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

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Project Stakeholders
Overall Goals & Benefits

INDOT’s Main Goal:
Protection of basic infrastructure:
  - PAVEMENT
  - 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>
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<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
Modern Weigh Station
Constrained NB Site

SB SITE

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

340’ H-

Inadequate ROW for typical sorting ramp means need to use MAINLINE SORTING

NB SITE

N
The Six Million Dollar Weigh Station

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

Seymour

Jackson County Line
CR 700 North
US 31
US 50
SR 11
Site 1 & Mainline Sorter WIM

- Currently Abandoned Weigh Station Sites
- Proposed Truck Directions
  Dynamic Message Sign (DMS) – 800’ to 900’ Before Exit Gore
- Proposed Mainline Sorter WIM Location
- CSX RR & I-65 Overpass
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

40’

Temperature Sensor

6’ x 6’ Loop Detectors

Ln 1 Ln 2

Traffic Flow
Site 1 Inspection Station Components

Static Scale (~84’ x 12’)

Extended Pavement Areas
for WB-67 Trucks

Admin. Bldng.

Inspection Barn
Typical Inspection Pit

Inspecting brakes, suspension, tires, etc.
Site 2 Concept

Rejoins I-65 to north

Site 1
Weigh Station

Site 2
V-WIM Range

Potential Truck Evasion Route

Site 1
Weigh Station

Site 2
V-WIM Range

Potential Truck Evasion Route
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
- Revised V-WIM site
- Originally proposed SB V-WIM site
- SR 11
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
PITWS Detail

Plan View
200’ x 14’ flat concrete section

Source: MDOT
Portable scale insert area

Portable scale inserted in depressed slot