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# ICPF Meeting IN DOT Soils IC Demo

2:30 p.m. to 3:30 p.m. EDT

July 16, 2010

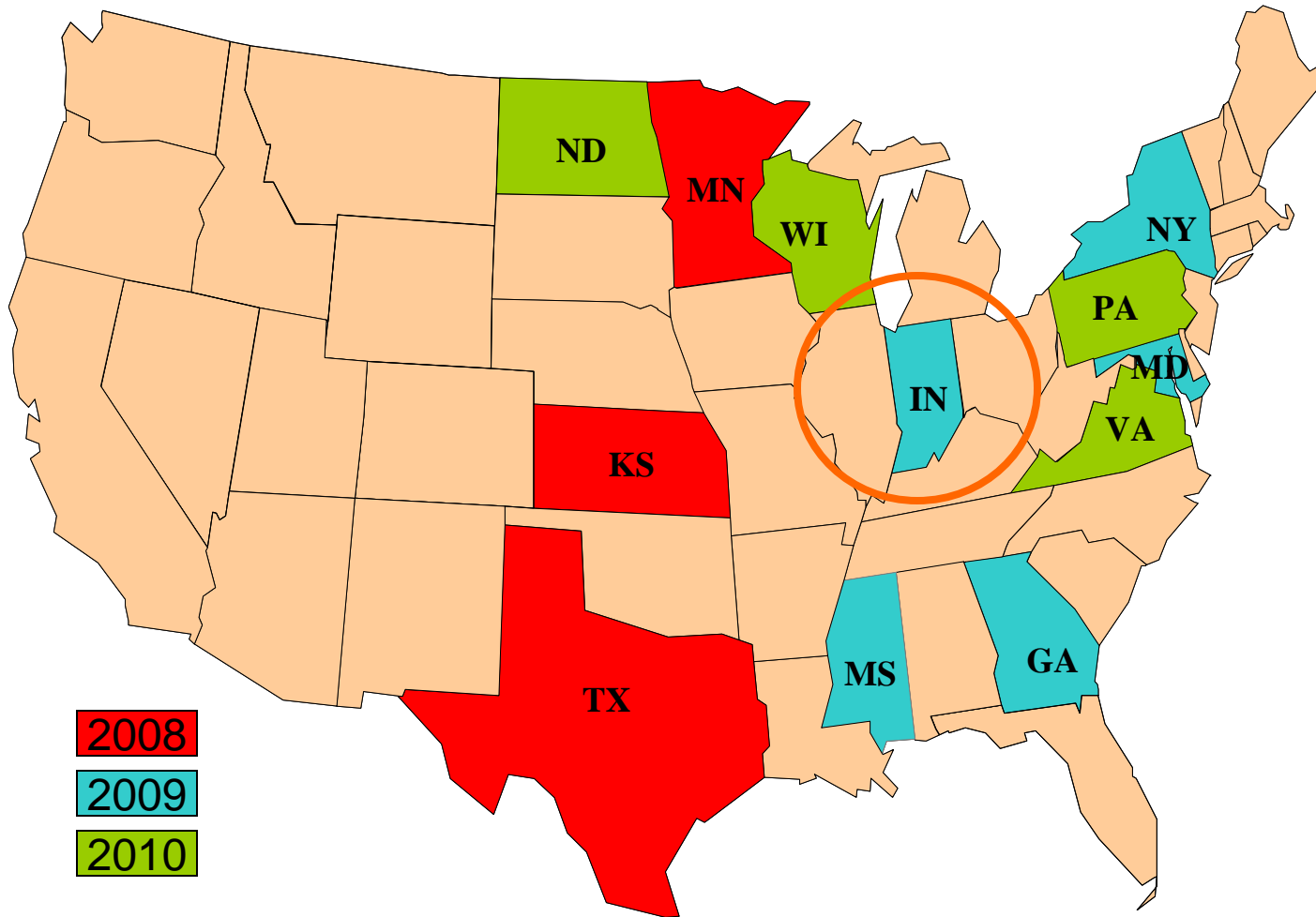
# Purpose

- Review Schedule/Activities
- Coordinate Work/Responsibilities
- Review Experimental Plan



