



VISIONING STUDY UPDATE

Recommendations

The recommendations of the RRSVS Update are intended to guide the planning and implementation of transportation improvements within the study area over the next 20 years. Significant growth is anticipated in the next 20 years, and a unified transportation vision is needed to support development and guide future efforts of the cities, county, and MnDOT to plan, fund, and implement transportation improvements.

ROADWAY IMPROVEMENTS

The 16 roadway recommendations of the RRSVS Update reflect the changes that have occurred in traffic conditions, land use plans, and the transportation network since the 2010 RRSVS was completed. The recommended improvements will provide for safe and efficient travel in and through the study area and support development in the RRSVS study area and surrounding communities.

Each of the recommended roadway improvements is shown in **Map 1**; the need for the improvement, dependencies among improvements, and modifications to the improvement scope compared to the 2010 RRSVS recommendations are discussed below. The improvement numbering system was used for referencing on the map and does not indicate importance or priority.

1. CR 26 (70th Street W), TH 3 (Robert Trail) to CR 73 (Babcock Trail): Expansion to 3 lanes – The 2040 and Beyond 2040 traffic forecasts showed future traffic volumes of about 10,000 vehicles per day, which indicates that improvements would be needed to the existing two-lane roadway. Based on the technical analysis, the scope of this improvement was modified from a four-lane expansion (recommended in the 2010 RRSVS) to a three-lane expansion (recommended in the RRSVS Update). A three-lane roadway would have one through lane in each direction with left-turn lanes. Access management will also be needed on CR 26 (70th Street W), consistent with the 2040 Dakota County Transportation Plan.

2. 65th Street Extension, TH 3 (Robert Trail) to CR 73 (Babcock Trail): City collector street (2 lanes) – The RRSVS Update confirmed the need for the 65th Street extension to support residential development in the area bounded by TH 3 (Robert Trail), Upper 55th Street, CR 73 (Babcock Trail), and CR 26 (70th Street W). The 2040 and Beyond 2040 forecasts show that the 65th Street extension would carry 800 to 2,000 vehicles per day, with the higher volume expected if the CR 63 (Argenta Trail)/I-494 interchange was constructed.

If 65th Street were not extended between TH 3 (Robert Trail) and Babcock Trail (CR 73), the analysis indicated that the recommended number of lanes on TH 3 (Robert Trail) and CR 26 (70th Street W) would not change. However, neighborhood street connections to the county and state highways would only be permitted at most every 1/4 mile (full access) or 1/8 mile (partial access). This means that all the traffic from the future neighborhoods (800 to 2,000 vehicles per day) would be accessing the highway system via neighborhood streets. Residential streets, with very frequent driveway accesses, are not designed to accommodate these traffic volumes and would be expected to negatively impact safety and livability on the neighborhood streets.

3. CR 28 (80th Street W) at TH 3: Roadway realignment (2 lanes) – This recommendation meets a connectivity need because CR 28 (80th Street W) currently intersects TH 3 (Robert Trail) only 1/8 mile north of the TH 55 ramp intersection. Based on access management guidelines, the existing CR 28 (80th Street W)/TH 3 (Robert Trail) intersection is a partial access. Realignment of CR 28 (80th Street W) to intersect TH 3 (Robert Trail) at Amana Trail would allow for a full access intersection and provide improved connectivity of the county road.

4. TH 3 (Robert Trail), CR 30 (Diffley Road) to CR 71 (Rich Valley Boulevard): Expansion to 4

lanes – The 2040 and Beyond 2040 forecasts showed future traffic volumes of 16,500 to 19,000 vehicles per day south of TH 149 (Jefferson Trail), which indicates that a four-lane roadway would be needed to provide adequate capacity. This recommendation is also supported by the identification of TH 3 (Robert Trail) and TH 149 (Jefferson Trail) as future principal arterial highways. More detailed traffic analysis will be needed to determine the intersection design and control at the TH 3 (Robert Trail)/TH 149 (Jefferson Trail) intersection and the number of lanes on TH 3 (Robert Trail) between TH 149 (Jefferson Trail) and CR 71 (Rich Valley Boulevard). The expansion of TH 3 (Robert Trail) would require modifications or reconstruction of the existing railroad bridge.

