



Board of County Commissioners

**Project Update
December 9, 2014**

Agenda

- Project Dashboard
- Equity Dashboard
- Construction Update
- Sustainability

Schedule Milestones

	Estimated Completion	Status
- 100% Miles Place Design	April '14	Complete
- Stephens Creek Construction	June '14	Complete
- Miles Place Construction	Winter '14	On-going
- Complete Land Use / ROW	Spring '15	On-going
- Long-Term Maintenance IGA	Spring '15	On-going
- Metro Agreement	Spring '15	On-going
- Macadam Bay Driveway	Summer '15	On-going
- Overall Project completion	Fall '16	On-going

Recent & Upcoming Meetings and Board Actions

BCC Briefing	10/7/14
BCC Briefing	12/9/14
BCC Briefing	2/24/15
BCC Briefing	4/21/15
BCC Briefing	6/23/15

Public Involvement

Thru November, 2014

- Schools outreach for the 2014/2015 school year gets kicked off
- Provided ongoing traffic updates
- Kept bridge neighbors informed of ongoing work
- Final plans made for fall/winter schools outreach program

December 2012 Project Funding Plan

Multnomah County VRF (Collected)	\$ 22,708,000
Multnomah County VRF (Bonded)	\$ 141,684,000
City of Portland	\$ 74,750,000
Oregon Jobs and Transportation Act	\$ 30,000,000
2012 Oregon Legislature	\$ 5,000,000
Federal funds carryover from planning	\$ 15,658,000
Federal TIGER III Act	\$ 17,700,000
TOTAL	\$ 307,500,000*

*VRF provides adequate funds to cover anticipated County expenditures

Stakeholder Issues

Thru November, 2014

- Concerns from commuters/business owners about Nov. bridge closure
- Bridge closure causes traffic delays
- Coordinating temporary business signage near construction on east
- Stakeholder coordination for Macadam Bay driveway

Project Expenditures (post-ROD)

	\$ Spent	
ROW	\$ 24,756,013	As of Dec 2014, the total cost is anticipated to be 0%-3.25% above the original projection. (\$307,500,000 - \$317,500,000)
Design/pre-con.	\$ 29,175,134	
Construction	\$ 163,447,952	

Total expended \$ 217,379,099 thru October 2014

Social Equity

Thru September, 2014

A&E Team (Design) Sep '12	Goal	To Date	Status
DBE	7%, (\$1.0m)	9.0%	Complete
MWESB	13%, (\$1.8m)	14.9%	Complete
CM/GC Contractor	Goal	To Date	Status
DBE (Committed)	4%	3.2%	On Target
DMWESB (Contracted)	20%	16.5%	On Target
Workforce <i>Women</i>	14%	13%	On Target
Diversity <i>Minority</i>	20%	29%	Above Target

Note: DMWESB goals/targets published Sept 2011 from CM/GC in subcontracting plan.

News Headlines

[Sellwood Br. closed until Friday, drivers seek new commute routes \(KATU\)](#)
[Sellwood Bridge project costs increase \(Portland Tribune\)](#)
[Sellwood Bridge budget grows beyond \\$307.5 million, Mult. County acknowledges](#)
[Sellwood Bridge opening delayed \(Portland Tribune\)](#)
[Engineers show off 6 new arches for Sellwood Bridge \(OPB\)](#)

Followers - Weekly email updates = 731
 - Twitter account = 1148

Sustainability

- Project sustainability tracking and documentation continues
- Reuse and recycling of onsite materials continues
- Plan refinement and preparations for park, stream, and habitat
- Draft Greenroads Certification documents pending comments
- Advancements to the Regional Trail connectivity (at Miles Place)

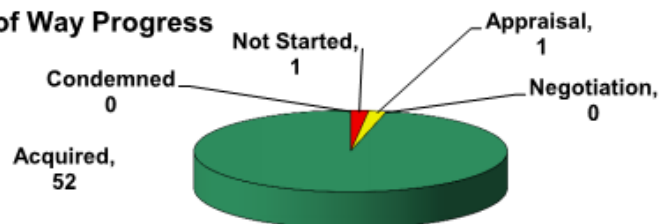
Design Accomplishments

- Support for long-term maintenance intergovernmental agreement
- Coordination with PGE, Freeman Motors, and PBOT for Macadam Bay Driveway

Construction Accomplishments

- Paving of Miles Place/multiuse path - nearing overall completion
- Work on the bridge deck for the east bridge approach
- Continued work on foundations, approaches, and new main bridge span
- Continued work on west retaining walls (some complete, others nearing completion)

Right of Way Progress



ROW actions to be completed = 54
Current as of December 2, 2014

Upcoming Site Work

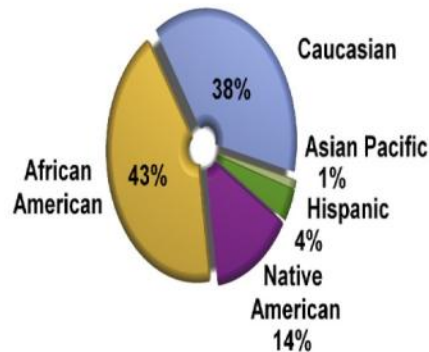
- Steel being delivered for main span
- Completion of work for some west retaining walls
- Continued work on west interchange and regional trail
- Construction of interchange ramps
- Continued deck work for east bridge approach

