Description

- There are 3,715 centerline miles of state-maintained routes and roads in Connecticut, 1,406 of which are on the National Highway System (NHS), including 346 Interstate miles.
- There are another 17,466 centerline miles of town maintained roads, 56 of which are on the NHS.
- 70.7% of CTDOT maintained centerline miles are flexible (asphalt) pavements, 29.0% are composite pavements (asphalt over concrete), and 0.3% are rigid (concrete) pavements.
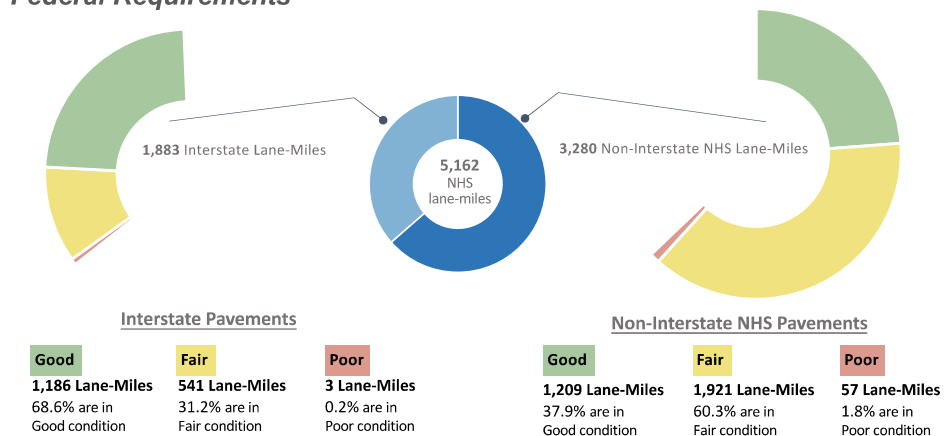
State of Good Repair (SOGR)

A pavement section for which the Pavement Condition Index (PCI) is 6 or greater is classified as being in a State of Good Repair (SOGR). The PCI is based on cracking, rutting, drainage disintegration, and ride. FHWA uses different condition measures for NHS pavements.

Pavement Age

The average Connecticut NHS pavement structure was constructed 48.6 years ago, and the average surface age is 7.5 years old, based on lane miles.

NHS Roadways Inventory and Condition
Federal Requirements

Good-Fair-Poor defined by MAP-21/FAST Act

5,162 NHS lane-miles

1,883 Interstate Lane-Miles

3,280 Non-Interstate NHS Lane-Miles

Interstate Pavements

Good	Fair	Poor
1,186 Lane-Miles	**541 Lane-Miles**	**3 Lane-Miles**
68.6% are in Good condition	31.2% are in Fair condition	0.2% are in Poor condition

Non-Interstate NHS Pavements

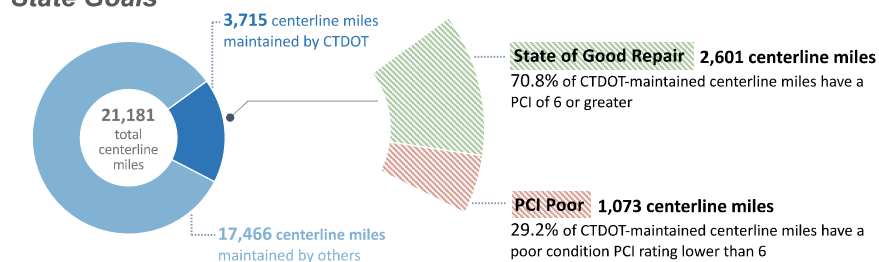| Good	Fair	Poor
1,209 Lane-Miles	**1,921 Lane-Miles**	**57 Lane-Miles**
37.9% are in Good condition	60.3% are in Fair condition	1.8% are in Poor condition

Note on Interstate: Total condition lane miles of 1,730 excludes 131 lane miles coded as bridge and 22 lane miles missing/invalid.
Note on Non-Interstate NHS: Total condition lane miles of 3,187 excludes 80 lane miles coded as bridge and 13 lane mile missing/invalid. Totals include 148 NHS lane miles which are locally maintained, 3.4% in good condition, 92.6% in fair condition and 4.0% in poor condition.