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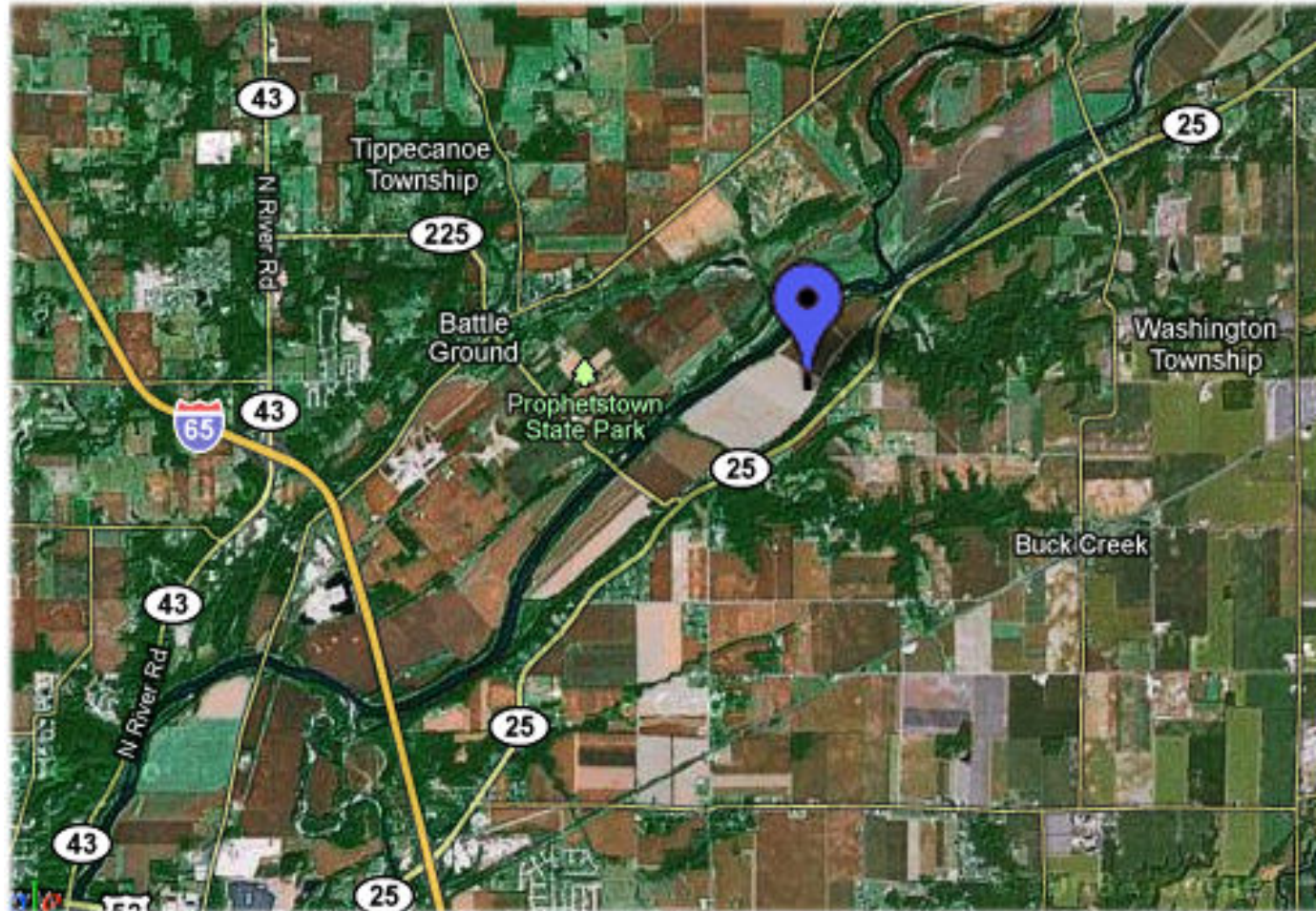
# FHWA/TPF Demo Projects



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# Test Site – SR-25

Aug 17 – 19, 2010



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# Update from Contractor

- Test Site
  - Locations of test sections (~ 700 ft long?)
  - Roller delivery (shipping address, contact phone no., ETA Aug. 13/16?)
  - ISU mobile lab stationing (next to project field offices?)
- Provide
  - Site plan or design image file
  - Soils information (granular?)
  - 1 or 2 roller operators (may not needed if no production rolling)
  - Mobilization of IC rollers if necessary (e.g. to the Open House Facility on Thursday AM)
  - Fuel for IC roller(s) (~ 200 gallons)



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# Update from IN DOT

- DOT Personnel Support
  - FWD and an Operator (?)
- Open House
  - Thursday, Aug. 19, 2010: 8:30AM to Noon
  - Location: INDOT Research and Development
  - RSVP: Paul Berebitsky (ICA)
  - 2-hr indoor presentation & 1-hr field demonstration
  - Invitation to DOTs, Cities, Counties, Universities, AGC, and others



