

DAVID EVANS
AND ASSOCIATES INC.

## Review of Day 1 and 2

Presented by

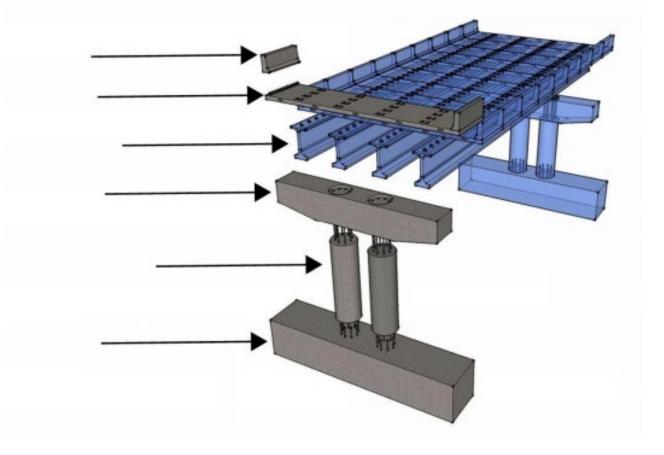
Travis Kinney



#### **Bridge Components and Elements**

- Lots of bridge types and different requirements.
- Is it a deck, or a top flange or a slab?
- Is it broken?

11. (6 pts) Label the bridge elements on the following diagram:





#### Silica Regulations

- Silica is everywhere.
- Small amounts matter.
- PPE is not our first line of defense.
- Stop Silica at the source.
  - Water
  - Vacuum Controlled





#### Timber Pile Repairs

- Lots of work for Oregon
- Example of posting repair
- Temporary repair options as well.
  - Pushed piles
  - Banding
  - Bolting on channels
  - Adding in temp supports





#### Scour

- # 1 Bridge Killer
- Even the high desert isn't safe.
- Learned about the program side of scour
- Saw some pretty cool methods of isolation and scour installation





#### **Bridge Joints**

- Lots of types
- Many of them have pros and cons
- Hopefully you had a chance to look at the demos





#### **Demo: Timber Inspection**

- Can you find the rot?
- Is a hammer enough?





#### Demo: Timber Pile Repair

- Timber Pile Repair Cut out
- Welded pipe pile splice







### **Demo: Crane Setup**







#### **Demo: Emseal Joints**





### Demo: Asphaltic Plug Joint





## Demo: Aqua Dam







#### What we do



**Energy** 



Land Development



**Transportation** 



Water and **Environment** 

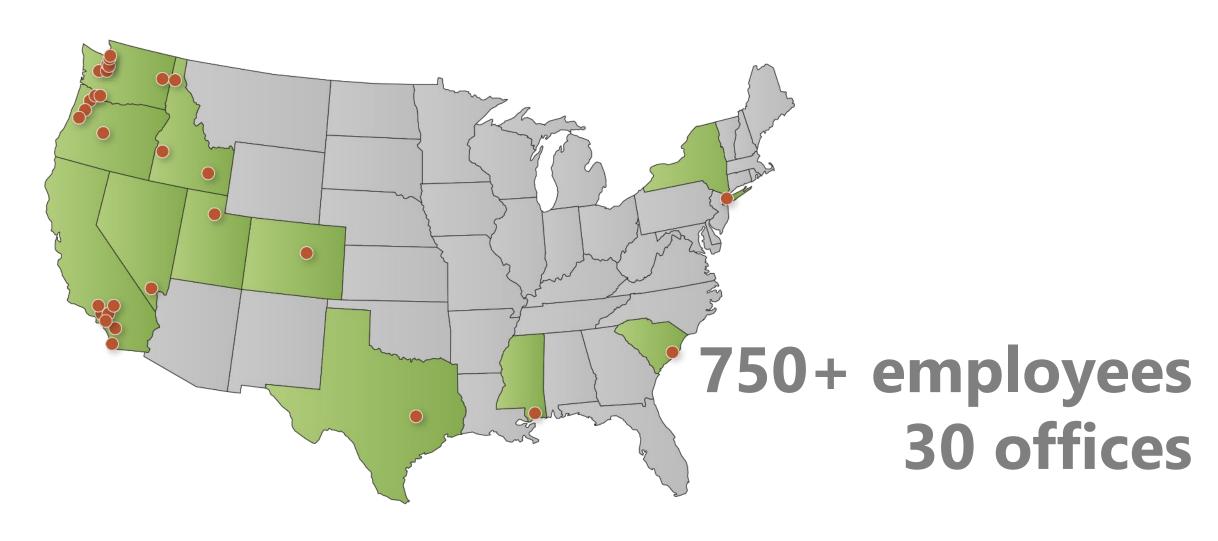


**Surveying and Geomatics** 



**Marine Services** 

# We are where you are





6,500 megawatts
POWERING
1,120,000
Households annually

REDUCING
6,720,000
tons of greenhouse gas / yr

# Recent awards

2020 Best in Transportation, I-205: Johnson Creek - Glenn Jackson Bridge, Phase 2, ACEC Oregon

2020 Honor Award, SW 124th Avenue Improvements, ACEC Oregon

2020 Honor Award, Chetco Point Memorial Trail Project, ACEC Oregon

2019 Outstanding Urban Land Development Project, Uptown Newport Village, ASCE Orange County

2019 Outstanding Architectural Engineering Project, The Boardwalk Project, ASCE Orange County

2019 Award of Merit, Century Boulevard Extension from Grape Street to Alameda Street: Highway Bridges, ENR California

2019 Outstanding Roadway and Highway Project, Century Boulevard Extension – Grape Street to Alameda Street, ASCE Los Angeles

2019 Gold Award, Restoration of the Mariposa Grove of Giant Sequoias, ACEC Washington

2019 Best in Transportation, Nehalem River (Lommen) Bridge Replacement, ACEC Oregon

2019 Honor Award, Mirror Lake Trailhead Relocation, ACEC Oregon

#### **Solutions**



**ALTERNATIVE PROJECT DELIVERY** 

**CONSTRUCTION ENGINEERING** 

**ENERGY DEVELOPMENT** 

**ENGINEERING** 

**GENERAL SERVICES AGREEMENT** 

LANDSCAPE ARCHITECTURE

**PLANNING** 

**PROJECT MANAGEMENT** 

NATURAL RESOURCES



#### Social Responsibility



Our social responsibility is uniquely aligned with our strategy to improve the quality of life while demonstrating stewardship of the built and natural environments.















2016 Award of Excellence, California Parks and Recreation Society



#### **Memory Lane Park**

Santa Ana, California