

BRIDGES

Column 1 – (Agency) Name of the agency that has responsibility for the maintenance of the bridge.

Column 2 - (Structure Number) Each structure is assigned a permanent unique number for purpose of identification. When a structure is replaced, the structure number of the old structure is retired and a new number is assigned to the replaced structure.

Column 3 - (Route Number) Refers to the principal state highway route number. Where multiple route numbers occur, the lower numbered route number is used. The principal route is determined by the class of roadway in the following order: interstate highway, U.S. highway, state highway, county highway, city street, others. If two or more intersecting routes are of the same class, the lower route number will be designated as the principal route.

Column 4 – (Route Suffix) A: Alternate; B: Business; L: Loop; T: Temporary; S: Spur. Route number “0” indicates that the Bridge is owned by a State agency other than ADOT.

Column 5 - (Route Milepost) Each structure is located by the milepost of the principal route as established by the Transportation Planning Division and reported in Arizona State Milepost System.

Column 6 - (Bridge Name) Is assigned based on the name of the feature intersected by the principal route. These features could be river, stream, wash or road.

Column 7 - (District) ADOT Engineering & Maintenance District in which the structure is located:

District Name
Central
Northcentral
Northeast
Northwest
Southcentral
Southeast
Southwest

Column 8 - (Original Construction Project Number) Original construction project number under which the structure was constructed.

Column 9 - (Year Built) A four digit code showing the original year of construction of the structure.

Column 10 & 11 - (Bridge Type) Structure type for the main span is coded as follows:

1st Digit - Material	2nd and 3rd Digits - Type
1 Concrete 2 Concrete continuous 3 Steel 4 Steel continuous 5 Prestress concrete 6 Prestress concrete continuous 7 Timber 8 Masonry 9 Aluminum, W.I. or C.I. 0 Other	01 Slab 02 Stringer/Multi-beam or girder 03 Girder and Floorbeam System 04 Tee Beam 05 Box Beam or Girders-Multiple-Precast 06 Box Beam or Girders-Single or Spread 07 Frame (except frame culverts) 08 Orthotropic 09 Truss - Deck 10 Truss - Thru 11 Arch - Deck 12 Arch - Thru 13 Suspension 14 Stayed Girder 15 Movable - Lift 16 Movable - Bascule 17 Movable - Swing 18 Tunnel 19 Culvert (including frame culverts) 20 Mixed Types 21 Segmental Box Girder 22 Channel Beam 00 Other

Column 12 - (Number of Spans) Total number of main spans in the structure. Does not include approach spans, if any.

Column 13 - (Maximum Span Length) The length of the longest span in the structure to the nearest foot.

Column 14 - (Structure Length) The length of the structure to the nearest foot, measured from abutment back wall to abutment back wall.

Column 15 - (Skew) The angle to the nearest degree between the centerline of the intersecting roadway, pier or abutment and a line normal to the centerline of the structure.

Column 16 - (Roadway Approach Width) The width of the approach roadway, including shoulders, to the nearest foot.

Column 17 - (Bridge Roadway Width) The bridge roadway width to the nearest tenth of a foot which is the most restrictive minimum distance between curbs or rails.

Column 18 - (Allowable Vertical Clearance) The bridge vertical clearance under the structure to the nearest hundredth of foot which is the most restrictive clearance. Blank or zero entry in the column signifies "not applicable".

Column 19 - (Overlay Thickness) The thickness of overlay (generally asphaltic concrete) over deck in inches.

Column 20- (Bridge Rail Type) Bridge rail type is coded as follows:

1st Digit	Rail Type
0	None
1	H-2-1
2	H-3-1
3	Single rail with parapet
4	Concrete (other than concrete barrier)
5	Baluster (Aluminum or steel)
6	Special steel (includes curb mounted guardrail)
7	Timber
8	Thrie-beam retrofit
9	Concrete barrier
Blank	Culvert not at grade

When **2nd** or **3rd** digit is **0**; the bridge rail does not conform to current AASHTO geometric or structural requirements respectively. When **2nd** or **3rd** digit is **1**; the bridge rail conforms to current AASHTO geometric or structural requirements respectively.