5. TH 149 (Jefferson Trail), CR 71 (Rich Valley Boulevard) to TH 3 (Robert Trail): Expansion to 4

lanes – The 2040 and Beyond 2040 forecasts showed future traffic volumes of 13,000 to 14,500 vehicle per day south of Wescott Road, which indicates that additional lanes would be needed to provide adequate capacity. This recommendation is also supported by the need for continuity with the segment of TH 149 (Dodd Road) to the north and identification of TH 149 (Jefferson Trail/Dodd Road) as a future principal arterial highway. More detailed traffic analysis will be needed to determine the intersection design and control at TH 3 (Robert Trail) and TH 149 (Jefferson Trail).

6. CR 28 (Yankee Doodle Road) to TH 149 (Jefferson Trail) or CR 71 (Rich Valley Boulevard): City collector street (2 lanes) – The RRSVS Update confirmed the need for a city collector street to support the low- to medium-density residential development in the 2040 MUSA area south of TH 55 (Courthouse Boulevard) between TH 149 (Jefferson Trail/Dodd Road) and TH 3 (Robert Trail). The city collector street would connect neighborhoods to the highway network and is not intended to serve through traffic. The collector street is recommended to connect to CR 71 (Rich Valley Boulevard) because the RRSVS Update traffic forecasting showed that a connection to TH 149 (Dodd Road) would be more likely to result in cut-through traffic.

If a city collector street were not built as the low- to medium-density residential land uses are developed, all the traffic from the neighborhood would be accessing the highway system via neighborhood streets. Residential streets, with very frequent driveway accesses, are not designed to accommodate these traffic volumes and would be expected to negatively impact safety and livability on the neighborhood streets.

7. TH 3 (Robert Trail), CR 71 (Rich Valley Boulevard) to TH 55 (Courthouse Boulevard): Spot

Improvements – The 2040 and Beyond 2040 forecasts showed that future traffic volumes would remain less than 10,000 vehicles per day if TH 3 (Robert Trail) is not expanded and if an interchange is constructed at CR 63 (Argenta Trail)/I-494. Based on the traffic forecasts, corridor constraints in this segment of the TH 3 (Robert Trail) corridor, and both public and agency input, the scope of this improvement was modified from a roadway expansion (recommended in the 2010 RRSVS) to spot improvements which could include shoulders, turn lanes, access management, and intersection improvements. More detailed traffic analysis will be needed to determine the location and type of spot improvements.

8. TH 3 (Robert Trail), TH 55 (Courthouse Boulevard) to CR 26 (70th Street W): Spot

Improvements – The 2040 and Beyond 2040 forecasts showed that future traffic volumes would remain less than 10,000 vehicles per day if TH 3 (Robert Trail) is not expanded and if an interchange is constructed at CR 63 (Argenta Trail)/I-494. Based on the traffic forecasts, corridor constraints in this segment of the TH 3 (Robert Trail) corridor, and both public and agency input, the scope of this improvement was modified from a roadway expansion (recommended in the 2010 RRSVS) to spot improvements which could include shoulders, turn lanes, access management, and intersection

improvements. More detailed traffic analysis will be needed to determine the location and type of spot improvements.

9. TH 3 (Robert Trail), CR 26 (70th Street W) to I-494: Spot Improvements – The 2040 and Beyond 2040 forecasts showed that future traffic volumes would remain less than 10,000 vehicles per day if TH 3 (Robert Trail) is not expanded and if an interchange is constructed at CR 63 (Argenta Trail)/I-494. Based on the traffic forecasts, corridor constraints in this segment of the TH 3 (Robert Trail) corridor, and both public and agency input, the scope of this improvement was modified from a roadway expansion (recommended in the 2010 RRSVS) to spot improvements which could include shoulders, turn lanes, access management, and intersection improvements. More detailed traffic analysis will be needed to determine the location and type of spot improvements.

11. TH 55 (Courthouse Boulevard) and CR 28/63 (Yankee Doodle Road/Argenta Trail) High-Capacity Intersection or Interchange – This improvement meets a connectivity need because TH 55 (Courthouse Boulevard) is an existing principal arterial highway and CR 28 (Yankee Doodle Road/Argenta Trail) is identified as a future principal arterial highway. The existing traffic signal would be expected to have significant congestion by 2040. To support the function of both roadways as principal arterial highways, a future grade separation or high-capacity intersection is recommended.

12. CR 63 (Argenta Trail), TH 55 (Courthouse Boulevard) to I-494: Expansion to 4 lanes – The 2040 and Beyond 2040 traffic forecasts showed future traffic volumes of 18,000 to 33,000 vehicles per day with a new interchange at CR 63 (Argenta Trail)/I-494. Based on the technical analysis, the scope of this improvement was modified from a six-lane expansion (recommended in the 2010 RRSVS) to a four-lane expansion (recommended in the RRSVS Update). The roadway expansion would not be needed until the new interchange is constructed at I-494.

