



BIM for Bridges and Structures

Introduction Collaboration Meeting

Scot Becker



Presentation Outline

- Welcome
- How we got here
- Today
- A Challenge to You
- Video

How we got here

- Building Blocks
 - FHWA working on it for years
 - Market Success in the Building Industry referred to “vertical industry”
 - T-19 and COBS prioritizes information modeling in 2013 strategic plan

Events Leading to Today

- 20-07 “Standardized Format for Bridge and Structure Information Models” workshop in Baltimore, May 2016
- FHWA workshop “Bridge Information Modeling Standards” in Washington DC, August 2015
- EDC 3 3D Workshop in Ames December 2015

T-19 (2015) - Saratoga

- We introduced SCOBS to BIM terminology
- We provided examples of Building Information Modelling uses in our community
- We prepared a “mini research project(20-07)” to execute a resource to determine our path forward

2017 – Midyear Meeting

- At our Mid Year Meeting we developed our Work Plan for this Initiative:
 - We are calling the T-19 initiative “**BIM for Bridges and Structures**”
 - We used the results of our 20-07 to determine our Work Plan.

STANDARDIZED FORMAT FOR BRIDGE AND STRUCTURE
INFORMATION MODELS
FINAL REPORT

Prepared for:

AASHTO SCOBS T-19

Prepared by:

