

## Future of Washington Infrastructure

**2015 Infrastructure Assistance Coordinating Council  
Annual Conference**

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## Infrastructure = Boring!? ...but it's SO Important!




- ▶ Economic Development
  - ▶ Environment
  - ▶ Quality of Life

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- Vital services
- Affordability for residents and business
- Job creator & sustainer
- Attract real estate/business investment

## We're going to spend staggering sums

...in the coming decades to keep our transportation, energy, water, and waste systems in working order.

- ▶ Globally, \$57 trillion will be required for infrastructure by 2030 just to keep up with GDP growth -- McKinsey and Company
- ▶ Along the Pacific Coast, \$1 trillion needed the next 30 years -- CH2M Hill



How do we get *smarter* about how we'll invest this money?

## Our Infrastructure Deficit

- 1. Capital funding is lagging to restore aging facilities, and to accommodate growth.
  - ▶ Traditional state and federal funding sources have shrunk (*or are being 'swept'!*)
  - ▶ Revenues may decline as people get more efficient
- 2. Budgets for O&M are under serious strain as systems age and costs escalate.
  - ▶ Maintenance deferred is 2-4x more expensive



## Innovation Required!

"We're making decisions today that we'll live with for 50 years. We can't keep doing things the way we always have."  
-- Peter Binney, 2011 winner of the ASCE President's Medal




**The purpose of the Center for Sustainable Infrastructure:**

- Advance a new sustainable infrastructure paradigm and practice
- Help Washington and Oregon become nationally-recognized innovators in sustainable infrastructure solutions.

## Interview 70 Thought Leaders and Innovators

- ▶ From Washington, Oregon and British Columbia
- ▶ Span the energy, transportation, water and waste sectors, plus cross-cutting experts.



**Special report:**

Inspiration and guidance for current and future infrastructure leaders, policymakers, and change agents.



### Go for the Triple Crown: Fiscally Sound, Resilient, and Sustainable

The best infrastructure solutions optimize simultaneously for:

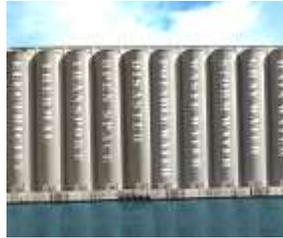
- ▶ affordability for residents and businesses, for the long-term
- ▶ superior environmental performance
- ▶ resilience in the face of major disruptive events



And the Fourth Crown:

- ▶ multiple community-wide benefits - economic, public health, social, environmental

### Encourage Silo-Busting



Build collaboration to:

- ▶ manage these as parts of a larger whole
- ▶ find valuable synergies

### Build a Better Business Case

▶ Before committing real money to business-as-usual projects and programs:

- ▶ Invite innovative ideas
- ▶ Thoroughly compare options to find ones with the most community-wide benefits

▶ Measure full benefits and costs, and to do it on a life-cycle basis.

- ▶ Within the department silo, to government more broadly, and to the community.



Shining Example:

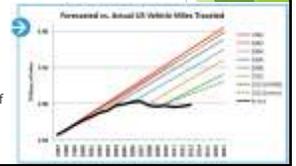


### Choose for a Changing World

▶ Infrastructure decision-makers must increasingly be future-casters.

▶ It's vital to build infrastructure systems well-adapted to our changing world

- technology revolutions and breakthroughs
- environmental stresses
- changing living patterns and lifestyles of the next generation



### Get Smart

▶ Today people carry devices packing information, communications, and monitoring capabilities unimaginable a generation ago.

▶ Advanced technologies are transforming many industries.

▶ Infrastructure managers could achieve radical cost efficiencies and service gains.



### Build Community Prosperity

▶ Infrastructure is a job generator and vital to local business and economic vitality.

▶ Integrate the community's strategies for infrastructure and economic development

- Opportunity to in-source infrastructure jobs and lift segments of community too often left out.

▶ Higher education can build the critical pipeline of local talent

- The infrastructure workforce is graying!



**Bottom Line:  
We Need Infrastructure Innovators**

We're running a serious infrastructure deficit  
The workforce is aging (*10% of national employment!*)

**We need to:**  
Reimagine our Infrastructure Systems - Innovate!  
Rethink Infrastructure Investment!  
Inspire and Mentor a New Generation of Planners and Managers!




**Two 'Asks' for You:**

1. Feedback on the 'Future of Washington Infrastructure' group's draft vision and goals
2. Take the AWC infrastructure survey

**Growing Appetite for a New Strategy**

"...(W)e need a far-sighted **Statewide Infrastructure Strategy** that starts with meeting the needs of Washington communities and builds the capacity of our people, our economy, and our government to thrive throughout the 21<sup>st</sup> century... A key question is: How can the state get smarter about how it invests infrastructure dollars to deliver more long-term value in Washington communities?"

-- From the vision statement of the *Future of Washington Infrastructure* group

**Future of Washington Infrastructure - Participants**

Staff from:

- ▶ Association of Washington Cities
- ▶ Washington State Association of County
- ▶ Washington Association of Sewer and Water Districts
- ▶ Washington PUD Association
- ▶ Washington Department of Commerce/Public Works Board
- ▶ Building Industry Association of Washington
- ▶ Washington Department of Ecology
- ▶ Washington Department of Health
- ▶ ...and several others

**AWC - Future of Washington Infrastructure Survey**



- ▶ Challenges and impediments to delivering infrastructure projects
- ▶ Policies and strategies to address those challenges

**Wiki-Survey**

From 'All Our Ideas' - a research project based at Princeton University

- Support from Google and the National Science Foundation



- ▶ "...a new form of social data collection combining the best features of quantitative and qualitative methods
- ▶ ...that has the scale, speed, and quantification of a survey
- ▶ ...while still allowing for new information to 'bubble up' from respondents as happens in interviews, participant observation, and focus groups."



For more information, contact...

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The logo for the evergreen state college Center for Sustainable Infrastructure is located at the bottom left of the slide. It features the college's name in a green box above the center's name in a blue box.