13. CR 63 (Argenta Trail)/I-494 Interchange – The 2040 and Beyond 2040 traffic forecasts showed that a new interchange at CR 63 (Argenta Trail)/I-494 would best provide regional highway access to and from the densest development in the RRSVS study area. This confirms the recommendation from the 2010 RRSVS. The 2010 RRSVS included significant analysis to site the interchange and roadway network around the interchange, therefore the recommendation in the RRSVS Update perpetuates the previously recommended location and design: the new interchange would provide access to and from Eagan, Inver Grove Heights, and both directions of I-494. There would not be direct access to the interchange from north of I-494. The design and footprint (interchange configuration) at CR 63 (Argenta Trail)/I-494 have not been determined. Further evaluation of the CR 63 (Argenta Trail)/I-494 interchange configuration would be needed to determine the interchange layout and whether the I-494/TH 3 West Ramps would need to be removed. The removal of the I-494/TH 3 West Ramps was not evaluated in this study.

Changes in interchange access require significant time for evaluation, funding, and approvals. Future evaluations could determine that a new interchange is not warranted or may determine that other modifications may be needed along with the interchange.

14. Vikings Parkway Extension: City collector street (2 lanes) – This improvement meets a roadway connectivity need west of CR 63 (Argenta Trail). An east-west collector street between I-494 and CR 26 (Lone Oak Road) would serve the future development area east of Ames Crossing Road.

18. TH 62/TH 149 (Dodd Road) Intersection Improvements: Additional evaluation needed to identify specific improvements – This improvement meets both capacity and safety needs. While a new interchange at CR 63 (Argenta Trail)/I-494 would reduce the future traffic demand on this segment of TH 149 (Dodd Road), improvements would still be needed to address capacity issues and potential

existing safety needs. More detailed traffic analysis will be needed to determine the location and type of improvements.

19. TH 62/CR 63 (Delaware Avenue) Intersection Improvements: Additional evaluation needed to identify specific improvements – This improvement meets both capacity and safety needs. While a new interchange at CR 63 (Argenta Trail)/I-494 would reduce the future traffic demand on this segment of CR 63 (Delaware Avenue), improvements would still be needed to address capacity issues and potential existing safety needs. More detailed traffic analysis will be needed to determine the location and type of improvements.

20. CR 63 (Delaware Avenue), I-494 to TH 62: Spot Improvements – The 2040 and Beyond 2040 forecasts showed that future traffic volumes would be approaching the capacity of a two-lane roadway. While a new interchange at CR 63 (Argenta Trail)/I-494 would reduce the future traffic demand on this segment of CR 63 (Delaware Avenue), improvements would still be needed to address capacity issues. Spot improvements, which could include shoulders, turn lanes, access management, and intersection improvements, are recommended to address the capacity need. More detailed traffic analysis will be needed to determine the location and type of spot improvements.

Alternatives Considered - Not Recommended

There were five potential transportation improvements that did not meet a transportation need. These alternative improvements, shown in Map 2, were therefore not considered further and are not included in the recommendations for this study.

