

# KAPSCH/INDOT Direct Enforcement Pilot Project

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Multimodal Planning and Programs

Photography credits to Wayne Bunnell, Purdue University

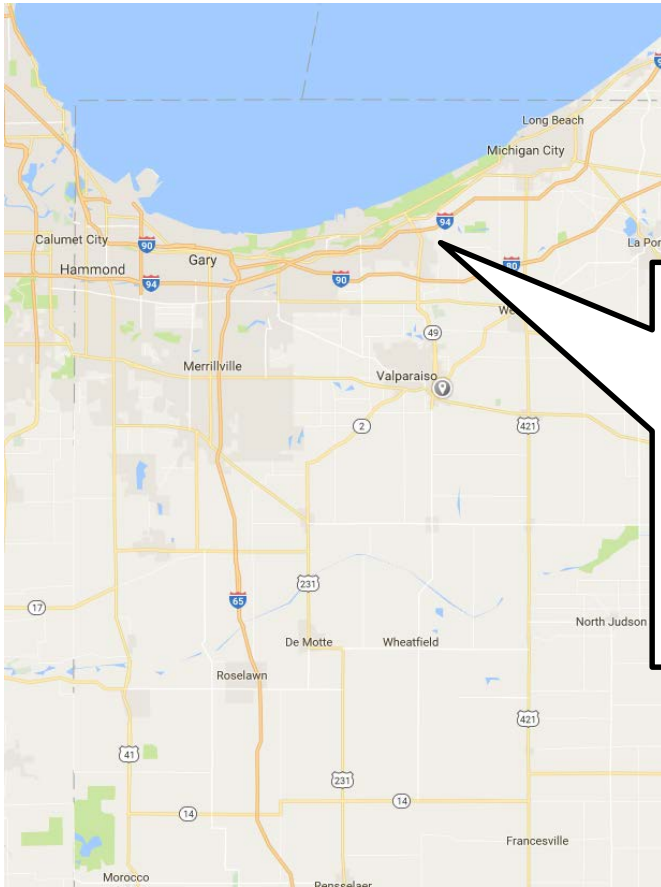
Data Analysis Credit to Purdue Traffic Lab



# Project Stakeholders



# Location: I-94 EB Lane 3 mm 28.0

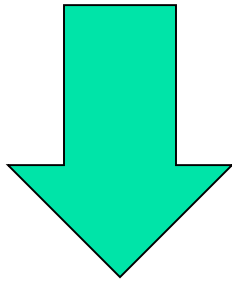


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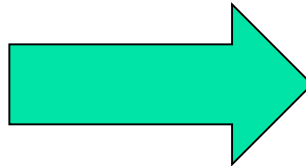


# Project Challenges

Need to Verify Site Suitability

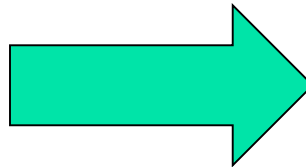


Construction ??



Need site in good condition without pending construction

Pavement Quality & Smoothness ??



INDOT Provided Kapsch roadway profile and let them decide if the site was appropriate for their equipment



