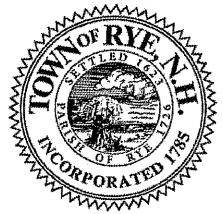




Department of Public Works

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CAPITAL IMPROVEMENTS PROJECTS 2027

DEPARTMENT OVERVIEW

The Town of Rye Department of Public Works (DPW) is responsible for the maintenance, preservation, and operation of a substantial portion of the Town's municipal infrastructure. These responsibilities include approximately 45 miles of Town-maintained roads, stormwater drainage systems, public beaches and recreational areas, municipal buildings and grounds, and the Town's Transfer Station.

To fulfill these responsibilities, the Department operates a diverse fleet of vehicles and specialized equipment, including four six-wheel dump trucks, three one-ton dump trucks, two passenger vehicles, one utility truck, two front-end loaders, two backhoes, a mowing tractor, a skid-steer loader, a woodchipper, a rack truck, and numerous smaller pieces of equipment. These operations are supported by 10 full-time and four part-time employees.

The Department's priorities for the 2027–2032 planning period focus on maintaining a reliable municipal fleet, modernizing aging Transfer Station infrastructure, addressing deferred municipal building maintenance, and preserving the Town's roadway network.

The Department's principal priorities for the 2027–2032 planning period include:

1. Maintaining the Highway Vehicle and Equipment Capital Reserve Fund through consistent annual appropriations and implementation of the revised fleet replacement schedule.
2. Replacing the Transfer Station's aging municipal solid waste compactor and deteriorated concrete infrastructure with a modern, redundant two-unit system.
3. Completing a comprehensive municipal facilities and needs assessment to establish a prioritized, multiyear building maintenance and capital replacement program.
4. Continuing roadway pavement preservation and rehabilitation through consistent funding, objective condition assessments, and data-informed project prioritization.

VEHICLES AND EQUIPMENT

The Department's vehicle and equipment replacement program currently identifies 17 major pieces of rolling stock, representing an estimated combined replacement value of approximately \$2.5 million.

In 2025, the Select Board and Budget Committee supported revisions to the anticipated service life of certain Public Works vehicles. Under the revised replacement strategy, six-wheel dump trucks are scheduled for replacement approximately every 10 years, while one-ton dump trucks are scheduled for replacement approximately every seven years. Other equipment follows replacement schedules based on equipment type, operating conditions, maintenance requirements, and anticipated useful service life.

Exposure to road salt, moisture, abrasive materials, heavy loading, and repeated freeze-thaw cycles contributes to accelerated corrosion and mechanical deterioration. As equipment ages, maintenance requirements generally increase while operational reliability and resale value decline. The Department performs a substantial portion of its vehicle and equipment maintenance using in-house personnel. Although this approach provides significant cost savings compared with outsourcing mechanical services, it can obscure the actual cost of maintaining aging equipment. The Department's revised fleet replacement strategy is intended to reduce these escalating maintenance costs while preserving equipment reliability and maximizing resale or trade-in value. A shorter, predictable replacement cycle also reduces the likelihood of major mechanical failures during critical operations, particularly winter storms and emergency response events when dependable equipment is essential to public safety

FUNDING

At the 2025 Town Meeting, voters approved a \$250,000 appropriation to continue funding the Highway Vehicle and Equipment Capital Reserve Fund.

During 2026, the Department initiated the replacement of Truck #115 at an estimated cost of \$268,000 and Truck #116 at an estimated cost of \$95,000. Funding for these replacements was authorized through the Highway Vehicle and Equipment Capital Reserve Fund.

For 2027, the Department anticipates replacing Truck #118, an International 7400 six-wheel dump truck, at an estimated cost of \$275,000, and Truck #120, a one-ton dump truck, at an estimated cost of \$110,000. The combined estimated replacement cost is \$385,000.

The Department is requesting an additional \$250,000 appropriation to the Highway Vehicle and Equipment Capital Reserve Fund for 2027. Accordingly, the Department recommends maintaining an annual capital reserve contribution of \$250,000. This amount represents a reasonable funding target based on current replacement values, anticipated equipment needs, and the objective of maintaining a predictable capital replacement program.

Anticipated Vehicle and Equipment Replacements, 2027–2032

Vehicle/Equipment	Year	Estimated Cost
Truck #118 – Six-Wheel Dump Truck	2027	\$275,000
Truck #120 – One-Ton Dump Truck	2027	\$110,000
Truck #119 – Six-Wheel Dump Truck	2028	\$285,000
Woodchipper	2028	\$75,000
Skid Steer #210	2029	\$65,000
Truck #121 – One-Ton Dump Truck	2030	\$120,000
Truck #123 Pick up	2032	\$85,000
Total		\$1,015,000

BUILDINGS AND STRUCTURES

Transfer Station – Municipal Solid Waste Compactor Replacement

The Town's existing municipal solid waste compactor has reached the end of its anticipated service life and requires replacement. Additionally, the concrete pad supporting the compactor and associated waste containers has deteriorated and requires reconstruction.

The Department proposes a comprehensive replacement project in 2027 at an estimated cost of \$150,000.

The proposed project includes removal of the existing stationary compactor, demolition and reconstruction of the deteriorated concrete pad, necessary electrical improvements, installation, and procurement of two self-contained compactor containers.

The existing configuration consists of a stationary compactor serving detachable municipal solid waste containers. During routine hauling operations, the Transfer Station must temporarily suspend certain activities while staff removes a full container and replaces it with an empty container. This process creates operational interruptions and requires careful coordination to prevent conflicts between hauling equipment, municipal employees, and Transfer Station users. The proposed installation of two self-contained compactors would provide several significant improvements.

