

VII. STANDING COMMITTEES

B. Finance, Audit and Facilities Committee

Capital Projects Office Semi-Annual Status Report

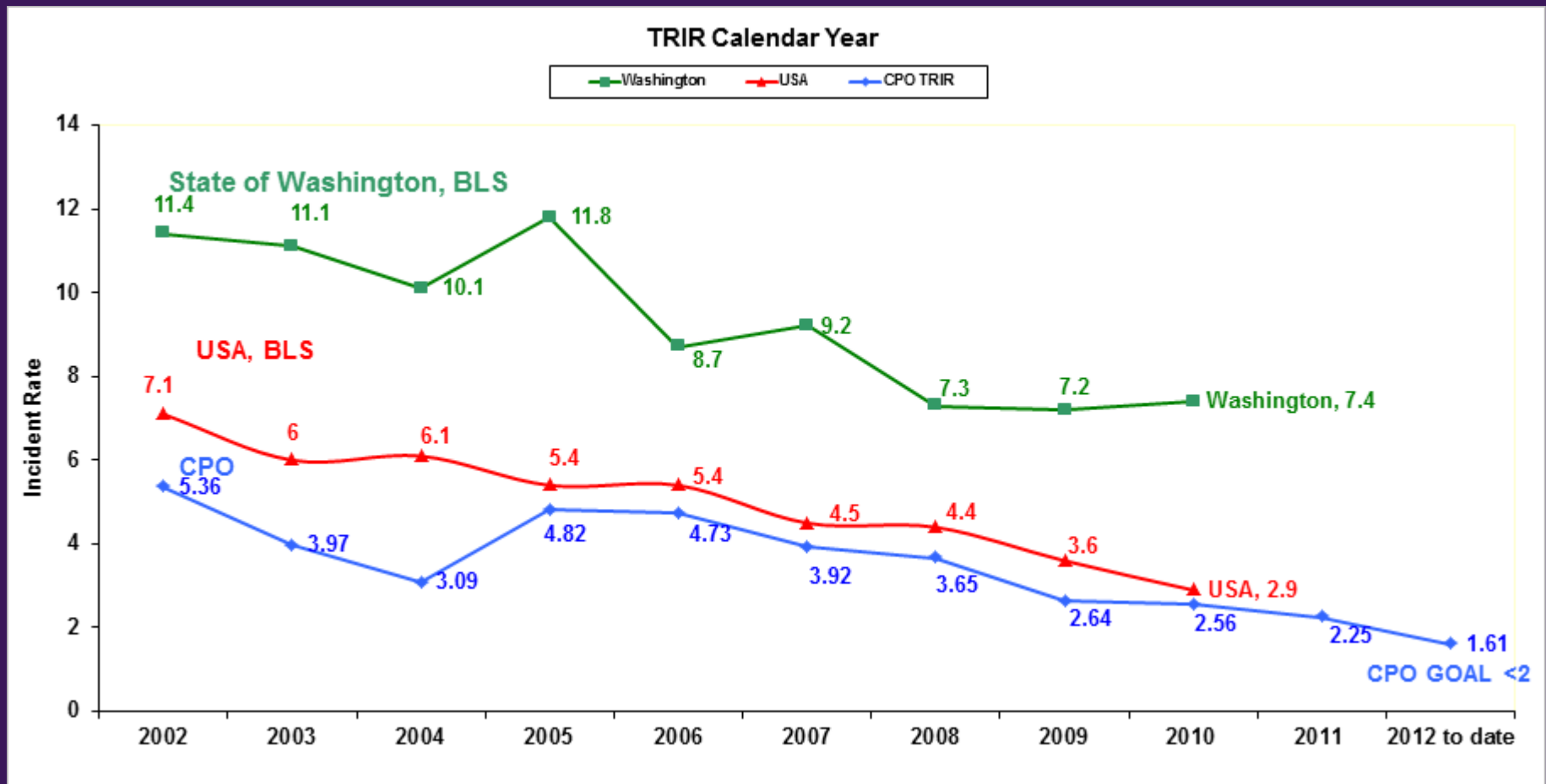
There will be an oral report for information only.



Capital Projects Office Semi-Annual Status Report

March 2012 – August 2012

Safety





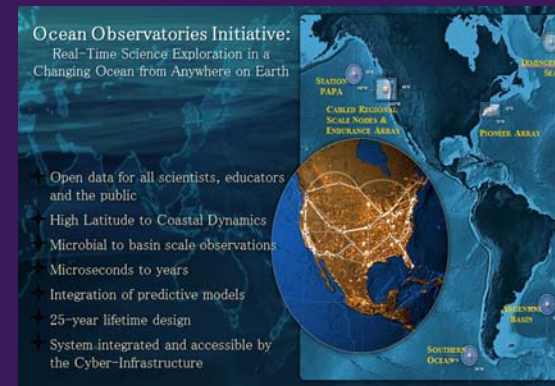
Emerging Projects



- Animal Research and Care Facility Phase 1
- New UW Police Station
- North Campus Student Housing
- UWMC Expansion Phase 2
- UWMC Main Entrance Upgrade
- UW Bothell Student Activity Center
- ICA Basketball Operations Building

Other Projects

- Sound Transit University Link
- Sound Transit Northgate Link Extension
- Ocean Observatories Initiative



Ocean Observatory Initiative Regional Scale Nodes

Status Update

Pete Barletto
Director – RSN
September 13, 2012
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Outline