# WIM Site Preparation





# WIM Site



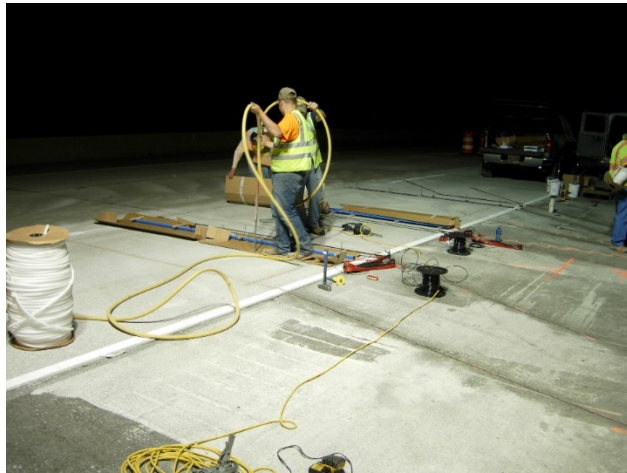
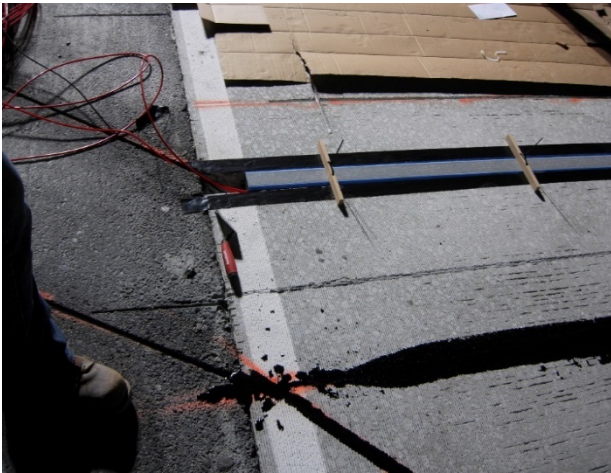
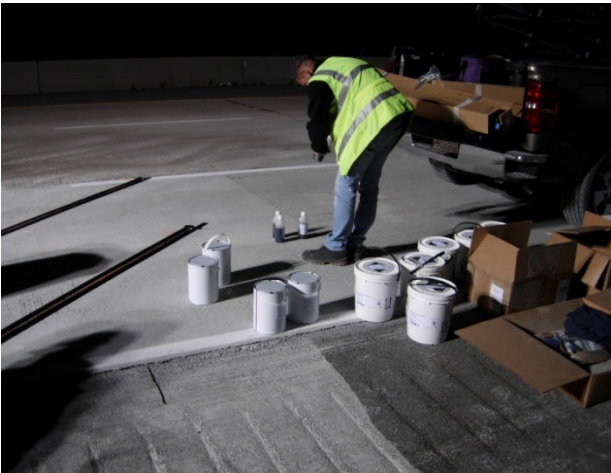


# Misc. Site Images





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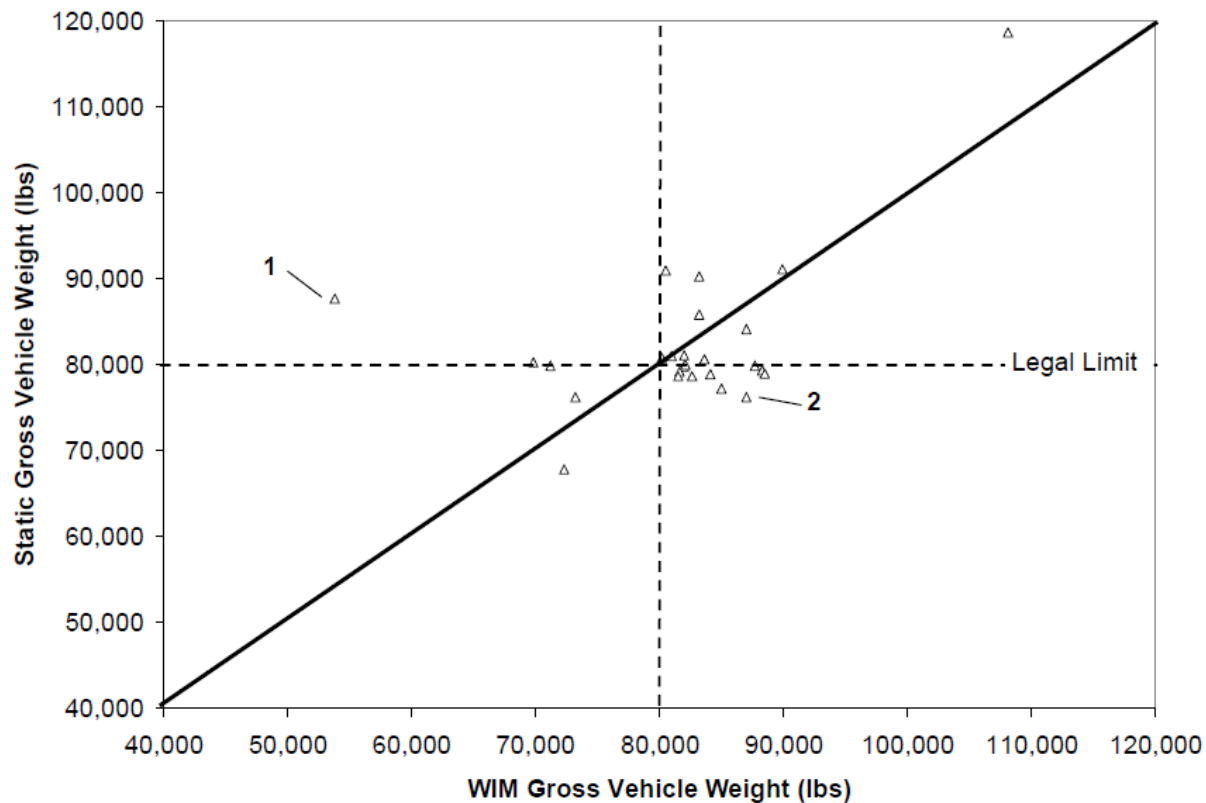
# Misc. Site Images





