I-65 Seymour Weigh Station - Indiana's First Mainline Weigh-in-Motion

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Weigh Station in Indiana

Overall Goals & Benefits

INDOT’s Main Goal:
Protection of basic infrastructure:
  o PAVEMENT
  o BRIDGES

Other Goals
Safer operations – reduced truck involvement in crashes

Revenue from Permit Violations

Collection of comprehensive load data (Volume, ESALs) for pavement & bridge design
## Weigh Station Locations

<table>
<thead>
<tr>
<th>WEIGH STATION</th>
<th>LOCATION</th>
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</thead>
<tbody>
<tr>
<td>I-65 SB Seymour</td>
<td>1 mile north of US 50, Seymour, IN, MM 51</td>
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<tr>
<td>I-65 NB Seymour</td>
<td>1 mile north of US 50, Seymour, IN, MM 51</td>
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<tr>
<td>I-65 SB Lowell</td>
<td>0.5 mile north of SR 2, Lowell, IN, MM 241</td>
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<tr>
<td>I-69 SB Fort Wayne</td>
<td>2 miles north of SR 5, Warren, IN, MM 80</td>
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<tr>
<td>I-70 EB Terra Haute POE</td>
<td>0.5 mile east of Ill. state line, West Terre Haute, IN, MM 0</td>
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<tr>
<td>I-70 WB Richmond</td>
<td>1 mile west of US 35, Richmond, IN, MM 148</td>
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<tr>
<td>I-74 WB West Harrison POE</td>
<td>0.5 miles west of Harrison Ave., West Harrison, IN, MM 170</td>
</tr>
<tr>
<td>I-94 EB Chesterton</td>
<td>2 miles east of SR 49, Chesterton, IN, MM 29</td>
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</table>
Weight Enforcement in Indiana

Weigh Station Locations
Weight Enforcement in Indiana

Seymour Indiana Weigh Station
The Future of Weight Enforcement

Modern Weigh Station
Constrained NB Site

To be abandoned except for use as portable scale weigh-in site

Inadequate ROW for typical sorting ramp means need to use MAINLINE SORTING
We Have the Technology, We Can Rebuild It
Construction Schedule

Estimated Completion Dates - 2017

Site 1
• Scale House Building – May 15
• Scale Complete – June 21
• Sorting System – July 1

Site 2
• US 31 Site – June 1

Site 3
• SR 11 Ramp – May 15

Site 4
• I-65 Southbound Site – May 1
VIRTUAL WEIGH-IN-MOTION (VWIM): Uses In-pavement piezo quartz sensors

Weight Info (by axle, axle group, GVW) sent wirelessly to downstream Commercial Veh. Officer in squad car:
OVERALL SITE LAYOUT:
OVERVIEW CAMERA
MAY ALSO INCLUDE LPR CAMERA
Mainline sign either directs truck to EXIT TO SCALE or DO NOT EXIT:

Mainline WIM Sensors
Mainline Sorter (cont.)

Exit to static scale
Seymour Sites Overview

Site 1: NB I-65
- Weigh Station & Inspection Barn
- Mainline Sorter WIM for Site 1

Site 2: NB US 31
- Evasion V-WIM

Site 3: SB I-65 & SR 11 Ramp V-WIMs

Site 4: SB I-65 Weigh Station Demolition & New PITWS

1 Mile

Jackson County Line

SR 11

US 31

US 50

Evasion V-WIM

Mainline Sorter WIM for Site 1

Seymour
Site 1 Sensor Plan

4 Sets of quartz sensors and loop detectors to weigh & track trucks on NB I-65:

1. Mainline sorter WIM, loops & camera
2. Tracking loops
3. Tracking loops & sorter DMS
4. Exit tracking WIM & loops
Typical Sensor Set-Up: Full WIM & V-WIM

2 Lane Case

"Off WIM" Sensor

Quartz Sensors (~2" wide)

Oversight Fixed Camera

Ln 1

Ln 2

Traffic Flow

6’ x 6’ Loop Detectors

Temperature Sensor
Site 1  Inspection Station Components

Static Scale (≈84’ x 12’)

Extended Pavement Areas for WB-67 Trucks

Inspection Barn

Admin. Bldng.
Typical Inspection Pit

Inspecting brakes, suspension, tires, etc.
Rejoins I-65 to north

Site 1
Weigh Station

Site 2
V-WIM Range

Potential Truck Evasion Route

Site 2 Concept
Site 2 Plan – V-WIM

- Quartz sensors and loop detectors NB, loop detectors SB, plus camera on US 31.
- 300’ of new concrete pavement.

Truck weight & snapshot sent to downstream ISP vehicle via Internet.
Site 3 Concept

Potential Truck Evasion Route

Originally proposed SB V-WIM site

Revised V-WIM site

SR 11

Little Acre

Redding

Rockford

74, USA Scymp"
Quartz sensors, loop detectors & cameras on mainline & ramp.
300’ of concrete pavement on ramp.

(Detail on separate sheet)
Site 4 Plan: Enforcement Location

"Portable Intermittent Truck Weigh Station" - PITWS
Plan View
200’ x 14’ flat concrete section

Source: MDOT
Portable scale insert area

Portable scale inserted in depressed slot