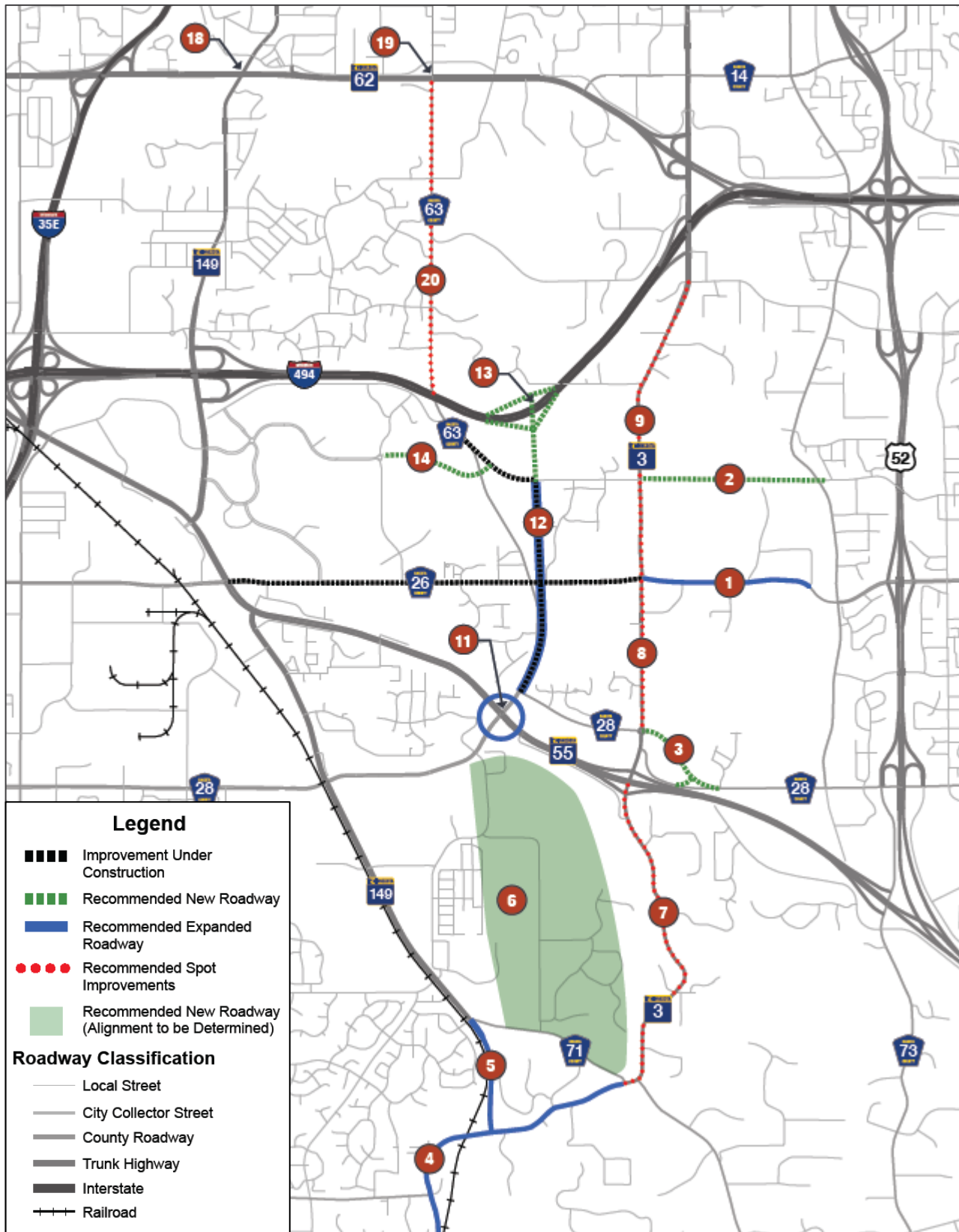
10. TH 3 (Robert Trail)/I-494/TH 62 Interchange Improvements – The 2040 and Beyond 2040 traffic forecasts did not show traffic capacity needs at the interchange, and additional interchange capacity at TH 3 (Robert Trail) would not be needed with a new interchange at CR 63 (Argenta Trail)/I-494. This finding is consistent with the 2010 RRSVS, which included more intense development in the study area.

15. TH 149 (Dodd Road), TH 55 (Courthouse Boulevard) to I-494: Expansion to 6 lanes – The 2010 RRSVS included a recommendation to expand the roadway to six vehicle lanes. The RRSVS Update forecasts for 2040 and Beyond 2040 showed traffic volumes on TH 149 (Dodd Road) less than 35,000 vehicles per day, which indicates a 6-lane section would not be needed. In addition, a new interchange at CR 63 (Argenta Trail)/I-494 would reduce the future traffic demands on TH 149 (Dodd Road) in this segment.

