

Transportation Asset Management Plan - 2022

OVERVIEW

NHDOT, MAY 2022



General Information

Required by federal law, updates every 4 years

Must include:

- NHS Pavements & Bridges – inventory & condition
- Asset management objectives
- Lifecycle information
- Risk assessments
- Financial plan
- Investment strategy

Includes strategies, targets, and approaches that must be reflected in the STIP/TIPs

Pavements - Basics

Condition is rated based on Roughness, Cracking & Rutting

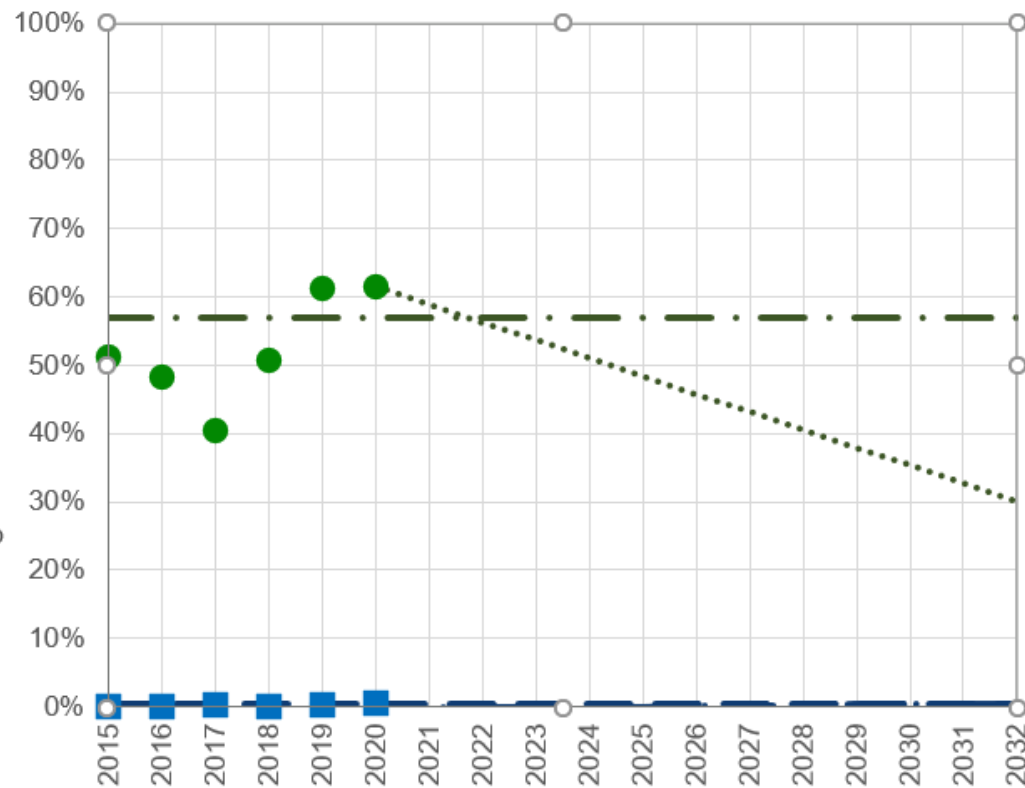
NHDOT collects condition on entire NHS annually

	Total	Good		Fair		Poor	
	Lane-Miles	Lane-Miles	%	Lane-Miles	%	Lane-Miles	%
Total NHS	2,813	1,378	49%	1,395	50%	41	1%
Interstate	779	479	62%	296	38%	3	0%
Non-Interstate	2,034	898	44%	1,098	54%	38	2%

