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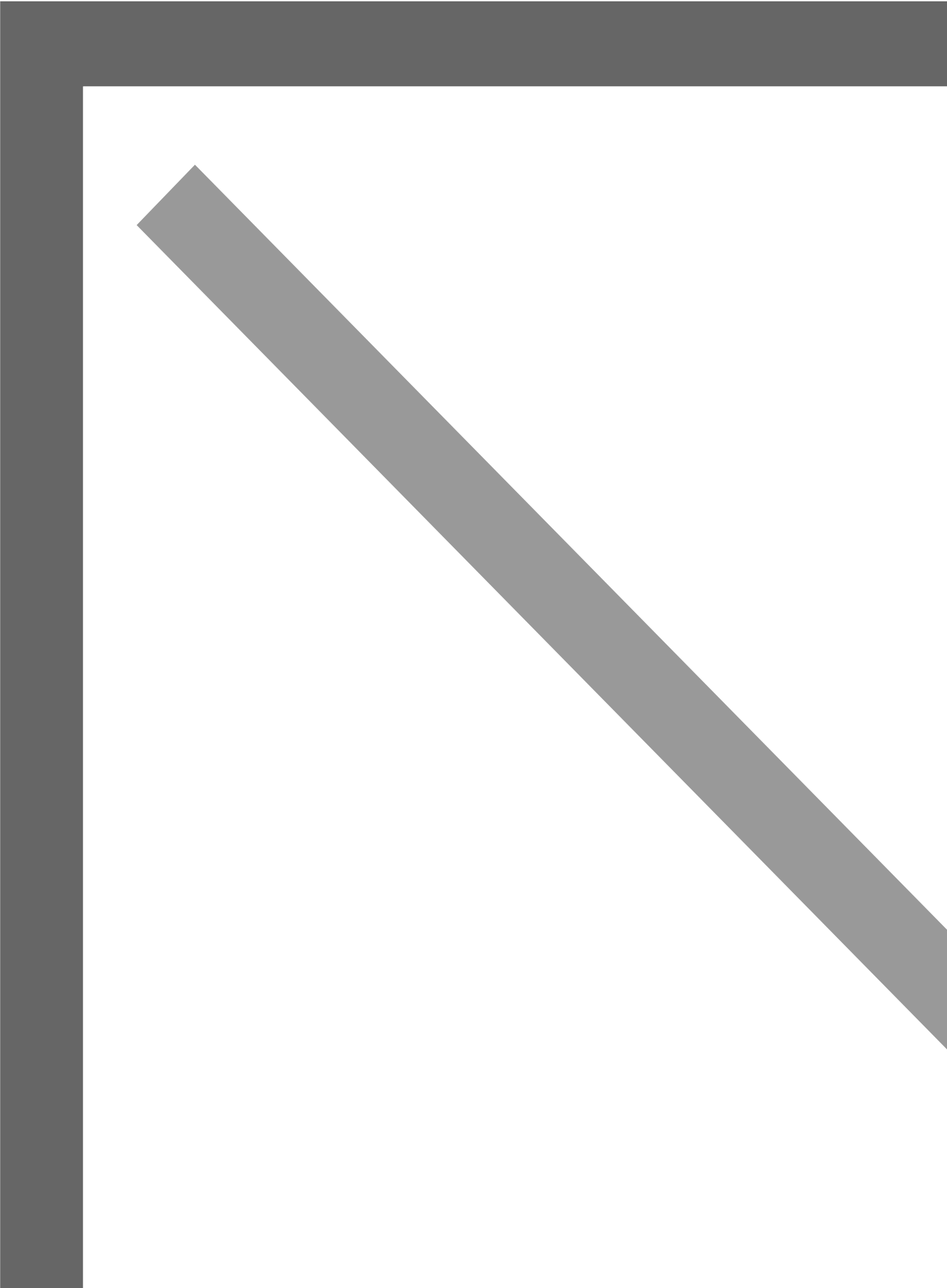
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A new image-enhancing technology has been adopted by the Rail Division that gives employees pinpoint accuracy of our 106 miles of track more clarity about the tasks ahead and even before they step foot on the right-of-way.

The word is now spreading to other departments that are finding it useful as well.

It's called Roadview – a technology driven software solution developed through a laser-guided mapping and detection technology called LiDAR.

“Roadview allows MTS employees to find, map, and categorize everything along the right-of-way, which is our responsibility to maintain safe and efficient operations,” said Business Systems Analyst Jason McNeill.

It's similar to Google's Street View system that offers users panoramic views from on-the-ground positions along many streets and neighborhoods in the world. MTS hired Mandli Communications to take the Google Street View idea from the streets to the rails. Using a front mounted camera on a Trolley that traveled on all three lines, a panorama of stitched images consisting of the entire MTS right-of-way was created.

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Big proponents and users of Roadview are the MTS Track and Wayside departments. In charge of the nuts and bolts of the entire rail system, these departments are responsible for ensuring the MTS railway remains clear, safe and navigable.

There's a lot of ground to cover. It's a challenge to keep up with inventory (i.e. 87 crossing gates, 115 miles of catenary wire, 63 traction substations, thousands of fasteners, nearly 300,000 cross ties, insulated joints, switches, and much more).

Track condition is primarily monitored by visual inspections. And it's important to have these eyes and ears on the ground. But it's also time consuming and cumbersome. Recording specific locations through Roadview's GPS feature speeds up the visual inspections, maintains a strict accounting of assets and helps MTS understand when and where items need to be replaced.

"It really comes in handy to pin down locations using GPS coordinates with contract work," said Fred Byle, MTS Superintendent of Wayside Maintenance. "If a contractor pins a GPS location where we need to do repairs like cut a rail, change out a rail tie, or replace insulated joints, we can see the exact spot through Roadview. It saves a lot of time."

And while Track and Maintenance of Wayside have found substantial benefit from Roadview, other Rail departments are finding ways to use it as well – particularly in the classroom. "Roadview is a perfect element for the Train Operator training program," said Training Supervisor Dave Jensen. "We are just getting into the process of using it. It shows new students all the intricacies of the system through a new lens. We can show students about defensive driving, what to look

for in tough intersections, speed limits through certain areas and much more. And do it all from the classroom setting."

MTS Right-of-Way Engineer Monica Coria said Roadview has helped her when analyzing permit requests for applicants who want to enter MTS property. "Google Earth or Google Street View help, but sometimes you hit gaps in coverage. Roadview fills in the gaps and also provides more details about existing conditions in a particular location on our tracks. It allows me to get multiple perspectives on a right-of-way permit request." Adopting new technology has become

commonplace across many MTS departments. When one item, such as Roadview, can help multiple departments in different ways, it's a win-win situation for employees and our passengers.

### **News Category:**

Trolley

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