# **Technology Funding Opportunities** Leverage Federal funding to realize YOUR agency's Digital Dream

#### Patrick Holtz

- 25 years in Federal government relations
  - Represented all modes of transportation
  - Have worked within every facet of the life cycle: from the project level to the program level.
  - Clients have included: Bentley Systems, the Colorado Department of Transportation, the Port Authority of New York & New Jersey and LA Metro, Dallas Area Rapid Transit
  - Principal Planner, Northeast OhioAreawide Coordinating Agency (NOACA)



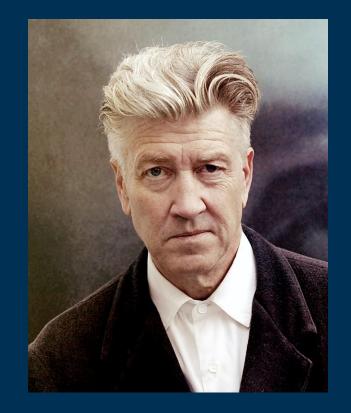
My value: The program itself. See it as an organic, growing entity. In submitting you are a steward, shaping it.



#### **Grants are Ideas**

"Ideas are like fish. If you want to catch little fish, you can stay in the shallow water. But if you want to catch the big fish, you've got to go deeper. Down deep, the fish are more powerful and more pure. They're huge and abstract. And they're very beautiful."

-David Lynch (Catching the Big Fish).





# **Funding Restrictions are Creative Fuel**





# **Creativity Application**

- BUILD Program
- \$10,0000 win
- Restriction: Little to no match available. Reliance on State DOT for implied match upon win.
- Creativity: Consciously applied rural projects to urban programs. Made our projects different. Multi-Modal and Multi-Species (horse and buggy)!







# **Current Programs to Work From**

- Rural and Tribal Assistance (RTA) Pilot Program
- Tribal Transportation Program Safety Fund
- BUILD
- INFRA
- TIFIA
- Safe Routes
- ADCMS



# Trimble Unity<sub>®</sub>

















# Why have an Asset Lifecycle Strategy?

40%

Organizations that employ Asset Lifecycle Management technology solutions **save as much as 40%** on the Total Cost of their Assets

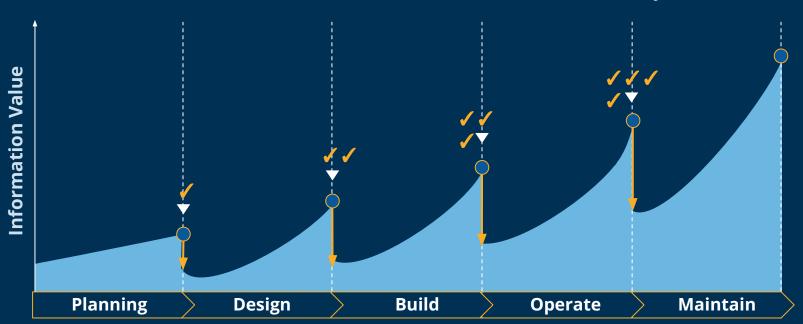
#### **Sources:**

- Woolpert Strategic Consulting 2024
- Deloitte Connected Asset Lifecycle Management 2018
- Committing to the Cost of Ownership: Maintenance and Repair of Public Buildings. Washington, DC: The National Academies



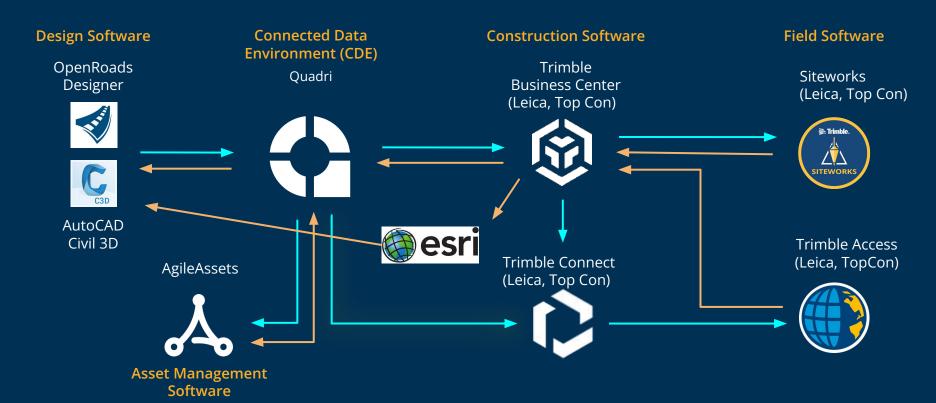
# Lost data causes productivity setbacks

**Actual State:** Information Loss Across The Lifecycle





# **Interoperability - Why it matters**

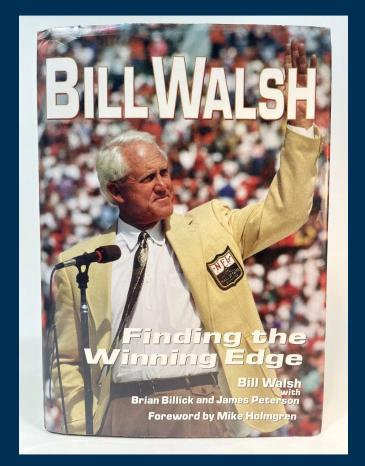






## The Winning Edge

- Experiences & Values
- The Organization
- The People
- The Game
- The Business





#### ADCMS Overview

- Tribes are eligible partners. State DOT's submit.
  - o Partnerships with Local Public Agencies (LPAs) and private sector
  - 3 applications per FY
  - Up to \$17 million available for each FY from FY 2024-26
- Award size: \$1-5 million (5-10 grants awarded per FY)