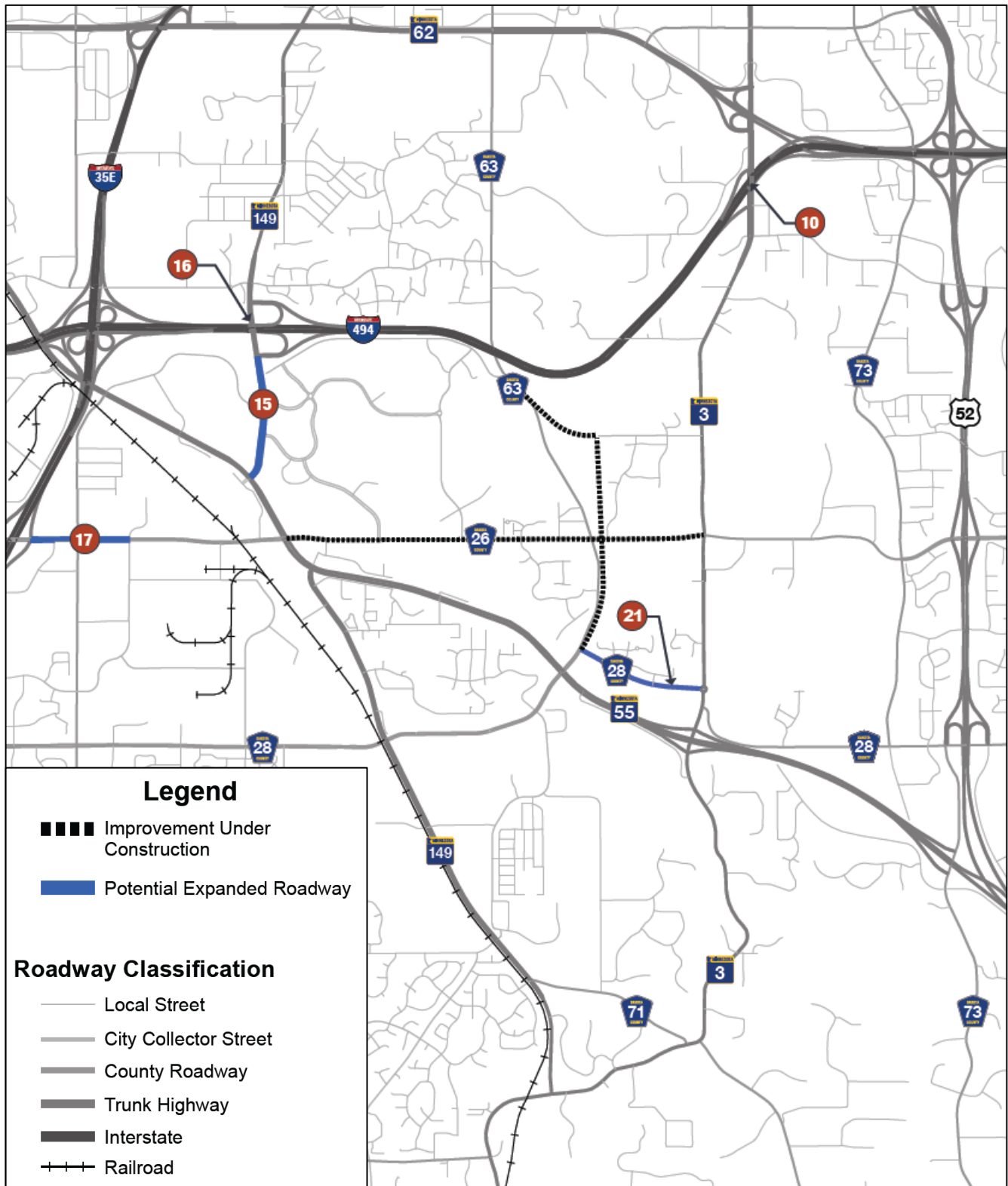
16. TH 149 (Dodd Road)/I-494 Interchange Improvements – The 2040 and Beyond 2040 traffic forecasts did not show traffic capacity needs at the interchange, and additional interchange capacity at TH 149 (Dodd Road) would not be needed with a new interchange at CR 63 (Argenta Trail)/I-494. This finding is consistent with the 2010 RRSVS, which included more intense development in the study area.

17. CR 26 (Lone Oak Road), I-35E to CR 43 (Lexington Avenue): Expansion to 6 lanes – The 2010 RRSVS included a recommendation to expand the roadway to six vehicle lanes. The RRSVS Update forecasts for 2040 and Beyond 2040 showed traffic volumes on CR 26 (Lone Oak Road) were less than 35,000 vehicles per day, which indicates a 6-lane section would not be needed. In addition, the forecasts on this segment of CR 26 (Lone Oak Road) had little variation in traffic volume when testing combinations of potential improvements in the RRSVS study area, which indicates that this roadway segment is not significantly affected by the transportation improvements in the RRSVS study area.

21. CR 28 (Amana Trail), CR 63 (Argenta Trail) to TH 3 (Robert Trail): Expansion to 4 lanes – The 2010 RRSVS included a recommendation to expand the roadway to four vehicle lanes. The RRSVS Update forecasts for 2040 and Beyond 2040 showed traffic volumes on CR 28 (Amana Trail) less than 8,000 vehicles per day, which indicates a 4-lane section would not be needed. In addition, the forecasts on this segment of CR 28 (Amana Trail) had little variation in traffic volume when testing combinations of potential improvements in the RRSVS study area, which indicates that this roadway segment is not significantly affected by the transportation improvements in the RRSVS study area.



Map 1. RRSVS Update Recommendations



Map 2. Alternative Improvements Considered and Not Recommended.