# Purdue WIM Accuracy Evaluation

1. Observe WIM Outputs
2. Observe Static Scale Outputs
3. Perform Comparison and Plot Results

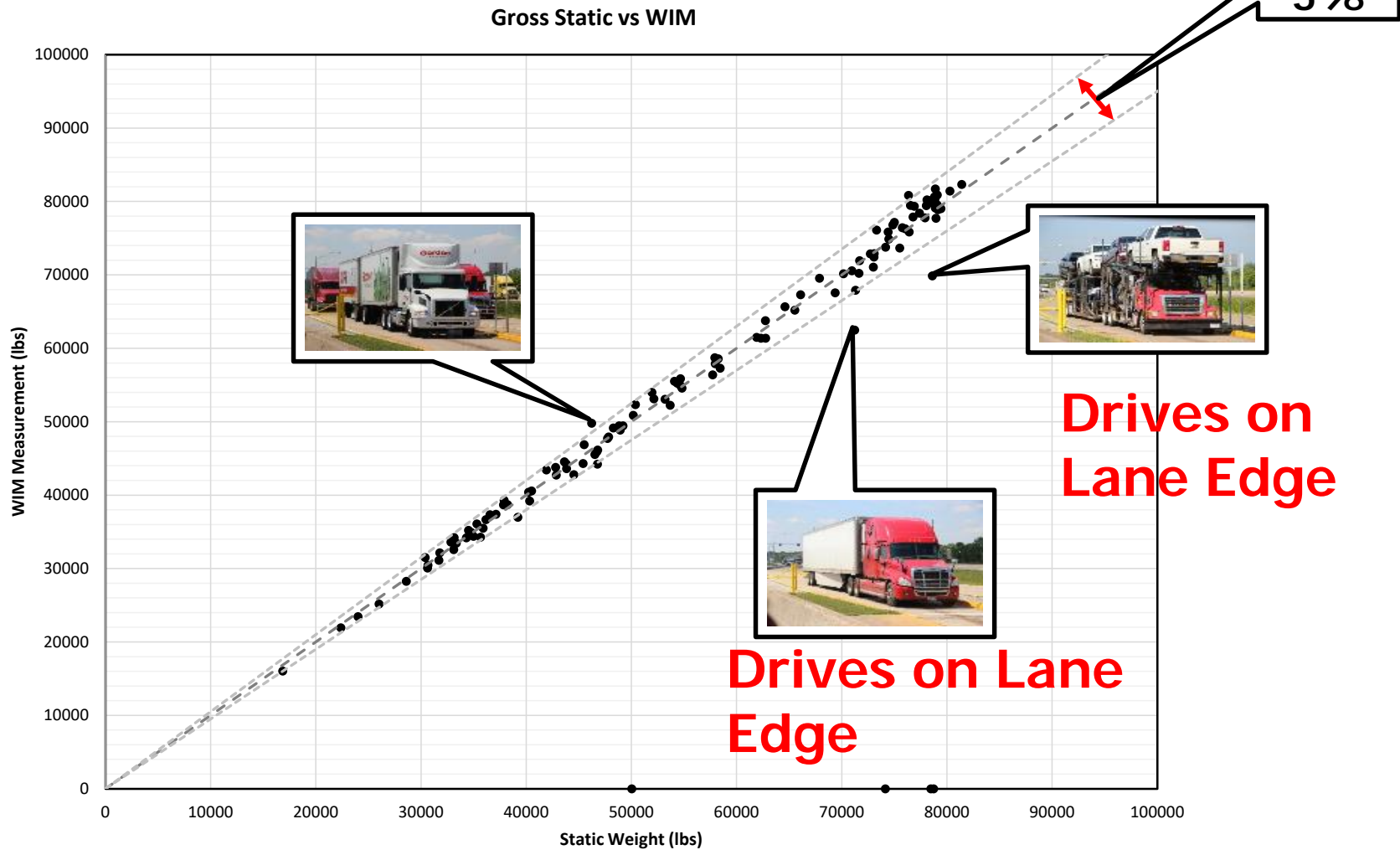




# Chesterton Weight Station Control Room

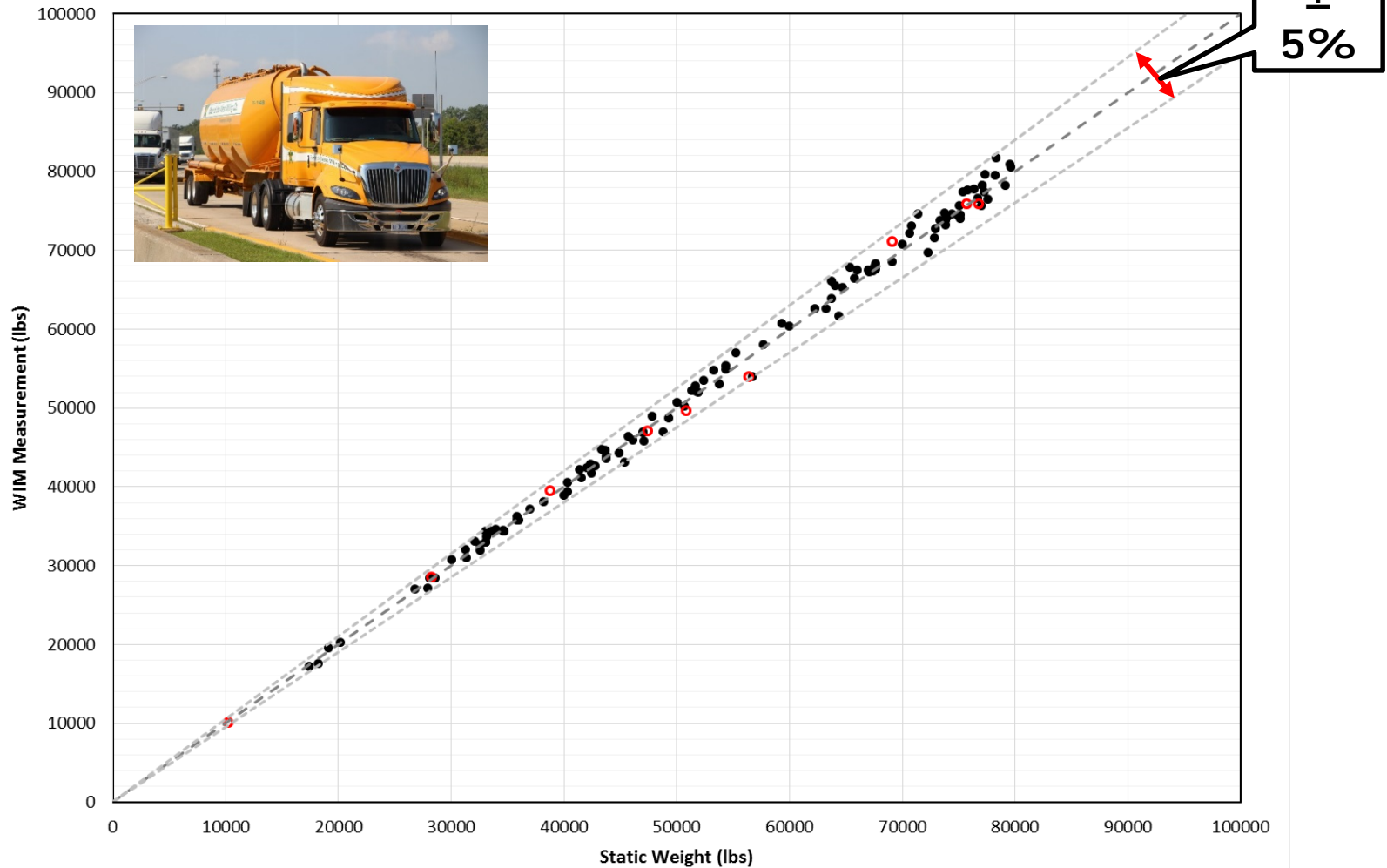


# August 2016 Evaluation Kapsch Weigh In