November 2014 Sellwood Small Business Dashboard

Summary

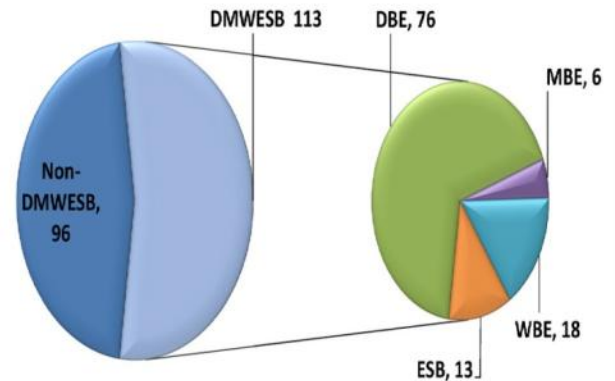
- These charts are based on contracts and dollars awarded.
- The contractor's goal is to award 20% of total contract dollars to DMWESB firms. Currently, the DMWESB Contracted is 16.5% and the DMWESB Paid is 9%.

DMWESB Ethnicity



Total Contracts Awarded

Total Contracts - 209



DMWESB Participation and Paid to Date

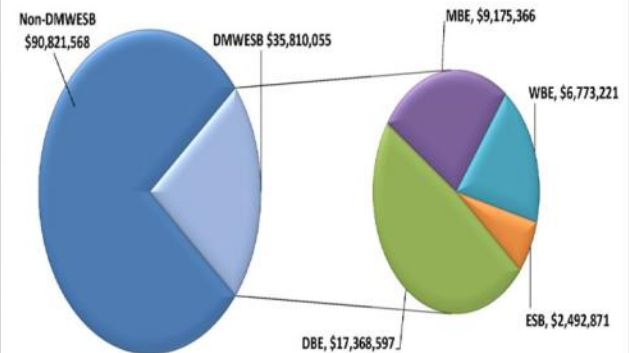


Total Dollars Awarded

\$126,631,623

Total Project Contract Amount

\$217,395,083

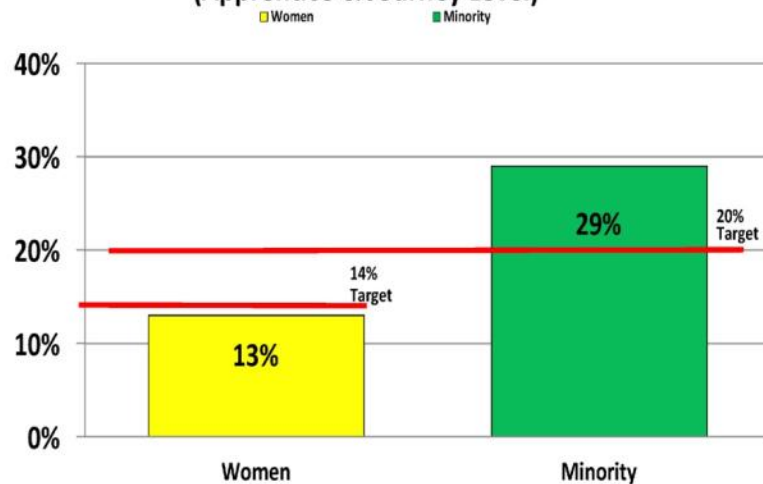


Glossary: DBE—Disadvantaged Business, MBE—Minority-Owned Business, WBE—Women-Owned Business, ESB—Emerging Small Business

Summary

- Progress on meeting aspirational goals for minority and female participation.
- SSJV is exceeding the target for minorities and meeting the target for women.

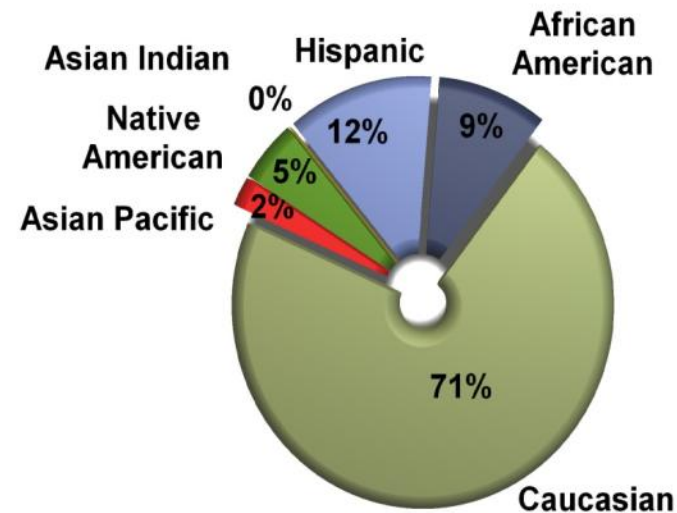
**Total Workforce Hours
(Apprentice & Journey Level)**



Minority includes male and female minorities.

