



April 2013

ALTERNATIVES ANALYSIS STUDY RESULTS

Ten Alternatives Studied

Based upon the Feasibility Study, a comprehensive evaluation of all reasonable alternatives was performed. Ten alternatives advanced from the Feasibility Study to the Alternatives Analysis. All alternatives were evaluated on a total of 39 trains/day.

Existing Alignment Alternatives

- **No Action (E-0)**—No changes to existing alignment
- **Existing Alignment with Rail Improvements (E-1)**—relocation of Rochester Yard; construct new 9,000' siding east of Rochester; installation of Power-Assisted Switching; track upgrade to continuous welded rail; installation of centralized traffic control (CTC)
- **Existing Alignment with Two Grade Separations (E-2)**—grade separations located at 11th Avenue NW and Broadway Avenue N
- **Existing Alignment with Three Grades Separations (E-3)**—grade separations located at 11th Avenue NW, Broadway Avenue N, and East Circle Drive
- **Existing Alignment with Elevated Rail (E-4)**—elevate rail over roadway beginning east of US 52 overpass and remain elevated over Zumbro River to west of 7th Avenue NW

Bypass Alternatives

- **South Long Bypass (B-1)**—new 48-mile bypass begins west of Dodge Center and rejoins existing track west of Dover
- **South Short Bypass (B-2)**—29-mile bypass starting east of Dodge/Olmsted County Line and rejoins existing line in Eyota
- **South Bypass (B-3)**—adds approximately 5 miles to short bypass option to extend route south of airport
- **North Bypass (B-4)**—28-mile bypass begins east of Byron and ends at Eyota.
- **Combined South Bypass (B-6)**—new 39-mile bypass starting east of Dodge/Olmsted County Line and continues south to approximately 100th street SW before joining South Long Bypass alignment and heading east to Dover