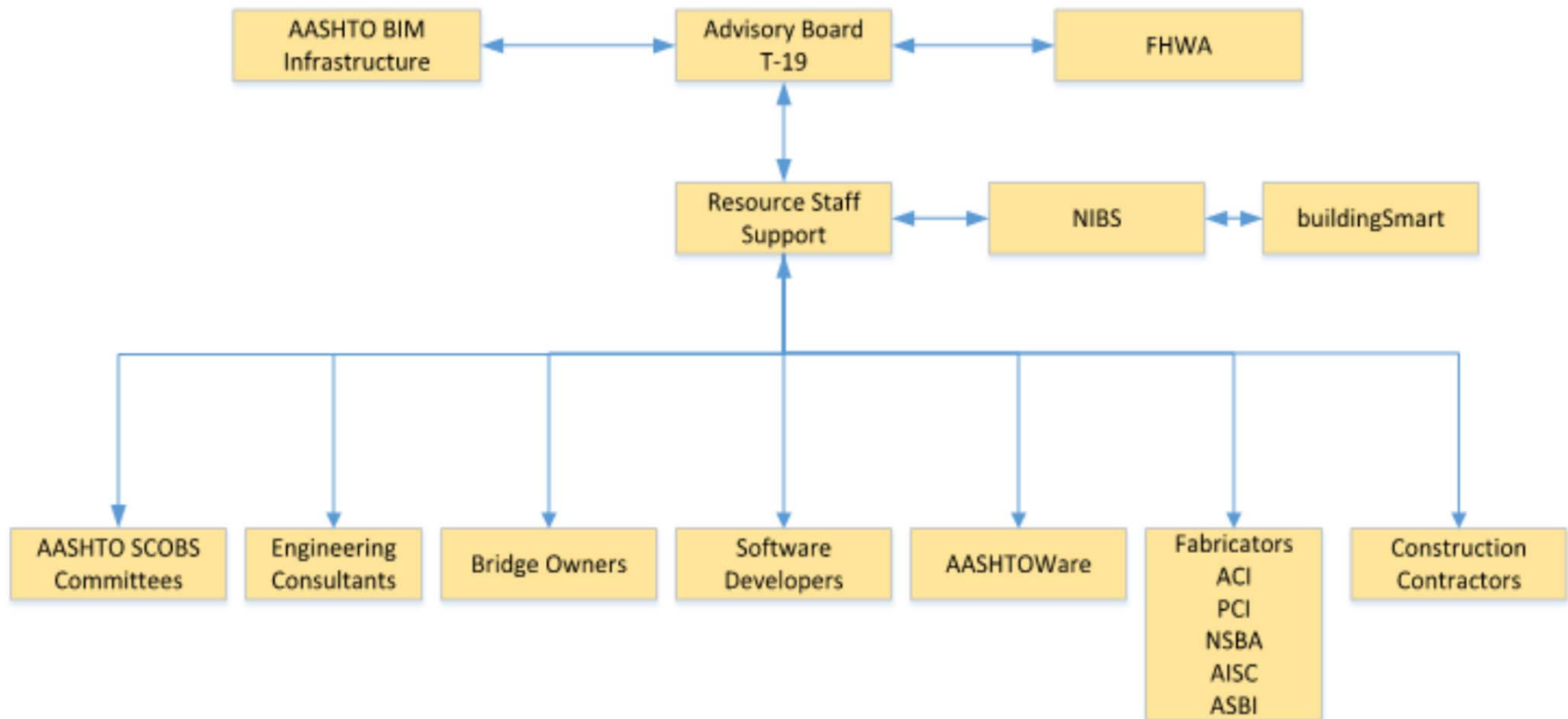
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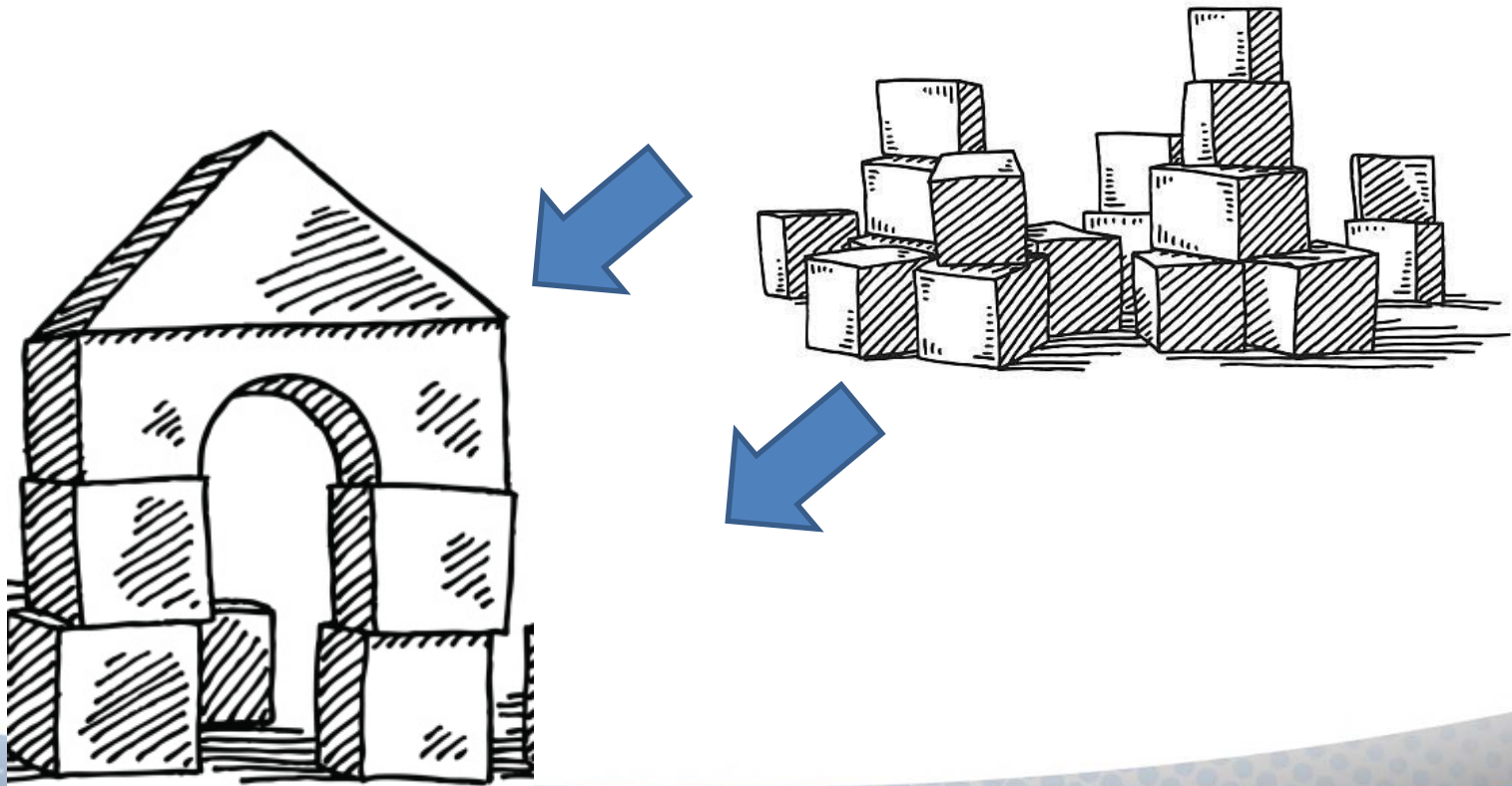
Task 2 – Stewardship Model 5: Hybrid Stewardship Model- REVISED (2/28/2017) BIM for bridges and structure



T-19 (2017) - Spokane

- We solicited states to participate in the pooled Fund Project
- Success!
 - We received commitments from 22 states and FHWA
 - Started project very quickly
 - We will be getting more states involved

What is it? - Conceptually



What's in it for SCOBS?