Based on number of hours worked.

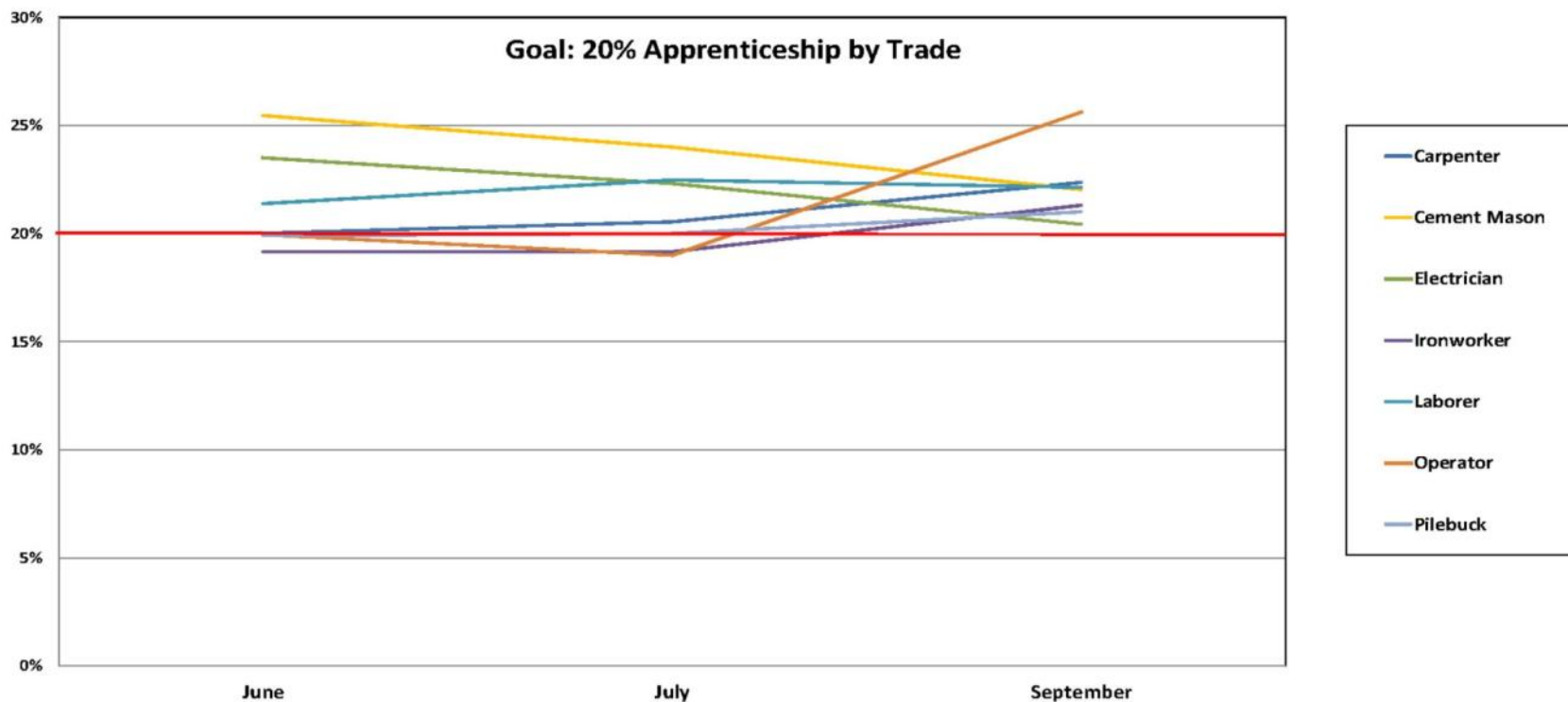
**Total Workforce Ethnicity
(Male and Female)**



Summary

The following chart represents total apprenticeship hours by trade for all subcontractors working on the project. Any contractor over \$100K is required to achieve 20% apprenticeship hours by trade per the County's Workforce Training and Hiring Program. Multnomah County allows for exceptions to the apprenticeship requirement based on low hours, complexity of work, safety, and other considerations. The chart reflects apprenticeship including contractor exceptions.

Apprenticeship by Trade



Construction Update

Sellwood Bridge Replacement Project Information

- About 70% complete construction
- Traffic on new span – Winter 2015-2016
- East approach and remaining work complete – Fall 2016

Construction Progress

(thru 11/30/14)

	Detour Bridge	Land- slide	Condo. Mods.	Work Bridge	OR 43 Walls	Bridge & IntX	Total
Total Value	\$20.68	\$12.72	\$3.19	\$9.39	\$12.12	\$159.36	\$217.47
Paid to dt	\$20.68	\$12.68	\$3.13	\$8.95	\$10.69	\$95.36	\$151.49
	100%	99.7%	98.0%	95.3%	88.2%	59.8%	69.7%
Costs in millions							



