The Future of Bridges Challenges and Opportunities for Preservation

Carmen Swanwick, S.E

Utah Department of Transportation

Project Development Director













Mission and Vision

Collectively leading and serving the bridge community to provide safe bridges and structures that are:

Resilient, Innovative,
Sustainable, and
Efficient
(RISE)



Strategic Plan Goals

GOAL 1: Maintain and enhance the AASHTO specifications

GOAL 2: Maintain, enhance and grow the workforce

GOAL 3: Assess the condition of bridges and structures

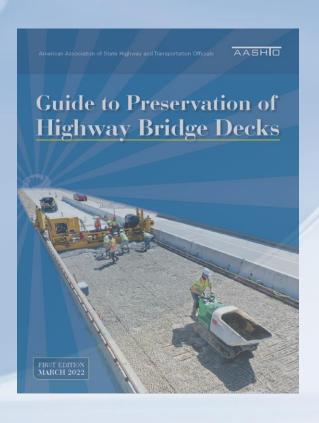
GOAL 4: Manage the inventory of bridges and structures

GOAL 5: Advance methods for project delivery

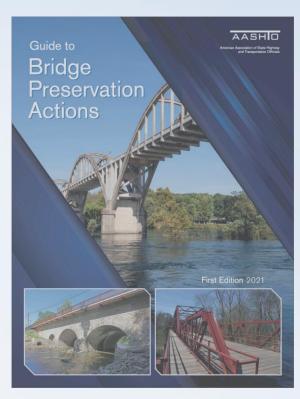
GOAL 6: Strategically plan and promote research

GOAL 7: Contribute to national policy

Technical Committee on Bridge Preservation



- AASHTO Guide to Bridge Preservation Actions
- AASHTO Guide to Preservation of Highway Bridge Decks
- Guide Specifications for Service Life Design of Highway Bridges
- Historic Bridge Preservation Guide
- Guidelines for Historic Bridge Rehabilitation and Replacement



National Aging Infrastructure

Cracking Spalling Corrosion



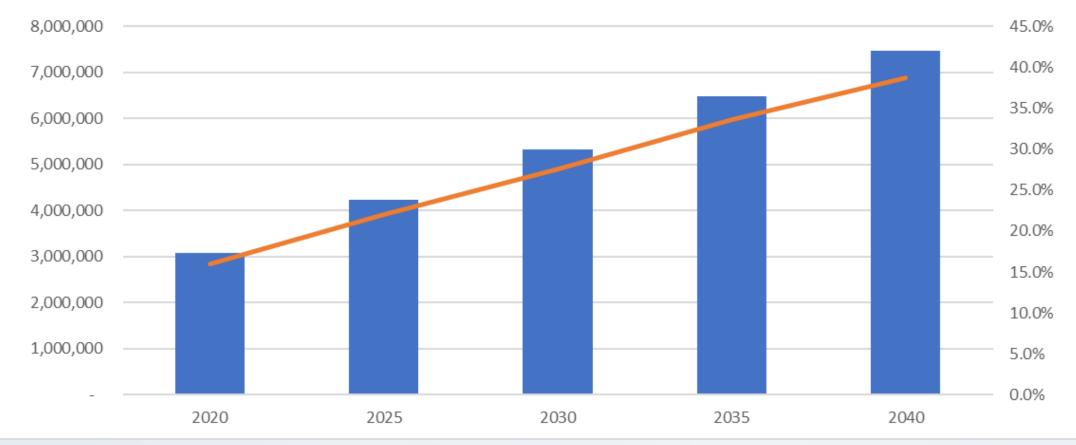
Age
Deicing chemicals
Vehicle overloading