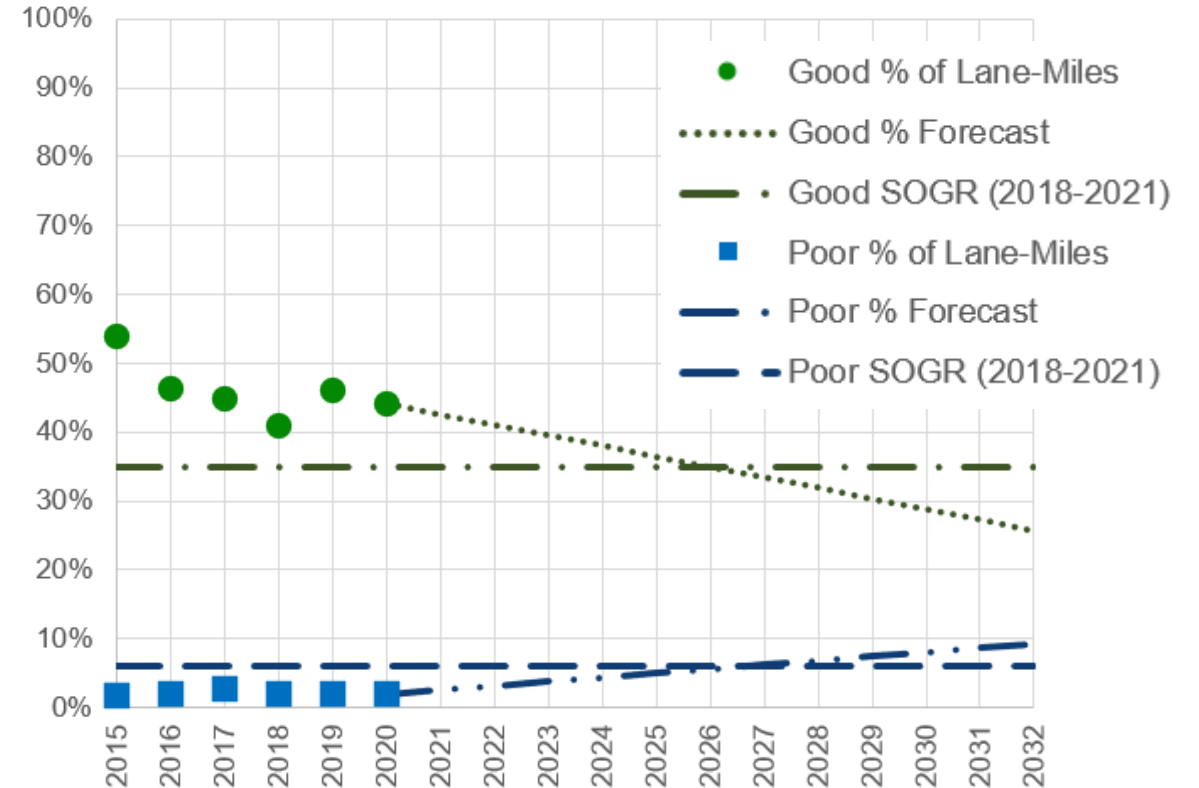
	Total	NHDOT Highways		NHDOT Turnpikes		Municipalities	
	Lane-Miles	Lane-Miles	%	Lane-Miles	%	Lane-Miles	%
Total NHS	2,839	2,144	76%	486	17%	208	7%
Interstate	1,060	833	79%	228	21%	0	0%
Non-Interstate NHS	1,779	1,312	74%	259	15%	208	12%

Pavements - Forecasts

Interstate



Non-Interstate NHS



Pavements - Forecasts

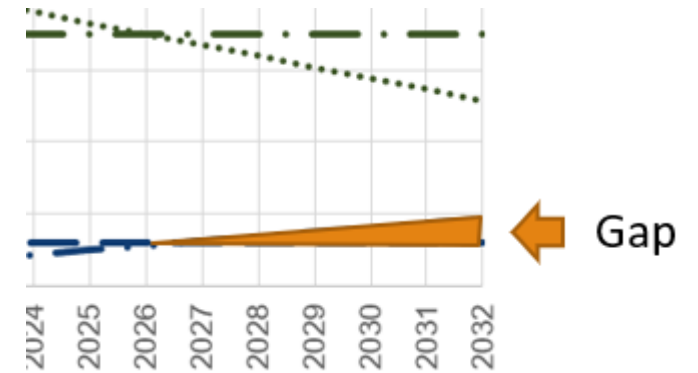
Highlights

- Good conditions are likely to decline – but not dramatically
- Poor condition on the Interstate remains negligible
- Poor condition on Non-Interstate NHS is likely to exceed the State of Good Repair (SOGR) target

Pavements - Gap

Gap Analysis

- Base forecast use draft 10-Year Plan 2023-2032
- Test the forecasts under different budget scenarios
- Identify best & reasonable scenario to close gap
 - Additional \$5M/year in Maintenance
 - Additional \$10M per 3 years in Rehabilitation