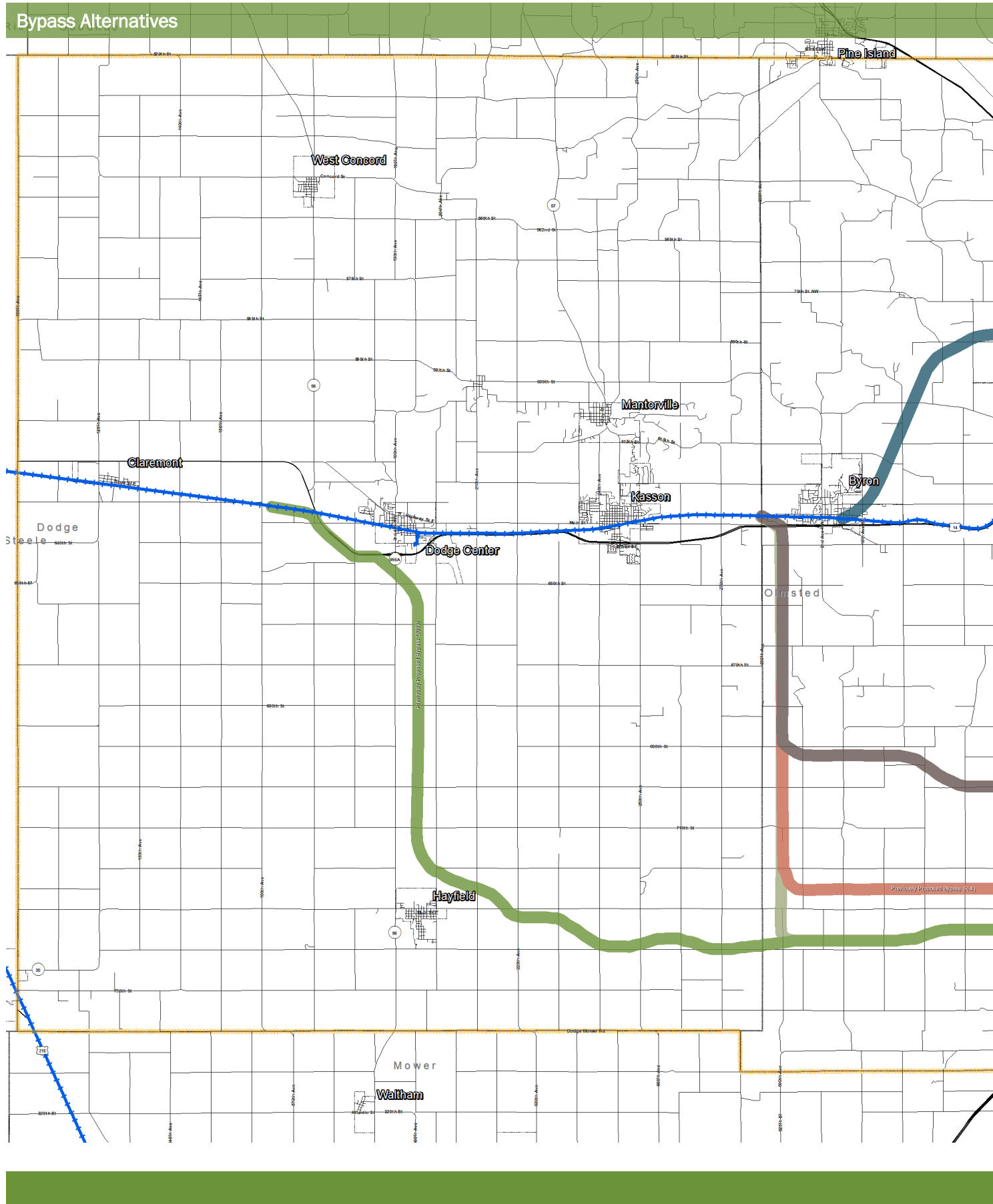
Project Team

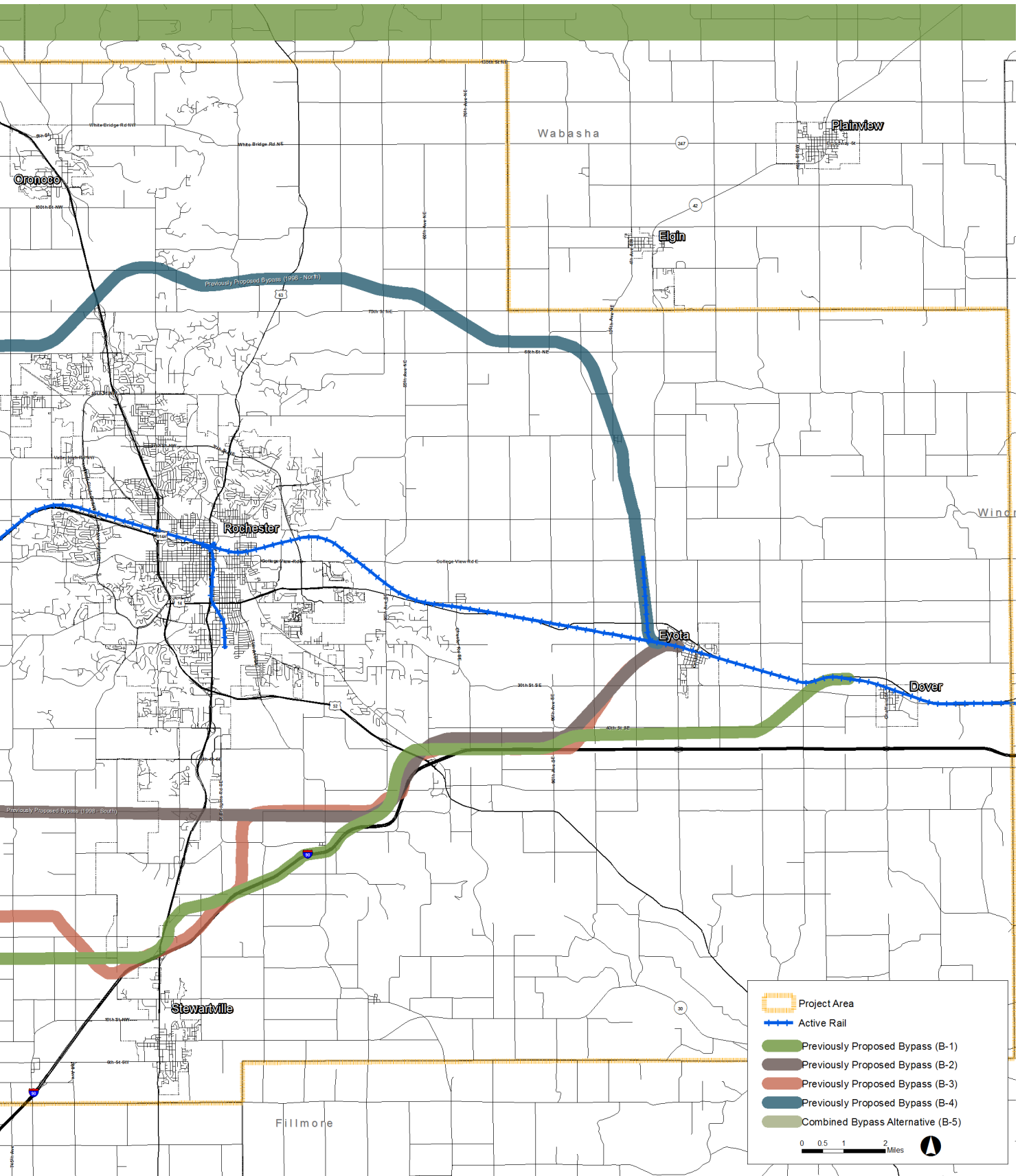
**Federal Railroad Administration (FRA)
MnDOT
Olmsted County Regional Railroad Authority**

