BIM For Bridges and Structures

Scot Becker
Wisconsin DOT
State Bridge Engineers Meeting
History
Pooled Fund Project Overview
Next Steps
AASHTO T-19 BIM History

Build on FHWA Work

SCOBS Saratoga
BIM Terminology

Mid Year Meeting - “BIM for Bridges and Structures Born”

IOWA - EDC Workshop

20-07 Standardized Format Workshop

Pooled Fund Closed - RFP Released

HDR Team Selected Contract Started

COBS Information Modelling - Strategic Plan

2013

2015

2016

2017

2018

2019

2019 AASHTO COBS
Develop a National Standard for open exchange of modeled bridge and structure data to be used for design to construction and fabrication.
In coordination with International Standards

Governance and stewardship framework

5-year project, pooled fund effort
PROJECT OVERVIEW

01 INVESTIGATION & EXPLORATION
- Existing initiatives
- Terminology

02 IFC DEVELOPMENT
- Development of standard
- Model View Definitions

03 COLLABORATION & IMPLEMENTATION
- Designers
- Contractors
- Fabricators
- Software vendors & developers
- buildingSmart International (bSI)

04 ECONOMIC ANALYSIS: ROI
## CONSULTANT TEAM

### PROJECT MANAGEMENT
- Connor Christian
- Will Sharp, PE, PTOE
- Julie Rivera, PE, SE

### INVESTIGATION & EXPLORATION
- Aaron Costin, PhD

### IFC DEVELOPMENT
- Thomas Liebich, PhD

### ROI
- Stéphane Gros, PhD

### COLLABORATION & IMPLEMENTATION
- Francesca Maier, PE
- Katie Hatfield Edstrom, PhD

### INDUSTRY INVOLVEMENT

- Bentley
- Autodesk
- buildingSMART International
- Trimble
- NEMETSCHEK GROUP
- AASHTO
- BUREAU OF STRUCTURES
INDUSTRY INVOLVEMENT

Bridge Engineers
Fabricators
Consultants

Contractors
Developers
Software Vendors
Communicators
SOFTWARE COLLABORATION

OBJECTIVE:
Incorporation of MVDs into commercial off-the-shelf software

Software vendor inclusion is paramount

Certification process through BSI

Training & effective communication
COLLABORATION & IMPLEMENTATION

Stakeholder Collaboration Forum

- Discussion threads
- Educational tools
- Videos
- Case studies
- Quick polling
- Stakeholder input
2019 PRIORITIES

INVESTIGATION & EXPLORATION

IFC DEVELOPMENT

INDUSTRY INVOLVEMENT

EFFECTIVE COMMUNICATION TOOLS
Next Steps
TRANSPORTATION POOLED FUND – TPF-5(372)
Why Join This Pooled Fund?

It’s not what’s in it for me.
Benefits to your Organization

- Resources from pooled fund products
- Shaping the future for information modelling of COBS
- BIM knowledge building in your “bridge and structure” office
- Pilots and sharing with this national initiative
- Access to national models and libraries
Benefits to COBS

- Opportunity for standardization
- Transforming workflows for model based delivery and asset management
- Keeping pace with the vertical industry
Thank You