



INTERNATIONAL ROAD DYNAMICS INC.

# Bridge Protection System

**Monitor, Advise, Enforce**



# **24.5% or 145,996 of Interstate and Local Bridges are in Distress.**

Source: Better Roads, 2006 Bridge Inventory



INTERNATIONAL ROAD DYNAMICS INC.

# MONITOR, ADVISE, ENFORCE

## MONITOR - Data Collection

- Data collection at bridge sites to monitor approaching traffic
- Identify bridges at risk for overloading
- Set priorities and determine which bridges require immediate attention
- Collect data portably or permanently



## ADVISE - Bridge Protection System

- Once a bridge is identified as at risk, the bridge protection system with Weigh-in-Motion technology is deployed
- Overweight trucks are identified and advised to follow a detour route
- Advisory signs can be either flashing static signs or Variable Message Signs
- The message is relayed early enough that the driver has ample time to follow an alternate route



## ENFORCE - Video Monitoring

- Video imaging and tracking ensures that vehicle operators are complying with the bridge protection system
- Axle weights and gross vehicle weight for enforcement
- For additional information, a License Plate Reader can also be installed

Screenshot of the IRD Intelligent Transportation Systems software interface. The interface displays a video feed of a truck and a table of axle weights and separations. The table is as follows:

| AXLE | SEPARATION (ft) | WEIGHT (kips) | THRESHOLD (kips) | ALLOWABLE (kips) |
|------|-----------------|---------------|------------------|------------------|
| 1*   | 19.4            | 16.5          | 13.6             | 17.0             |
| 2*   | 4.2             | 16.5          | 13.6             | 17.0             |
| 4*   | 31.7            | 13.7          | 13.6             | 17.0             |
| 5*   | 4.0             | 14.1          | 13.6             | 17.0             |

Additional data shown in the interface includes: Record 0074, Mon Jun 18 12:37:28.67 2007, CLASS: 9, LENGTH: 74 ft, SPEED: 48 mph, THRESHOLD OVV: 64.0 kips, OVV: 71.0 kips, 18-K ESAL: 2,863, MAX OVV: 80.0 kips. Warnings: Warning: Over GW Threshold, Warning: Over Axle Threshold.

IRD's system protects bridges from damage caused by overweight vehicles

# We make highways talk™

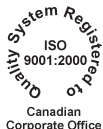
International Road Dynamics Inc. (IRD) is a highway traffic management technology company specializing in supplying products and systems to the global Intelligent Transportation Systems (ITS) industry. IRD is a North American company with sales and service offices throughout Canada, the United States and overseas.

With more than twenty-five years of experience, IRD is a multi-discipline company offering proprietary technologies that include automated truck weigh station systems, Virtual Weigh-In-Motion systems, advanced traffic control, management and data collection systems, automated toll road systems, and in-vehicle driver monitoring systems. The Company supports its products and solutions with long-term service and maintenance contracts.

IRD has installed its world-leading ITS solutions in countries around the globe, and currently has the world's largest installed base of Weigh-In-Motion with a growing presence in other related ITS applications and markets.



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