#### ADCMS Overview

- USDOT/FHWA goals
  - Safety
  - Climate change and sustainability
  - Equity
  - Workforce development, job quality and wealth creation
- Emphasis on partnerships and industry expertise
- Leverage ADCMS grant with other existing grant application efforts
  - Mega/INFRA/Rural
  - PROTECT discretionary



#### What ADCMS is **not**

- It is not a long, cumbersome grant-15 maximum pages for project description.
- A complicated grant: narrative, budget and supporting documentation
- A planning exercise. The intended purpose is the deployment of technology.
  - Rationale is to meet the goals of the FHWA BIM national strategy
  - Critical factor is "interoperability"--that is the competitive advantage
    - Go small that way.
  - Show how you are moving data through the life cycle with the technology you are requesting to implement



#### 22What were the experiences and values of Round 1 &2

- Very specific, boutique parts of the life cycle
- Interoperability-crossing the chasm from these boutique parts
- Collaboration
- Inefficiency: Workforce Development & Rapid
   Deployment of Technology. "Ready to Go" needs to be a value in Round 3.





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#### **The Organization**

- This is you. The owner.
- Submit for something you need. Fundamental. Begin there before trying to discern what FHWA wants.
- Grants.gov
- Understand your internal process on submission
- Talk to your government
   affairs team; their prior PNRS
   submissions can align with
   your ADCMS submission





## The People

- Internally
  - Coalition-building program between design, construction & asset management
- External Letters of Support
  - Software, hardware
  - Congressional
  - o MPO's





#### **The Game**

- Congressional oversight
- Expiration of IIJA
- What to do?
  - <u>Because</u> of these realities – you can create the most competitive application possible.

"While asking for what I need, I will draft an application that focuses on interoperability and collaboration and is enhanced **because** of the funding shortfall and is framed narratively to reflect the current and prospective conversation between FHWA & Congress."





# The Business

#### **Every Day Counts**

- 5 Frames offered for review
  - e-Construction
  - o 3D Engineered models
  - Unmanned Aircraft systems
  - e-Ticketing
  - Digital As-Build
- Level of Implementation
  - Not implemented
  - Assessment
  - Demonstration
  - Development
  - Institutionalized



Recommendation: Does your project hit one of these 5 frames? And if so, can you show progress on implementation?



#### **The Business**

- General Grant Tips
  - o The Project Name-What is it?
  - The Project Description-Reflects Every
     Day Counts Topics
  - The Budget Table-Reflects Ready to go! Tell that story!
  - Match-above 20%





## The Business

- Takeaways
  - Focus on "shovel" ready tech
  - What can you do in 1 years? (the life of IIJA)
  - o If you can help it, improve match beyond 20%
  - Project description that clearly addresses one of the 5 Every Day Count Topics
  - Clearly show how the tech progresses internally from demonstration to institutionalization





# **How We Can Help**

#### **Grants Development**

- Letter of Support
- Strategic Guidance
  - Project Description
  - Explain how our tools assist on collaboration and interoperability
    - Workflow assistance
  - Budget Table Assistance



#### **Benefits of ADCMS**

Management tools that connect project data across all phases of asset lifecycle management (ALM) such as design, build, operate, and maintain leading to safer, greener, more efficient projects that save money and bring equity and sustainability to your communities.

- Maximize interoperability with other systems, products, tools or applications
- Leverage automated and connected machinery
- Enhance data reporting and data management
- Decrease environmental footprint through more efficient construction projects



# Trimble ALM: Broad solutions for specialized agencies

#### **Planning**

- Funding Flow
- Public Engagement
- Right of Way Acquisition
- Design Letting
- ProjectVisualization

#### Design

- Existing Conditions Survey
- Design Iterations
- 3D Quantity Validation
- Constructability Review
- Contractor Letting

#### **Build**

- Machine Control
- Data Collection
- Quantity QA/QC
- Cost ManagementProject
- Management
- Bidding
- As-Built Model
- PMIS
  - Vertical
  - Horizontal

# Operate & Maintain

- Work Orders
- Field Operations
- Inspection
- Asset Inventory (Mobile Mapping)
- As-Maintained Model
- Facilities Mgt.
- Fleet Mgt.

#### **ALM:**

Bi-Directional data flow throughout the project creates a Digital Twin that exchanges information during the entire lifecycle of the asset

Data



"Trimble has been a valued partner to Caltrans that not only provides hardware and software, but has provided invaluable technical assistance by assisting with the improvements and innovations in other business practices."

# **How We Can Help**

- Collaborate an an industry partner
- Strengthen your application with relevant project experience
- Provide technical assistance and expertise for your project
- Assist with development and writing of the grant application
- Contact Pat on next steps





#### Questions

#### **Thank You**

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