

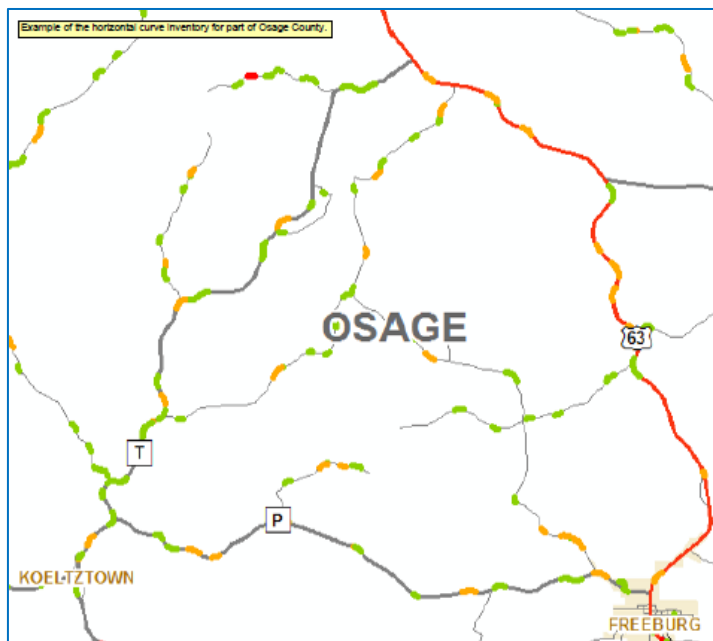
Projects First-Round Winner

Innovations Challenge
<http://wwwi/intranet/cr/SolutionsAtWork/Innovations.htm>

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Missouri Department of Transportation

Automatic Horizontal Curve Inventory



Description

The innovation relates to the creation of a new inventory in Transportation Management System (TMS). Most states do not have this inventory, and those that do often spend a great deal of funding to get it built. MoDOT's current horizontal curves inventory was built using a unique programming method and was visually verified using ArcGIS. The inventory has been used to establish a "Top 200" curves list. This list relates to curves that have shown a history of severe crashes and ones where districts are implementing safety countermeasures. The list has been used by the Long Range Planning section for establishing top safety needs and will be used in the future to identify systemic safety initiatives. Curves can now be analyzed by radius, length, AADT, speeds, grade, super elevation and surface type.

Benefit

Developing a horizontal curves inventory is critical for a successful safety program. By developing a curves inventory for use in TMS, staff can better understand the curves having safety issues and how to treat those curves using a systemic safety approach. Staff can now better treat these problematic curves with safety strategies ranging from low-cost chevrons to more expensive high-friction surface treatments. Ultimately, this inventory will allow MoDOT to become more proactive and apply systemic safety countermeasures.

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Additional photos can be seen by accessing the Innovations Challenge homepage at:
<http://wwwi/intranet/cr/SolutionsAtWork/Innovations.htm>.