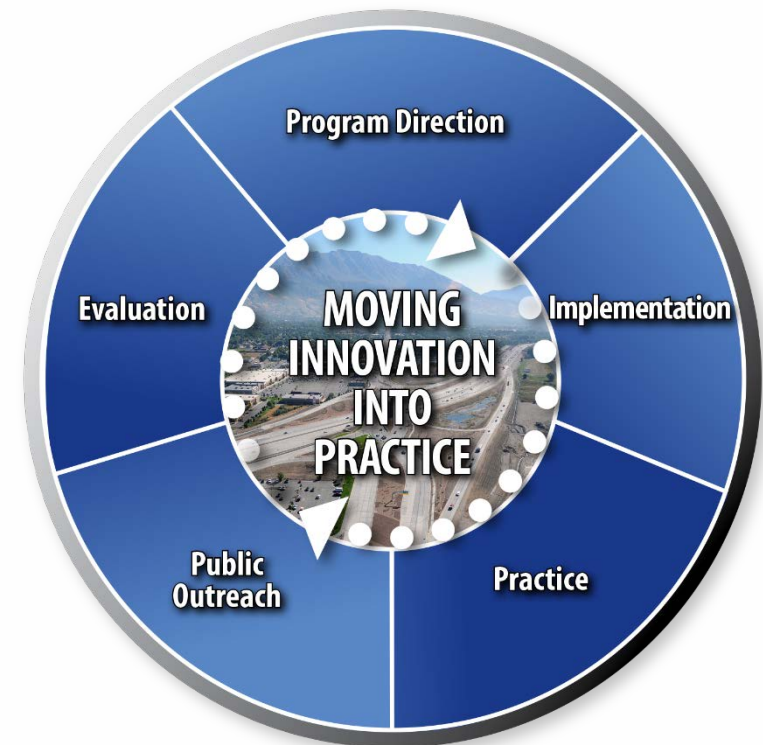


Moving Innovation Into Practice

Carmen Swanwick, S.E
UDOT Chief Structural Engineer

Presentation Outline

- Program direction
- Implementation
- Practice
- Public outreach
- Evaluation



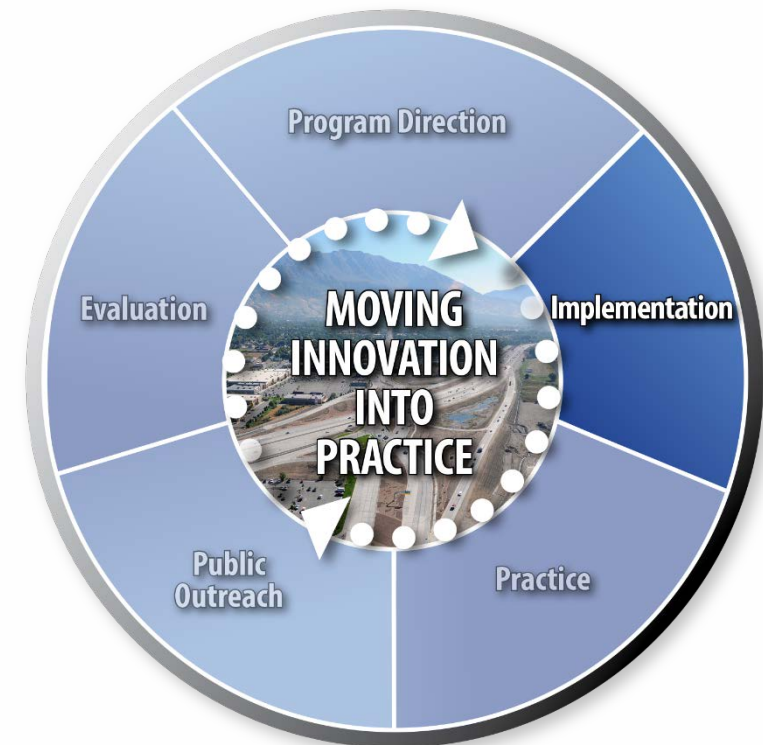
Program Direction

- Establish goals
- Understand the risks
- Recognize benefits



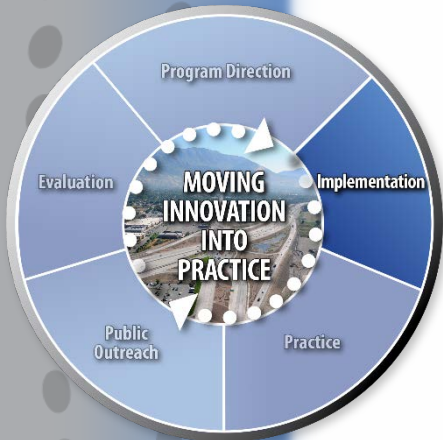
Implementation

- Research
- Get involved nationally
- Market internally and externally
- Perform scanning tours
- Conduct pilot project
- Identify program of projects



