

Next Stop 2050 Project Prioritization

Glossary

Scoring Summary

High Volume Corridors	25	13%
Safety	35	18%
<i>Crash Density</i>	15	
<i>High Injury Network</i>	5	
<i>Vulnerable Road Users</i>	15	
RR Xing Improvements	5	3%
Multimodal	15	8%
Community and Economic Access	15	8%
Current Congestion	25	13%
Future Congestion	10	5%
Freight Plan	5	3%
% Freight Traffic	10	5%
Bridge Condition	25	13%
Extending Life Cycle	15	8%
Local Priority	15	8%
	200	100%

Scoring Details

1. High Volume Corridors

Corridors that have high volumes will be awarded additional points. Corridors are scored based upon AADT, including passenger car equivalents for freight. This data is obtained annually from MoDOT. The most recent data is used.

Over 65,000 = 25 Points
 40,000 to 65,000 = 20 Points
 30,000 to 40,000 = 15 Points
 20,000 to 30,000 = 10 Points
 10,000 to 20,000 = 5 Points
 0 to 10,000 = 0 Points

2. Safety

Projects may receive points for both recent crash density and overlap with the regional High Injury Network.

Recent Crash Density

75th percentile and up = 15 points

50th to less than 75th percentile = 10 points

25th to less than 50th percentile = 5 points

Below the 25th percentile = 0 points

Crashes from calendar years 2023 through 2025 will be used. This period does not overlap with the 2018–2022 crash data used to develop the High Injury Network.

For corridor projects, the total number of crashes within the project analysis area will be divided by the project length in miles and by three years to calculate average annual crashes per mile. The actual project length will be used unless the project is shorter than 0.25 miles. Projects shorter than 0.25 miles will use a standardized 0.25-mile analysis length.

For intersection projects, crashes will be counted within a standardized intersection analysis area extending 250 feet from the center of the intersection along each approach. The total number of crashes will be divided by three years to calculate average annual crashes per intersection. Intersection projects will be ranked against other intersection projects using the same percentile-based point scale. Large or specialty intersections, such as interchanges, may use the entire intersection area if it extends beyond 250 feet.

High Injury Network

The project area intersects the OTO regional High Injury Network identified in the Destination Safe Streets Safety Action Plan.

Yes = 5 points

No = 0 points

The High Injury Network and recent crash density are separate measures. A project may receive points under both categories because they use different crash periods and measure different aspects of safety.

Vulnerable Road Users

All bike and ped crashes from calendar years 2021-2025.

More than 5 bike/ped crashes = 15 points

3 to 5 bike/ped crashes = 10 points

1 to 2 bike/ped crashes = 5 points

Maximum = 15+5+15

3. Improvement or Removal of At-Grade Railroad Crossing

Yes = 5 Points

No = 0 Points

If a project improves or removes an at-grade railroad crossing, it receives 5 points.

4. Multimodal

Projects receive points based on their location relative to existing transit service and identified pedestrian and bicycle needs. Multimodal scoring identifies projects located where transit, sidewalk, bicycle, trail, or other active transportation needs have already been identified. These locations provide opportunities to consider multimodal connections as projects advance through development and design.

Project is located on an existing transit route = 5 Points

Project intersects an identified sidewalk gap = 5 Points

Project intersects an adopted bicycle, trail, or active transportation priority = 5 Points

Maximum = 5+5+5 Points

5. Community and Economic Access

Projects receive points based on their proximity to concentrations of low-income households, families with children under age 18, and employment. The analysis will use regional hexbin data to compare the averages for hexbins within 0.5 miles of the project location to the OTO areawide average.

Project serves hexbins with an above-average concentration of low-income households = 5 Points

Project serves hexbins with an above-average concentration of families with children under age 18 = 5 Points

Project serves hexbins with an above-average concentration of jobs = 5 Points

Maximum = 5+5+5 Points

6. Congestion Management Current

Current volume-to-capacity greater than or equal to 1 = 25 Points

Current volume-to-capacity greater than or equal to 0.92 = 15 Points

Current volume-to-capacity greater than or equal to 0.86 = 5 Points

A volume-to-capacity ratio for roadways in the OTO region was calculated using 2025 Average Annual Daily Traffic totals and percentage of bus and combo semi-trailer traffic obtained from the MoDOT Central Office. A passenger car equivalent volume was calculated by multiplying the roadway AADT by the percent of bus and semi traffic. This value was subtracted from the AADT value, multiplied by 3 and then added back to the AADT value. The passenger car equivalent value was compared to roadway capacities stored in the travel demand model to determine the current V/C scoring.

The OTO uses a link capacity system based on functional classification contained in the OTO travel demand model to measure V/C. Some capacities for segments along Hwy 14, Route MM, US Hwy 60 east of US Hwy were revised using 24-hour capacities determined via a roadway capacity analysis conducted for the OTO by CJW Consultants. Capacities at other locations of known improvements, e.g. auxiliary lanes added to segments along James River Freeway were revised by OTO staff. The travel demand model no-build scenario for 2050 includes projects committed through 2024. The

projected volume to capacity ratio for the 2050 no-build scenario is used for the future V/C scoring. The ratio of 0.86 is considered Level of Service E (or at capacity).

Congestion scoring uses the highest qualifying volume-to-capacity ratio intersecting the project area to provide a consistent regional measure across projects. Travel demand model segments and conceptual project limits may not align exactly, so the measure is applied consistently based on the modeled roadway segments associated with each project. Projects with segments less than 0.86, current or future, received 0 points.

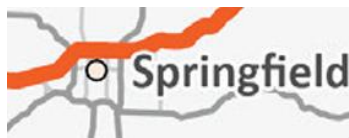
7. Congestion Management Future

Future (2050 or most recent model run) volume-to-capacity greater than or equal to 0.86 = 10 Points.

Future volume-to-capacity ratios were calculated for opposing directions. The segment with the highest future v/c ratio intersecting the project area was used to determine the score.

8. Freight Corridor Statewide Freight Plan

Project is on a corridor that is identified on the National or Missouri Highway Freight Network (working on an-OTO centered map).



— National Highway Freight Network
— Missouri Highway Freight Network
— Interstate
— U.S. Route
— State Highway

Yes = 5 Points

No = 0 Points

9. Percentage Freight Traffic

Greater than 20% = 10 Points

Between 15% and 20% = 7 Points

Between 10% and 15% = 3 Points

10. Bridge and Crossing Condition

Poor Condition Bridge

Project corridor includes a structurally deficient bridge determined to be poor or very poor by MoDOT.

Yes = 15 Points

No = 0 Points

Structurally Deficient Bridge

Weight or Height Limited Bridge = 10 Points

OR

Low Water Crossing = 10 Points

Maximum = 15+10 Points

11. Extending Life Cycle

Project extends lifecycle of existing assets, delaying maintenance.

Yes = 15 Points

No = 0 Points

12. Local Priority

Community considers project a local priority. Each community can choose 2 projects as local priorities.

Yes = 15 Points

No = 0 Points

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