11/12/14

Courtesy of ODOT

Work

- Landslide stabilization (complete)
- Stephen's Creek culvert (complete)
- Work bridges (complete)
- In-river foundations (complete)
- Condominium rebuild (Phase 1 complete)
- Riverview Cemetery (Phase 1 complete)
- Miles Place
- Regional Trail
- West OR 43 retaining walls
- West approach
- Removal of old bridge piers
- Main bridge piers
- East approach (S side complete, traffic re-aligned)
- East approach – north side demolition
- Steel fabrication
- Steel installation





20

sta 133+98

V





11/12/14
Courtesy of ODOT





River Piers









East Approach

An aerial photograph showing a bridge structure spanning a body of water. Below the bridge, there are several parking lots filled with cars and boats. To the left, there is a marina with many small boats docked. In the center, there are some buildings and a large open area that appears to be a construction or storage site. To the right, there are more buildings and a residential area. The image is taken from a high angle, looking down on the scene.

11/12/14
Courtesy of ODOT



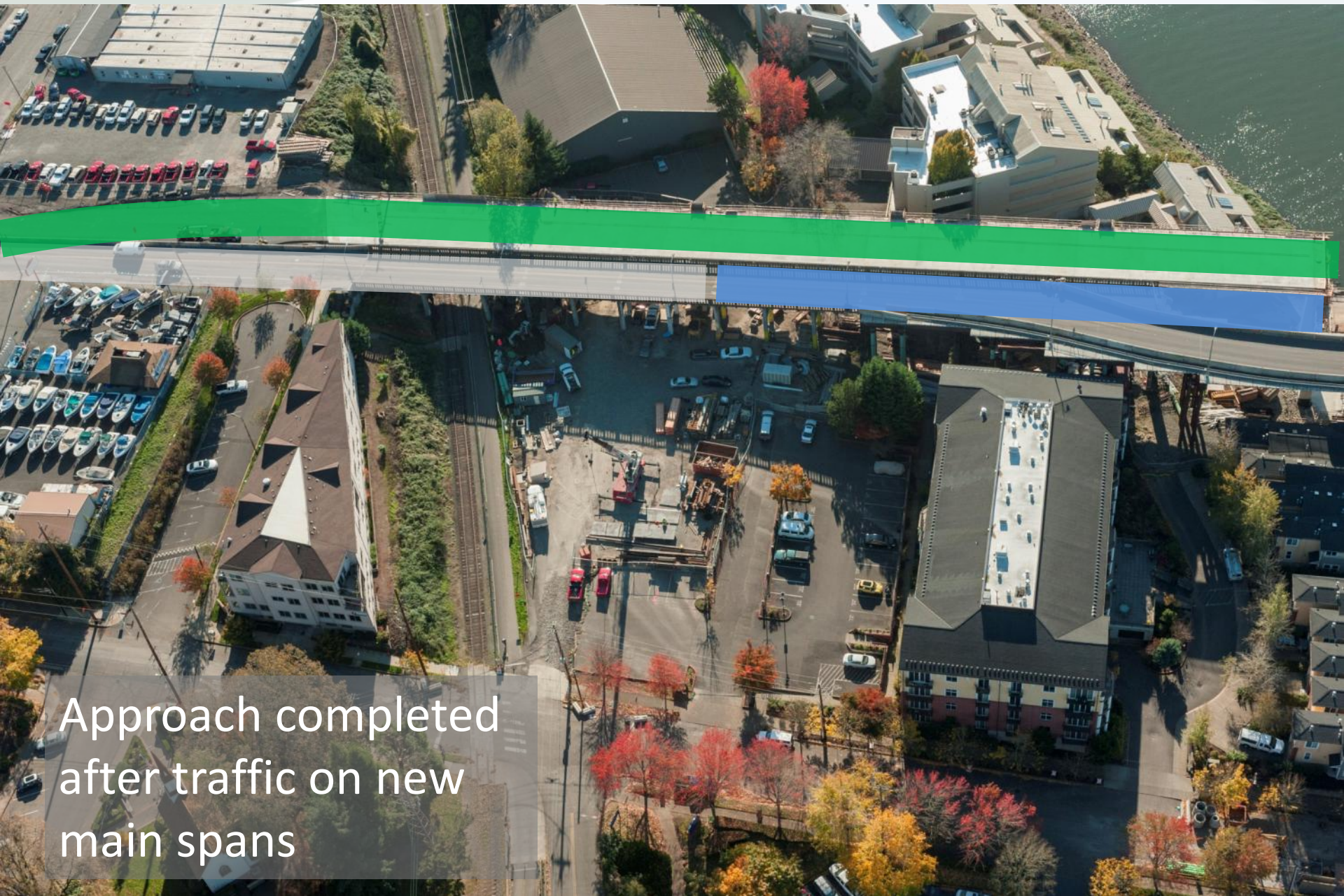
Traffic
Rerouted



Old bridge
removal



Partial
approach
construction



Approach completed
after traffic on new
main spans







MULTNOMAH
COUNTY

Sellwood Bridge is OPEN during the holidays.
Support local businesses.