Motion Comparison with Static



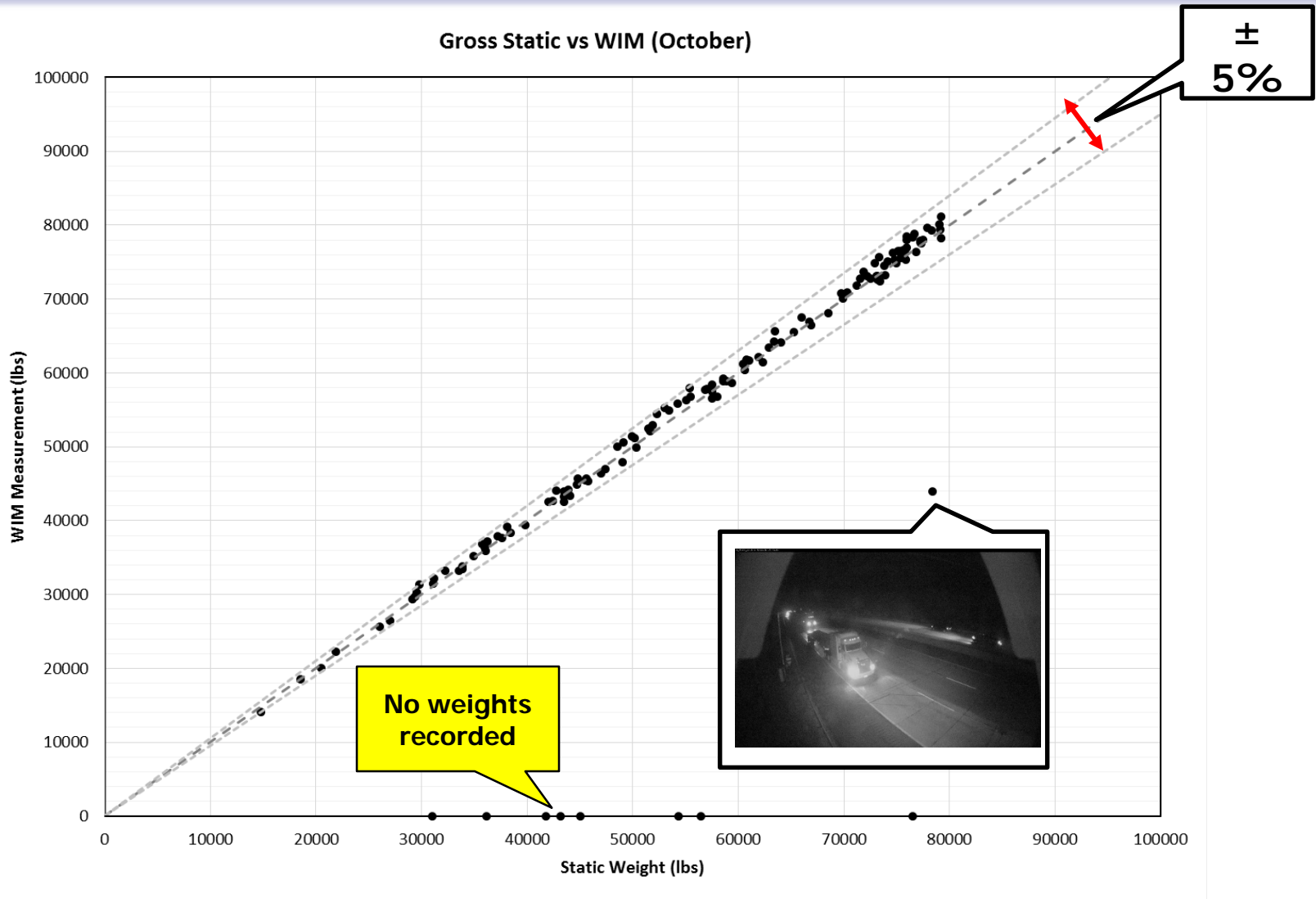
# September 2016 Evaluation Kapsch Weigh In Motion Comparison with Static

