



DELDOT BRIDGES

Description:

A NBI (National Bridge Inventory) bridge is any bridge carrying vehicular traffic on a public roadway with a total length > 20'. State bridges are comprised of any DelDOT-owned bridge with a total length < 20' and includes pedestrian bridges regardless of length and any structure with a hydraulic opening greater than 20 square feet and a minimum vertical clearance of 4'.

DelDOT is responsible for 1,789 NBI & State bridge structures. DelDOT has 326 NBI bridges on the National Highway System (NHS), with an additional 12 owned by DRBA and 2 owned by the USACE.

A comprehensive Bridge inspection program is required as per the Code of Federal Regulations (NBIS) by the FHWA for NBI bridges only. DelDOT's Bridge Inspection Program includes NBI & State bridges.

Annual Budget:

DelDOT spent ~\$70M in FY24 on bridge preservation activities and the expected average annual budget for the next 3 years is \$87M. This includes \$13M of State funds, and \$74M of Federal funds. This excludes projects that are funded through special pots of money, grants, or funding outside of the Bridge Program.

Asset Valuation:

The current valuation of DelDOT's bridge assets is estimated to be \$3.36B with the culvert bridge population accounting for ~12.5%.

STATE OF GOOD REPAIR

SOGR for bridges is defined using the minimum assigned NBI Condition Rating. DelDOT defines SOGR as follows:

DelDOT Bridge Program

Good Condition: NBI Rating ≥ 6

Poor Condition: NBI Rating ≤ 4

NHS Bridge Program

Good Condition: NBI Rating ≥ 7

Poor Condition: NBI Rating ≤ 4

TARGETS AND MEASURES

DelDOT Bridge Performance Goals

of Bridges in Good Condition > 75%

of Bridges in Poor Condition < 3.0%

NHS Bridge 2026 Performance Targets

Deck Area in Good Condition > 25%

Deck Area in Poor Condition < 3%

INVENTORY & CONDITION

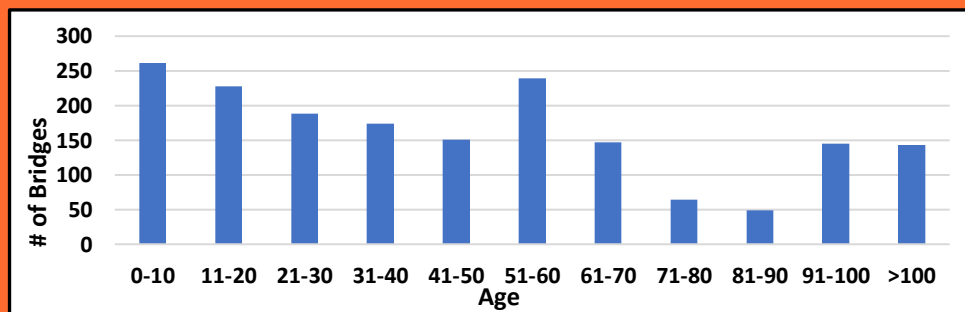
2024 Bridge Condition Rating Summary

Condition Rating	All DelDOT Bridges		DelDOT NBI Bridges		DelDOT State Bridges	
	# Bridges	% Bridges	# Bridges	% Bridges	# Bridges	% Bridges
Poor (≤ 4)	22	1.23%	8	0.95%	14	1.48%
Fair = 5	188	10.51%	103	12.23%	85	8.98%
Good (≥ 6)	1579	88.26%	731	86.82%	848	89.55%
Total =	1,789	100.0%	842	100.0%	947	100.0%

2024 NHS Bridge Condition Rating Summary

	All NHS Bridges (340 bridges)		DelDOT Bridges (326 Bridges)		Army Corps Bridges (2 Bridges)		DRBA (12 Bridges)	
Condition Rating	Deck Area (ft ²)	% Deck Area	Deck Area (ft ²)	% Deck Area	Deck Area (ft ²)	% Deck Area	Deck Area (ft ²)	% Deck Area
Poor (≤ 4)	16,733	0.2%	16,733	0.3%	-	0.0%	-	0.0%
Fair = 5 & 6	6,195,951	76.3%	4,097,760	68.2%	723,663	100.0%	1,374,527	99.0%
Good (≥ 7)	1,906,046	23.5%	1,892,235	31.5%	-	0.0%	13,811	1.0%
Total =	8,118,730	100.0%	6,006,728	100.0%	723,663	100.0%	1,388,338	100.0%