Steel Fabrication



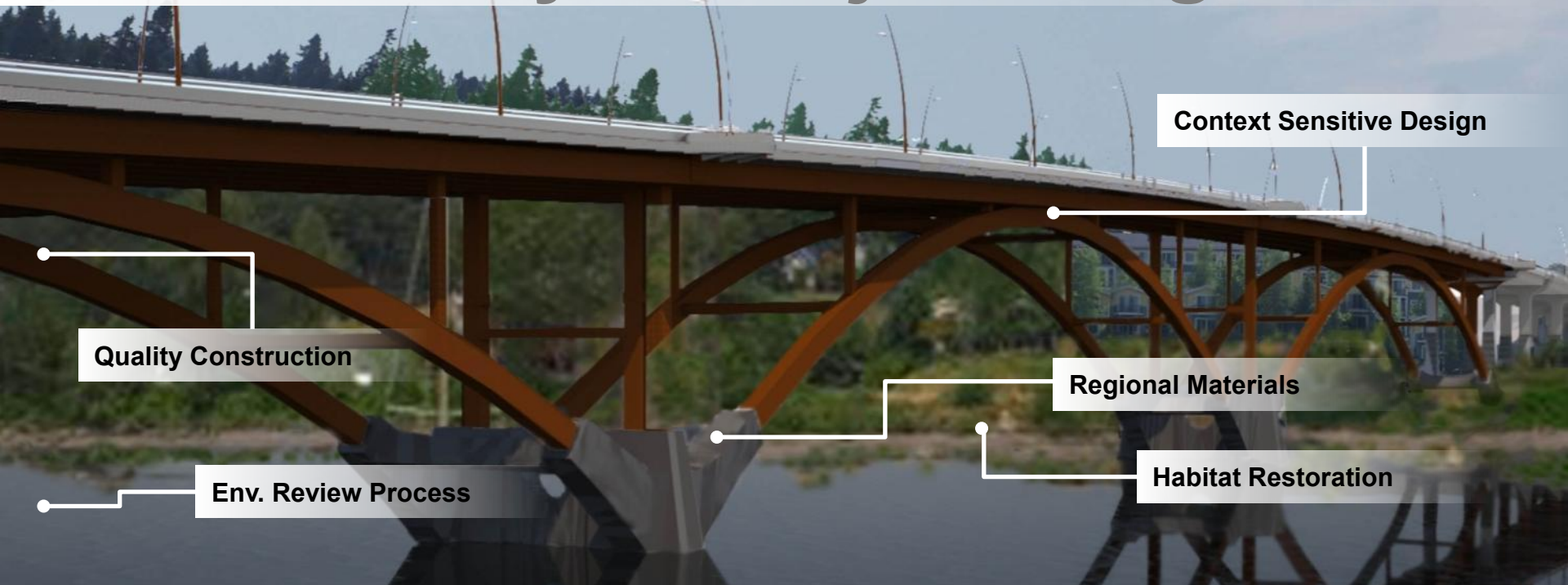
Steel Installation



Sustainability

- Design
- Construction
- Public Outreach
- This Work Matters

Sustainability at Project Stages



Context Sensitive Design

Quality Construction

Regional Materials

Env. Review Process

Habitat Restoration

Sustainability at Project stages: Design, Construction, and Public Outreach



Design



Construction



Public Outreach



Certification

Design

The background of the slide features a large, multi-arched bridge spanning a wide river. The bridge has a series of repeating arches and is supported by several piers. The river is calm, and the sky is overcast. The overall image is faded to allow the text to be prominent.

**Multi-Modal
Stormwater Management
Habitat Restoration
Plantings**

Multi-Modal

FEATURES

Regional Trail:

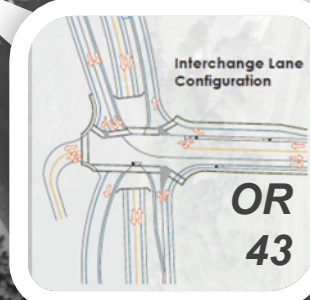
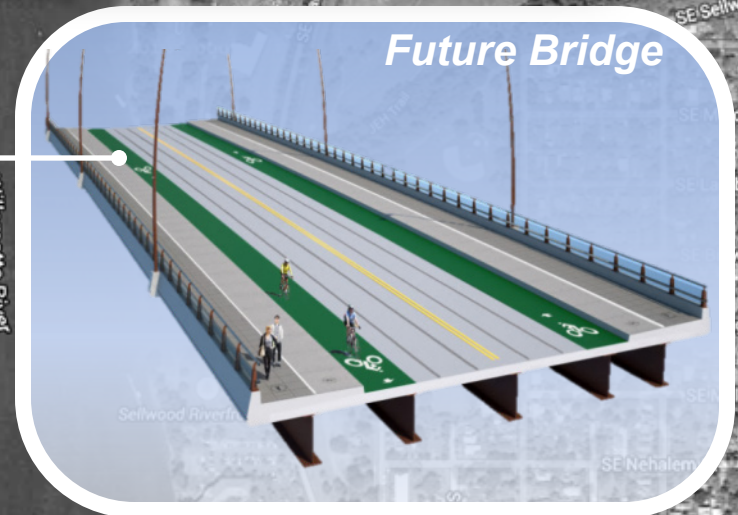
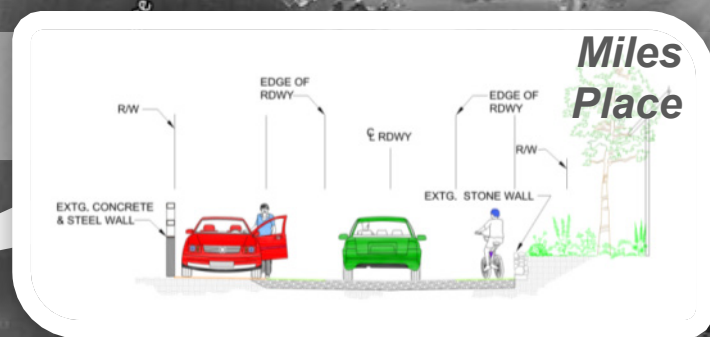
- Will construct 2,400 linear ft. of dedicated regional trail (restricted motor vehicle access)
- Built over 600 linear ft. of critical regional trail connection (shared road at Miles Place)

