

Illinois Improves Transportation Decision Making Through Safer Roads Index (SRI) Ratings and Safety Tiers

IDOT enhanced its approach to incorporating safety into IDOT's overall transportation management process by establishing the Safer Roads Index (SRI rating) and Safety Tiers for state maintained routes. The goal is to improve the integration of quantitative safety performance in transportation project planning and programming. Since 2006, IDOT's FIVE PERCENT Report identified locations statewide with higher potential for safety improvement and meriting further safety analysis.

Safety Tiers categorizes roadways segments and intersections based on their level of safety performance and opportunity for improvement, providing a rating for relative comparison. The Safety Tiers include a 5%, High, Medium, Low or Minimal designation. Safety Tiers allow transportation officials to understand relative performance of a location compared to similar types of roadways or intersections. For example, a rural 2-lane roadway segment would be compared to other similar types of rural 2-lane roadways statewide and would not be compared to an urban multi-lane facility. The Safety Tiers allow more locations to be identified and analyzed for similar roadway features and potential crash trends.

The SRI is being now being used in planning and programming and is being considered alongside pavement condition and bridge condition to improve selection and prioritization of transportation projects.

CRS Range	State of Repair
9.0 to 7.6	Excellent
7.5 to 6.1	Good
6.0 to 4.6	Fair
4.5 to 1.0	Poor
IRI Range (in/mi)	
1 to 94	Good
95 to 177	Fair
> 177	Poor
SRI Range	
Minimal	Good
Low	Minor
Medium	Moderate
High	Severe
5%	5%

Condition Rating System (CRS) represents the loss of load carrying capacity or structural breakdown, the International Roughness Index (IRI) provides a rating for the excessive roughness impacting the functional usability and causing drive discomfort and the Safer Roads Index (SRI) establishes the safety risk based on historical severe crashes and exposure.

Comparing the representative ratings allows for improved decision making. Figure 4, shows an example of the side-by-side comparison of roadway ratings that are used in transportation planning and programming. This allows the department to leverage limited resources and expand its safety efforts.

IDOT plans to expand this to the local roadway network.

FIGURE 3: State of Repair Comparison

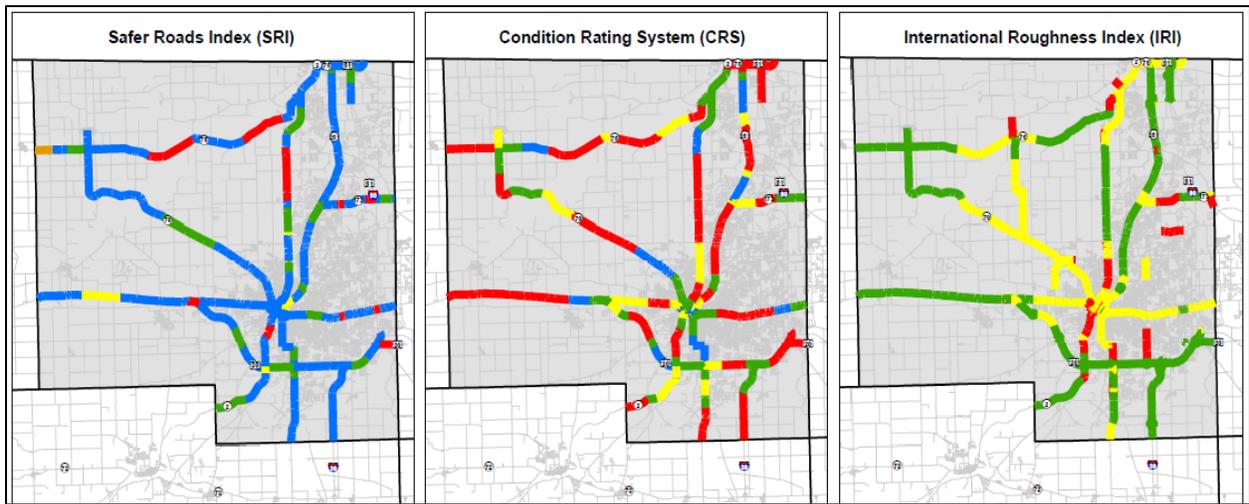


FIGURE 4: Planning and Programming Performance Measures

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