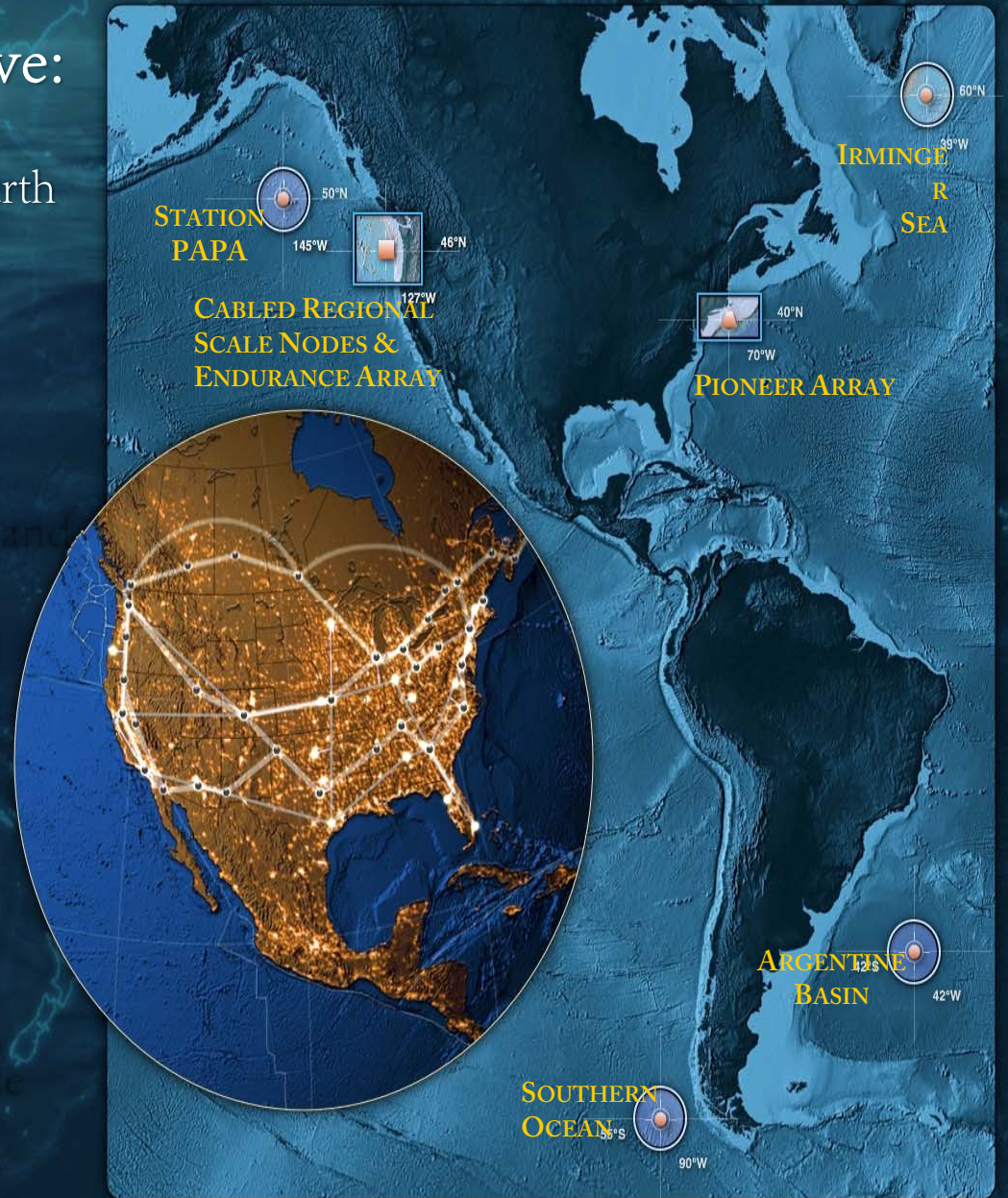
- NSF Sponsored Ocean Observatory Initiative - OOI
- Regional Scale Nodes (RSN) Component
- Design
- Schedule & Progress
- Funding
 - Construction
 - Operations & Maintenance
- Other Facts
- Thanks !



Ocean Observatories Initiative:

Real-Time Science Exploration in a Changing Ocean from Anywhere on Earth

- ★ Open data for all scientists, educators and the public
- ★ High Latitude to low latitude
- ★ Microbial to basin scale observations
- ★ Microseconds to years
- ★ Integration of predictive models
- ★ 25-year lifetime design
- ★ System integrated and accessible by the Cyber-Infrastructure

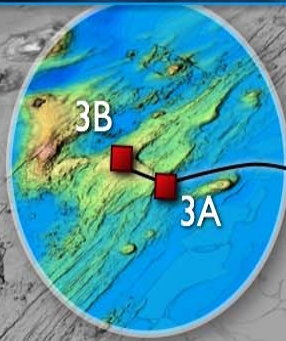


RSN Schedule

- | | |
|---|-----------------|
| • Proposal | October 2006 |
| • PDR | November 2007 |
| • FDR | December 2008 |
| • V-FDR | March 2009 |
| • NSB Approval | May 2009 |
| • Co-operative agreements signed | September 2009 |
| • Primary Infrastructure signed | November 2009 |
| • Primary Infrastructure acceptance | December 2012 |
| • Secondary Infrastructure installation | 2013 & 2014 |
| • RSN acceptance | 2015 - OOI 2016 |
| • Contract re-compete | 2017 (?) |