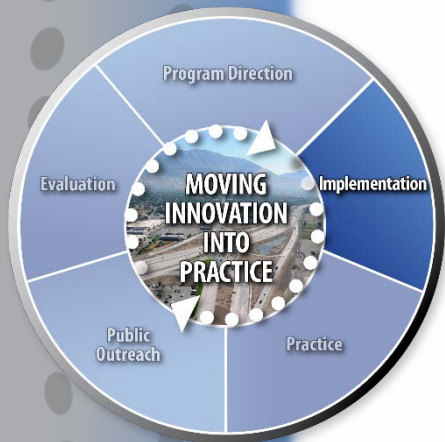
Implementation

PBES; Hoytsville Road over I-80 (Wanship); Design-Bid-Build



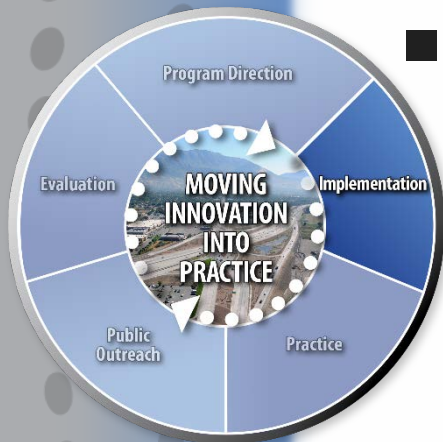
Implementation

- Program of projects
 - Prescriptive projects – gain experience
 - Design-Bid-Build
 - Construction Manager General Contractor (CMGC)
 - Performance projects – innovations led by contractor
 - Design-Build



Implementation

- Conduct workshops
- Establish common applications
- Provide training
- Obtain feedback
- Share lessons learned

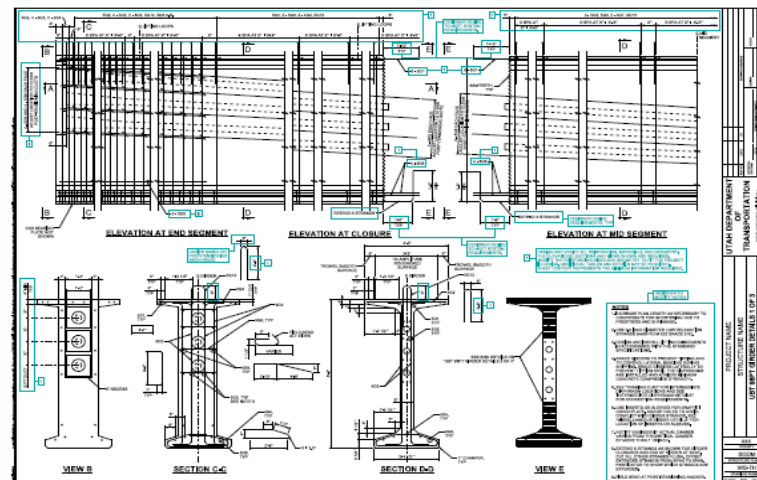
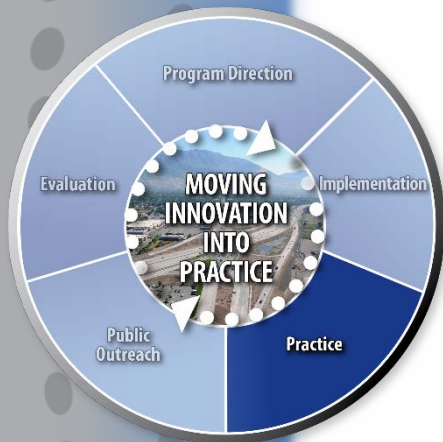