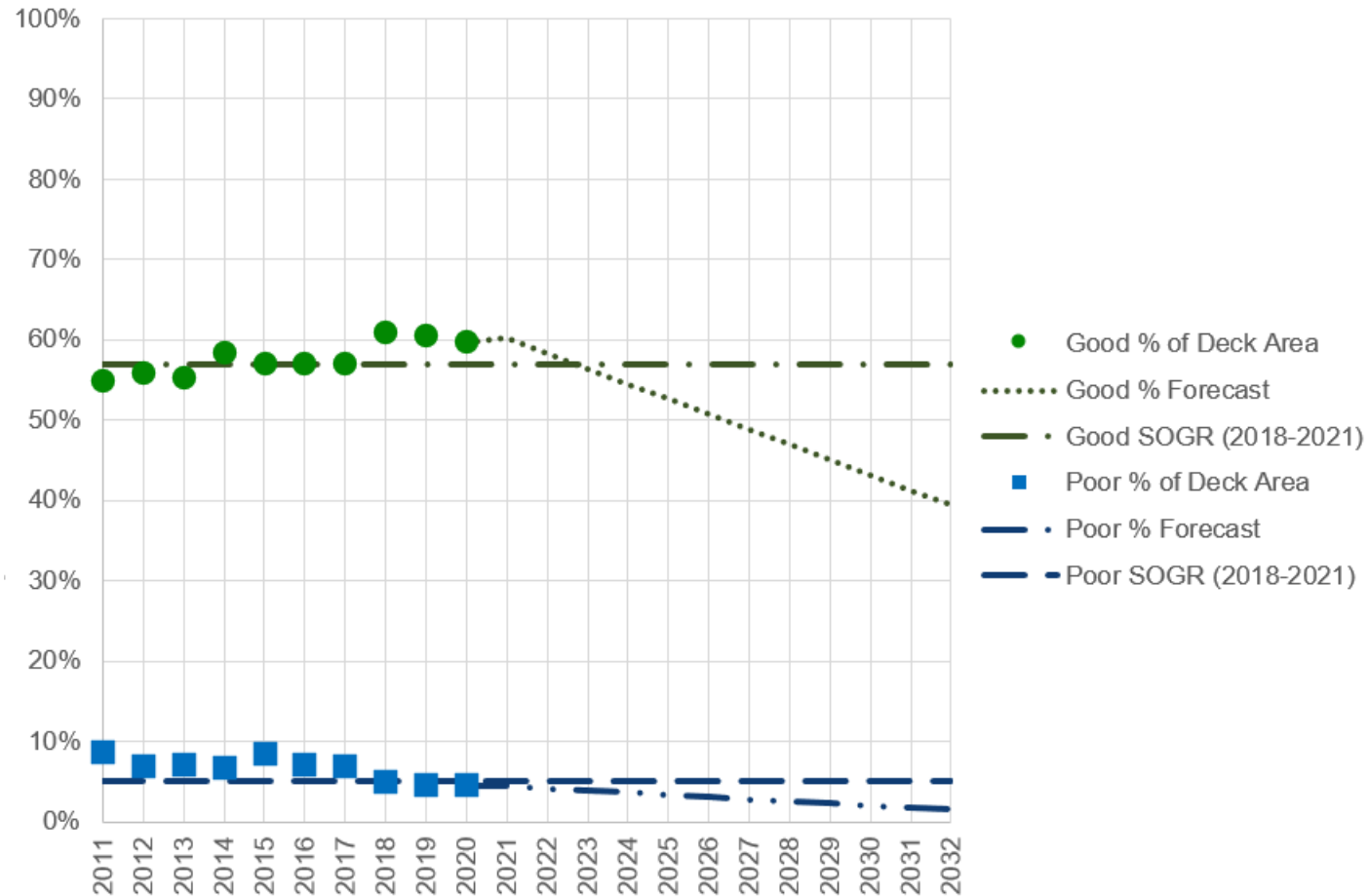
Bridges - Basics

Condition is rated based on Deck, Superstructure, Substructure
NHDOT inspects all bridges every 2 years (or more often)

	Total	Good		Fair		Poor	
	Deck Area (ft ²)	Deck Area (ft ²)	%	Deck Area (ft ²)	%	Deck Area (ft ²)	%
Total NHS	7,433,194	4,341,869	58.4%	2,771,647	37.3%	319,678	4.3%

	Total	NHDOT Highways		NHDOT Turnpikes		Municipalities	
	Deck Area (ft ²)	Deck Area (ft ²)	%	Deck Area (ft ²)	%	Deck Area (ft ²)	%
NHS	7,433,194	4,753,125	63.9%	2,111,412	28.4%	568,657	7.7%

