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**Bridge Inspection & Condition Inventory – Misc. Key Info**

**CONDITION:** Key elements of the bridge inspected (Deck (58), Superstructure (59), Substructure (60), Culvert (62), Deck Geometry (68), Waterway Adequacy (71), and Approach Alignment (72)) were assigned a condition rating based on our evaluation of its current condition. The ratings were assigned using the nine (9) point ConnDOT (and Federal Highway) National Bridge Inspection System (NBIS) rating system as listed below:

| Rating | Description |
|---|---|
| 9 | EXCELLENT — no noticeable deficiencies or deterioration. |
| 8 | VERY GOOD — no problems requiring attention. |
| 7 | GOOD — some minor problems; potential exists for minor maintenance. |
| 6 | SATISFACTORY — elements show some minor deterioration; potential exists for major maintenance. |
| 5 | FAIR — all primary elements are sound, but may have minor section loss, cracking, spalling or scour; potential exists for minor rehabilitation |
| 4 | POOR — advanced section loss, deterioration, spalling or scour; requires major rehabilitation |
| 3 | SERIOUS — loss of section, deterioration, spalling or scour have seriously affected primary elements. Local failures are possible. Fatigue cracks in steel or shear cracks in concrete may be present. Rehabilitation or repair required immediately. |
| 2 | CRITICAL - need for immediate repairs or rehabilitation is urgent. |
| 1 | IMMINENT - structure is or should be closed, study should determine feasibility of repair or rehabilitation |
| 0 | FAILED - structure is or should be closed, structure is beyond repair or rehabilitation |

**STRUCTURAL EVALUATION (67)**: The Structural Evaluation rating is the lowest of the condition ratings from Deck, Superstructure, Substructure, or Culvert (when applicable). A rating of 'N' means that no rating is required for that item based on its structure type (either Bridge or Culvert).

**STRUCTURE TYPE**

| Code | |
|---|---|
| 1 | Concrete |
| 2 | Concrete continuous |
| 3 | Steel |
| 4 | Steel continuous |
| 5 | Prestressed concrete |
| 6 | Prestressed concrete continuous |
| 7 | Wood or Timber |
| 8 | Masonry |
| 9 | Aluminum, Wrought Iron, or Cast Iron |
| 0 | Other |

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## FUNCTIONAL ROADWAY CLASSIFICATION (26)

**Rural**

1 Principal Arterial - Interstate
2 Principal Arterial - Other
6 Minor Arterial
7 Major Collector
8 Minor Collector
9 Local

**Urban**

11 Principal Arterial - Interstate
12 Principal Arterial - Other Freeways or Express ways
14 Other Principal Arterial
16 Minor Arterial
17 Collector
19 Local

## TRAFFIC SAFETY FEATURES (36)

1st Digit Bridge Railings
2nd Digit Transition Railing
3rd Digit Approach Guiderail
4th Digit Approach Guiderail Ends

| Code | Description |
|---|---|
| 0 | Inspected feature does not meet currently acceptable standards or a safety feature is required and none is provided. |
| 1 | Inspected feature meets currently acceptable standards. |
| N | Not applicable or a safety feature is not required. |

**PRIORITY FACTORS:** This section lists the Structural Adequacy Rating, Sufficiency Rating and Level of Importance.

The Structural Adequacy Rating represents the overall structural condition based on superstructure or substructure condition and estimated load capacity. It is a value between 0 and 55 with 0 being the worst rating and 55 being the best rating.

The Sufficiency Ratings are calculated from formulas based on the "Recording and Coding Guide for the Structure Inventory and Appraisal of the Nation's Bridges" by the U.S. DOT Federal Highway Administration. The Sufficiency Rating is a weighted percentage (0% entirely deficient and 100% entirely sufficient) that factors in technical data about the bridge combined with the condition ratings on various bridge components based on their current condition. The Sufficiency Rating is proportioned into three major sections: Structural Adequacy and Safety, Serviceability and Functional Obsolescence, and Essentiality for Public Use.

- Structural Adequacy & Safety – 55% max.; based on the structural adequacy rating and overall safety
- Serviceability & Functional Obsolescence – 30% max.; considers items such as deck condition, clearances, roadway alignment and roadway width

- Essentiality For Public Use – 15% total divided into two possible parts:

  15% max.; Essentiality - includes items affecting overall impact from loss of use such as level of importance to town-wide travel patterns, detour length, average daily traffic, defense highway designation, etc.

  13% max.; Special Reductions – includes other special considerations of local or special importance

The spreadsheet is arranged so that the bridges with the lowest percentage (least sufficient) are at the top and the highest percentage (most sufficient) are at the bottom.

Level Of Importance is High, Medium, or Low based on the Average Daily Traffic (ADT).

Low - ADT levels 3000 vehicles per day (vpd) and below
Medium – ADT levels between 3000 (vpd) and 6000 (vpd)
High – ADT levels 6000 (vpd) and above