Future Bridge Facilities:

- 12' multi-use paths + 6.5' bike lanes
- Will support buses for first time since 2004
- Built to accommodate future streetcar
- Improved bike/pedestrian/bus facilities at OR 43 interchange

BENEFITS

- Improved access and mobility
- Increased access to active transportation and transit
- Reduced fossil fuel use, air emissions, and greenhouse gases
- Improved health and safety



The new bridge will increase average daily trips (ADT) but does not add many vehicle trips. Most ADT increase comes from bicyclists, pedestrians, and bus riders.

Stormwater Management

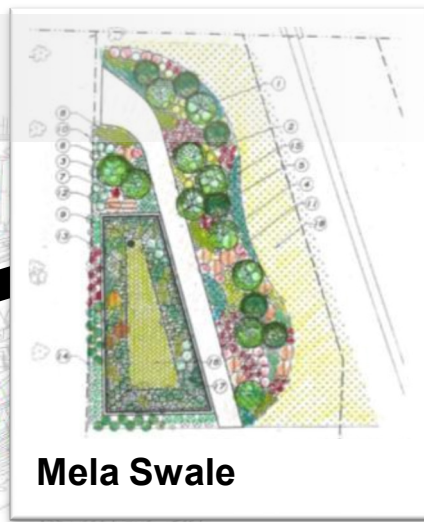
FEATURES

- Stormwater treatment for all contributing impervious areas
- Vegetated swales on the east and west sides to collect and treat runoff from bridge and OR 43

BENEFITS

- Improved water quality – Cleaner water going into the Willamette River
- Divert stormwater from costly treatment facility
- Reduced lifecycle costs

Snapshot as part of 2012 Stormwater Management Plan



Mela Swale



Staff Jennings Swale

SELLWOOD BRIDGE PROJECT
CONTRIBUTING IMPERVIOUS AREA
Sheet 1 of 1

Stephens Creek

FEATURES

- Precast concrete arch culvert
- 90-ft long, 32-ft wide, 16-ft tall
- Meets NOAA and ODFW standards for fish passage

BENEFITS

- Restored fish and wildlife habitat
- Improved connections between Stephens Creek and the Willamette River
- Improved water quality
- Reduced manmade footprint
- Reduced impacts of stream's rapid peak flows



New culvert

Old culverts

Plantings



FEATURES

Throughout the project:

- Over 1,500 trees
- Over 15,500 shrubs
- Over 5,600 ground covers
- 5.84 acres of seeding
- Removal of invasive species
- Mostly native plantings
- Monitoring and establishment period

BENEFITS

- Restored habitat for wildlife
- Improved water quality
- Improved air quality
- Reduced greenhouse gases
- Minimized manmade impacts
- Reduced weed management, feeds wildlife, improved plant health

