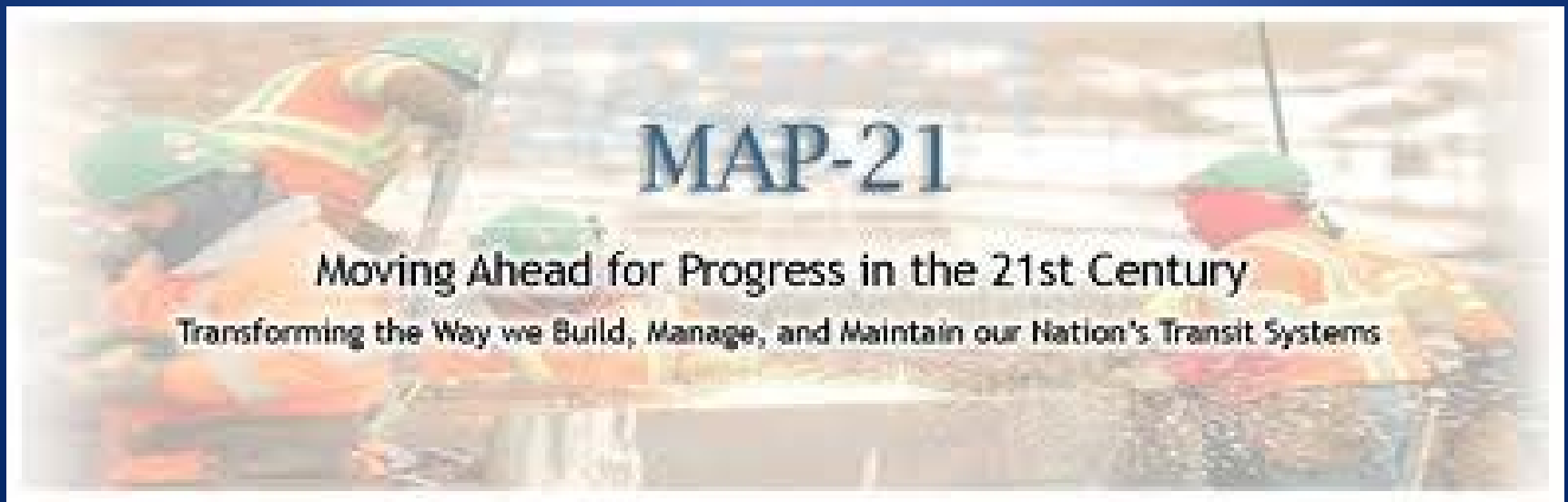


IHEEP 2014  
DIGITAL PROJECT DELIVERY

Danny Kahler, PE

# 2012 MAP-21 Law

The US Secretary of Transportation shall encourage the use of ***advanced modeling technologies*** during environmental, planning, financial management, design, simulation, and construction processes of the projects.



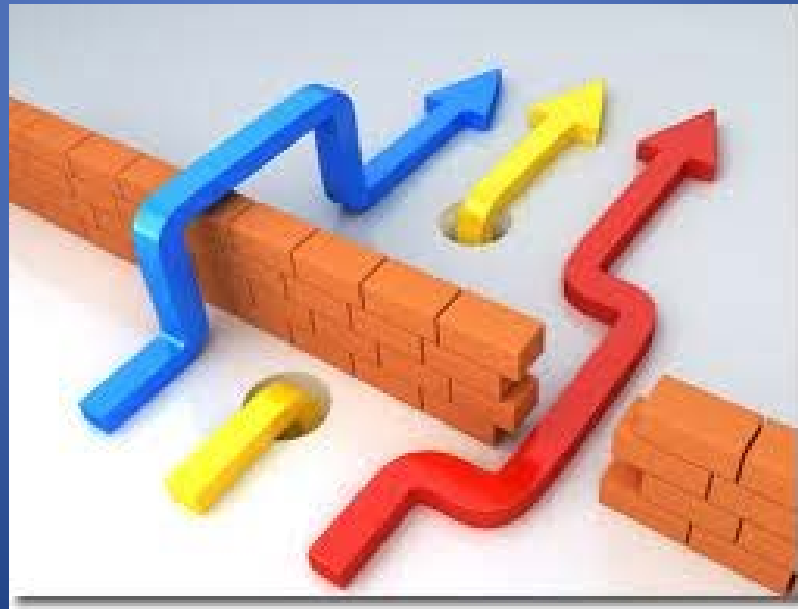
# Advanced Modeling Technology

Advanced modeling technology means an available or developing technology, including 3-dimensional digital modeling, that can:

- (A) accelerate and improve the environmental review process;
- (B) increase effective public participation;
- (C) enhance the detail and accuracy of project designs;
- (D) increase safety;
- (E) accelerate construction, and reduce construction costs; or
- (F) otherwise expedite project delivery with respect to transportation projects that receive *Federal funding*.

# Engineering Process Waste

2004 NIST report estimates 40% - 60% of time and money in engineering wasted creating, locating, and verifying non-interoperable analog information



That's 15.8 Billion Dollars Per Year!