Gross Static vs WIM - Validity Flags

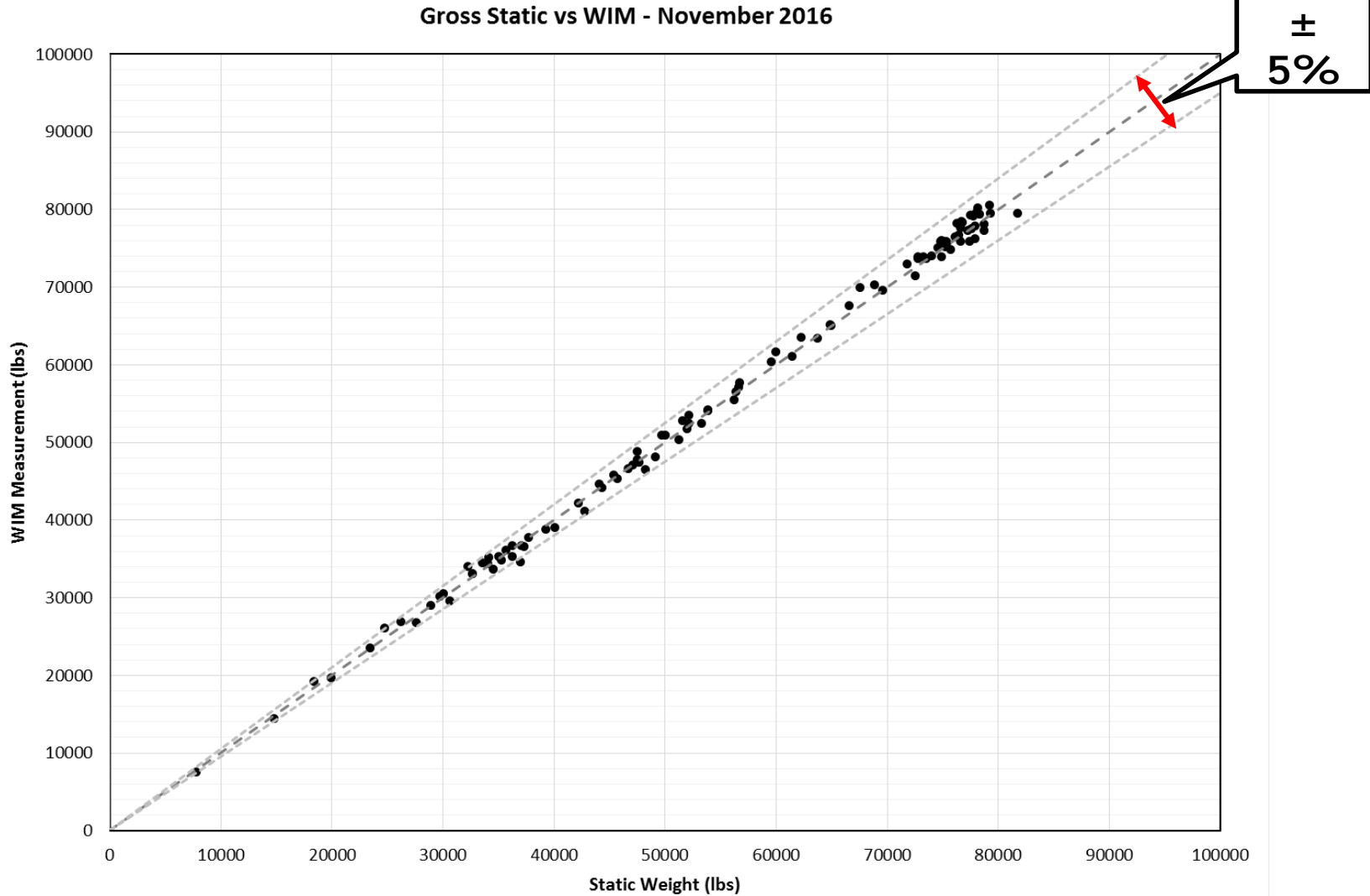




