# BRIDGES WITH NOTHING TO HIDE

You don't have time to babysit your bridge inventory. If there's a problem, you need to know about it fast, so you can fix it fast.

### STEEL IS THE ULTIMATE CHOICE FOR SUPERIOR INSPECTABILITY AND REPAIRABILITY.

## Visual inspections = quick, economical results

Structural steel components are easily accessible to bridge inspectors, so they can be simply visually inspected—no costly equipment or specialized testing methods required.

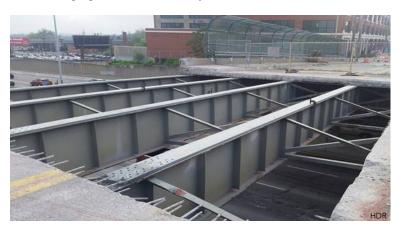
Inspectors can get up close to touch the steel that carries a bridge's load, making it easy to obtain measurements and other data they need to accurately load-rate the structure.

That's the benefit of a bridge with nothing to hide: The structural system is out in the open, where you can see it—and steel bridges are ideally suited for fast, economical repairs.

#### Repairability

Steel bridges are ideal for fast, economical repairs--even in cases where a bridge in another material would need to be completely replaced. See aisc.org/bridge-service-life for more.

Need more strength for new loadings? Components can be strengthened with additional steel, or simply replace the damaged members—without removing the bridge permanently from service. FHWA design guides make this easy.



New cover plates on existing steel girders, like these on the Lincoln Avenue Bridge over I-71 in Hamilton County, Ohio, increase the load capacity of a bridge to extend its service life.

#### Steel bridges: The obvious choice

#### NO OTHER STRUCTURAL BRIDGE MATERIAL CAN MATCH DOMESTICALLY FABRICATED STRUCTURAL STEEL.

The steel industry has the pedal to the metal, with constant innovation making it faster and easier to design, fabricate, and construct a bridge with steel.

An economical choice, today and tomorrow: Steel's unmatched resilience and durability provide outstanding value that adds up fast during a service life of a century or more.

Bridges with nothing to hide: Inspecting a steel bridge is much easier, faster, and less expensive than inspecting a concrete bridge. And if an inspector does find a potential issue, it's also much easier, faster, and less expensive to repair.

ABC—easy (and as fast as) 1, 2, 3: When's the last time you replaced a bridge overnight? It's possible with accelerated bridge construction (ABC) techniques, like assembling a complete bridge offsite and moving it into place during a brief road or rail closure.

Less is, in fact, more: Steel's unmatched strength-to-weight ratio allows longer spans with fewer intermediate piers—and a smaller environmental footprint.

Ace your geometry test: Steel is ideal for both simple designs and complex geometry, and its high span-to-depth ratios mean your bridge can go the distance with a shallower superstructure.

Go with the sure thing: Structural steel is a reliable choice because it has the most robust quality certification program out there, which is designed to prevent errors instead of correcting them.

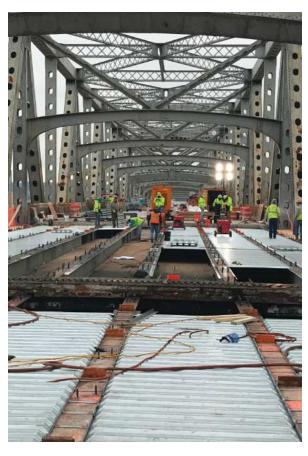
aisc.org/bridge-design-principles



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#### **NEED A FIX—FAST?**

Steel can be procured, fabricated, and installed at lightning speed.



The Brent Spence Bridge between Covington, Ky., and Cincinnati had 16 brand-new steel stringers installed just 18 days after a fire, and the bridge was closed for just over a month.

### DAMAGE FROM AN OVERHEIGHT VEHICLE?

Tried-and-true heat-straightening techniques often provide a fast, easy fix.



This simple fix to an existing member gets traffic moving again and saves money. More information can be found at aisc.org/steelbridgepreservation.