RSN ELEMENTS



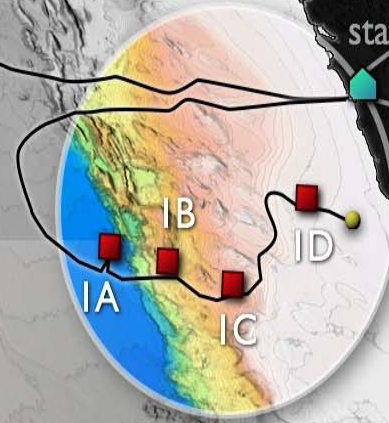
MidPlate

Backbone cable

Seattle

Shore station

Cyber POP



Design Facts

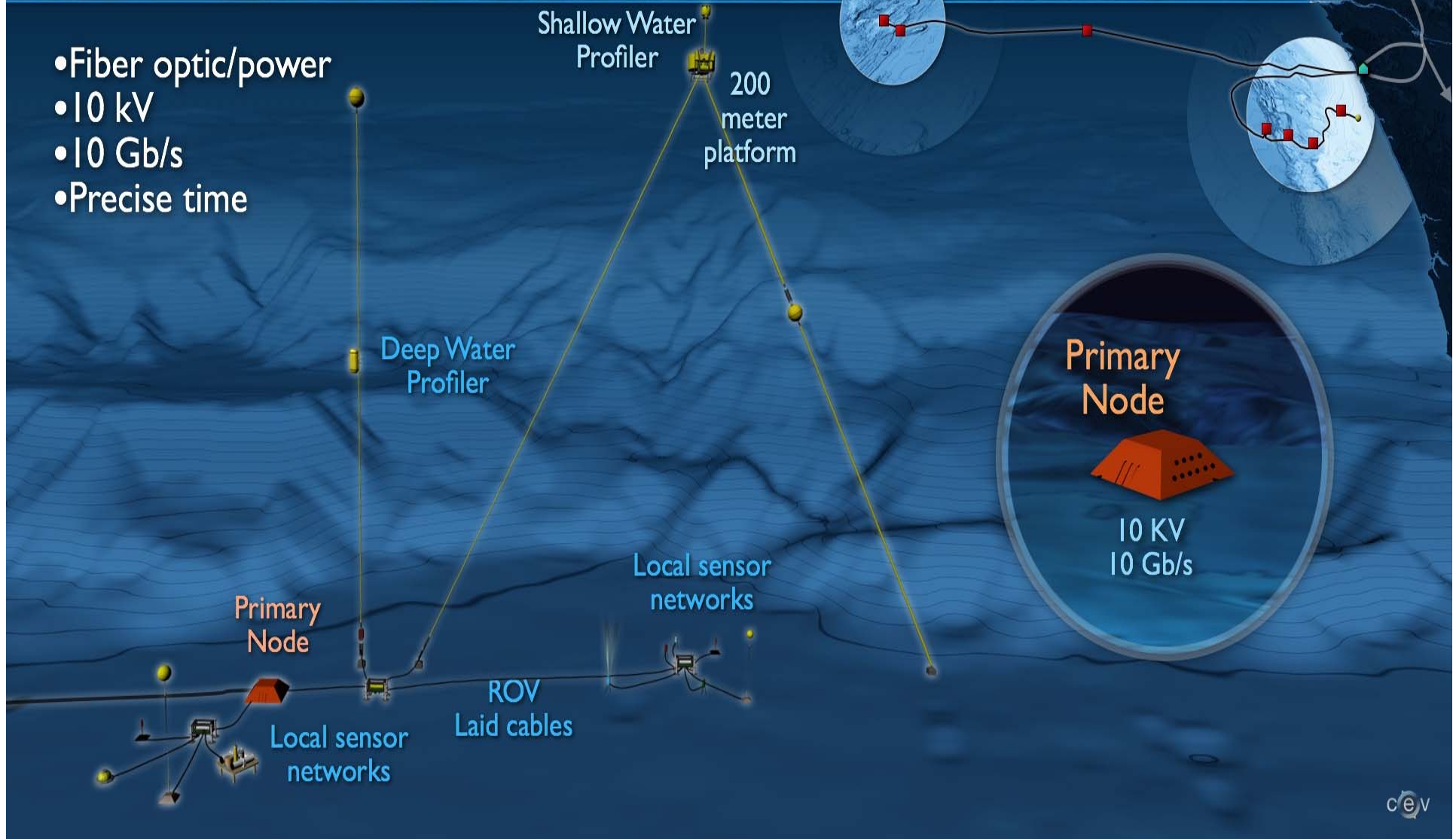
- 2 cables (~900 km)
- 1 Landing
- 1 Cable Station
- 2 Scientific sites
- 7 Primary Nodes

- Distribute power (10 KV) and communications (10Gb/s) from Shore Station to sub-sea Primary Nodes.
- Primary Nodes convert high power voltage (10 KV) to a lower level (375 V) and distribute to Science Ports along with communications and timing signals