Operational Safety: A redesigned compactor configuration would provide an opportunity to improve traffic circulation, separate hauling operations from public access areas, and reduce potential conflicts between residents, employees, and commercial hauling equipment.

Operational Redundancy: Two independent compactor units would provide additional operational flexibility. When one unit is removed for hauling or taken out of service for maintenance, the second unit could remain available for waste disposal.

Operational Efficiency: Two independent units would allow the Department to better coordinate waste collection volumes, hauling schedules, and equipment availability.

The proposed improvements represent more than the routine replacement of aging equipment. They provide an opportunity to modernize a critical municipal facility while addressing operational deficiencies and improving service reliability. The Department considers this project a priority because continued operation of the existing equipment and deteriorated concrete infrastructure increases the potential for mechanical failure, operational disruptions, and unplanned repair expenditures.

FUNDING

The Department recommends that the Town fund the estimated \$150,000 project in 2027 through either a warrant article or an appropriate capital outlay appropriation.

ROADS – PAVEMENT PRESERVATION AND REHABILITATION

The Town of Rye maintains approximately 45 miles of municipal roadways. These roads represent one of the Town's largest infrastructure investments and are essential to public safety, emergency response, commerce, and daily transportation. Preserving this roadway network requires a consistent, long-term pavement management strategy supported by adequate annual funding.

The anticipated service life of asphalt pavement varies based on traffic loading, pavement structure, drainage conditions, environmental exposure, and maintenance practices. Historically, a 15-year resurfacing cycle has been used as a general planning benchmark. However, the Department recognizes that certain roadways may require shorter maintenance intervals, particularly where traffic demands, drainage conditions, or pavement deterioration accelerate surface wear. For long-term planning purposes, a 12- to 15-year resurfacing cycle provides a useful general reference, although individual roadway conditions should ultimately determine the timing and type of treatment.

The Department's roadway maintenance strategy primarily utilizes two pavement rehabilitation methods: cold planing or milling, and asphalt shimming and overlay. Historically, the approximate cost of restoring roadway profile, installing a one-inch asphalt overlay, and restoring gravel shoulders has been estimated at \$30 per linear foot, equivalent to approximately \$158,400 per mile.

In 2026, the Town appropriated approximately \$780,000 within the Public Works operating budget for roadway milling, paving, and rehabilitation activities.

FUNDING

For 2027, the Department recommends an appropriation of \$600,000 for these activities.

This recommendation reflects the Department's effort to support the Town's overall budgetary objectives and targeted limitation on annual budget increases. The proposed \$600,000 appropriation represents a reduction of \$180,000, or approximately 23.1%, from the 2026 paving budget. While this recommendation demonstrates the Department's commitment to fiscal restraint, it is important to recognize that the reduction is not the result of diminished roadway maintenance requirements.

Pavement Condition Assessment and Asset Management

The Town has established a data-driven pavement management program through periodic roadway condition assessments. In 2015, 2020, and 2025, the Town contracted with CityLogix/StreetScan to evaluate pavement conditions throughout the municipal roadway network. These assessments use a Pavement Condition Index (PCI), expressed on a scale of 0 to 100, to evaluate pavement deterioration and assist with maintenance prioritization. The 2025 pavement assessment identified an average network PCI of 75.3, representing an improvement of approximately three points compared with the previous assessment. This improvement indicates progress in the Town's roadway preservation efforts and demonstrates the value of continued investment in pavement maintenance.

The Department has previously identified an estimated pavement rehabilitation backlog approaching \$13 million. This estimate highlights the magnitude of the Town's long-term pavement preservation obligations and reinforces the need for a sustainable funding strategy. The Department anticipates updating pavement condition information following completion of the 2026 paving program. The Department also recommends conducting the next comprehensive pavement condition assessment in 2030, maintaining the Town's established five-year evaluation cycle.

Regular assessments provide an objective basis for identifying deterioration, measuring the effectiveness of prior investments, developing future paving schedules, and demonstrating responsible stewardship of municipal infrastructure.

Long-Term Roadway Funding Strategy

For a 45-mile roadway network, a theoretical 15-year resurfacing cycle would require approximately three miles of roadway treatment annually. A 12-year resurfacing cycle would require approximately 3.75 miles annually. Using the Department's historical cost estimate of \$158,400 per mile, these cycles would represent approximate annual expenditures of \$475,200 and \$594,000, respectively, for the specified overlay treatment alone.

These calculations are illustrative and do not represent the full cost of maintaining the Town's roadway infrastructure. They exclude additional milling requirements, structural pavement rehabilitation, drainage improvements, full-depth reconstruction, and other site-specific conditions that can significantly increase construction costs.

The Department's proposed 2027 paving appropriation of \$600,000 should therefore not be interpreted as sufficient to address all existing roadway deficiencies or maintain the entire network on an optimal replacement schedule. Rather, it represents a financially constrained annual investment intended to continue the Town's pavement preservation program while accommodating broader municipal budget priorities.

The Department recommends that future paving appropriations be guided by updated pavement condition data, current construction costs, actual project experience, and a long-term funding model designed to preserve roadway conditions and minimize the accumulation of deferred maintenance. Consistent pavement preservation is a fiscally responsible investment. Maintaining roads while they remain structurally sound is generally substantially less expensive than allowing deterioration to progress to the point where extensive rehabilitation or full reconstruction becomes necessary.