DELAWARE DEPARTMENT OF TRANSPORTATION

DELDOT BRIDGES

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 < 5%

NHS Bridge 4-Year Performance Targets
Deck Area in Good Condition > 18.3%
Deck Area in Poor Condition < 3

INVENTORY & CONDITION

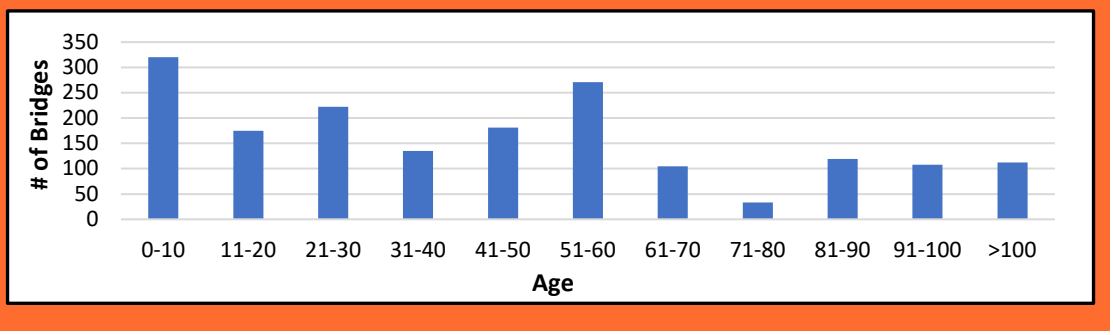
2020 DelDOT Bridge Condition Rating Summary

Condition Rating	All DelDOT Bridges		DelDOT NBI Bridges		DelDOT State Bridges	
	# of Bridges	% of Bridges	# of Bridges	% of Bridges	# of Bridges	% of Bridges
Poor (≤4)	29	**1.6%**	13	**1.5%**	16	**1.7%**
Fair = 5	261	14.7%	144	17.1%	117	12.5%
Good (≥6)	1488	**83.7%**	687	**81.4%**	801	**85.8%**
Total =	1,778	100.0%	844	100.0%	934	100.0%

2020 NHS Bridge Condition Rating Summary

Condition Rating	All Bridges		DelDOT Bridges		Army Corp Bridges		DRBA Bridges	
	Deck Area	Deck Area %	Deck Area	Deck Area %	Deck Area	Deck Area %	Deck Area	Deck Area %
Poor (≤4)	1,519	**0.02%**	0	**0.0%**	0	**0.0%**	1,519	**0.1%**
Fair = 5 & 6	7,054,071	83.3%	5,172,582	79.4%	723,608	100.0%	1,157,882	94.0%
Good (≥6)	1,415,777	**16.7%**	1,343,372	**20.6%**	0	**0.0%**	72,405	**5.9%**
Total =	8,471,367	100.0%	6,515,954	100.0%	723,608	100.0%	1,231,805	100.0%

BRIDGE AGE DISTRIBUTION



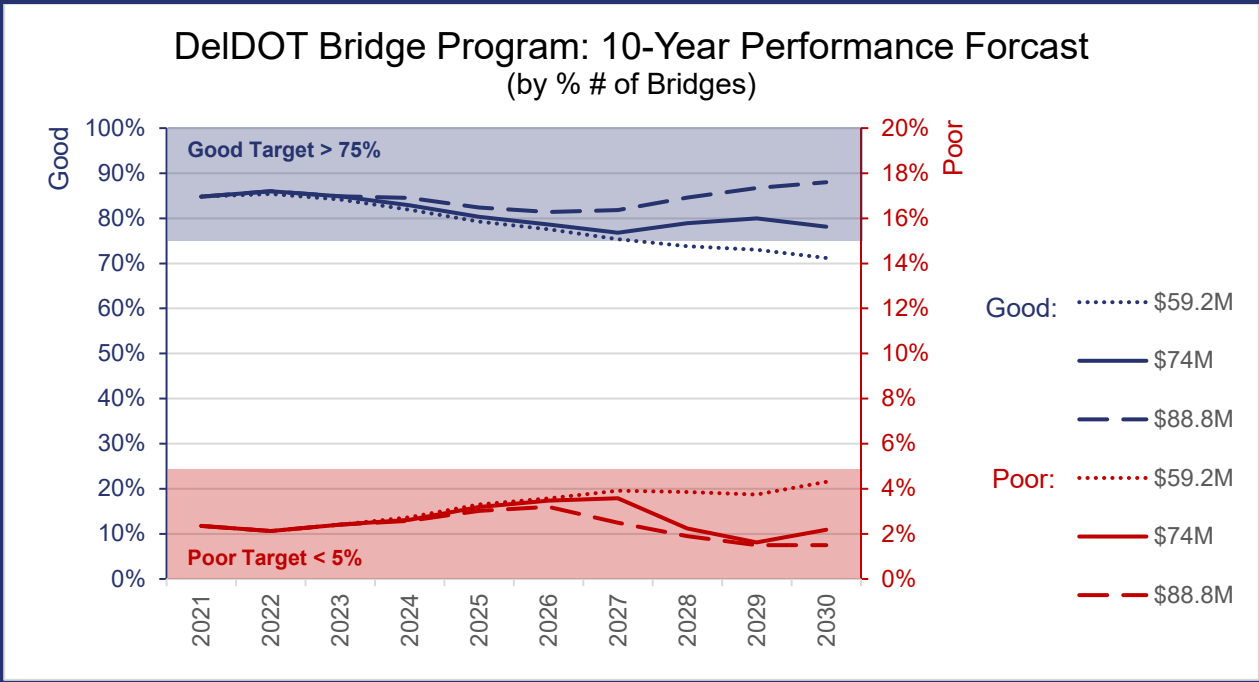
Description:
DelDOT is responsible for 1,781 bridge structures. Of these, 340 are on the NHS (NBI), with an additional 12 owned by DRBA and 2 owned by the USACE.
Any DelDOT-owned structure spanning over a roadway or waterway with a hydraulic opening greater than 20 square feet and a minimum vertical clearance of 4' is considered to be a bridge. Bridge inspection program is required as per the Code of Federal Regulations (NBIS) by the FHWA for NBI bridges only. However, the FHWA strongly encourages State DOTs to inspect smaller bridge & culvert structures