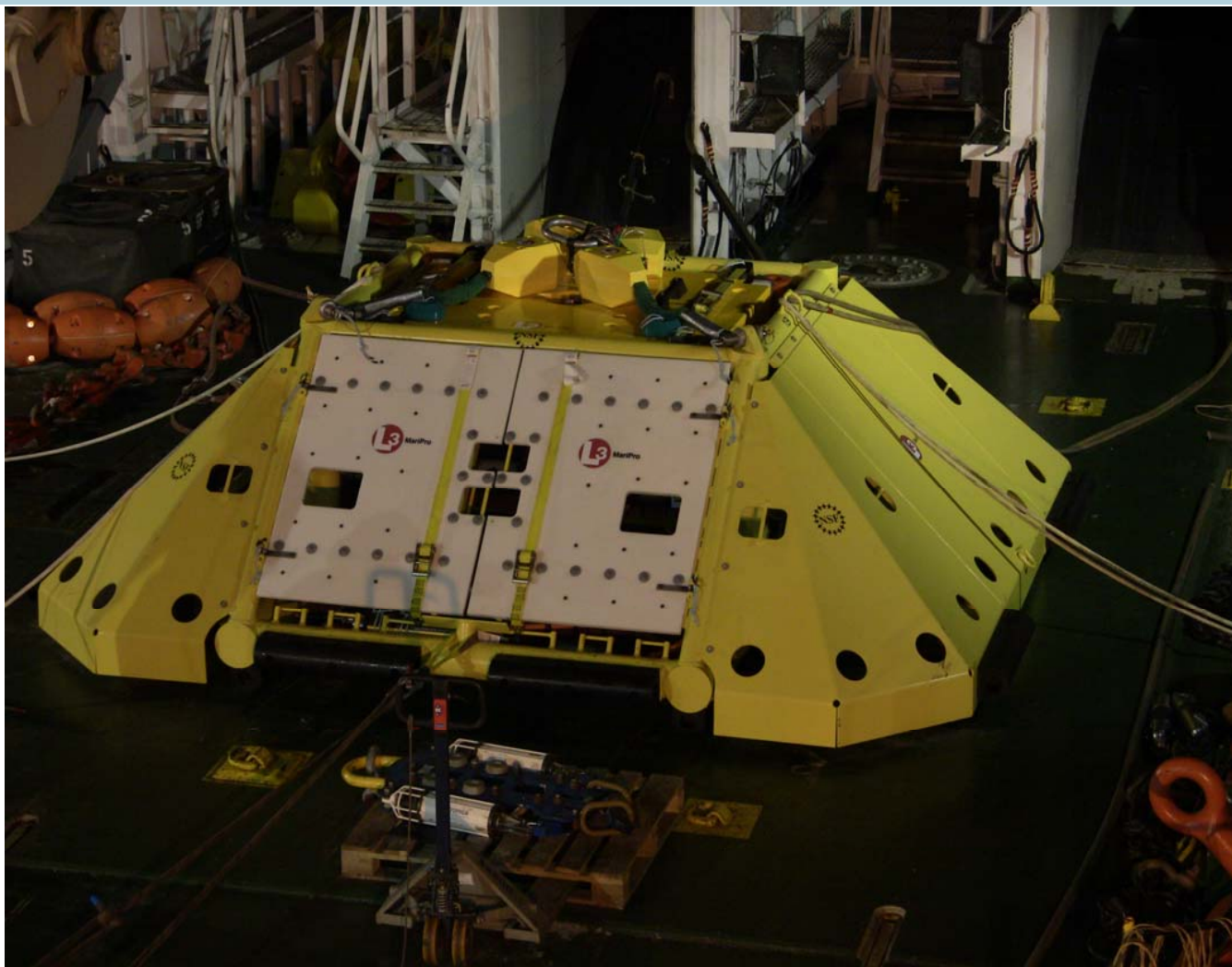


PRIMARY INFRASTRUCTURE

- Fiber optic/power
- 10 kV
- 10 Gb/s
- Precise time



Shallow Water Node



Deep Water Nodes



SHORE STATION

Shore Station subsystem encompasses the physical building, the battery backup and power connection to the grid, and space for the Primary Infrastructure SLTE and PFE