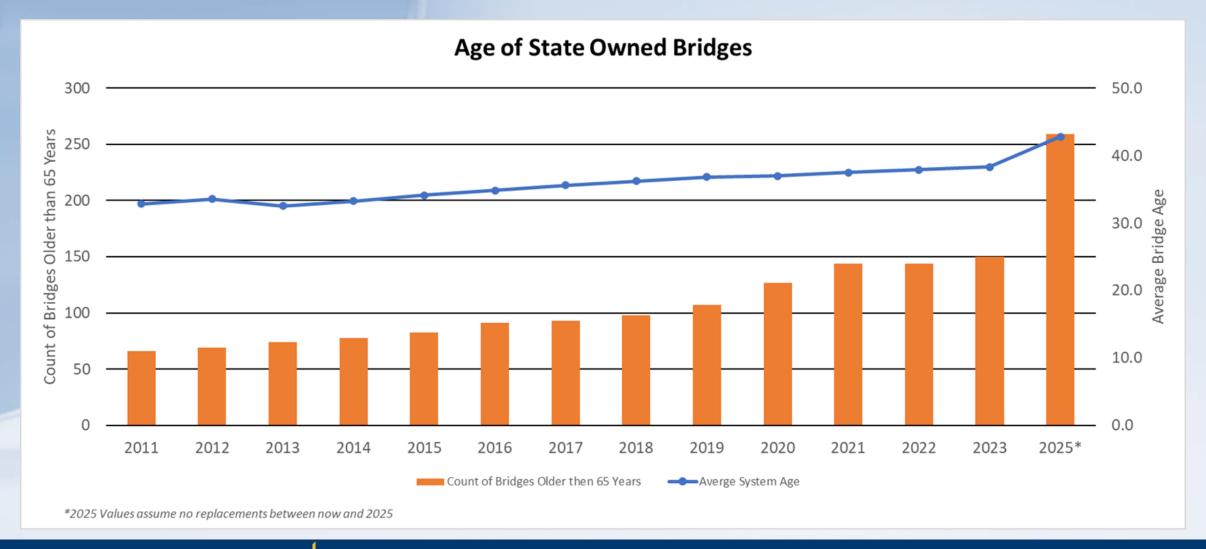
Condition assessments
Better materials
Treatment options
Decision making tools

Utah Bridges

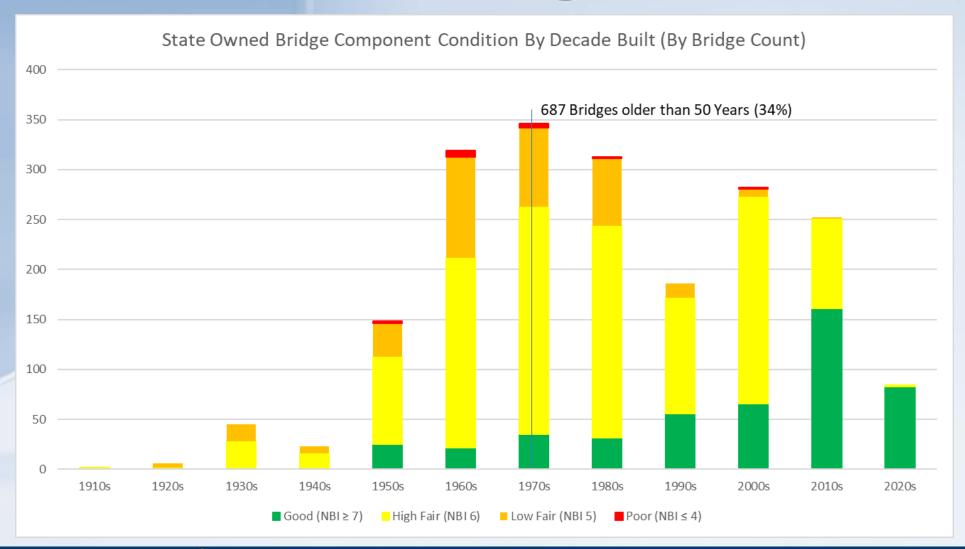




Utah Bridges



Utah Bridges



Challenges

Project cost increases

Increased inventory

Appropriate funding levels

Materials

Preservation warranties



Next Steps

- Develop cyclical preservation plans
- Create a national database of material products and performance
- Perform more research to validate improvements
- Develop better decision making tools for preservation treatments
- Continue to message the needs and benefits of preservation

Workforce Development



Thank You