

## Meeting Minutes: TPF-5 (334) Veta Enhancements & Technology Exchange (Meeting No. 5)

Date: 05/04/17  
 Minutes prepared by: Rebecca Embacher  
 Location: WebEx

### Attendance

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Pooled Fund State Contacts:

Participated	State	State Contact
<input checked="" type="checkbox"/>	Alaska	Richard Giessel
<input checked="" type="checkbox"/>	California	Ebi Fini
<input type="checkbox"/>	California	Chuck Suszko
<input checked="" type="checkbox"/>	Connecticut	Dave Howley
<input checked="" type="checkbox"/>	Georgia	John Martin
<input checked="" type="checkbox"/>	Maine	Ulrich Amoussou-Guenou
<input checked="" type="checkbox"/>	Maine	Dale Peabody
<input type="checkbox"/>	Maine	Casey Nash
<input checked="" type="checkbox"/>	Minnesota	Rebecca Embacher
<input checked="" type="checkbox"/>	Minnesota	Curt Turgeon
<input type="checkbox"/>	Mississippi	Alex Middleton
<input checked="" type="checkbox"/>	Missouri	Bill Stone
<input type="checkbox"/>	Missouri	Dan Oesch
<input type="checkbox"/>	New York	Zoeb Zavery
<input checked="" type="checkbox"/>	Oregon	Chris Harris
<input checked="" type="checkbox"/>	Oregon	Larry Illg
<input checked="" type="checkbox"/>	Oregon	Mike Stennett
<input checked="" type="checkbox"/>	Pennsylvania	Dan Clark
<input type="checkbox"/>	Pennsylvania	Sheri Little
<input type="checkbox"/>	Tennessee	Matt Chandler (non-voting member)
<input type="checkbox"/>	Texas	Jimmy Si (non-voting member)

FHWA:

Participated	Contact
<input type="checkbox"/>	Michael Arasteh
<input type="checkbox"/>	Steven Cooper
<input type="checkbox"/>	Richard Duval
<input type="checkbox"/>	Kevin Kliethermes
<input type="checkbox"/>	Antonio Nieves

The Transtec Group:

Participated	Contact
<input checked="" type="checkbox"/>	George Chang
<input checked="" type="checkbox"/>	Jason Dick

## Decisions Made

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- Replace tasks **D-01** (Spot tests manager [add/remove/change test types, define units, include specification requirements, and define legend for spot test values]) and **B-01** (Display multiple maps on the same screen and a mini overview map) with the feature to allow for direct data transfer from TopCon SiteLink3D directly into Veta.

## Action items

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- J. Dick | work with TopCon to allow for direct data transfer from SiteLink3D directly into Veta.
- Embacher | Send travel procedure and details to participants traveling to next pooled fund meeting and to the IICTG workshop.
- Embacher and J. Dick | Update wish list items and send out to pooled fund participants.
- All | Review wish list and rank items from highest to lowest priority. Items to be compiled and reviewed at next pooled fund meeting for determination of final tasks to move forward in Phase II.

## Agenda

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- FHWA Updates
- Pooled Fund Budget | Phase 1 Contract
- TopCon – Direct data transfer to Veta
- Standardized Data Format
- IICTG Workshop and Pooled Fund Meeting
- Other Topics

## Next Meeting

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Date: July 27, 2017

Time: 10AM-12PM Central Standard Time

Location: WebEx

Agenda items: IICTG Workshop & Pooled Fund Meeting in September; Phase I Contract Update; Phase II Scope of Work; Updates.

## Meeting Notes

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### FHWA Update

None provided. FHWA representation unable to be provided.

### Pooled Fund Budget, Phase I & Phase II

See attached Slides.

Nine states currently participating. Alaska is currently a non-voting member, but hoping to join pooled fund.

\$347,500 has currently been received to date. Phase I contract has a \$170,000 budget with an expiration date of 2/14/18.