Bridging the Information Gaps



- Marketplace for BrIM in the Bridge Process



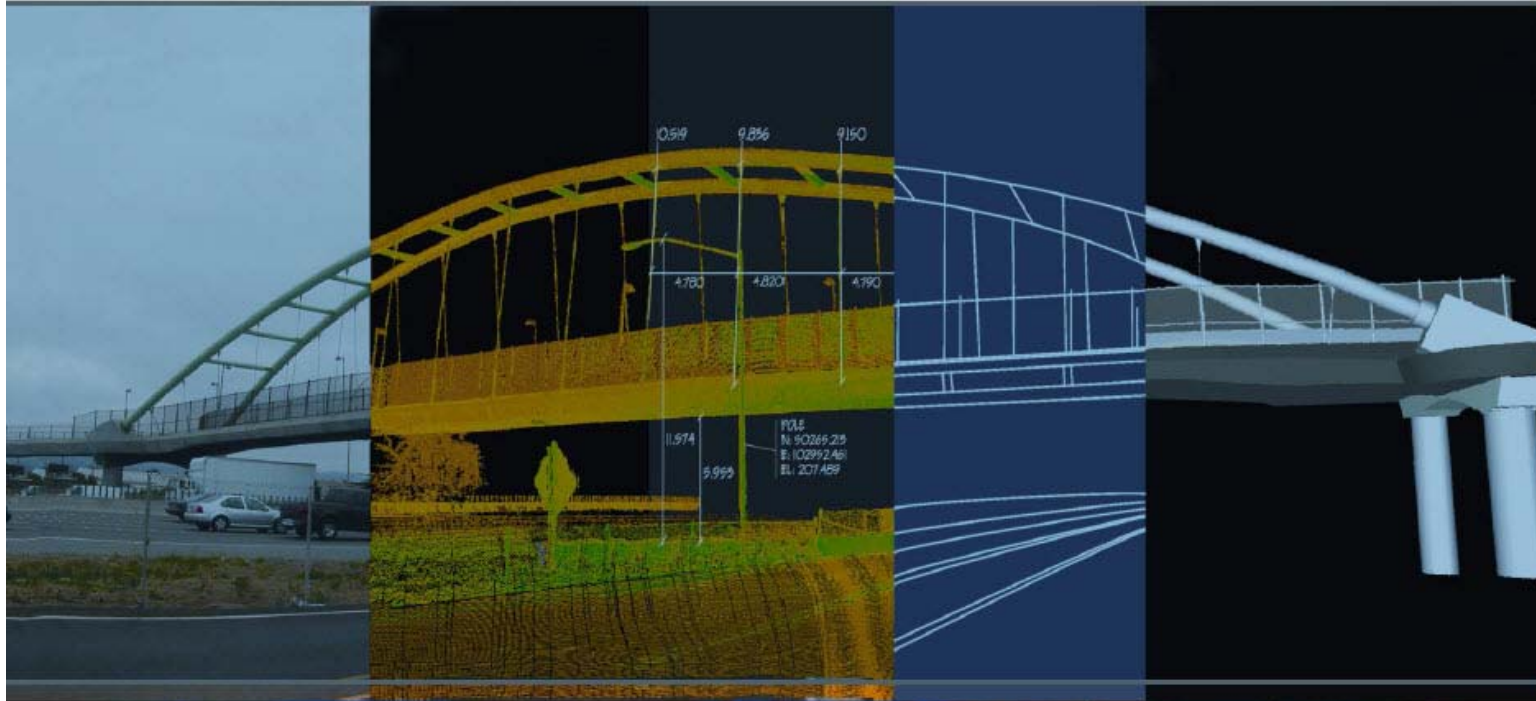
- ***Informed Planning***
- ***Coordinated Documents***
- ***Better Designs***

- ***Better Built Assets***
- ***Faster Completion***
- ***Reduced Cost of Construction***
- ***Commissioning***

- ***Optimal Use of Asset***
- ***Efficient Operation***
- ***Increased ROI***



CIM 3D Modeling: Zoo Interchange Design-grade/Post-construction Surveys



**Georeferenced
Hi-res Digital
Images**

**3D
XYZ Return
LAS Point
Clouds**

**2D -3D Feature
Lines
3D DTMs-TINs
X-Sections**

**3D
CIM-BIM
DSMs**

Today



It's Coming with or without US

- Other Disciplines very Far Ahead
- World Countries and AEC leading the way
- AMG / AI / Robotics Accelerated Advances

Challenge to You!

Consultants

Contractors

Fabricators

DOT and Owners

FHWA

Academia

Video