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# Logistics

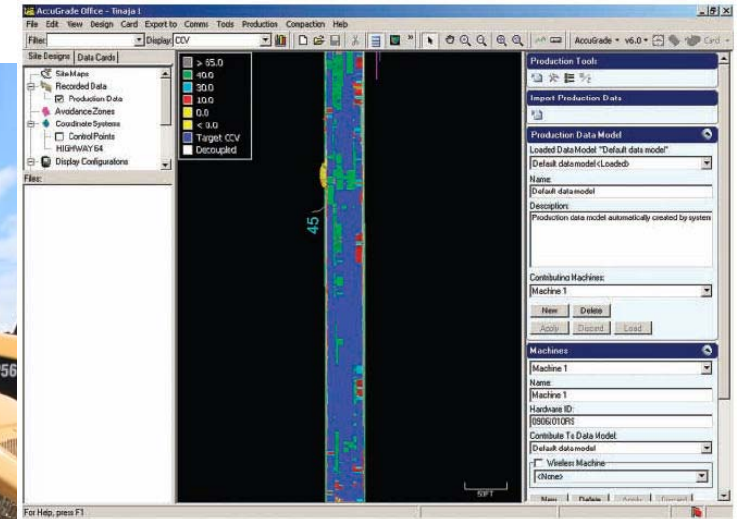
- Rollers and Tech Support
  - Shipment of IC Rollers
  - Storage and mobilization onsite
  - On-site Tech support personnel
    - IC roller vendor): Caterpillar
    - GPS – SiTech Indiana
- Research Team Travel Details



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# Caterpillar Single-Drum IC Roller



CAT CS56



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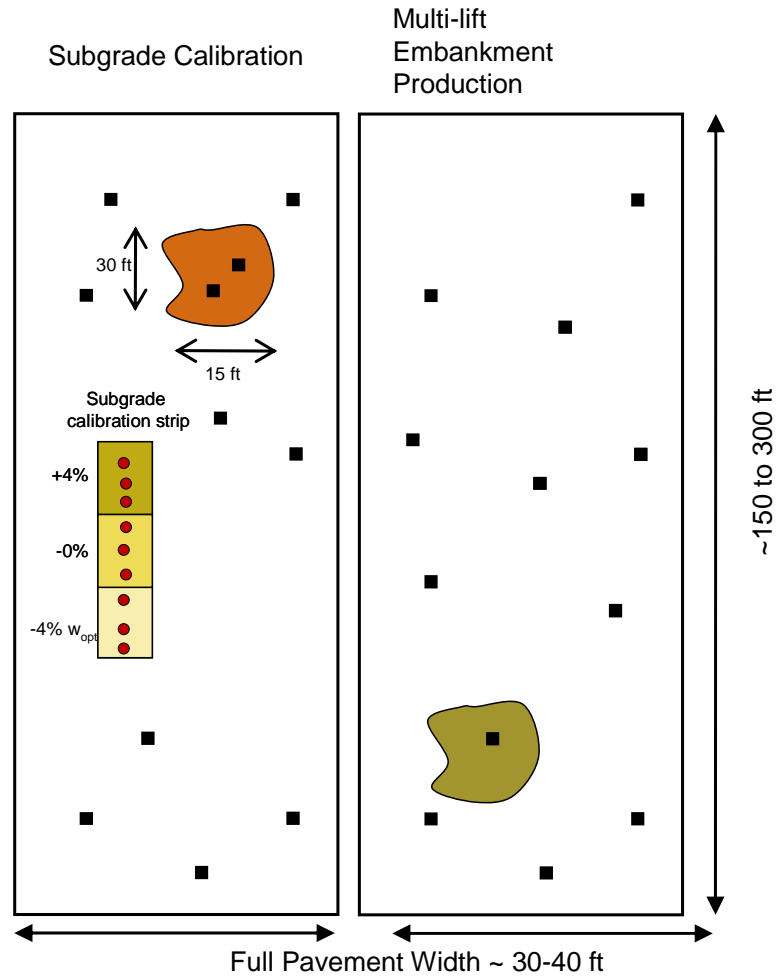
# Experiment Plan

- GPS Base Station and Roller Setup
- IC Test Strip/In-Situ Tests
- IC Production Rolling/In-Situ Tests



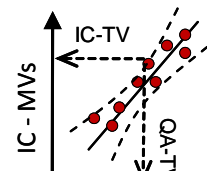
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# Typical Test Plan



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- Calibration tests
- Production testing (QA)