Based on 2021 HPMS pavement condition data submitted to FHWA June 14, 2022

CTDOT-Maintained Roadways Inventory and Condition
State Goals

SOGR defined by CTDOT

21,181 total centerline miles

3,715 centerline miles maintained by CTDOT

17,466 centerline miles maintained by others

State of Good Repair   **2,601 centerline miles**
70.8% of CTDOT-maintained centerline miles have a PCI of 6 or greater

PCI Poor   **1,073 centerline miles**
29.2% of CTDOT-maintained centerline miles have a poor condition PCI rating lower than 6
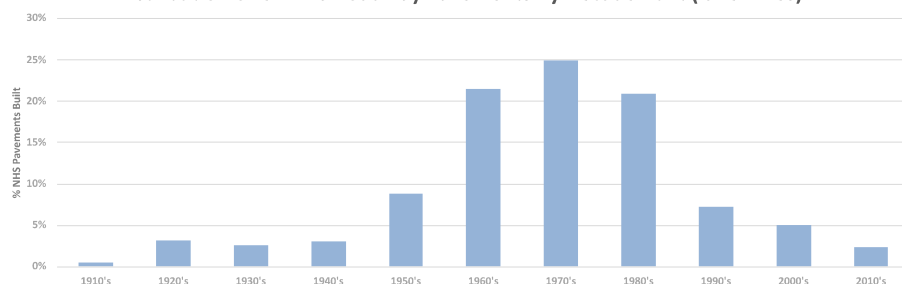
Note: Total condition centerline miles of 3,674 excludes 41 centerline miles missing/invalid.
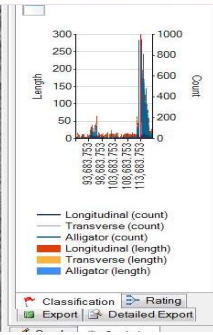
Based on CTDOT 1/11/23 Snapshot

History

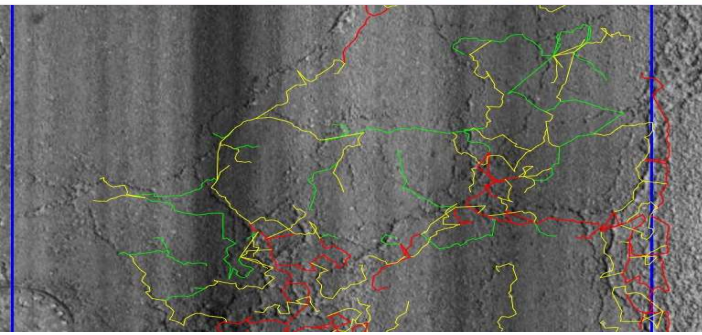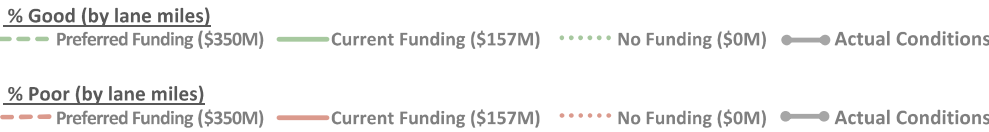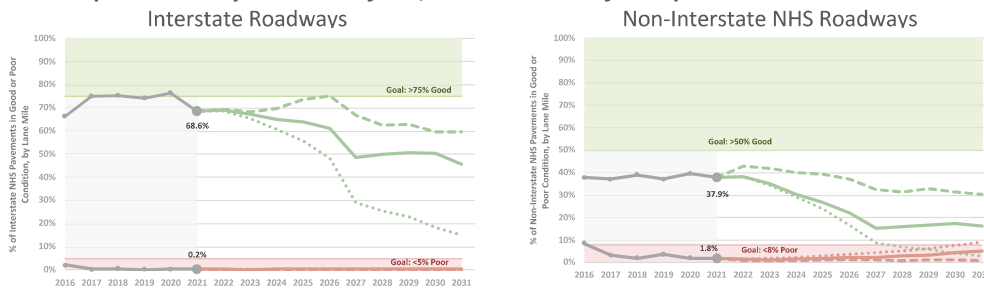**Distribution of CT NHS Roadway Pavements By Decade Built (lane miles)**

