



KANSAS BRIDGE FACT SHEET

GLOSSARY OF COMMON TERMS

Abutment - The substructure element at the ends of a bridge which act to support the ends of the bridge as well as retain the approach embankment.

Arch Bridge - A bridge composed of concrete, steel or masonry members arranged in a vertically curved configuration.

Beam - A linear structural member designed to span from one support to another and can be made of a variety of materials including concrete, steel or prestressed concrete.

Bridge - A structure, including supports, erected over a depression or an obstruction, such as water, a highway, or a railway, having a track or passageway for carrying traffic or other moving loads, and having an opening measured along the center of the roadway of more than 20 feet.

Bridge Deck - The surface of the bridge that is driven on.

Cast-in-Place Concrete - Concrete poured on site to create a structural concrete element in its final position.

Dead Load - The load due to the weight of the structure itself.

Functionally Obsolete - A bridge that does not meet current design standards (for criteria such as lane width), either because the volume of traffic carried by the bridge exceeds the level anticipated when the bridge was constructed and/or the relevant design standards have been revised. Addressing functional deficiencies may require the widening or replacement of the structure.

Girder - A linear structural member that typically supports the deck and can be made of a variety of materials including concrete, steel or prestressed concrete.

Legal Load - The maximum legal load for each vehicle configuration permitted by law for the State in which the bridge is located.

Live Load - Load on a bridge caused by vehicular traffic, wind, water, and/or earthquakes.

Load Rating - The determination of the live load carrying capacity of a bridge using bridge plans and supplemented by information gathered from a field inspection.



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Member - An individual component of the bridge (e.g. beam, column, or abutment).

National Bridge Inspection Standards (NBIS) - Title 23 Part 650(C) of the Code of Federal Regulations (CFR), the federal law which defines the frequency, procedures and personnel requirements for inspection of bridges.

Prestressed Concrete - Concrete that contains steel cables that are initially put in tension. These members are typically created at a fabrication plant and hauled on site as a finished element.

Rehabilitation - The major work required to restore the structural integrity of a bridge as well as work necessary to correct major safety defects.

Slab Bridge - A bridge where the “deck” of the bridge is the only superstructure component.

Structurally Deficient - A bridge with members which have deteriorated condition to the point that they could potentially reduce load-carrying capacity. A “structurally deficient” designation does not imply that a bridge is unsafe, but such bridges typically require significant maintenance and repair to remain in service, and would eventually require major rehabilitation or replacement to address the underlying deficiency.

Substructure - The parts of a bridge that are below the bottom of the girders or slab. Pilings, shafts, spread footings, abutments and columns may be part of the substructure.

Sufficiency Rating - The numerical rating (0 to 100) of a bridge based on its structural adequacy and safety, essentiality for public use, and its serviceability and functional obsolescence.

Superstructure - The parts of a bridge that are above the bottom of the girders or slab. Girders, bridge deck, and bridge railing are parts of the superstructure.

Truss Bridge - A bridge composed of steel members connected at their ends to form a network of triangles.