I-64 Battlefield Boulevard: Lessons Learned - Rideability

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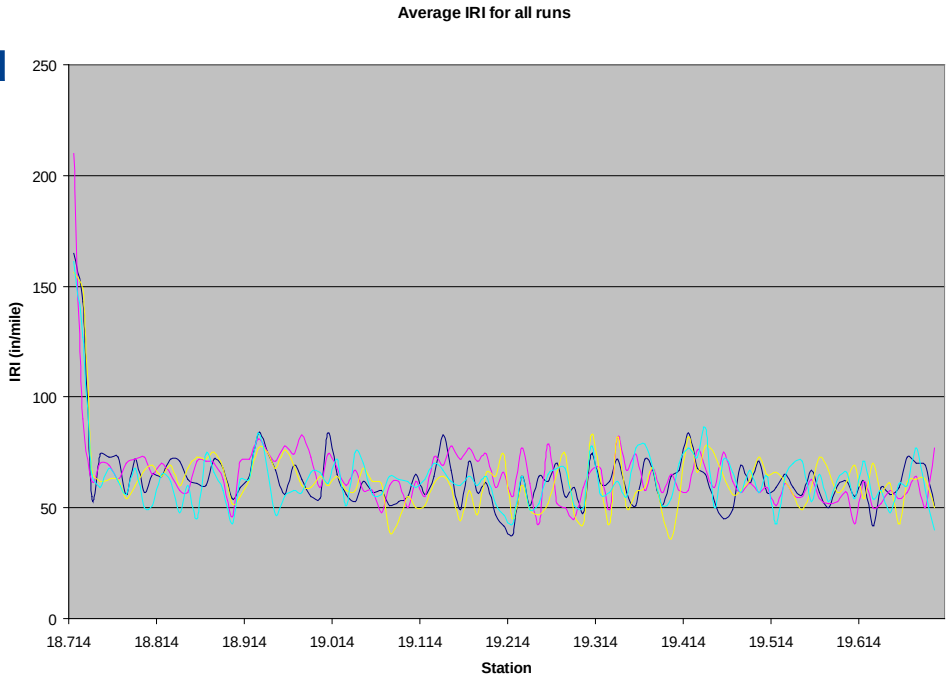
I-64 Battlefield Boulevard “Storyline”

- Initial preliminary Rideability testing was performed as a courtesy, and indicated an overall average IRI value of 82.
- After discussing the preliminary Rideability testing with the involved parties, the Contractor decided to diamond grind the entire project.
- Post Grinding Rideability results presented issues pertaining to IRI repeatability between successive test runs. The overall average IRI value was reduced to 54 after grinding.

	Pre-Grind	Post-Grind
EB Lane 1	79	52
EB Lane 2	87	49
EB Lane 3	74	58
EB Lane 4	83	51
EB Lane 5	84	50
WB Lane 1	81	55
WB Lane 2	83	58
WB Lane 3	81	53
WB Lane 4	83	52
WB Lane 5	84	65
AVG	82	54

