

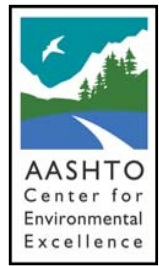


# Clarks Branch to Tunnel Mill Race Project

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- Replace 9 bridges, repair 2 bridges
- \$34.8 million
- Interstate 5
- Design-Build
- First project to use environmental programmatic permits
- Part of the Oregon Transportation Investment Act III bridge program





# Oregon Transportation Investment Act III

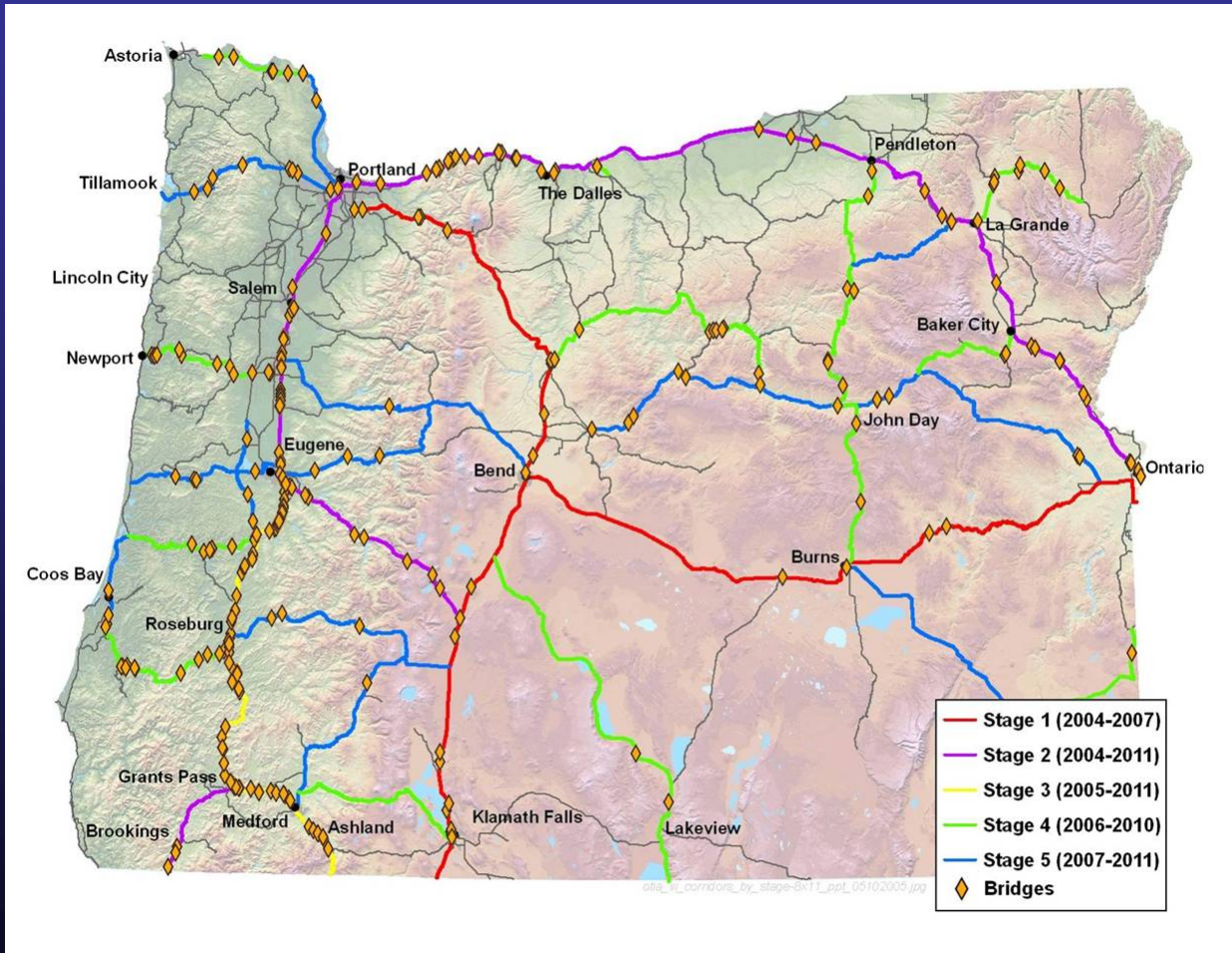
## Program

- Replace or repair 365 bridges
- \$1.3 billion
- 8-10 years
- Status
  - 2 years into program
  - 22% design, 11% construction complete

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# Location Map



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# OTIA III Bridge Program Goals

1. Stimulate Oregon's economy
2. Employ efficient and cost-effective delivery practices
3. Maintain freight mobility / keep traffic moving
4. Build projects sensitive to their communities and landscape
5. Capitalize on funding opportunities

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# Context Sensitive & Sustainable Solutions (CS<sup>3</sup>)

Context Sensitive Solutions

+

Sustainability

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# Main CS<sup>3</sup> Elements

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- Economic Stimulus
- Diversity
- Cost-effectiveness
- Mobility
- Public Information/Involvement
- Environmental justice
- Environmental Program Management
- Sustainability