BRIDGE AGE DISTRIBUTION



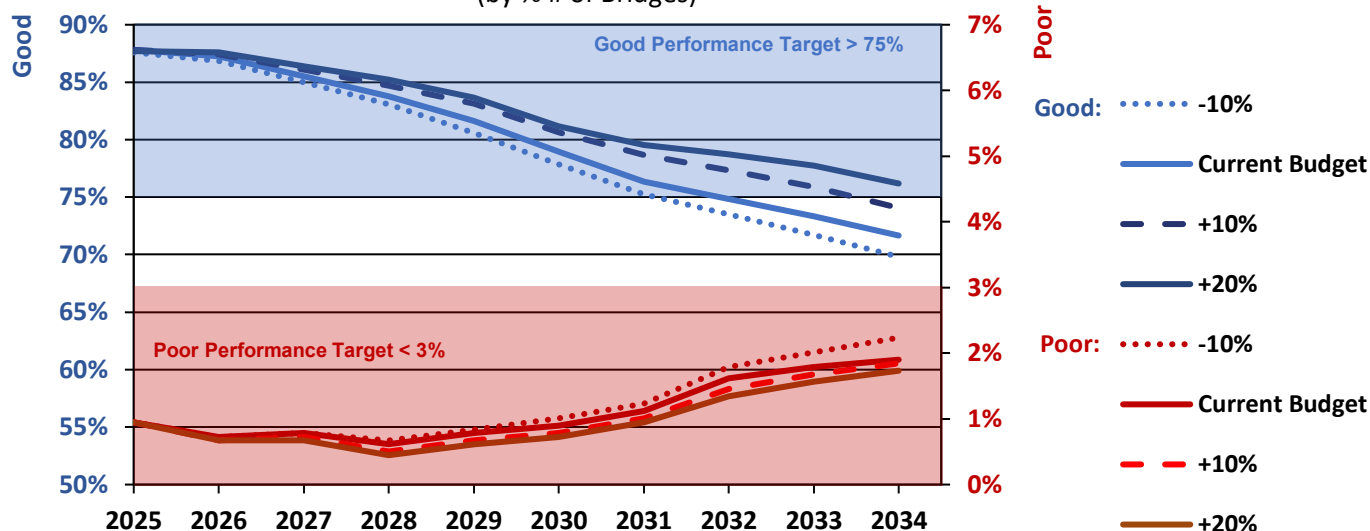


BRIDGE PERFORMANCE PROJECTIONS

Note: The increases & decrease to the Current Budget was applied in years 2026-2034.

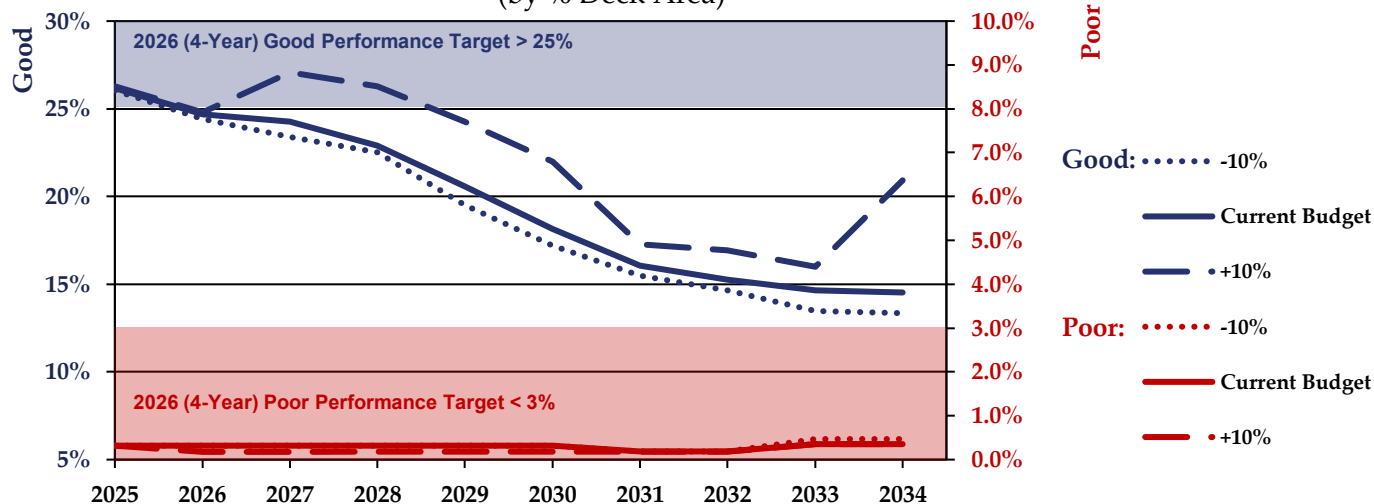
DelDOT Bridge Program: 10-Year Performance Forecast

(by % # of Bridges)



NHS Bridge Program: 10-Year Performance Forecast

(by % Deck Area)



POTENTIAL RISKS

Non-Redundant Steel Tension Member Bridges: These are steel bridges that contain members whose failure would cause partial or full failure of the bridge. These bridges require in-depth inspections to monitor for fatigue cracking to prevent damage and potential failure.

Scour Critical Bridge Population: These are bridges that have either been identified as having the potential to scour beyond the footings/piles through analysis or a pre-screening evaluation or have advanced scour damage that requires monitoring.

Large Rain/Storm Events: These types of events may result in increased water flow or overtopping that can cause advanced scour, settlement of the bridge, or a complete bridge failure.

Traffic Impact: Over height trucks that strike overpass bridges are a concern for the structural integrity of the bridge, as well as safety of motorists driving over or under the overpass bridge.