Practice

- Integrate innovation
- Perform projects



- Integrate innovation
 - Develop common details
 - Establish policies, procedures and specifications
 - Provide training and technical support

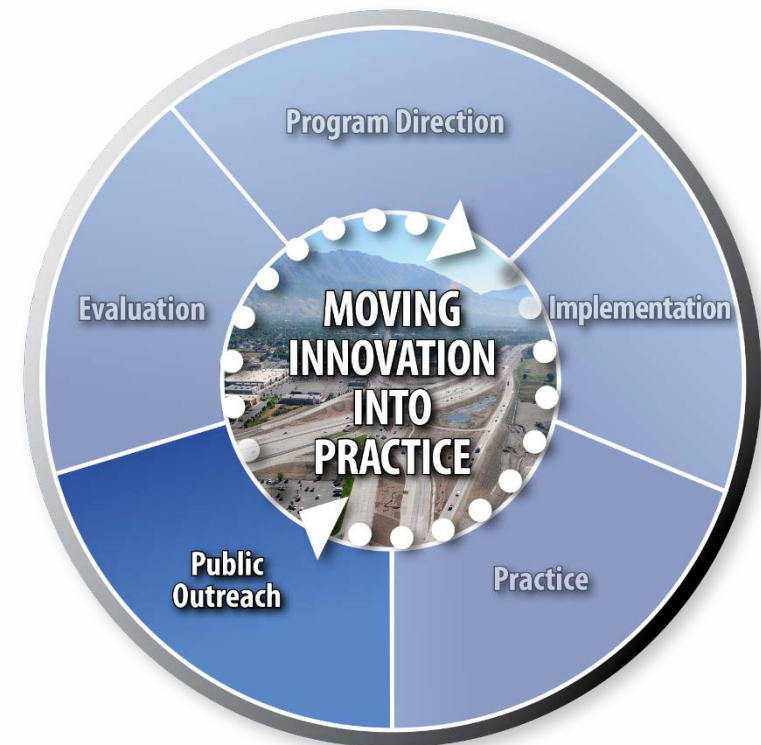


Public Outreach

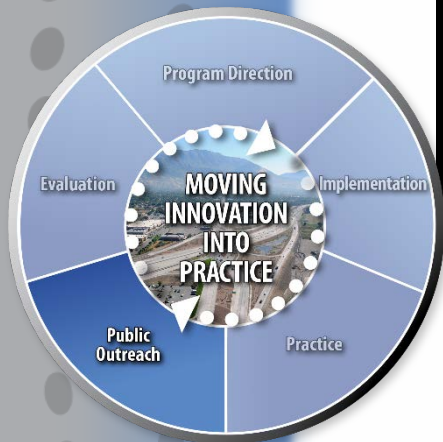
- Continue industry communication
- Implement marketing and messaging plan
- Prepare visual animations



354 Feet Long | Two Spans | One Big Night



Public Outreach



Evaluation

- Lessons learned
 - Perform program review
 - Find program deficiencies
 - Repair deficiencies
 - Review design decisions
 - Measure design assumptions vs. reality