Discussed work currently completed on phase I tasks.

Enough money to add an amendment to the current contract with an addition to the scope of work.

Current wish list will be sent out to folks to review and rank priorities prior to summer meeting.

### TopCon System

See attached slides.

Discussed moving forward with creating coding to allow for direct import of TopCon data directly into Veta and dropping the following two tasks from phase I scope of work to allow for this enhancement: task **D-01** (Spot tests manager [add/remove/change test types, define units, include specification requirements, and define legend for spot test values]) and task **B-01** (Display multiple maps on the same screen and a mini overview map).

### Standardized Data Form

See attached slides.

Discussed the need for data standardization of vendor file formats. Pooled fund participants agreed that this is an important issue.

Discussed options on how to best proceed to address this issue and the compatibility needs for Veta.

Discussed need requested by Vendors for states to standardize naming conventions used for paving / compaction areas. This would help with automation efforts and allow the ability to vendors to add features to their systems to decrease complexity for their customers.

### **IICTG Workshop**

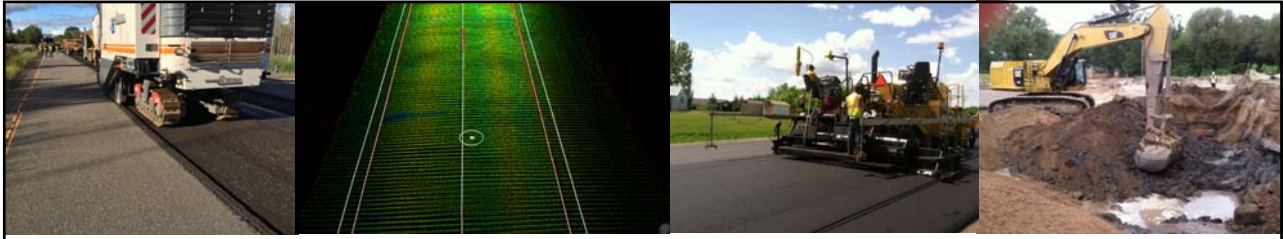
See attached slides.

Discussed workshop details and draft agenda.

Discussed pooled fund meeting location, hotel arrangements, meals, local travel, expense reporting and travel arrangements.

### **Other Updates**

None, due to time constraints.



## TPF-5 (334) WebEx Meeting #5

Rebecca Embacher | Advanced Materials and Technology Engineer

May 4, 2017 | TPF-5 (334) WebEx Meeting



AMT Website | <http://www.dot.state.mn.us/materials/amt/index.html>

## Meeting Agenda

- FHWA Updates
- Pooled Fund Budget | Phase I Contract
- TopCon – direct data transfer to Veta
- Standardized Data Format
- ICTG Workshop and pooled fund meeting
- Other topics?