Shallow Water Profiler

Shore station - Pacific City

Primary Node

Local sensor networks



Seattle

cev



SECONDARY NODE

- Low Voltage Nodes
- Medium Power J-Box
- 375 V
- 1 GigE

Shallow Water Profiler
200 meter platform

Deep Water Profiler

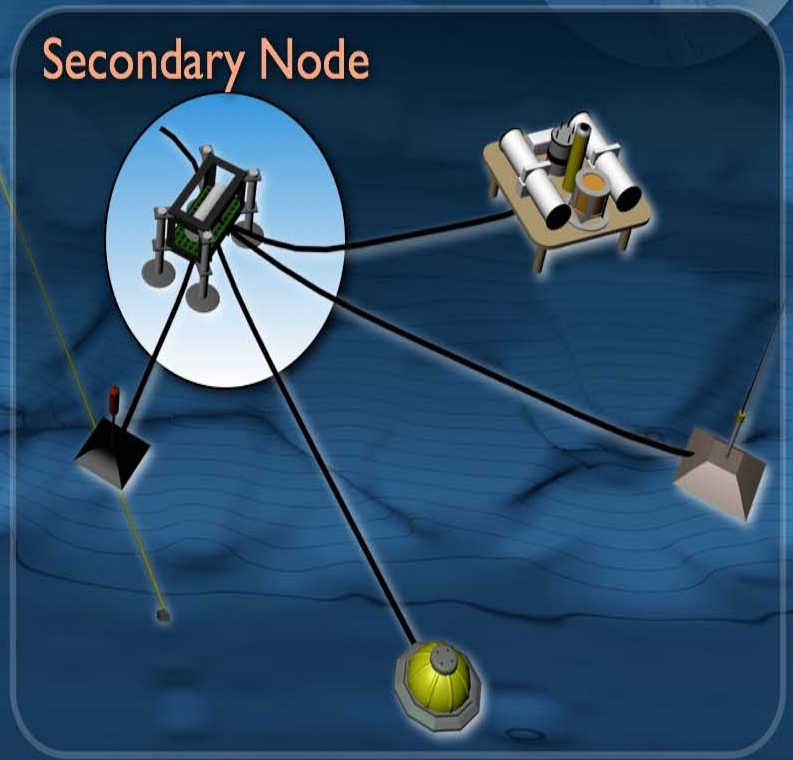
Primary Node

Local sensor networks

ROV Laid cables

Local sensor networks

Secondary Node

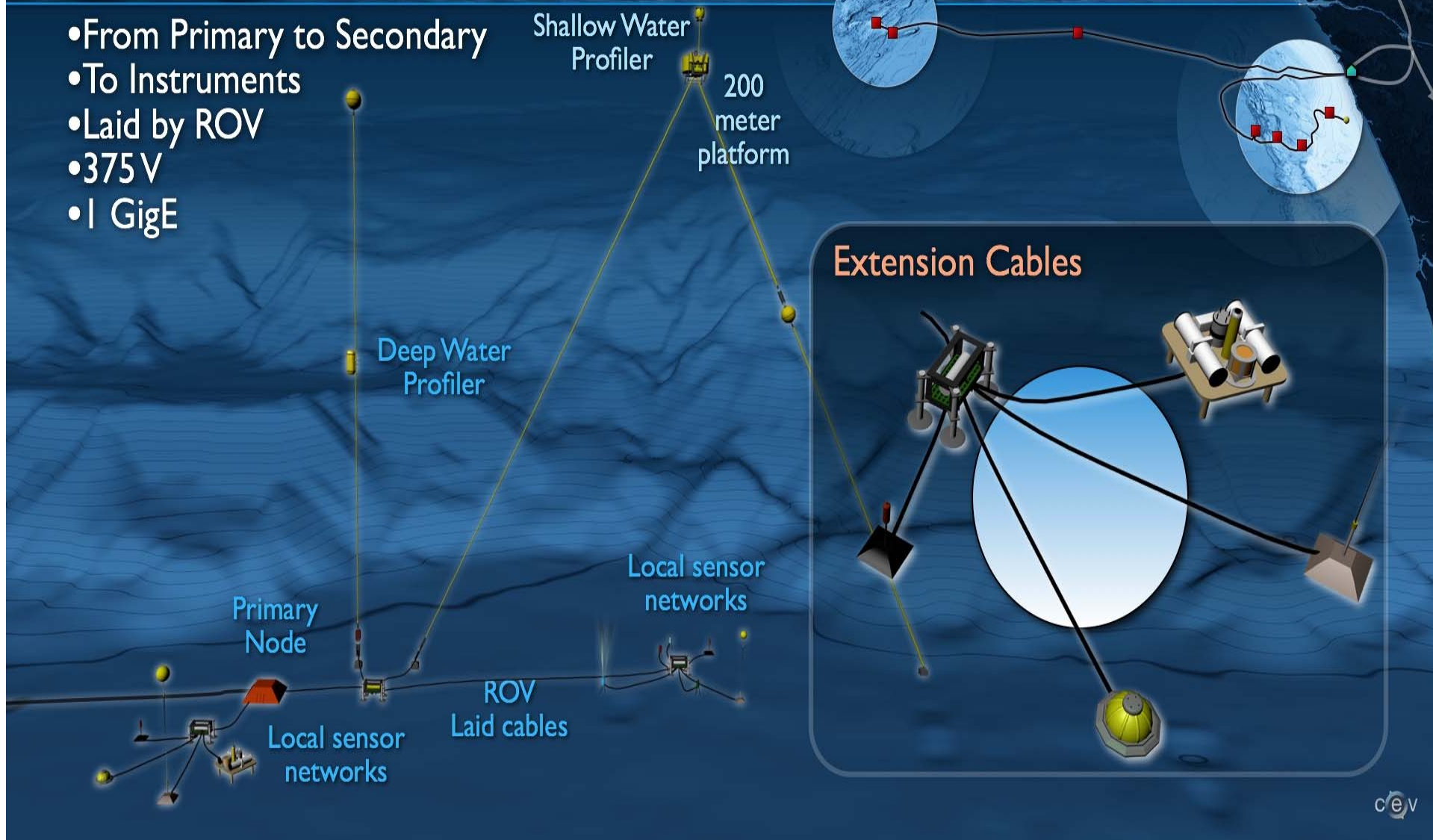


Seattle



EXTENSION CABLES

- From Primary to Secondary
- To Instruments
- Laid by ROV
- 375V
- 1 GigE



SENSOR NETWORKS

- Local sensor networks around Primary Nodes
- Water Column Moorings
- Spatial arrays key locations