NHS Pavement Performance Projections

Federal Requirements by lane miles for 4,917 lane miles of NHS pavement

Interstate Roadways

Goal: >75% Good

68.6%

0.2%

Goal: <5% Poor

Non-Interstate NHS Roadways

Goal: >50% Good

37.9%

1.8% Goal: <8% Poor

% Good (by lane miles)
- - - Preferred Funding ($350M) —— Current Funding ($157M) ····· No Funding ($0M) —●— Actual Conditions

% Poor (by lane miles)
- - - Preferred Funding ($350M) —— Current Funding ($157M) ····· No Funding ($0M) —●— Actual Conditions
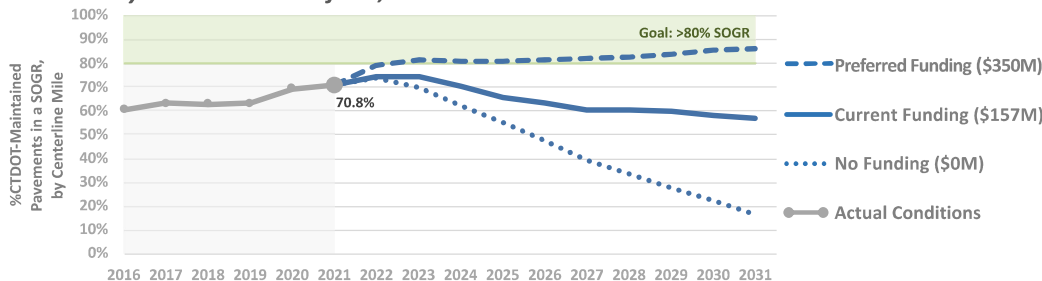
Based on funding as of 12/31/22

Performance Projections at Current Funding Level ($157M Budget)

End of Year	2022	2023	2024	2025	2026	Goal
Interstate Good	69.0%	67.1%	64.9%	63.9%	61.2%	75.0%
Interstate Poor	0.2%	0.1%	0.2%	0.2%	0.2%	<5.0%
Non-Int NHS Good	38.5%	35.3%	30.5%	26.7%	22.3%	50.0%
Non-Int NHS Poor	1.6%	1.4%	1.5%	1.9%	2.2%	<8.0%

CTDOT-Maintained Pavement Performance Projections

State Goals by centerline miles for 3,715 centerline miles

Goal: >80% SOGR

70.8%

- - - Preferred Funding ($350M)
—— Current Funding ($157M)
····· No Funding ($0M)
—●— Actual Conditions

Based on funding as of 12/31/22

Performance Projections at Current Funding Level ($157M Budget)

End of Year	2022	2023	2024	2025	2026	Goal
SOGR	74.4%	74.3%	70.6%	65.9%	63.5%	80.0%

NOTE: "Current Funding" shown in the graphs is limited to funding programed to address State of Good Repair. Projected performance is expected to be greater due to asset improvements funded through CTDOT's Capital Program which are not captured. The Department will soon be able to capture this funding through a project asset data system in development.

Performance Projections

The charts on the left depicts pavement condition for various funding scenarios developed through an analysis program using CTDOT pavement deterioration curves projected from 2021 pavement condition data.

Asset Valuation

$11,732,885,502

Asset value is estimated using the replacement value. For pavements, replacement value is the product of pavement area (SY) and unit construction cost. For 3,715 centerline miles of pavement: 99 million SY * $119/SY = $11.7 Billion

Measures and Goals

CTDOT has set the following pavement condition goals:
Federal Requirements:
- Interstate: 75% good condition and less than 5% poor condition (Federal minimum is less than 5% poor)
- Non-Interstate: 50% good condition and less than 8% poor condition

State Goal:
- 80% or more of State-maintained pavements in a SOGR (State)