



Overhead Sign Inspectors to Gain New Perspective

(Posted Sept. 21, 2015) Approximately 3,000 INDOT structures that support overhead signs are about to get a close-up examination by inspectors who, in some instances, will inspect the structures over lanes that are open to traffic.

This is a new procedure for INDOT as all overhead sign structure inspections previously were performed while travel lanes directly beneath the inspector were closed to traffic. This previous method poses a risk to motorists who may have encountered a traffic backup caused by the work. It also is more laborious, particularly regarding structures that span the roadway, since multiple lanes have to be closed. For example, the right lane is closed while the portion of the structure directly over that lane is inspected; then, after that lane closure is picked up, the left lane is closed for the remainder of the inspection.

To perform inspections over traffic without a lane closure, the inspector may either mount the structure by climbing it from the shoulder or gain access through a bucket truck that is positioned off the travel lanes. While the inspector is on the structure, his or her equipment will be tethered so that nothing can fall or drop below. The inspector will be fully tied-off to the structure by using a double lanyard system. This method of keeping the inspector and all of the equipment tethered ensures that the inspector and traffic beneath will remain safe.

“This new procedure provides two distinct advantages,” said Traffic Administration Manager Dave Boruff, who helped implement the program. “It is safer because the risks inherent to a lane closure, particularly when the traffic-control devices are being set up and taken down, are eliminated.

Box truss (upper-right photo) and double-arm cantilever (lower-right photo) structures are among the types of sign structures that inspectors may access by climbing from the shoulder of the road.



“Secondly,” Boruff continued, “the procedure lowers the cost of the inspections, meaning that we can do more inspections for the budget we’ve set aside. Not only are the inspections expedited, but there is less standby time while waiting for lane closures to be set up and taken down.”

INDOT’s Traffic Administration group and district offices use inspection reports to better assess maintenance needs and plan maintenance activities. In 2009, INDOT hired Collins Engineers, a consultant with 30 years of sign-structure inspection experience, to inspect 700 of INDOT’s 3,700 structures in its inventory. Collins completed that first contract earlier this year by closing lanes to inspect overhead signs.

However, Collins has signed a new contract with a

goal that the remaining 3,000 structures will be inspected by 2021. The terms of the new contract include provisions that enable inspections of certain structures over traffic without lane closures.

“Box truss, tri-chord truss, butterfly, and double-arm cantilever structures may be inspected via live-traffic climbing where it is feasible and safe for the inspector,” said Boruff. “While this procedure is new to INDOT, Collins has performed these types of inspections for many other agencies throughout the country with an excellent safety record.”

Besides inspecting sign structures for multiple state departments of transportation, Collins also developed Federal Highway Administration guidelines, lesson plans and curriculum for a course that focuses on the installation, inspection, maintenance and repair of structural supports for highway signs.

Collins personnel will also perform minor maintenance activities as part of the inspection, saving INDOT from sending our maintenance crews as well as preserving structural reliability and increasing structure life expectancy.

“Under the same agreement, we can also assign repair work to Collins in the case of a more serious deficiency or damage from vehicular impact,” said Traffic Administration Engineer Lalit Garg. “This also expedites the work to be done.”

Collins is to begin the new contract in the LaPorte District by late September or early October before expanding to the other districts.

So, don't be surprised to begin seeing workers atop overhead sign structures with no bucket truck in sight. If your travel companions wonder how that happened, you'll have the answer.



A new method of inspecting sign structures will allow consultant workers the option of mounting the structure by climbing it from the shoulder of the road during live traffic (left photo) to get to the upper area and inspect from above (below photo).