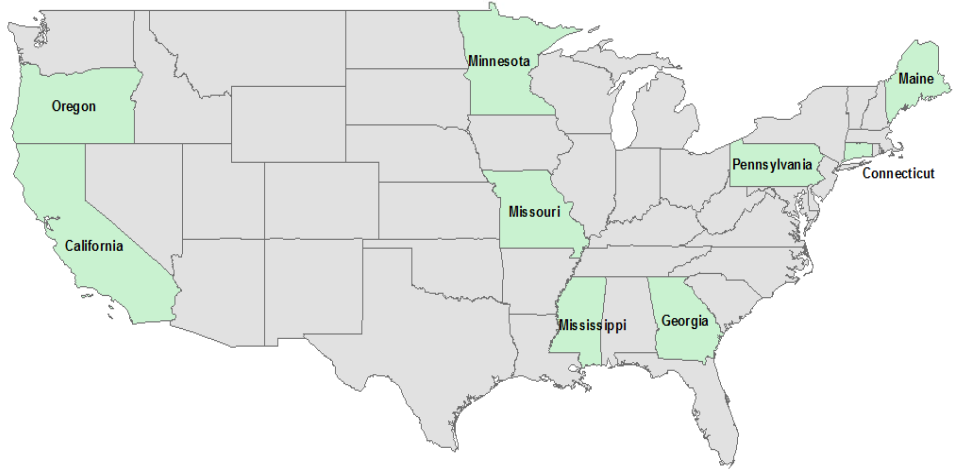
FHWA Update



Pooled Fund Budget, Phase I & Phase II

## Current Pooled Fund Participants

- Alaska (non-voting member)
- California
- Connecticut
- Georgia
- Maine
- Minnesota
- Mississippi
- Missouri
- Oregon
- Pennsylvania



				Budget Summary
State	3-Yr Commitment	Received	Date Received	
California	\$75,000	\$25,000 \$25,000	3/21/16 1/10/17	<u>Total Commitments per Pooled Fund Site:</u> <b>\$592,500</b>  <u>Total Received to date:</u> <b>\$347,500</b>  <u>Phase I Contract</u> <b>\$170,000</b>  <u>Total Expenditures to Date</u> <b>\$6,532.95</b>  <u>Phase II Contract (Available Money)</u> <b>\$177,500</b> Minus travel expenses (reserve ~\$20,000) → ~\$157,000
Connecticut	\$30,000	\$10,000 \$10,000	6/6/16 2/27/17	
Georgia	\$75,000	\$25,000	2/27/17	
Maine	\$52,500	\$17,500	2/27/17	
Minnesota	\$100,000	\$50,000 \$50,000	2/10/16 2/13/17	
Mississippi	\$50,000	\$25,000	2/27/17	
Missouri	\$75,000	\$25,000 \$25,000	3/21/16 2/27/17	
Oregon	\$75,000	\$25,000	1/10/17	
Pennsylvania	\$60,000	\$10,000 \$25,000	2/10/16 8/30/16	

## Veta Phase I Contract Update

- Phase I Contract Executed: February 14, 2017
- Contract Expiration Date: February 28, 2018
- Current Contract Amount: \$170,000

## Phase I: Scope of Work

- A.1 **Reporting [F-06]: Customized reports** (select which items to report, include logos, signatures, etc.).
- A.2 **Data Management [A-11]:** Automatic download of field data from Trimble and Moba (other vendors are not ready or have not provided needed information). **Includes architecture improvements to enhance performance.**
- A.3 **Filtering [C-02]:** Allow user to create location filter by entering offsets from a given line in the alignment file (e.g., 12 ft right of centerline (CL), 12 ft left of CL, etc.) and select which lines to use to trim data.
- A.4 **Analyses [E-09]:** Option to choose what to analyze (final coverage, all passes, individual passes; temperature, ICMV, frequency, etc).



## Phase I: Scope of Work (cont.)

- A.5 **Spot Tests [D-01]:** Spot tests manager (add/remove/change test types, define units, include specification requirements, and define legend for spot test values).
- A.6 **Mapping [B-01]:** Display multiple maps on the same screen and a mini overview map. (Requires task A-11).
- A.7 **Data Management [A-12]:** Recalculate pass counts when using All Passes data from multiple machines.
- A.8 **Mapping [MnDOT Phase 7]:** **Add map-based, user-accessible data (map clicks can show underlying data (IC, PAVE-IR, ProVAL, Test Roller).**

## Phase I: Scope of Work (cont.)

- A.9 **Analyses [MnDOT Phase 7]:** Tabular listing of paver stops (include stop and start time stamp and duration of paver stop)
- A.10 **Analyses [MnDOT Phase 7]:** Quality Control Chart (e.g., Box Whisker of temperature vs. time, temperature vs. pass count, temperature vs. speed, pass count vs. time, pass count vs. speed, speed vs. time, speed vs. amplitude, speed vs. frequency, etc.)
- A.11 **Reporting [MnDOT Phase 7]:** Tabular listing of filter and operation/data filters query settings (sensors included, temps used, date, file, etc.) This information can be used by agency to simply QA review of submitted Veta projects.
- A.12 **Bug Repairs**