Shallow Water Profiler
200 meter platform

Deep Water Profiler

Primary Node

Local sensor networks

Local sensor networks

ROV Laid cables

Sensor Networks

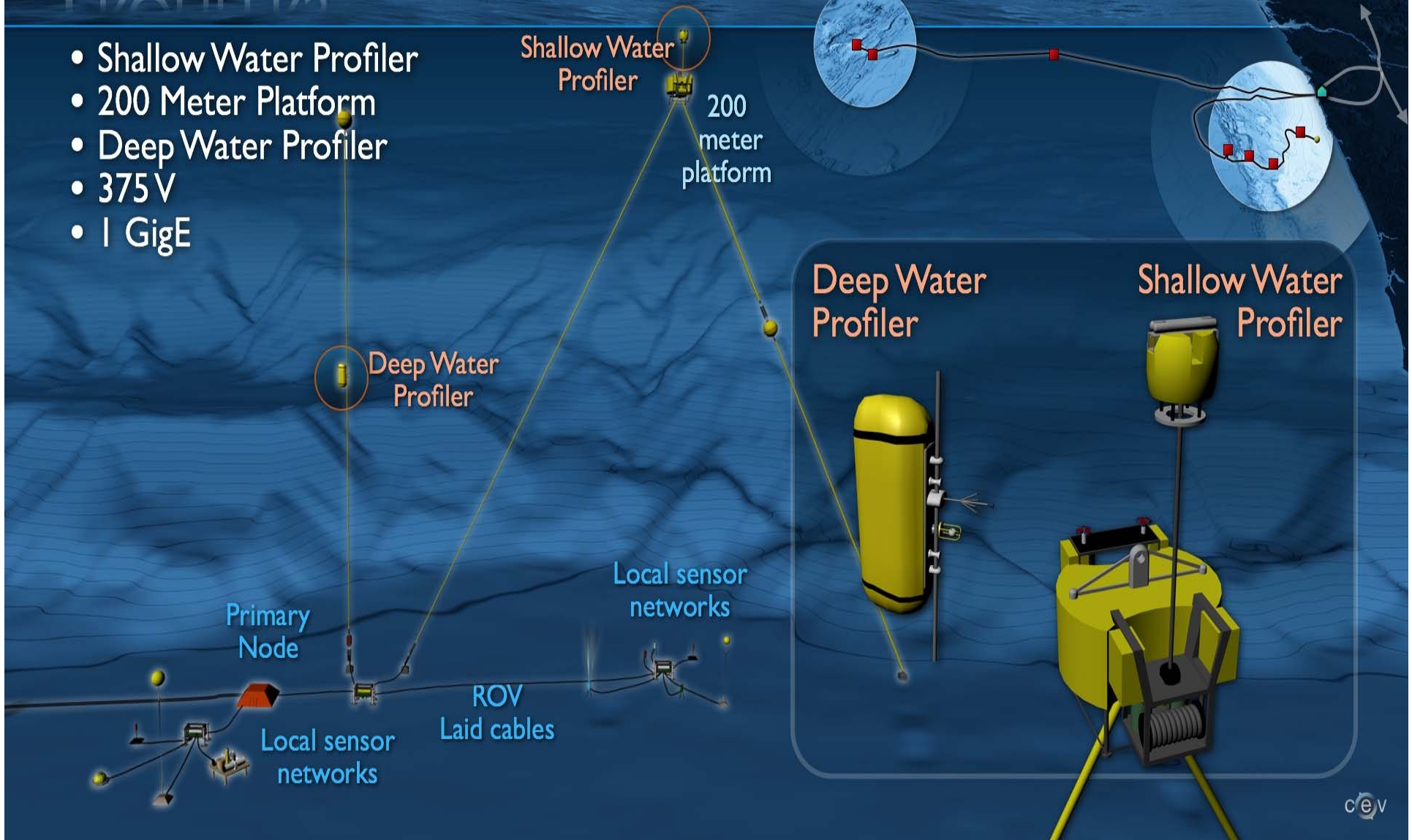
Seattle

c|e|v



PROFILERS

- Shallow Water Profiler
- 200 Meter Platform
- Deep Water Profiler
- 375 V
- 1 GigE



RSN Construction Schedule Overview

- July/Aug 2012: Primary Nodes deployed and integrated with Primary Infrastructure cable (deployed Summer 2011)
- Aug 2012 – May 2013: Design, build and test Secondary Infrastructure
- Dec 2012: Primary Infrastructure Acceptance
- Summer 2013: Deploy Seafloor Secondary Infrastructure
 - J-Boxes, LV Nodes, Extension Cable and Seafloor Instruments
- Summer 2014: Deploy Water Column Secondary Infrastructure
 - 3 Vertical Moorings, Profilers, Instruments, Sec Nodes, Cables
- RSN system commissioning to commence upon completion of Vertical Mooring installation, and complete in October 2014.

** Current deployment schedule matches 2009 Baseline Schedule*

RSN Budget Overview

CONSTRUCTION

- Approved Budget: \$154,040,548
- Funded to Date: \$109,452,916
- Spent to Date: \$91,338,348

OPERATIONS & MAINTENANCE

Received to Date:	\$19,867,874
Forecasted Annual estimate	\$14,800,000

Other Fun Facts

Number of :

- UW employees: 43 FTE
- Leases: Six
- Square feet: 74,000 sq'
- Instruments: 100+, 30 types
- Procurements: 1219
- Drawings: 3400
- Reviews: ~46
- Student Cruise participants: 15 /Cruise
- Work Variations: 14
- Requirements: 800+
- Contract Modifications: 33
- Master Schedule 500 pages



The RSN Team Acknowledges and Thanks !