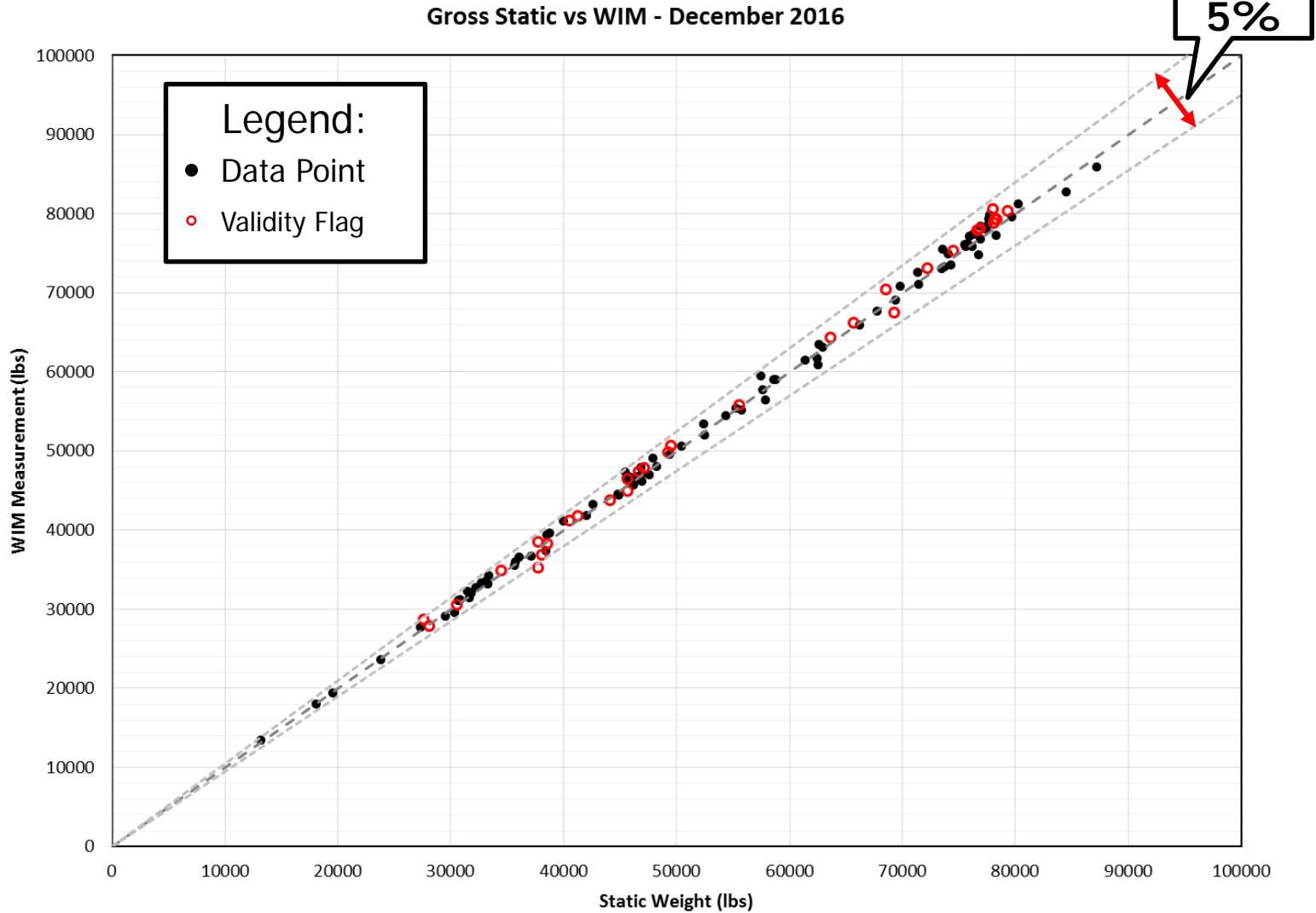
# October 2016 Evaluation Kapsch Weigh In Motion Comparison with Static



