

OPTICOM® Infrared System**Hanover Public Works saves money after being added to Opticom® Infrared (IR) system****CHALLENGE: Searching for a solution to improve efficiencies**

Hanover is a small community in New England and home to renowned Dartmouth College. It also includes one of the main routes to Dartmouth-Hitchcock Medical Center — New Hampshire's only Level 1 trauma center. Safe access to both institutions is critical for thousands of people in the area.

The Hanover Public Works Department is responsible for maintaining the roads. With annual snowfall averaging nearly 70 inches, clearing the roads in winter is an enormous task. The department uses up to 12 trucks to plow the streets, haul the snow away and lay salt and sand for safer transport for motorists. Clearer roads also help emergency vehicles bring patients to the medical center more quickly and safely.

As the town expanded, however, it required more time for Public Works to perform road maintenance. The team might make up to 50 four- or five-mile trips during each eight-hour shift. A significant portion of time was spent idling at intersections, waiting for traffic signals to turn green. As a result, shifts grew longer and operating costs increased.

"Our workload increased, our resources did not," said Mike Chase, Hanover Public Works Operations Manager. "Since we also maintained traffic signals in Hanover, we were familiar with the Opticom® IR system for emergency response. About four years ago, we added Public Works vehicles to the system. We've never looked back."

SOLUTION: Expanding the system to include Public Works

The town includes eight traffic signals equipped with the Opticom® IR system. Public Works modified driver routes to take advantage of these intersections. In addition, Public Works added emitters to each of its vehicles, so drivers can use priority control to significantly reduce wait times at traffic signals while clearing snow. Drivers simply push a button to activate the IR emitter on the vehicle's dash and request priority control.

PERFORMANCE: Efficient cost savings all year long

Each driver can shave up to 90 seconds off a single intersection stop — several times during every shift. They can clear more snow and treat more roads in less time, reducing fuel costs, labor expenses and wear-and-tear on trucks.

The Opticom® system is used all year. Hanover Public Works uses priority control to expedite street sweeping tasks and line painting, too. With priority control, crews can paint the lines at more consistent speeds and more efficiently for more uniform results.

"We use the system to correct problems, not create them," said Chase. "Emergency vehicles take priority and we request priority control only when necessary to minimize wait times at intersections when traffic congestion is minimal."

The innovative use of the system hasn't gone unnoticed. Town officials are also considering adding transit services to the system in the future. Clear rules and standards will dictate which service has priority — and will help to minimize its impact on normal, everyday traffic patterns.

**LOCATION**

Hanover, NH

MUNICIPALITY

Town of Hanover Public Works Department.

CHALLENGE

- Harsh winter storms
- Expanding town requires more snow removal
- Trucks stopped at traffic lights instead of clearing snow

SOLUTION

- Add Public Works vehicles to Opticom® IR System currently used by fire and police departments
- Modify routes to use Opticom® equipped intersections

PERFORMANCE

- Minimize wait times at intersections
- More snow cleared, more roads treated in less time
- Reduce fuel costs, labor expenses and wear-and-tear on trucks

"We love Opticom® IR. It's a reliable tool to help us do our jobs more effectively. We're able to clear and maintain the roads for our residents in significantly less time for significantly less money."

- Mike Chase
Operations Manager, Hanover