Construction Methods

Perched Box Caissons

Pier Removal

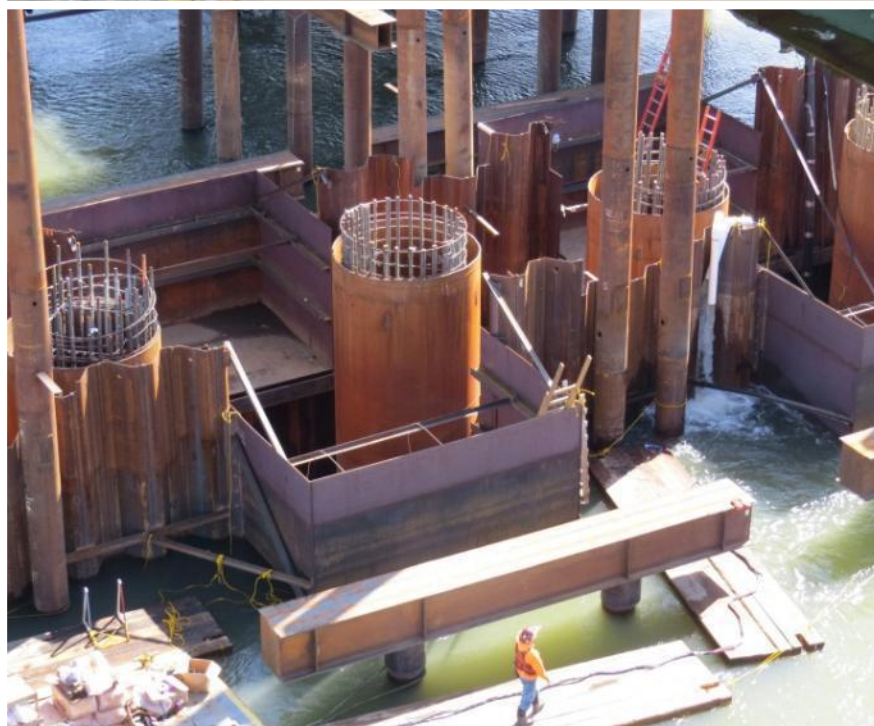
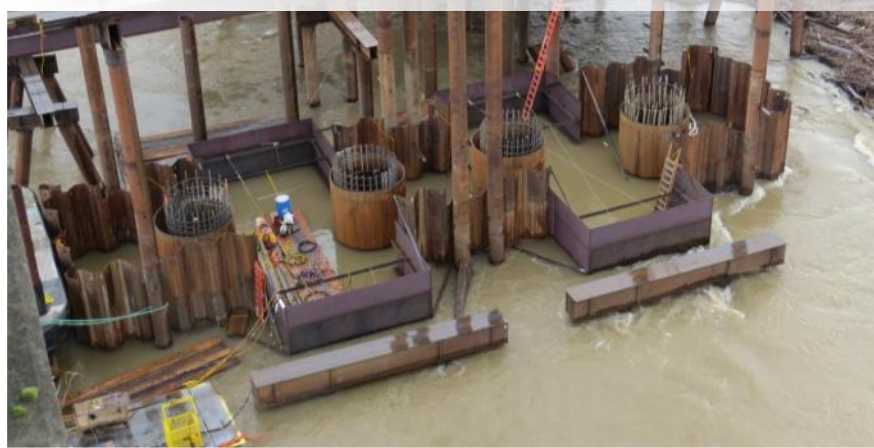
Erosion Control

Detour Structure

Material Reuse and Recycling

Local Resources

Perched Box Caissons



FEATURES

- Constructed out of the water and lowered into place
- Caissons made of a concrete floor built around drilled shaft casings, walls made of steel sheet piles

BENEFITS

- Avoided impacts to the riverbed
- Eliminated fish stranding inside cofferdams
- Added flexibility of schedule, reduced construction risks
- Improved water quality due to no active in-water work
- Reduced permanent aquatic habitat impacts from 0.25 acres to 0.03 acres

Pier Removal



FEATURES

- Original plan to demolish all 5 river piers in large cofferdams
- *Actual Method:*
 - Isolated 2 piers on the bank from the river using sandbags
 - Removed 3 piers in the river using a diamond wire saw

BENEFITS

- Avoided large cofferdam construction and impact to river bottom
- Avoided impacts to fish
- Removed concrete in large sections

Erosion Control

FEATURES

- 3,027 feet of sediment fences
- 980 feet straw wattles
- 11,938 square yards of plastic sheeting
- 1,736 feet of concrete barrier/geotextile fabric along OR 43
- Filter fabric (24 ft x 60 ft)
- Temporary seeding
- Straw mulch
- Dirt removal at truck exits
- Street sweeping

BENEFITS

- Improved water quality
- Protected exposed soil on-site to minimize the need for additional material
- Protected aquatic habitat



Detour Structure



FEATURES

- Reuse existing structure as a detour bridge by moving it to the north
- Construct new bridge in one phase

BENEFITS

- Reduced construction duration up to 12 months, minimizing time of impact to the environment and the community
- Reduced costs and environmental impacts associated with bringing new materials on-site for additional temporary structures
- Fewer temporary work bridges, reduced in-water riparian impacts

Material Recycling



RECYCLING OPPORTUNITIES

Source: 30% SSJV Sustainability Plan

Concrete – 95%

Asphalt – 95%

Soil Excavation – 95%

Existing Steel – 100%

Trees – 50%

Plywood – 100%

Temporary Steel – 95%

Temporary Concrete – 90%

BENEFITS

- Minimize the need for new materials
- Decreased transportation costs and environmental impacts
- Reduced amounts of solid-waste
- Reduced greenhouse gases and emissions