# November 2016 Evaluation Kapsch Weigh In Motion Comparison with Static



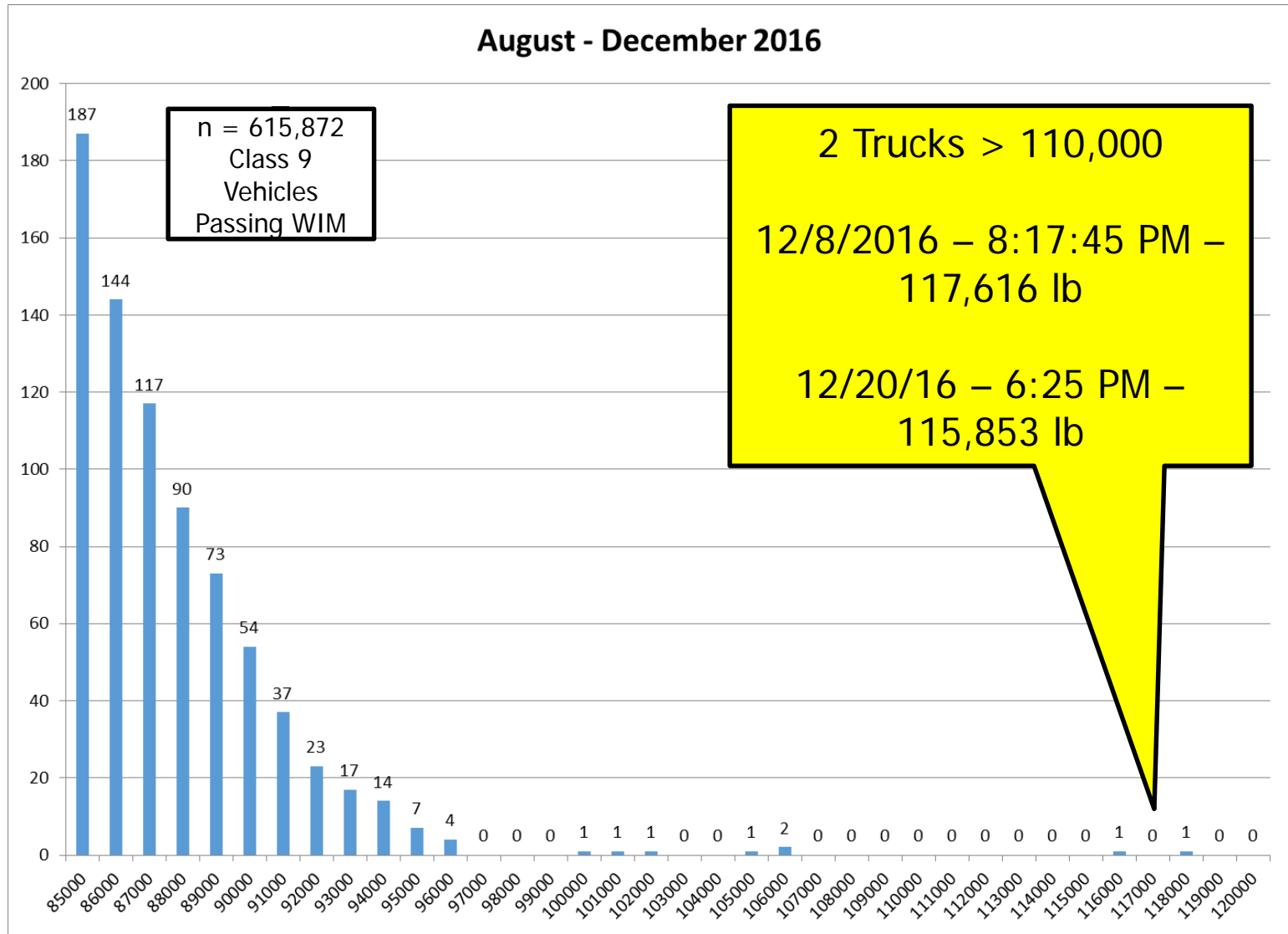
# December 2016 Evaluation Kapsch Weigh In Motion Comparison with Static





# Evaluation Summary By Weight Bin

August - December 2016



2 Trucks > 110,000  
 12/8/2016 – 8:17:45 PM –  
 117,616 lb  
 12/20/16 – 6:25 PM –  
 115,853 lb









# Credentials

- **Cameras capture license plates and DOT tags**
- **Compliance checks of registration and safety status**



# Enforcement Vision

- **Multiply enforcement using technology**
- **Allow tickets to be issued via virtual WIMs**
- **Over time, system acts as a deterrent**
- **Prolong life of state's infrastructure**

Virtual Weigh in Motion Systems are not revenue-generators!



# Current Status & Next Steps

- **Data collection at the I-94 Chesterton site continues.**
- **HB 1002 provides INDOT with the ability to expand the pilot program to other locations.**
  - If approved, INDOT will consider additional locations for virtual WIM systems.





# Thank you!

- Contact information:
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