

NHDOT Pavement Strategy – Summary

The New Hampshire Department of Transportation (NHDOT) is focused on managing the state's road network as efficiently and effectively as possible. With that goal in mind, the Pavement Strategy is based on the following concepts:

1. Highway Priorities (Tiers)
2. Making Sustainable Investments (Strategies)
3. Funding Priorities

Highway Priorities (Tiers) - Not all roads are equal

While every road is critical to the people and businesses that rely upon it, each road also serves a different number of users and provides different levels of connectivity. The Department has categorized the state managed road system into the following priorities (tiers):

- Tier 1 – Interstates, Turnpikes & the divided section of Route 101
- Tier 2 – Major corridors (like US 3, US 4, US 202, and Route 16)
- Tier 3 – Collectors (like Route 112, Route 31, and Route 155)
- Tier 4 – Secondary highways and unnumbered routes

Making Sustainable Investments (Strategies)

The road network in New Hampshire required a massive investment of public funds over many decades. In order to maximize the useful life of that prior investment, along with current and future investments, strategies are developed for different types of roads.

Preservation Strategy – Keeping good roads good

Pavement, as just about everything else that endures wear and tear, needs some attention every now and then to stay in good working condition. A variety of **low-cost** pavement treatments are used to keep roads in good working condition for as long as possible. These treatments extend the useful life of the road, are low-impact, and usually limit construction disruption to only a few weeks; however, they can only be used on roads that are already in good condition which makes their use time sensitive.

Roughness Paving Strategy – Keeping roads functional and acceptable

While preservation and light capital paving focus on good and reasonable pavement, the focus of roughness paving is solely on very rough roads. When roughness paving is proposed, the road has reached or is about to reach a point where the road is so rough that the public is dissatisfied, it is difficult to plow snow, and safety is becoming a concern. Roughness paving restores a minimum standard for state owned roads, is **low-cost**, and construction takes one season. This strategy is a one-time investment. A light capital paving strategy will maintain the roadway after this initial investment.

Light Capital Paving Strategy – Keeping roads in working order

The Department uses light capital paving for roads that are in reasonable condition, but are not suitable for preservation. This strategy of preventative maintenance uses **low-cost** treatments to protect the pavement that has developed cracking or other flaws thus extending the useful life of the pavement. Periodic paving will occur over the long-term to keep the road in a reasonable condition because light capital paving does not completely fix the pavement's needs.

Rehabilitation – Restoring poor pavements

The result of this activity is a new preservable pavement. Rehabilitation is not suitable for every road that needs attention and particular site conditions can significantly affect the cost or how long the rehabilitated road will last. These activities are generally **moderate-cost** and may take a couple months to complete. The Department evaluates rehabilitation candidates for cost effectiveness on a case-by-case basis. This strategy is a one-time investment.

Reconstruction – Building a good road

Because the road network in New Hampshire has developed organically over many decades, many roads do not have constructed foundations. These roads present a challenge for sustainability because no investment in them, short of reconstruction, will last for very long. Reconstruction has a **high-cost** and may take more than a year to complete. This activity is not a priority of the Pavement Strategy because NHDOT is seeking to maximize the effectiveness of limited paving budgets and reconstruction can be cost prohibitive.

Funding Priorities – Making Tough Choices

Table 1 shows the paving priorities for NHDOT. These priorities provide the most benefit to the public based on a limited budget. Tiers and strategies combine to prioritizing roadway needs.

1. Prioritize preservation for all roads
2. Eliminate unacceptable roads through roughness paving
3. Maintain a reasonable condition through light capital paving
4. Rehabilitate high volume corridors with remaining funds

Priorities shown in Table 1 determine the distribution of paving funds.

Table 1 – Pavement Strategy Priority

Pavement Strategies	Tier 1	Tier 2	Tier 3	Tier 4
Preservation	High	High	High	High
Roughness Paving	-	High	Moderate	Moderate
Light Capital Paving	-	High	Moderate	Moderate
Rehabilitation	High	Moderate	Low	Low
Reconstruction	-	-	-	-

The Department will review this document every two years in concurrence with the development of the Department's Ten Year Transportation Improvement Plan and update as necessary.

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Approved by:


_____ Date 7/16/17
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