



**AN OUNCE OF  
PREVENTION IS WORTH  
A MILE OF....**

**ASPHALT**





# THE PROBLEM

## COMMERCIAL VEHICLES ON SECONDARY AND URBAN HIGHWAYS

**Increasing commercial vehicle traffic is shortening the life of non-primary infrastructure.**

- High visibility enforcement on primary roads results in overweight violation rates of less than 2%
- Urban and secondary highways typically have a low level of enforcement. Low enforcement results in overweight violation rates often exceeding 25%
- Some trucks will avoid enforcement on primary roads by using secondary and urban roads
- Thinner surfaces on urban and secondary roads are more susceptible to overload damage
- Roadway damage cost due to overloaded trucks is estimated to be from \$.08 to \$2.50 per ton-mile, depending on vehicle weight



# THE SOLUTION

## IRD VIRTUAL WEIGH STATIONS

**Virtual Weigh Stations provide highly visible weight enforcement.**

- With targeted enforcement, only overloaded vehicles are identified
- Side-view and licence plate images provide positive vehicle ID
- 24/7 data collection
- Internet based/wireless access for real-time and post audit activities



WEIGH-IN-MOTION SCALES



CAMERA AND LICENSE PLATE READER



# THE SYSTEM

## MAKING 'VIRTUAL' A REALITY

**The integrated web-based virtual weigh station system allows for real-time enforcement of overloaded vehicles.**

- Monitor for overloaded vehicles
- Collect real-time data with visual records
- Plan additional law enforcement activities

## DISCREET, REAL-TIME TARGETED ENFORCEMENT

**The IRD Virtual Weigh Station combines Weigh-In-Motion technology with integrated side-fire cameras and license plate image capturing systems.**

- Access data through a secure web address
- Create customized reports based on user adjustable parameters:
  - hourly, daily, weekly, or monthly increments
  - vehicle speeds, classes and counts
  - number of violating and non-violating axles, axle groups, ESALs and GVWs

## LEADING-EDGE TECHNOLOGY

**Integration of all value added features/equipment.**

- Robust industrial grade components
- Low power consumption; solar compatible
- Supports plug & play features



SIDE-FIRE CAMERA IMAGE



LICENSE PLATE READER IMAGE

**Detailed Vehicle View**  
Lane: EB Left Lane

**Record 00579**  
LANE: 1-EB LEFT LANE  
SPEED: 65mph  
RECORDED GVW: 64.1 tons  
LENGTH: 1084 in  
18-K ESAL: 9414  
MAX.GVW: 62.5 tons

Wed May 04 09:57:42.92 2007  
CLASS: 15  
THRESHOLD GVW: 62.5 tons

AXLE	SEPARATION (m)	WEIGHT (lb)	THRESHOLD WT (lb)	ALLOWABLE (lb)
1*		12476	11000	11000
2*	223	19260	17000	17000
3*	61	18104	17000	17000
4	282	14769	15000	15000
5*	62	15620	15000	15000
6*	62	15404	15000	15000
7	225	16343	17000	17000
8	51	15987	17000	17000

Warning: Over GVW threshold  
Warning: 5 axle(s) over threshold

LANE EB - RIGHT LANE

LANE EB - LEFT LANE

SAMPLE WEB PAGE

\* Screen layout subject to change.

# 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, Latin America, India and China.

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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