Portland Innovation District:

Research and recommendations for Portland's industrial Central Eastside

An aerial view of the 46 acre site in Portland's Central East Side.

Project information:

The Oregon Leadership in Sustainability Spring practicum is a collaborative planning and design project with the Oregon Leadership in Sustainability program (OLIS), two visiting Chinese scholars, Oregon Museum of Science and Industry (OMSI), Gdansk University of Technology (GUT), University of Oregon PPPM SketchUp course, environmental design professionals, and City of Portland officials. The Oregon Leadership in Sustainability graduate certificate program trains students in the concepts and skills of organizational leadership and sustainable development.

This year, the OLIS cohort made recommendations for the 46 acre site surrounding the Oregon Museum of Science and Industry to become an Innovation District. The site is bounded by SE Clay Street on the north, SE Caruthers Street on the south, railroad on the east, and Willamette River on the west. The site is located within the Central Eastside Industrial District's Hosford Abernethy Neighborhood.

The Central Eastside Industrial District (CEID) is part of the *Portland Innovation Quadrant* which includes the University District, Marquam Hill, and South Waterfront.

Innovation districts are a new complementary urban model. These districts are geographic areas where leading-edge anchor institutions and companies cluster and connect with start-ups, business incubators and accelerators.

They seek to be at the forefront of innovative and intelligent development and are typically compact, mixed-use, and easily accessible by transit and other transportation options such as biking and walking.

The OLIS class has researched twelve topics related to the site and Innovation Districts, and made recommendations based on that research. The report with the findings, research, and recommendations from this project will be published in summer of 2015. The document will also include international case studies, SketchUp imagery, architectural design renderings, and more.

Project members hosted a charrette in May of 2015. The project will conclude with a public presentation in June of 2015.

Current conditions: surface parking

Current conditions: OMSI's plaza

Current conditions: OMSI, surface parking, and an undeveloped site

Project members:

Ric Stephens, instructor

OLIS graduate researchers and topics:

Faaiz Ajaz, Innovation Districts & Transit Oriented Development
Kyle Collins, EcoDistricts & Public Art
Claudia Denton, Sustainable Development & Regenerative Design
Boru Guyota, Sustainable Development & Public Open Space
Joseph Kendzierski, Public Engagement and Participation & Sense of Place
Celina Stilphen, Biophilic Design & Waterfront Development
Jamie Willeke, Green Infrastructure & EcoDistricts

Visiting Chinese scholars:

Shengnan Lai
Shanxun Wu

Dehui Wei, UO SketchUp instructor

The UO PPPM SketchUp class of Spring 2015

Gdansk University of Technology, Poland

Biophilic design, water features

Biophilic design, waterfront park

Farmers market, bike lanes, transit

Green roofs

Bike parking and valet service

Permeable pavers

Food carts

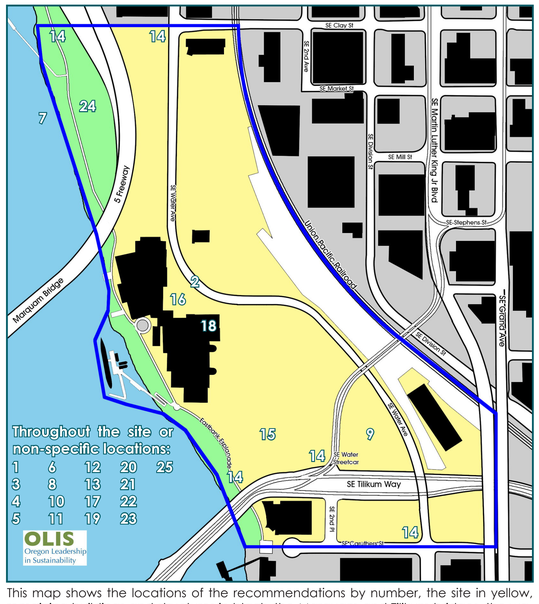
Renewable energy

Solar roadways

Tilikum bridge transportation options

Vertical gardening, public art

Green infrastructure, stormwater



This map shows the locations of the recommendations by number, the site in yellow, remaining buildings and structures in black, the Marquam and Tilikum bridges, the waterfront in green, and the surrounding area in gray.

Top 25 recommendations out of 70+:

1. Achieve LEED-ND certification for the entire site. All new buildings should be LEED or Living Building Challenge certified, Net Zero Water, or similar.

2. Convert Water Avenue to a solar roadway (www.solarroadways.com) or a biophilic street design. Alternatively convert the Eastbank Esplanade to a solar roadway path.

3. Install solar and wind energy components across the site.

4. For new development, use responsibly sourced or recycled materials and methods such as recycled wood and Fly Ash concrete.

5. For new development, design for flexible, changing uses as needs can change over time.

6. Site a nonprofit economic development center or business incubator.

7. Install a floating park dock for passive and active recreation.

8. Introduce vertical farming to produce local food.

9. Introduce a farmers market with local goods and produce, possibly in the smaller site west of the Oregon Rail Heritage Museum.

10. Include high quality bicycle and pedestrian infrastructure including paths, wide sidewalks or lanes, recycling bins, bike share, comfortable crossings, bike parking, and valet bike parking.

11. Establish a sense of place by connecting to the district's industrial history. Keep the visual aesthetic by building structures that match or complement historical styles.

12. Encourage high-tech, innovative industrial use by building adaptable industrial or research spaces.

13. Include decorative and interactive art elements to enhance a sense of place. Include meaningful public art that defines the local area such as the Cascades, science, historical and cultural elements of Portland or Oregon.

14. Develop entry statements along Water Avenue, the Eastbank Esplanade, etc. to enhance the area boundaries and sense of place.

15. Build a hotel or mixed-use development in the large ready-to-develop lot south of OMSI.

16. Completely transform the plaza outside OMSI's entrance. This can incorporate more open space for nature, socializing, and recreation, food carts with local food, interactive elements, seating, etc.

17. Install green roofs and green walls on new and existing buildings.

18. Transform select walls into living walls with art or organization identities, as well as incorporating moss graffiti art.

19. Install sustainable stormwater features to decrease urban runoff from reaching the Willamette River.

20. Start rainwater harvesting and reuse wastewater and stormwater to cycle back through irrigation, non-potable water fountain sculptures, and toilet flushing to increase energy and water conservation.

21. Redesign the waterfront to incorporate healthier fish and riparian habitats, as well as interaction areas for visitors to learn about the river ecosystem.

22. Replace the existing paths, sidewalks, and other impervious surfaces with permeable green pavers to absorb urban runoff.

23. Install native trees, vegetation, interactive water features, bioswales, and rain gardens throughout the District.

24. Create more public open space under Marquam Bridge. Use this space for recreation, temporary fairs, festivals, summer concerts, outdoor movie screenings, and farmer's markets.

25. Install a playground, rockwall, science-orientated play features, and interactive water features for children to play with.

A panorama of the undeveloped south of OMSI near the new Tilikum station.

A group photo following a successful charrette in Portland on May 15th, featuring the 2014-2015 OLIS cohort, instructor Ric Stephens, UO students, and area professionals.

OMSI OREGON MUSEUM OF SCIENCE AND INDUSTRY

ORHF

Portland Community College

CLIMB Center for Advancement Continuous Learning for Individuals, Management & Business

PORTLAND OPERA

GDAŃSK UNIVERSITY OF TECHNOLOGY

OLIS

UNIVERSITY OF OREGON