## Phase II: Contract Amendment

- Amendment
  - Scope of Work (~\$157,000)
  - Additional Time
- Action Items
  - Send out Current Wish List
  - Pool Fund
    1. Review existing list
    2. Update with additional items
    3. Send out list again for prioritization
    4. Compile priorities
    5. WebEx Meeting (prior to June 30, 2017)



TopCon System

## Data Transfer Directly to Veta

- TopCon no longer updating current version of SiteLink – report issue cannot be addressed at this time
- Cost Effective Solution for TopCon - Direct Data Transfer to Veta
  - This is now ready from TopCon Side, but not Veta!



## TopCon Report Generation

- Rollers are not carried through with each row of data.
  - Export reports per roller.
- Reports duplicate upon generation (re-export).
- A large amount of inputs to generate a report (large room for human error)
- For example: (assuming multiple days in one report – cumulative files)
  - 10-lane divided highway
  - 2-lifts
  - 5 Rollers
  - Number of Reports =  $10 \times 2 \times 5 = 100$  reports to manually create and generate

## Proposed Tasks to Move to Phase II

### Recommend

- Move 2 Phase I tasks to Phase II to address this need. (\$30,000)
- Negotiating with TopCon to waive \$5,000 annual fees for licensing T2P (George)

Spot Tests D-01	Spot tests manager (add/remove/change test types, define units, include specification requirements, and define legend for spot test values)	\$ 20,073.32
Mapping B-01	Display multiple maps on the same screen and a mini overview map. (Requires task A-11).	\$ 21,330.04



Standardized Data Format

## History

- Industry Meeting (September 2015)
  - Discussed Options: Participate in pooled fund or create a partnership
    - Agreed not to work together (2 hours of private deliberation)
  - Work privately
    - Vendors – Pay for Import Wizards, etc.
    - Pooled Fund – Pay for changes needed in Veta for requests made by pooled fund (e.g., direct data transfer)

## Current Discussions

- Complaining about costs associated for imports with new systems
- Paid for Import Wizards
  - ...

## How should we proceed?

- Continue as is . . .
- Standardized Data Format
  - Develop standardized format
    - ~\$83,400 for IC and PMTP standardized format
  - Vendor Options
    - Free – follow standardized format
    - Fee – Use of non-standard format
    - Grandfathered – Support for existing systems that are already Veta compatible
  - Not able to implement in Veta until 2019; Vendor Timelines?

## Request from Vendors

- Standardize Naming Conventions for paving / compaction areas
- Vendors want to add features to systems
  - Streamline / assist with standardized naming conventions
  - Decrease complexity for their customers through increased automation
- For example: Minnesota Uses

ROUTE-MATL-L#-XXX-XXX



## IICTG Workshop / Pooled Fund Meeting



# IICTG 2017 Conference

Sept. 26-28, 2017

Minneapolis, MN USA

Register at [www.IICTG.org](http://www.IICTG.org)

### Who Should Attend

- Federal, State & Local Agencies
- Construction Specification Writers
- Paving Contractors and QC Managers
- Grading Contractors and QC Managers
- Surveyors
- Pavement Design Engineers
- Construction and Material QA Engineers
- Equipment Vendors
- University Researchers
- Engineering Consultants

### The First International Intelligent Construction Technologies Group (IICTG) Conference



#### Agenda

The conference will include a Veta workshop, technical sessions, open panel discussion, IICTG business meeting, and vendors' exhibits. Check on the IICTG website for details on call-for-presentation.