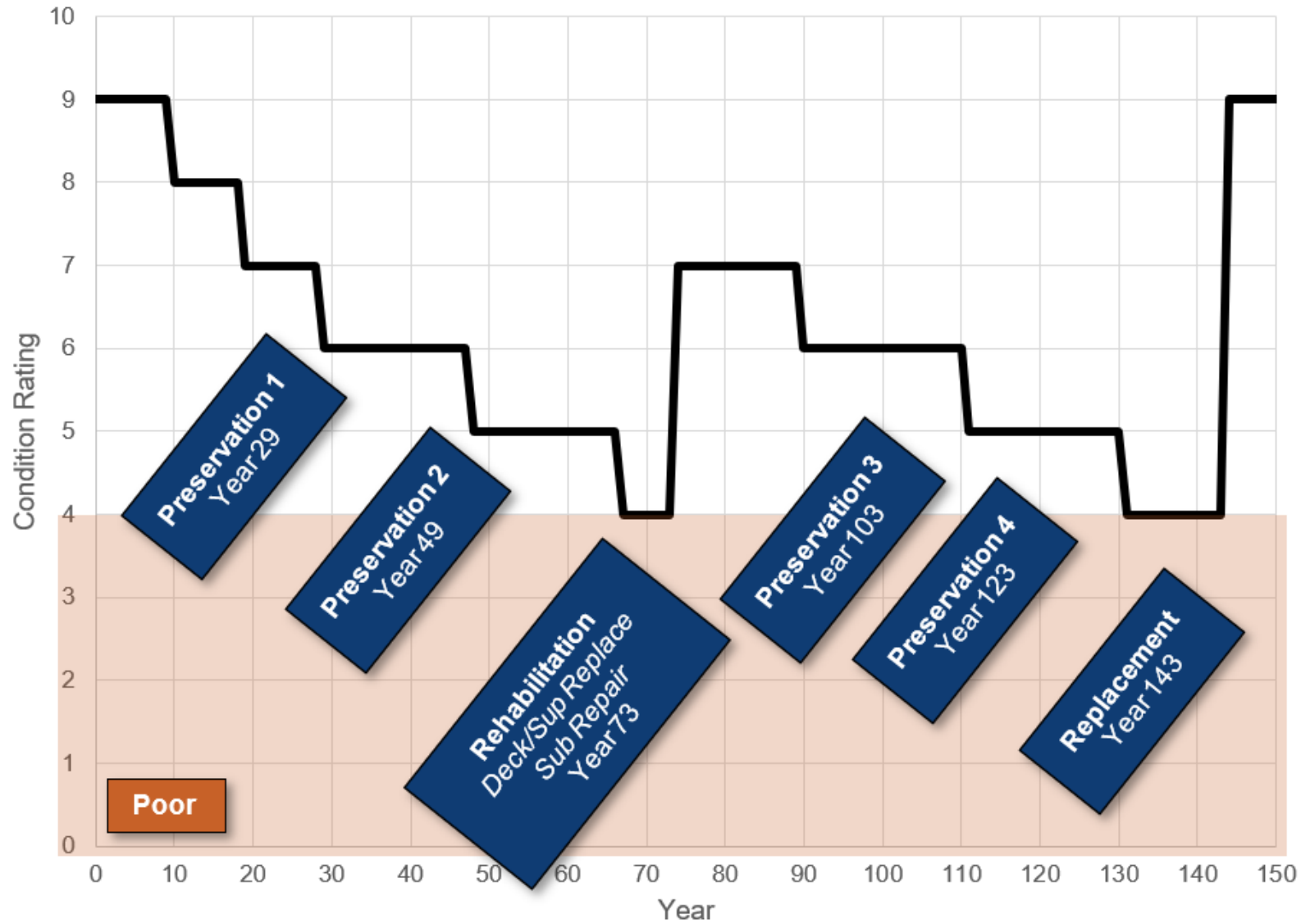
Bridges - Forecasts



Bridges - Forecasts

Highlights

- Good conditions are likely to decline – and we expect it
 - Revised SOGR set at 39.4% Good
- Poor conditions continue to decline



Bridges - Lifecycle

Risk - Analysis

Likelihood x Consequence model

- Frequency of occurrence (asset damage from flooding)
- Consequence of it happening, impacts to:
 - Safety
 - Condition
 - What is the geographic scope
 - Mobility
 - Finances

Risk - Highest Risks

Generalized risks:

- Flooding from sea level rise
- Flooding from storms
- Shortfalls in funding for programs
- Staffing difficulties
- Cost increases

Risk - Resiliency

Sea level rise

- Undertaking a framework to apply “NH Coastal Flood Risk Summary” processes

Inland Flooding

- Culvert inspection programs
- Apply framework from Coastal Summary for sizing

Financial - Basics

TAMP is linked to draft 10-Year Plan & STIP & TIPs

- Projects
- Programs
- Budgets
- Inflation
- Work types