Evaluation

Public Support

Political Capital

ABC

Design-Build

CMGC/CM at Risk

P+T

Total Project Cost

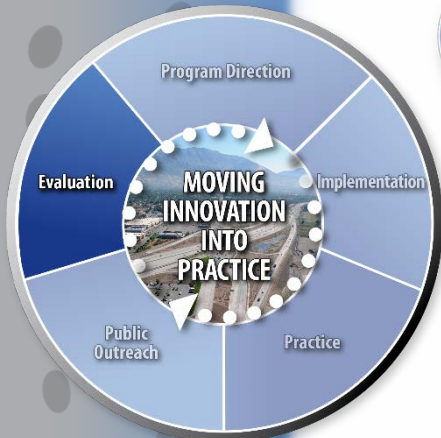
Societal Costs

Total Closure

Lane Rental

Limitation of
Operations

Incentives\
Disincentives

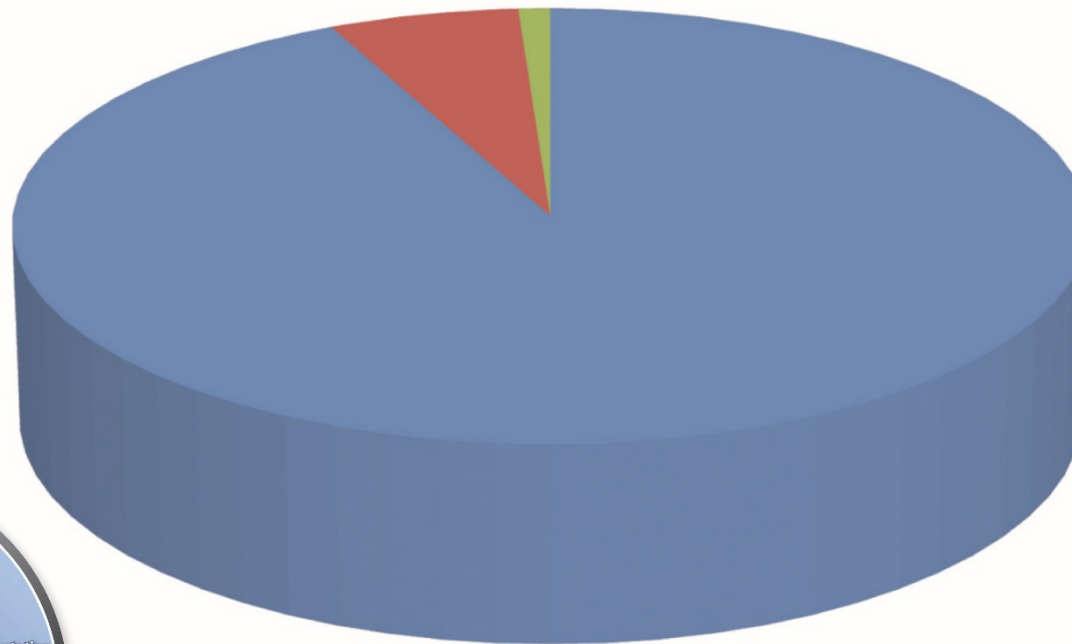


- Public support
 - Value added to the public
 - Societal costs minimized
 - Public support for innovation
 - Political capital



Evaluation

Have you seen or heard of this new ABC method of constructing bridges?