### Co-Sponsors

- Transportation Research Board (TRB)
- Transportation Research Arena (TRA)
- International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE)
- Minnesota Department of Transportation
- TRB AFD90 Pavement Surface and Vehicle Interaction Committee
- TRB AFH90 Flexible Pavement Construction
- TRB AFP70 Mineral Aggregate Committee
- University of Minho, Portugal
- University of Texas, El Paso, USA
- Southwest Jiaotong University, China

Topics: Intelligent construction Technologies; IC; PMTP; Automated Machine Guidance; digital records and more

TUESDAY, SEPTEMBER 26		IICTG 2017 Agenda
08:00 AM – 12:00 PM	IC-TP ETG Meeting	
01:00 PM – 05:00 PM	Vendors Setup; ICDM/Veta Workshop	
06:00 PM – 08:00 PM	Ice Breaker Reception	
WEDNESDAY, SEPTEMBER 27		
07:00 AM – 08:00 AM	Breakfast/Vendor Exhibits	
08:00 AM – 09:30 AM	Session 1 – Welcome and Keynotes Speeches	
09:30 AM – 10:00 AM	Break/Vendor Exhibits	
10:00 AM – 12:00 PM	Session 2 – Keynotes Speeches	
12:00 PM – 01:00 PM	Lunch/Vendor Exhibits	
01:00 PM – 02:30 PM	Session 3 – ICT Research I	
02:30 PM – 03:00 PM	Break/Vendor Exhibits	
03:00 PM – 05:00 PM	Session 4 – ICT Research II	
05:00 PM – 06:00 PM	IICTG Open Business Meeting	
06:30 PM – 09:00 PM	Banquet	
THURSDAY, SEPTEMBER 28		
07:00 AM – 08:00 AM	Breakfast/Vendor Exhibits	
08:00 AM – 09:30 AM	Session 5 – CIM Workshop	
09:30 AM – 10:00 AM	Break/Vendor Exhibits	
10:00 AM – 12:00 PM	Session 6 – ICT Solutions	
12:00 PM – 01:00 PM	Lunch/Vendor Exhibits	
01:00 PM – 02:30 PM	Session 7 – ICT Case Studies	
02:30 PM – 03:00 PM	Break	
03:00 PM – 05:00 PM	Session 8 – Open Panel Discussion on ICT Implementation	
05:00 PM – 05:30 PM	Closing, 2019 meeting, and Farewell	

## Action Items Pooled Fund Meeting

- Pooled Fund Meeting (in-person and WebEx)

Finalize Meeting Agenda:  
June 30, 2017

- Monday (Full or Half-Day – Working Meeting?)

- (Tuesday AM: ETG Meeting; PM: IC workshop)

- Location:

- The Depot (Monday - would it cost an additional fee to us to reserve a room)?
- MnDOT Office of Materials and Road Research - Maplewood

- Meeting Meal

- On our Own? Or,
- Pooled fund will setup meal for us
  - 1 month advanced notice needed
  - DBE Targeted Venues



## Action Item Pooled Fund Meeting

(George)

- Industry (ETG meeting) will be in MN for IICTG
- Open meeting to industry?
  - Entire Meeting or second half of meeting?
  - Have industry meeting immediately following pooled fund meeting?

## Action Items IICTG Travel Expenses

- Final Listing of Names of Individuals Traveling
  - Signed/Approval – (pooled fund : out-of-state travel request)
  - Purchase Order (MnDOT) – Registrations for IICTG
- Estimated Travel Expenses
  - Use to assist with available funds to reserve for travel vs. Phase II Veta enhancements
- Flights
  - Each individual will work directly with MnDOT Aeronautics Dept. who will book flights
  - Aeronautics dept. will contact names on approved out-of-state travel request listing

## Action Items IICTG Travel Expenses

- Remaining Expenses (e.g., hotel, parking, food, other travel modes)
  - Reimbursed through MnDOT (use MnDOT Expense Form)
  - Faster Reimbursement if W9 filled out in advance



Other Updates



Thank you again!



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AMT Website | <http://www.dot.state.mn.us/materials/amt/index.html>