Attorney General's Office
Capital Projects
Risk Management
Procurement Services
Office of Sponsored Programs
Grant & Contract Accounting
The ARRA Team
Accounts Payable
Equipment Inventory
Center for Commercialization
Real Estate
Finance & Facilities Decision Support



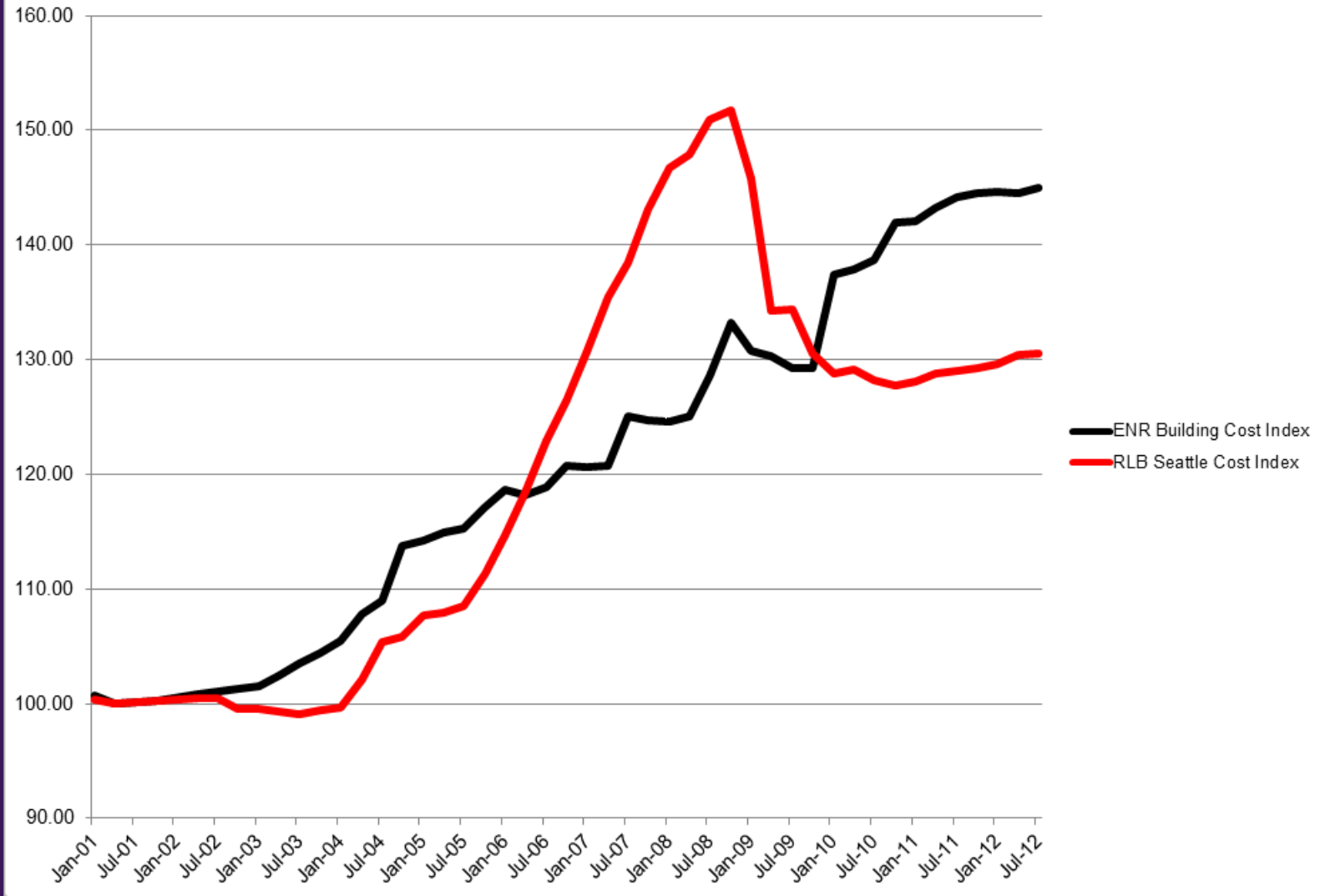
Thank you



Number of Contracts Issued March 2012 – August 2012

	MWBE	Total
Designers/Consultants	10 (8%)	128
Contractors	2 (3%)	69

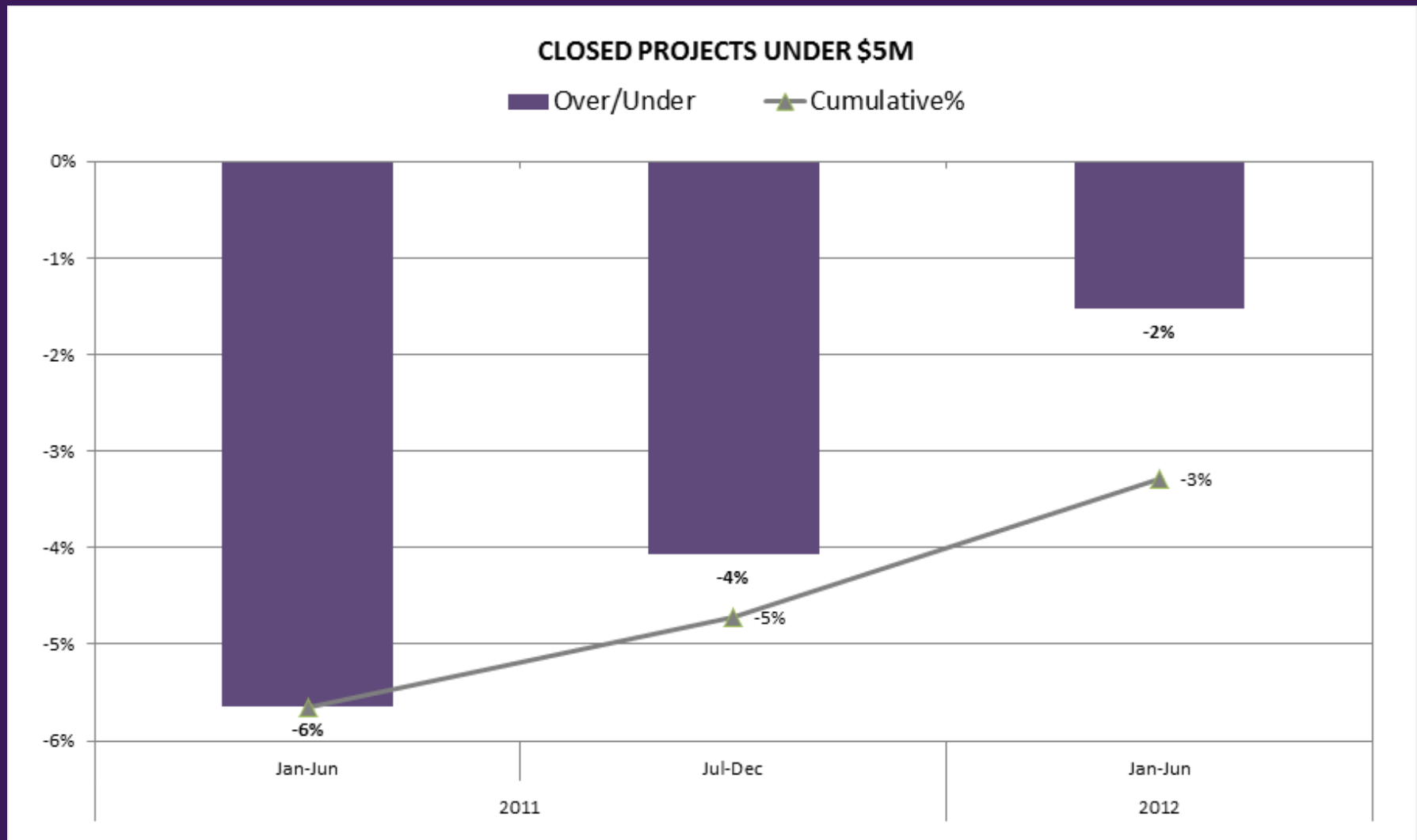
ENR Building Cost Index vs. RLB Seattle Cost Index



Projects under \$5 Million Closed



Projects under \$5 Million Closed



Major Projects Closed

Projects	Cost \$M		Use Date	
	Approved	Actual	Approved	Actual
Benjamin Hall Interdisciplinary Research Building	29.9	29.4	9-05	3-06
Foster School of Business Phase 1 - PACCAR Hall	95.0	91.5	9-10	9-10
Safe Campus Fire and Life Safety Monitoring and Notification	8.0	8.0	7-11	9-11

Major Projects in Closeout

Projects	Cost \$M		Use Date	
	Approved	Forecast	Approved	Forecast
Tower Data Center	32.5	31.6	12-09	12-09
Foster School of Business Phase 2 - Balmer Replacement	46.8	39.9	9-12	7-12