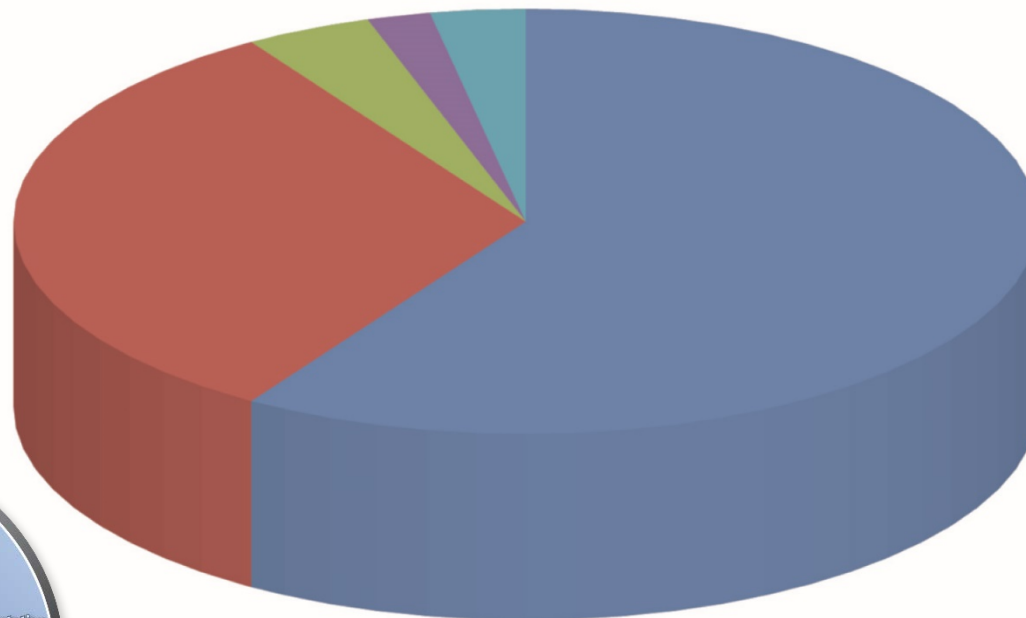
-  **93%** Yes
-  **6%** No
-  **1%** Don't know

Source: 2011 UDOT Annual Survey



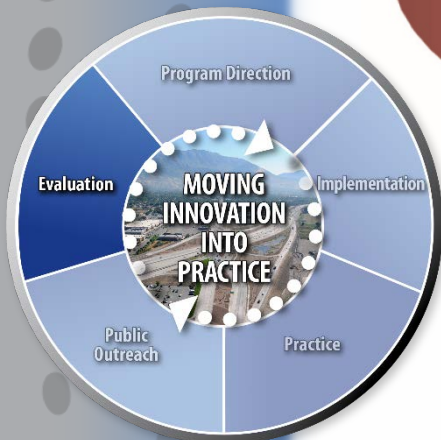
Evaluation

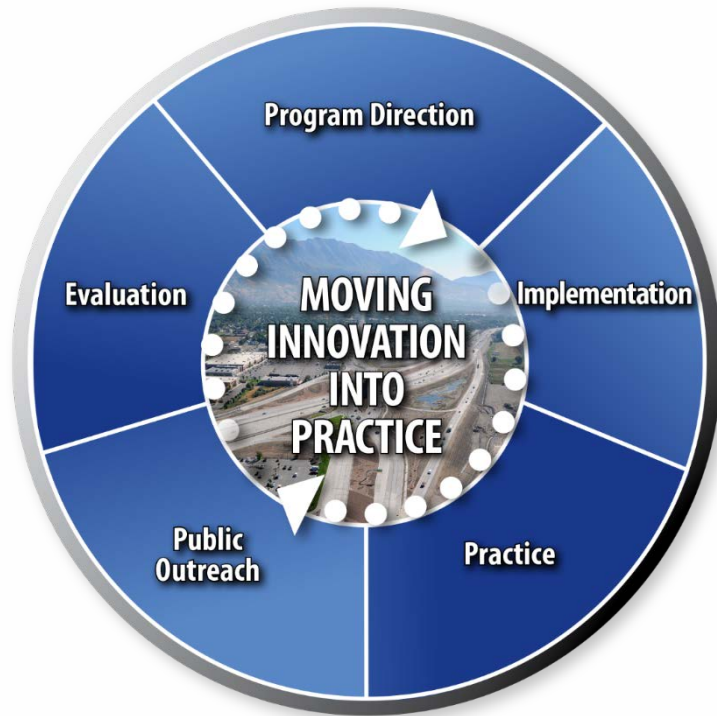
Knowing that ABC reduces traffic congestion and road closures, but increases costs, do you favor or oppose UDOT continuing to use ABC to build bridges on its major highways?



- 59%** Strongly favor
- 32%** Somewhat favor
- 4%** Somewhat oppose
- 2%** Strongly oppose
- 3%** Don't know

Source: 2011 UDOT Annual Survey





Thank You!

Moving Innovation Into Practice

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