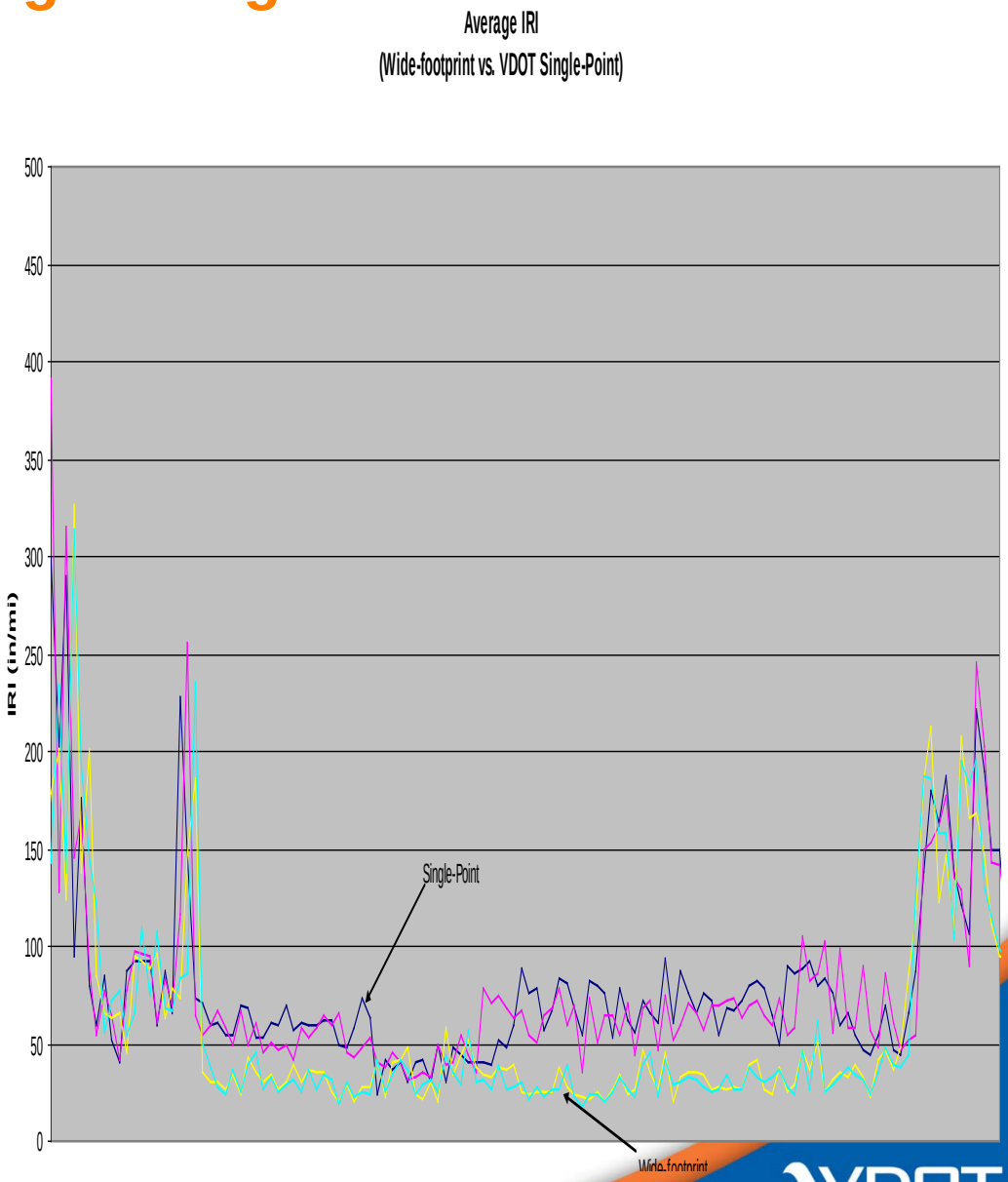
Issues Encountered during testing of Diamond Ground Surface

- Non-Repeatable IRI values during successive runs on Diamond Ground Surface
- IRI values outside of the project limits were repeatable
- Which data is correct?
  - Data could vary as much as 20-30 in/mile between successive runs at the same location
  - The spec. adjusts payment based on the lowest average IRI value from two successive runs



Issues Encountered during testing of Diamond Ground Surface

- The contractor decided to hire a consultant to collect data on the project using a “wide-footprint” laser.
- The data obtained showed better repeatability, but provided average IRI values 50% less than that of the “single-point” model lasers used by the Department.
- It was noticed on some lanes that the outside extremities of the project were not as repeatable as the single-point laser.



Lessons Learned

- **If Rideability is to be applied to longitudinally ground surfaces an approach must be agreed upon between the Department and Industry.**
  - **Currently we have a sub-committee consisting of members from the Concrete Industry, Grinding Industry, and the Department reviewing our current concrete rideability specification and its application in regards to diamond ground surfaces.**