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

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2017 Purdue Road School Session 124 March 8, 2017
Project Stakeholders

[INDOT Logo]

[Indiana State Police Logo]
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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<tbody>
<tr>
<td>I-65 SB Seymour</td>
<td>1 mile north of US 50, Seymour, IN, MM 51</td>
</tr>
<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>
Weigh Station Locations
Weight Enforcement in Indiana

Seymour Indiana Weigh Station
The Future of Weight Enforcement

Modern Weigh Station
Constrained NB Site

SB SITE

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

340' HI

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:

- Axle Weight Distribution:
  - Right: 4673, 8941, 9573, 7338, 6578
  - Left: 4996, 8607, 8716, 7446, 7514
- Total Weight:
  - Total: 9609, 17548, 18289, 14784, 14992
  - TNDM: 95837, 29876
  - InBr 1-3: 45446, 2-5: 64713
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
Seymour Sites Overview

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

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

Site 1: NB I-65 Weigh Station & Inspection Barn

Mainline Sorter WIM for Site 1

Site 2: NB US 31 Evasion V-WIM
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
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 2 Concept

- Site 1: Weigh Station
- Site 2: V-WIM Range
- Potential Truck Evasion Route
- Rejoins I-65 to north

- CSX RR
- US 31
- Site 1 Weigh Station
- Site 2 V-WIM Range
- Potential Truck Evasion Route
- Rejoins I-65 to north
Site 2 Plan – V-WIM

Truck weight & snapshot sent to downstream ISP vehicle via Internet

Quartz sensors and loop detectors NB, loop detectors SB, plus camera on US 31. 300’ of new concrete pavement.
Site 3 Concept

- Potential Truck Evasion Route
- Revised V-WIM site
- Originally proposed SB V-WIM site
- SR 11
- Little Acre
- Redding
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 inserted in depressed slot