Material Reuse

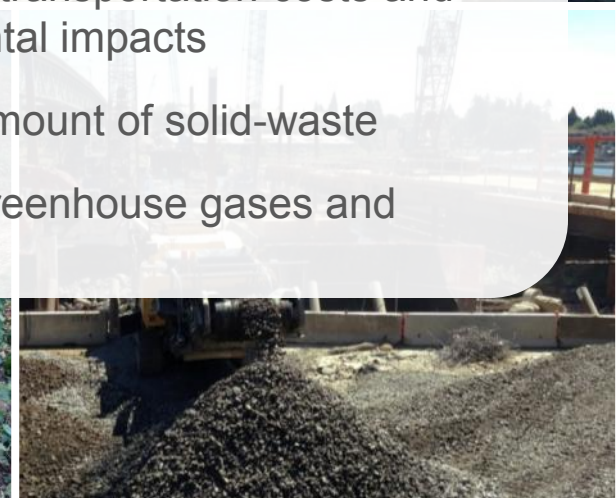


EXAMPLES

- Crushed concrete for temporary access roads and fill
- Wood chips used for erosion control
- Root balls, timbers, and boulders for stream restoration
- Trees to local tribes
- Rocks to other Parks properties

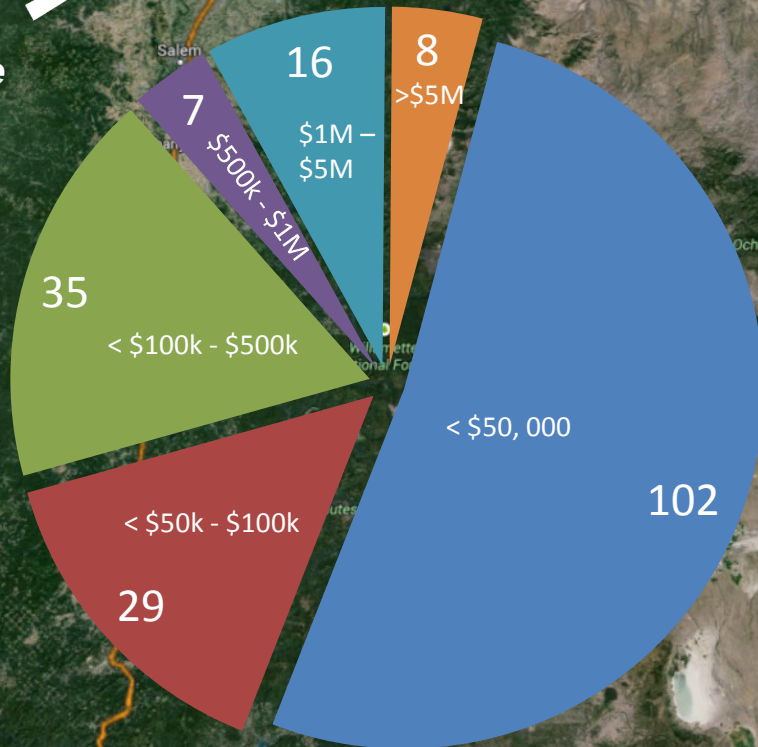
BENEFITS

- Minimize the need for new materials
- Decreased transportation costs and environmental impacts
- Reduced amount of solid-waste
- Reduced greenhouse gases and emissions



Local Resources

Sellwood Bridge



of Sub contractor contracts by \$ amount
NOTE: SOME CONTRACTORS HAVE MULTIPLE CONTRACTS

FEATURES

- 129 contractors of all sizes from Oregon, 23 from Washington
- Total of over \$43 million to DMWESB contractors (20% of total)
- Sub contractor contracts ranging in size from under \$1,000 to \$31 million

BENEFITS

- Reduced costs and environmental impacts of material transport
- Reduced air emissions
- Reduced greenhouse gases
- Improved local economies
- Minimized lifecycle costs
- Build local capacity

Equity

FEATURES

- Diversity Goals
- Apprenticeship Program
- Mentoring Program
- Contracting

BENEFITS

- Provides diverse work force
- Develops expertise and skills in people entering construction related fields
- Provides mentoring opportunities
- Develops small contractors
- Provides living wage jobs



Public Outreach

Industry Presentations
School-Based Outreach
Greenroads™ Certification

Industry Presentations and School Based Outreach

BENEFITS

- Improves public awareness and education about the sustainable features of the Sellwood Bridge Project
- Provides an example of how sustainable principles can be incorporated into real projects

SCHOOL-BASED OUTREACH

- Educating the community on the sustainability of the Sellwood Bridge Project through the school-based outreach program
- Hands-on erosion control lessons with local classes on-site
- Planning and sustainability certification lessons with Portland Youth Builders





Targeting...



Greenroads Rating System is:

A third party certification process similar to LEED for road and bridge projects established in 2011

The Sellwood Bridge Project is:

- The first project to be registered in the State of Oregon
- The third major structure seeking certification by Greenroads
- The second largest project (in terms of budget) for Greenroads

Status Update:

- Preparing documentation for initial Greenroads credit review

This Work Matters

The Sellwood Bridge Project is operating as a model of sustainability by:

- Improving access (pedestrian, bicycle, bus, future streetcar)
- Managing stormwater runoff to improve water quality
- Reconnecting aquatic and terrestrial wildlife
- Restoring critical habitat by planting native species
- Reducing in-water work and controlling erosion
- Reusing and recycling materials
- Utilizing local resources
- Developing local workforce and contractors
- Educating the community to build awareness and recognition