Column 21 - (Inventory Rating) This capacity rating will result in a load level which can safely utilize existing structure for an indefinite period of time. All the ratings are based on HS loading except as noted below for railroad structures. The rating gives the gross loading in tons. If the bridge is closed and/or will not carry any live load, the loading will be 00. When both inventory and operating ratings are coded 36, it signifies that rating analysis has not been performed. For railroad underpasses, the coding will give Cooper Class or Equivalent.

Column 22 - (Operating Rating) This capacity rating will result in the absolute maximum permissible load level to which the structure may be subjected for the loading type used in the rating. All the ratings are based on HS loading except as noted below for railroad structures. The rating gives the gross loading in tons. If the bridge is closed and/or will not carry any live load, the loading will be 00. When both inventory and operating ratings are coded 36, it signifies that rating analysis has not been performed. For railroad underpasses, the coding will give Cooper Class or Equivalent.

Column 23 & 24 - (Definition & Sufficiency Rating) The sufficiency rating, which is indicative of bridge sufficiency to remain in service, is expressed as a percentage in which 100% would represent an entirely sufficient bridge and zero percent would represent an entirely insufficient bridge. For structures that are classified as the “functionally obsolete” or “structurally deficient” the letter “F” or “S” precedes the rating number. Refer to the FHWA “Recording and Coding Guide” for additional information. The rating number ranges from 0 to 100. Blank or “- value” field indicates railroad, pedestrian or flume bridge.

Column 25 – (Bridge Condition) 23 CFR 490.409(b) stipulates that the assignment of a classification of Good, Fair, or Poor must be based on the bridge’s lowest condition ratings for Deck (N58), Superstructure (N59), Substructure (N60), and Culvert (N62) as follows: Good – When the lowest rating of the 4 NBI Items is 7, 8, or 9; or Fair – When the lowest rating of the 4 NBI Items is 5 or 6; or Poor – When the lowest rating of the 4 NBI Items is 0, 1, 2, 3, or 4.

Column 26 – (NHS) Inventory Route is on the National Highway System.

TUNNELS

Column 1 – (Agency) Name of the agency that has responsibility for the maintenance of the tunnel.

Column 2 - (Tunnel Number) Each tunnel is assigned a permanent unique number for purpose of identification. When a tunnel is replaced, the tunnel number of the old tunnel is retired and a new number is assigned to the replaced tunnel.

Column 3 - (Route Number) Refers to the principal state highway route number. Where multiple route numbers occur, the lower numbered route number is used. The principal route is determined by the class of roadway in the following order: interstate highway, U.S. highway, state highway, county highway, city street, others. If two or more intersecting routes are of the same class, the lower route number will be designated as the principal route.

Column 4 – (Route Suffix) A: Alternate; B: Business; L: Loop; T: Temporary; S: Spur. Route number “0” indicates that the Bridge is owned by a State agency other than ADOT.

Column 5 - (Route Milepost) Each structure is located by the milepost of the principal route as established by the Transportation Planning Division and reported in Arizona State Milepost System.

Column 6 - (Tunnel Name) Is assigned based on the name of the feature intersected by the principal route. These features could be river, stream, wash or road.

Column 7 - (District) ADOT Engineering & Maintenance District in which the structure is located:

District Name
Central
Northcentral
Northeast
Northwest
Southcentral
Southeast
Southwest

Column 8 - (Year Built) A four digit code showing the original year of construction of the tunnel.

Column 9 – (Tunnel Shape) Shape of the tunnel.

Column 10 – (Complex) A complex tunnel is characterized by advanced or unique structural elements or functional systems.

Column 11 – (Number of Bores) The number of bores in a tunnel.

Column 12 – (Tunnel Length) The length of the tunnel measured along the centerline of the roadway.

Column 13 – (Roadway Width) The most restrictive minimum distance between curbs or rails on the mainline tunnel roadway.

Column 14 – (Minimum Vertical Clearance over Tunnel Roadway) The minimum vertical clearance between the mainline tunnel roadway surface and any overhead restriction.