Consultant Team

Kimley-Horn & Associates, Inc.
TranSystems
Richardson, Richter & Associates, Inc.

Bypass Alternatives





Project Area
 Active Rail
 Previously Proposed Bypass (B-1)
 Previously Proposed Bypass (B-2)
 Previously Proposed Bypass (B-3)
 Previously Proposed Bypass (B-4)
 Combined Bypass Alternative (B-5)

0 0.5 1 2 Miles

Results of Final Evaluation of Alternatives

The results of the final evaluation of alternatives, as shown below, indicate no one alternative emerges as a clearly preferred alternative. Cost is the primary differentiator, with the bypass options being significantly more expensive than the existing alignment alternatives. Improvements, by trains per day, are shown at the bottom of the page.

No	OBJECTIVE	E-0	E-1	E-2	E-3	E-4	B-1	B-2	B-3	B-4	B-5
Goal 1: Provide sufficient rail capacity through the project area											
1.1	Minimize train delay associated with increased rail activity	○	●	●	●	●	●	●	●	●	●
1.2	Maximize rail travel time reliability within the project area	○	●	●	●	●	●	●	●	●	●
1.3	Preserve freight rail access for shippers and maintain access for freight business growth in area	●	●	●	●	●	●	●	●	●	●
Goal 2: Maintain acceptable traffic conditions at grade crossings within the project area											
2.1	Maintain acceptable levels of service at grade crossings	○	○	◐	◐	◐	●	●	●	●	●
2.2	Minimize peak queue lengths at grade crossings	○	○	◐	◐	◐	●	●	●	●	●
Goal 3: Provide appropriate accessibility for emergency response vehicles within the project area											
3.1	Maximize emergency response time reliability	◐	◐	●	●	●	●	●	●	●	●
3.2	Minimize emergency vehicle delay associated with grade crossings	◐	◐	●	●	●	●	●	●	●	●
Goal 4: Address health, safety and environmental issues relative to increased rail activity within the project area											
4.1	Minimize total collisions at grade crossings	○	○	◐	◐	◐	●	●	●	●	●
4.2	Minimize collision severity at grade crossings	●	●	●	●	●	●	●	●	●	●
4.3	Support a safe crossing environment for pedestrians, bicyclists and other non-vehicular traffic	●	●	●	●	●	●	●	●	●	●
4.4	Minimize or mitigate environmental impacts associated with increased rail activity including related capital improvements	●	●	●	●	●	○	○	○	○	○
4.5	Minimize risks associated with the transport of hazardous materials	○	●	●	●	●	○	◐	○	◐	○
Total		○	○	●	●	●	●	●	●	●	●

●=High Performance
◐=Medium Performance
○=Low Performance

Corridor Improvements

