

WIM Pre-Selection Program Benefits from Improved Sensor Accuracy and Operational Savings

The state of Oregon has a “Green Light Preclearance Program” where Weigh-In-Motion (WIM) sensors are used to verify vehicle weights and information, which allows them to bypass static weigh stations. Improving performance of WIM sensors would have the dual benefits of allowing commercial vehicle operators to bypass the stations, as well as decreasing the amount of traffic processed by ODOT’s stations.

“ODOT has used Single-Load-Cell (SLC) scales for WIM pre-selection in the past, but we are converting our WIM sites to Strain Gauge WIM Sensors due to the similar technology's performance and added cost of ownership savings which we've observed at more than ten WIM Strip Sensor sites.” -Oregon Department of Transportation

For Westbound traffic on Interstate 94 in Emigrant Hill, the Oregon DOT (ODOT) has a WIM site upstream of a static truck scale for their Green Light Preclearance system. When road maintenance was conducted on the mainline in the fall of 2018, ODOT took the opportunity to remove the SLC scales and install Intercomp WIM Strip Sensors. In the first full month of operation in December, 2018, the site precleared over 4,500 trucks - a significant improvement over former 1,500 truck monthly average at that location. This saves time and money for the motor carriers, as well as decreasing the queues and workload at the static weigh stations.

The **Intercomp WIM Strip Sensors** were installed in two rows per lane in the mainline, and accuracy at calibration were observed to be within 2% of Gross Vehicle Weight (GVW), as measured on the static scales. Connected to IRD iSINC™ electronics, the sensors are easily integrated into existing systems and software to provide vehicle data including axle and gross weight, speed and axle spacing.

Realizing cost benefits as well, ODOT notes that the Intercomp WIM Strip Sensor installations cost 60% less than frame-based WIM scale installations and eliminate recurring annual maintenance costs of over \$2,000 per WIM site. Adding this to the increased efficiency at the static weigh stations, ODOT realizes significant cost of ownership benefits due to the performance and minimal maintenance required with the Intercomp WIM Strip Sensors.

To learn more about the Oregon Green Light Program:
<https://www.oregon.gov/ODOT/MCT/Pages/GreenLightProgram.aspx>



When resurfacing the mainline, ODOT removed frame-based scales and replaced with WIM Strip Sensors.



Mainline pre-screening WIM strip sensor installations have 4 sensors in a dual-threshold configuration.



Intercomp sensors are embedded in 3" (75 mm) channels cut into the pavement.

View
Product Video



Additional Data or Customer Testimonials Available Upon Request