Oregon State Presentation

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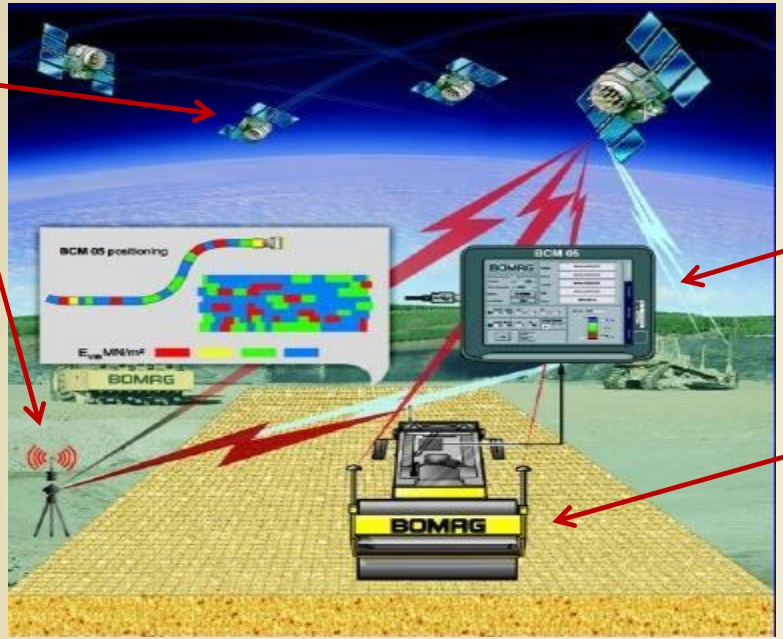
Program Change
Intelligent Compaction

What is Intelligent Compaction?

GPS



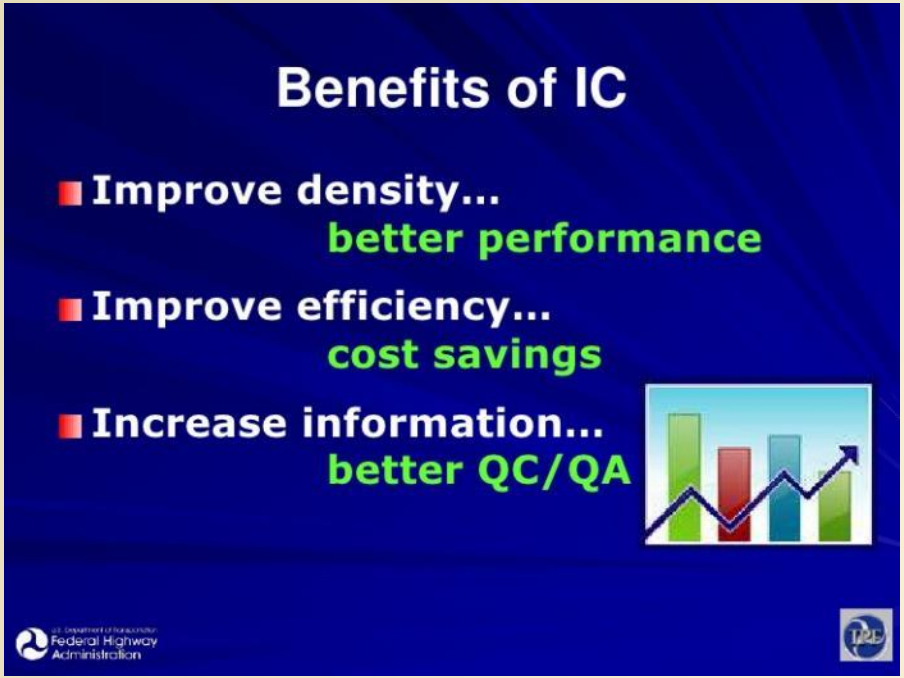
Wi-Fi

Cellular

on-board reporting system

continuous measurement system

Advantages of IC (according to FHWA)



ODOT IC History

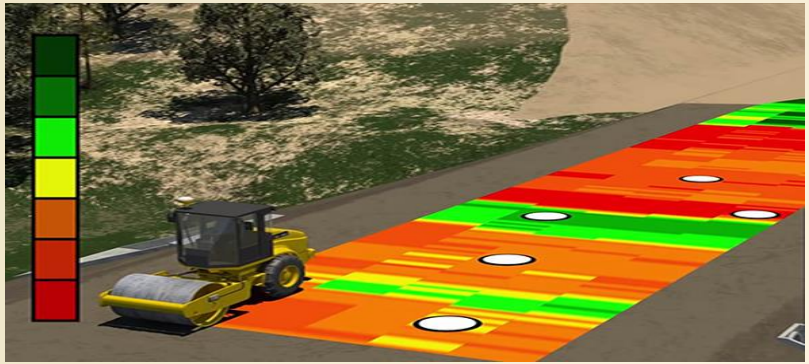
2013 – FHWA EDC Initiative

2014 – ODOT Design to Paver workshop

2015 – 3 Pilot Projects (via change order)

2016 – 3 more IC Projects (bid)

2017 – Even more projects



- Observations:
- Use Rover to Identify Trim Surfaces of shift paving?
  - Cuts at grind edges, pavement edges
  - Captures areas for grind payments
  - Saves the design, shape creation, import effort into VEDA
  - Design file need to exactly define grind/pave limits.
  - Closed Polygons around each shift grind/pave.
- Requires a full time capable tech to understand, run, analyze data real time
  - Need preparation before paving starts.
- GPS accessibility critical
  - Can drop signal and then IC is dead
    - Urban corridors
    - Tree cover
    - Mountain Canyons
  - Contractor Provides GPS, Rovers, Repeater, Control Survey

- Maintain Roller Order to aid sorting/combining data
- Roller Operator specification for IC on/off
  - Mobilization to Train
  - Fueling/ Watering
  - Traversing between No-Work zones.
  - Time stamps provides evidence of when, where roller is, vibe on? Static?
- ODOT Real-Time access to roller/website data
  - WiFi on-site: tablet access, monitoring
    - Removes Cell coverage issues
  - Website Off-site viewing real time
- ODOT access to raw, unprocessed Data.
  - Trimble requires pre-processing for input to VEDA.
- File naming convention
  - Top Con, Trimble have different file naming conventions
  - Translation prior to sending files?

For More Info:

https://www.youtube.com/watch?v=aDx7P-QXkVI&feature=youtu.be

Or

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