Husky Ballpark Phase 1	3.5	4.5	12-11	2-12
Hall Health Primary Care Center Clinical Units Remodel	10.2	8.3	8-11	9-11
HSC J-Wing Microbiology	23.5	19.5	3-11	5-11
Molecular Engineering	77.7	75.7	1-12	7-12
Smart Grid	10.1	10.1	5-12	7-12

Major Projects in Bid/Construction

Projects	Cost \$M		Use Date	
	Approved	Forecast	Approved	Forecast
Housing - New Residence Halls Phase 1	147.7	151.5	9-12	9-12
Housing - Mercer Court	118.0	116.8	8-13	8-13
Housing - Lander Replacement	77.0	79.0	9-14	1-14
HUB Renovation/Expansion	128.3	122.0	9-12	9-12
Odegard UG Learning Center Renovation	16.6	17.2	9-13	9-13
Samuel E Kelly Ethnic Cultural Center	15.5	15.4	9-11	1-13
UWMC Expansion Phase 1	199.5	210.5	5-12	10-12
UW Bothell Phase 3	68.0	68.0	6-14	6-14
UW Tacoma Phase 3	54.3	54.3	6-12	9-12

Major Projects in Design

Projects	Cost \$M		Use Date	
	Approved	Forecast	Approved	Forecast
Fluke Hall Renovation	28.5	28.5	tbd	tbd
Housing - Maple and Terry Halls	133.0	133.0	8-15	8-15
Husky Ballpark Phase 2	10.4	9.4	tbd	tbd
watlab ^w (Intellectual House)	5.9	5.9	12-14	11-14
Montlake Triangle	25.3	25.3	9-15	9-15