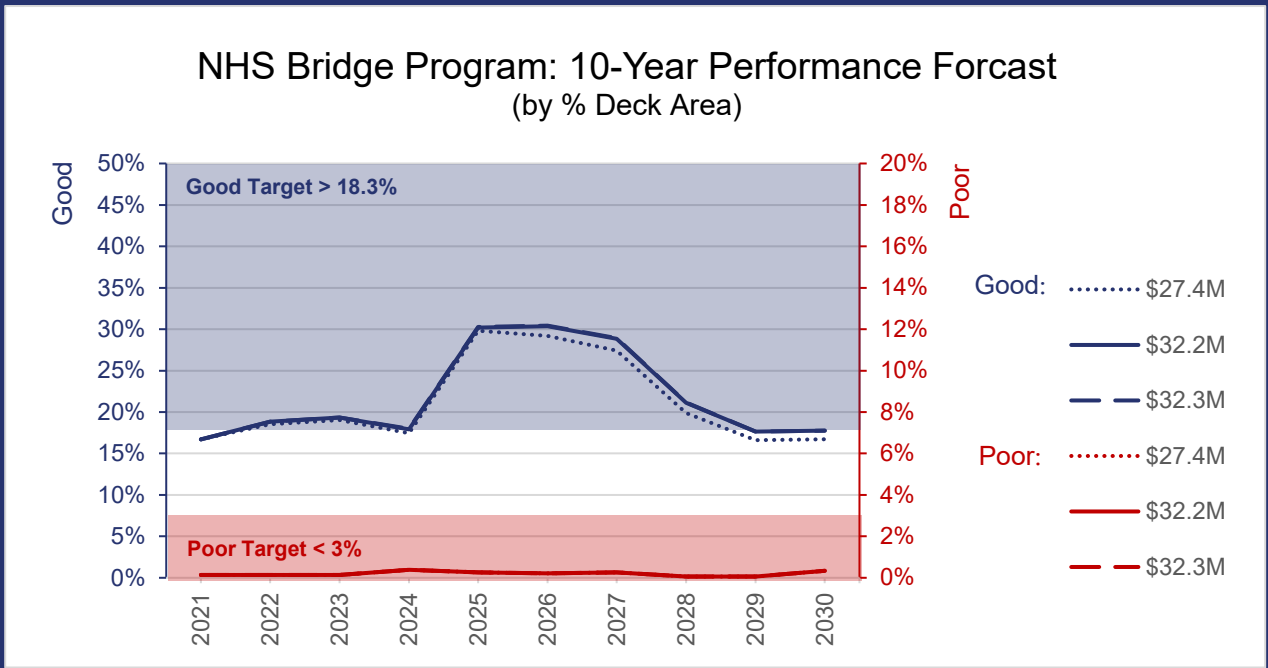
Annual Budget:
DelDOT spent $66.5M in 2020 and the expected average annual budget for the next 3 years is $78.3M. This includes $26.6M of State funds, and $51.7M of Federal funds. This excludes projects that are funded through special pots of money, grants, or funding outside of our Bridge preservation, Bridge Management, and Bridge Painting Programs.

Asset Valuation:
The current valuation of DelDOT's bridge assets is estimated to be $2.2B with the culvert bridge population accounting for ~14%.

DELAWARE DEPARTMENT OF TRANSPORTATION

BRIDGE PERFORMANCE PROJECTIONS





POTENTIAL RISKS

Fracture Critical Bridges: These are steel bridges that contain members whose failure would cause partial or full failure of the bridge. These bridges require more 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 identifed 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: Overheight 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.