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SUMMARY of Road Safety Audit REPORT

Interstate 55 Work Zone: From US 6 to Weber Road

Project Data

Date: July 30-31, 2007

RSA Team and Participants:

Dave Piper – Illinois Department of Transportation (IDOT) Bureau of Safety Engineering (BSE)

Dennis Whitehead – IDOT BSE

Brian Copple – Illinois State Police (ISP)

Heidi Liske – Federal Highway Administration (FHWA)

Background:

The RSA was conducted on Interstate 55, between portions of US 6 and Weber Road. The focus of the RSA was to identify opportunities for safety improvements during construction activities and in work zone areas. Throughout the study, the RSA Team examined several risk factors that impact traffic safety on Interstate 55, including exposure, probability, and consequence. The RSA was conducted over a two-day period with a team that was comprised of law enforcement, transportation, and other local officials.

Because of the changeable nature of a work zone, the RSA decision making process was accelerated to include discussion and acceptance of certain items at the close out meeting.

RSA Process:

The RSA was performed by conducting field studies along construction sites and work zones on Interstate 55. Specifically, the areas of study were located on Interstate 55, between US 6 and Weber Road. In addition, the RSA Team also examined crash history reports and statistics from several areas along the Interstate. This data was reviewed and synthesized by the RSA Team to help identify safety issues or concerns. The data was also used to identify roadway countermeasures that will help improve traffic safety.

RSA Stage: Existing Road (reconstruction projects)

Major RSA Findings

Issue: Speed

Location: Work Zones on Interstate 55, between portions of US 6 and Weber Road

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Description of Safety Issue:

One of the biggest safety issues along this portion of the Interstate is vehicle speed. In many instances, drivers travel through the work zones in excess of the legal speed limit. This is a major safety concern for both drivers and individuals who may be working along this portion of the Interstate or work zone. As a result, the RSA Team rated this issue as a high risk rating.

Suggestion: The RSA Team recommended that the quality and number of speed signs be improved. It was also recommended that there be a greater State Police presence along this portion of the Interstate and a photo enforcement van should be utilized. As a long term recommendation, the RSA Team believes a speed management policy should be established and enforced.

Issue: Speed Signage

Location: Work Zones on Interstate 55, between portions of US 6 and Weber Road

Description of Safety Issue:

The RSA Team noted that there are an insufficient number of speed signs along this portion of the Interstate. In addition, there is a lack of speed limit notification between some of the lane shifts. The RSA Team also noted that some of the existing speed limit signs lack consistent font type and retroreflectivity levels throughout the work zones. The RSA Team scored this issue as a moderate risk.

Suggestion:

The RSA Team recommended that additional speed signage be added throughout the work zones, including stretches of highway where lane shifts occur. It was also recommended that the overlay panels on the speed limit signs be updated so the font and retroreflectivity are consistent and easy to read.

Issue: Shoulder Hazards

Location: Work Zones on Interstate 55, between portions of US 6 and Weber Road

Description of Safety Issue: There are several areas along this portion of the Interstate that have excess debris or hazardous objects on the side of the roadway. This debris or roadway material often gets blown or knocked onto the Interstate, impacting a driver's ability to operate their vehicle safely. The RSA Team scored this issue as a moderate risk.

Suggestion: The RSA Team recommended that scheduled garbage patrols be implemented to help remove debris along the Interstate.

Issue: Vegetation Blocking Signs

Location: Work Zones on Interstate 55, between portions of US 6 and Weber Road

Description of Safety Issue: There are several areas along this portion of the Interstate where overgrown vegetation has obstructed the views of traffic signage, including speed limit, work zone, and lane shift signs. As a result, this

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may prevent drivers from viewing or complying with Interstate traffic signs while driving. The RSA Team scored this issue as a moderate risk.

Suggestion: The RSA Team recommended that obstructive vegetation be trimmed or removed to increase traffic signage visibility.

Issue: Low Guardrail

Location: Work Zones on Interstate 55, between portions of US 6 and Weber Road

Description of Safety Issue: There are several areas along this portion of the Interstate that have low guardrails. During a traffic incident, the existing guardrails may not adequately prevent vehicles from leaving the roadway. As a result, this may increase the severity of traffic accidents. The RSA Team scored this issue as a moderate risk.

Suggestion: The RSA Team recommended adding guardrail delineation. In addition, the RSA Team also suggested that crashworthy guardrails be tested and implemented during design stages.

Issue: Stage I - Narrow Lanes

Location: Work Zones on Interstate 55, between portions of US 6 and Weber Road

Description of Safety Issue: There are several areas along this portion of the Interstate that have narrow lanes. The RSA Team scored this issue as a moderate risk.

Suggestion: Ensure effective and accurate striping for this portion of the Interstate.

Issue: Narrow Shoulders

Location: Work Zones on Interstate 55, between portions of US 6 and Weber Road

Description of Safety Issue: There are several areas along this portion of the Interstate that have narrow shoulders. As a result, this may restrict drivers from pulling off the roadway after a traffic accident or during vehicular malfunctions. The inability to use the shoulder during these types of situations may cause lane blockages or excessive traffic delays. It may also increase the level of roadway exposure for individuals. The RSA Team scored this issue as a moderate risk.

Suggestion: The RSA Team recommended guardrail delineation. It was also recommended that effective and accurate striping be maintained along this portion of the Interstate.

Issue: Coordinated Work Zone Signage

Location: Work Zones on Interstate 55, between portions of US 6 and Weber Road

Description of Safety Issue: There are several closely adjacent work zones along this stretch of highway that do not have coordinated signage. As a result, it may be difficult for drivers to know when they are entering or leaving work zone areas. The RSA Team scored this issue as a moderate risk.

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Suggestion: As a long term recommendation, the RSA Team recommended the development of a policy and/or standards to address this issue

Other RSA Findings

The RSA also produced several other findings. These include conflicting pavement markings, lack of “trucks use left lane” signage, sign clutter, adverse super elevation, lack of dual display signage on southbound approaches, and confusing type 3 barricade signals. These findings, however, received low – minimal risk ratings from the RSA Team.