# Typical Test Settings

Date	TB	Strip	Machine	Amp (mm)	Spot Tests	Notes/Comments
08/17	Meet at US 69 field lab 6:30pm. ISU mobile lab move to project site.					
08/18	1	Calibration/ Mapping	Sakai (pad)	0.85, 1.9	DCP, LWD, NG, ST, PLT	30' X 150' test strip (see Note A and B).12 passes. Mapping with changes in machine operations.
08/19	2	Calibration/ Mapping	Cat (pad)	Static, 0.85, 1.85	DCP, LWD, NG, ST, PLT	30' X 150' test strip (see Note A and B).12 passes. Mapping with changes in machine operations.
08/20 – 08/22	3/4	Production/ Mapping	Sakai (pad)	0.85, 1.9	DCP, LWD, NG, ST, PLT	30 ft x up to 300 ft with multi-lift compaction (~ 3 to 6 lifts). ~ 8 passes per lift. Acceptance according to KDOT criteria. Mapping at different roller operations.
			Cat (pad)	Static, 0.85, 1.85	DCP, LWD, NG, ST, PLT	30 ft x up to 300 ft with multi-lift compaction (~ 3 to 6 lifts). ~ 8 passes per lift. Acceptance according to KDOT criteria. Mapping at different roller operations.
8/21	Open House (10:30AM – 2:30PM)					
8/22	AM: Wrap up, PM: ISU mobile lab departs.					



Notes:

- A. Moisture condition calibration test strip with 50' sections of -4%, 0%, and +4% of optimum moisture content. Moisture condition the production area per project QC requirements. Need water truck and mixer/reclaimer for moisture conditioning and soil mixing.
- B. Perform roller repeatability passes.

# In-Situ Tests for Soils/SB



# ISU Geotech Mobile Lab



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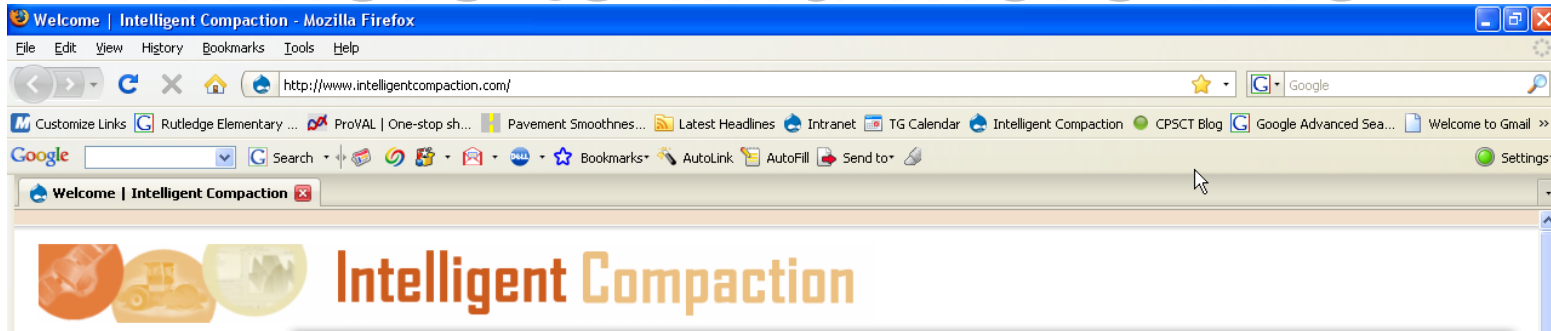
# Wrap up

- Follow up action items
- Date/Time for the onsite meeting
  - 8AM, Tuesday, Aug. 17 (?)
  - Station area of the ISU GeoTech Lab (?)



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# Where to find more info



[www.IntelligentCompaction.com](http://www.IntelligentCompaction.com)

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gkchang

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## Learn About Us

Find out who we are and what we do under this research project... [Check it out here!](#)



## Field Demonstration

- **Mn/DOT Demo** - The first IC field demo was conducted in Willmar, Minnesota from June 2 to June 23, 2008. This demo included several HMA test sections - thanks to big help and additional funding from Mn/DOT. Missed the actions of the field demo? Now you can see them in YouTube!

**You** Find out more and view all video clips ...  
**Tube**

- **TxDOT Demo** - The second IC field demo was conducted in Fort Worth, Texas from July 20 to 25, 2008. It covered cohesive soil, lime stabilized base, and granular/flex base. [Find out more and see all video clips here...](#)
- **KSDOT Demo** - The third IC field demo was conducted on US 69, Kansas from August 17 to 24, 2008. It covered cohesive soil. [Find out more...](#)

**Extra! Extra!** The Mn/DOT HMA IC demo was on the **front page** of the West Central Tribune! Read the online article "The future is this Moment" - pdf'ed web version or the scanned print version.



## Download an IC Flyer

[Download a flyer](#) to catch an overview on the IC demonstration projects now!

Done

Now: Cloudy, 69° F Tue: 75° F Wed: 76° F