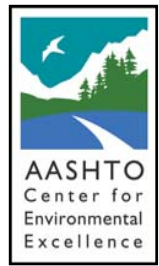


# CS<sup>3</sup> Approach

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- Stakeholder participation in issue identification and resolution
- CS<sup>3</sup> guidebook and mandatory training
- Early consideration of CS<sup>3</sup> elements in projects
- CS<sup>3</sup> Performance Measures





# Compatibility with Natural Environment

- Environmental Needs: permitting and stewardship
- Major Issues: volume of work and timing
- Resolution Methodologies:
  - Stakeholder workshops
  - Environmental Baseline Reports
  - **PARIT**- Programmatic Agreements Reporting and Implementation Team
  - Environmental Performance Standards
  - Programmatic Permitting

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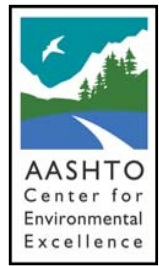


# Stakeholder Workshops

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- Led by Wayne Kober - AASHTO CEE Technical Assistance Program
- Six days
  - NEPA and Context Sensitive Design
  - Natural Resources and Permits
  - Cultural Resources
- Participants
  - State and federal regulatory agencies
  - FHWA
  - Governor's office
  - Construction contractors and A&E consultants
  - ODOT managers and staff





# Environmental Baseline Reports

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- Prepared for each bridge before design started
- Literature review and fieldwork
- Area of Potential Impact
  - Rural Interstate 1000 x 4000 ft
  - Rural non-interstate - 1000 x 2000 ft
  - All urban – 500 x 2000 ft
- Written reports and GIS layers
- Designers build-in avoidance
- Minimizes re-design





# Stakeholder Involvement

- Workshops
- **PARIT**
  - Jointly developed performance standards and single permit application
  - Biweekly meetings to review projects and program
- Funding regulatory agency liaison positions

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# Environmental Performance Standards

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- Single set of terms and conditions for the programmatic permits
- Guidance to achieve program goals and objectives
- Outcome oriented versus prescriptive measures
- Means to confine effect to that allowed in programmatic permits





# Programmatic Environmental Permitting

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- Goals:
  - Reduce bridge design and environmental permitting times
  - Reduce cost and schedule impacts from re-design
  - Maintain ODOT's strong commitment to environmental stewardship
- Benefits
  - coordinates the requirements of multiple agencies
  - eliminates the confusion and duplication
  - ensures comprehensive environmental protection
  - Permitting is cheaper and faster
  - Design effort is more efficient





# Clarks Branch to Tunnel Mill Race

- First bridge to test the system
  - No programmatic permits had been processed by agency partners
- Replacement bridge, with significant in-water work
- Crossed major waterway, on major highway
- Design-build project

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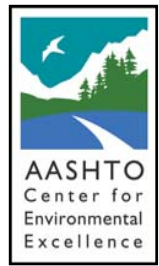


# Clarks Branch to Tunnel Mill Race

- Design-builder met with ODOT for two two-hour meetings prior to submitting permit application to agencies
  - Calibrated application content and format understanding
  - Calibrated EPS intent and understanding
  - Calibrated submittal process understanding
- Extremely minimal coordination efforts for even standard permitting process

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# Clarks Branch to Tunnel Mill Race

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- Design-builder submitted the application within a few weeks of notice to proceed
  - Example of minimal content necessary
  - Design was hardly at type, size, and location phase
  - No plan sheets or reports were available
- Uncertainty in design and construction – but not in permitting process/requirements





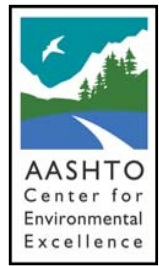


# Clarks Branch to Tunnel Mill Race

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- Design-builder invited agencies to the site during permit processing
  - Key design-build team members were present, including:
    - Project Manager
    - Design Manager
    - Construction Manager
  - Early coordination facilitated agency understanding
  - Q&A opportunity facilitates agency “comfort”
- Maintaining collaboration and communication





# Clarks Branch to Tunnel Mill Race

- Authorizations received within 31 days of submittal
  - Standard process can exceed 135 days for one regulation
  - Minimal agency review questions because of EPS
  - Agencies pleased that enhancement and avoidance were driving design and construction practices

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# Accomplishments

- First bridge replaced
  - Complied with Environmental Performance Standards
  - Reduced permitting by 100+ days
  - Reduced cost by \$1+ Million
  - Pleased Contractor, ODOT and Permitting Agencies



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# Challenges

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- Requires substantial initial investment
  - Workshops
  - Development of performance standards & programmatic permits
  - Environmental Baseline Reports
  - Training for consultant & agency staff
- Requires commitment from agency leaders
- Requires trust between all parties





# CSS Bottomline

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- How were our actions different?
  - Environmental data gathered before design started
- How was our attitude different?
  - Worked cooperatively with resource agencies to save time and money and to get better environmental performance
- How was our decisionmaking different?
  - Designers considered environmental impacts from the beginning
- How did our customers respond as partners?
  - **OUTSTANDING!**





# Contact Information

- For further Information please contact

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503 986-6612 [jim.b.cox@odot.state.or.us](mailto:jim.b.cox@odot.state.or.us)

OTIA III Bridge Program

[oregon.gov/ODOT/HWY/OTIA/bridge\\_delivery.shtml](http://oregon.gov/ODOT/HWY/OTIA/bridge_delivery.shtml)

or

[OBDP.org](http://OBDP.org)

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