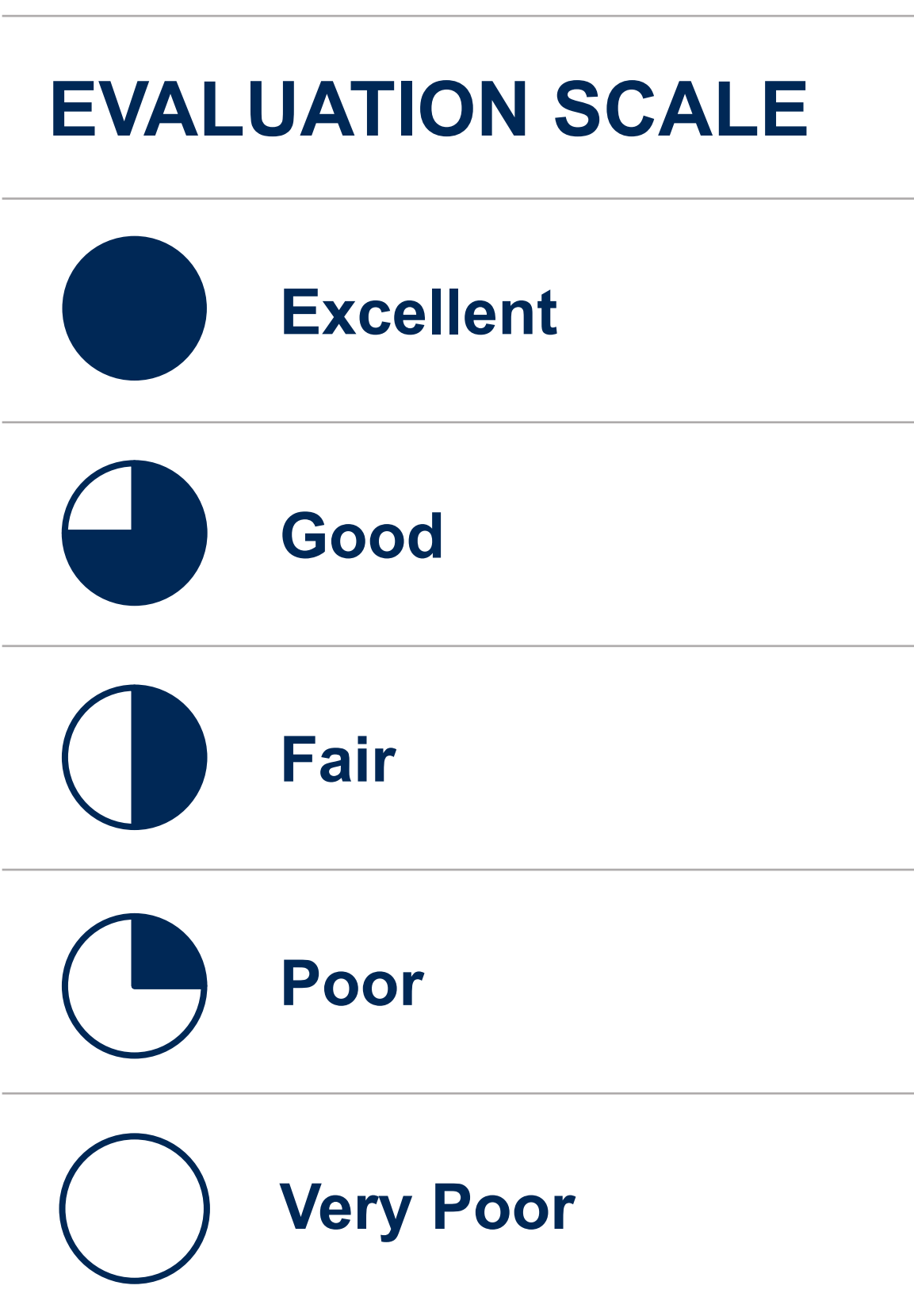
◐ **Good**



Comparing Alternatives

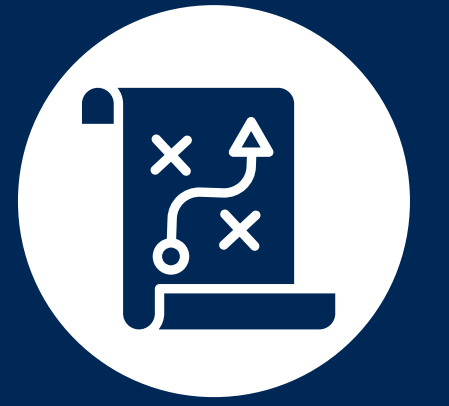


The chart to the right shows the evaluation criteria scoring of alternatives considered.



PERFORMANCE MEASURE	Do Nothing	Alternative 1	Alternative 2
U.S. 50 Safety			
Cow Palace Road Safety			
Meridian Road Safety			
Cow Palace/Meridian Connectivity			
Future Development Accommodation			
Construction Traffic Impacts			
Construction Cost	\$0.0M	\$73.9M	\$74.9M
Right of Way			
Environmental			

Next Steps



Spring
2024

Public Meeting

WE ARE HERE

Spring
2024

Finalize Study

2024-
2026

Design & Right-of-Way Acquisition

2027-
2028

Possible Construction

Actual construction timeline will be provided once project is funded for construction.

WE NEED YOUR INPUT!

Please leave written feedback in the comments area or send to KDOT after the meeting.



For more information about the project visit ike.ksdot.gov/us50-meridian-interchange-newton
Comments will be accepted through May 17, 2024.

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