℞ How Healthy is Your Road System?

Find out with systemic analysis

Systemic analysis is like a health screening for your road system. Just as your doctor identifies risk factors for illness, systemic analysis identifies locations that are at highest risk for severe crashes. Practitioners can then prioritize projects based on risk and apply low-cost safety treatments to reduce severe crashes across the whole at-risk system.

CURVE COUNTY – X RAY RESULTS

Symptoms

Severe roadway departure crashes on curves.

Possible Risk Factors:

🚗 Avg. Daily Traffic > 1,000 vehicles

𝐏 Curve Radius < 1,000 feet

➕ Intersection within Curve

❗ Visual Trap within Curve

🔥 Severe Crash within Curve

Diagnosis

11% of all curves have 3 or more risk factors.

Lab Results:

Curve A 🚗

Curve B 🚗 𝐏 ➕ ❗ 🔥

Curve C 🚗 ➕

Curve D ❗

Curve E 𝐏 ❗ 🔥

Treatment

Prioritize highest risk sites and treat with low-cost countermeasures such as chevron signs or rumble strips.

Follow-Up

Track and evaluate safety improvements. Further remediation can be implemented as needed.

Systemic vs. Systemwide

Systemic does not mean treating all locations. It allows agencies to treat the highest-risk sites within limited budgets.

U.S. Department of Transportation
Federal Highway Administration

For more information visit
www.fhwa.dot.gov/innovation/everydaycounts/edc-3/ddsa.cfm

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