A Front Porch for Marquam Hill & OHSU

Project Description
This three-term studio developed new “front porch” proposals that provide access to the institutions and amenities on Marquam Hill, including the area from the south waterfront to OHSU, with a focus on the base of Marquam Hill and urban spaces adjacent to the Gibbs Street station as well as the conveyance through Terwilliger Parkway. University of Portland engineering students also contributed to the project.

New Mobility Ecosystem

Project Description
Students studied the future of urban transport and the potential impacts of emerging technologies and new business models as they relate to the urban mobility ecosystem.

Selected Recommendations
- Charge for Park & Ride use
- Develop data sharing, AV, and security policies
- Update transit apps to provide cross-system payment and multi-mode service delivery

Integrating Transit and Technology

Project Description
Students applied product design skills to determine how a multi-modal urban transit app could provide a variety of system users with incentives and information needed to guide mobility choices. The final product includes app design concepts.
Autonomous Vehicle Federal Policy Implications

Professor: Greg Dotson
Partner Lead: Eric Hesse, TriMet
Discipline: Law

Project Description
Law students researched federal autonomous vehicle policy development and legal cases related to local government and autonomous vehicles.

Autonomous Vehicle Budget & Revenue Implications

Professor: Rebecca Lewis
Partner Lead: Eric Hesse, TriMet
Discipline: Planning, Public Policy, and Management

Project Description
Public Budget students examined how transportation revenue in Tualatin, Tigard, and Portland would be affected by the adoption of AVs as a primary source of transportation.

Selected Recommendations
- Cordon pricing
- Pick-up and drop-off zones
- Mobile business tax
- Electric vehicle charging stations

Bridgeport Village Transit Opportunities

Professor: Marc Schlossberg
Partner Lead: Zoe Monahan, City of Tualatin
Discipline: Planning, Public Policy, and Management

Project Description
Students generated ideas and concepts for sustainable transportation integration into the future Bridgeport Village shopping center development.

Selected Recommendations
- Redirect traffic to avoid high-volume pedestrian crossings
- Install physical barriers between vehicles
- Increase visibility in high-volume automobile corridors
- Begin a bus microtransit service
Walkability & Placemaking in the City of Tigard

**Project Description**
Students generated concepts for connectivity/walkability, community outreach, placemaking and neighborhood identity, and affordable housing.

**Selected Recommendations**
- Invest in the 70th Avenue corridor to increase transit and pedestrian/bicycle paths
- Use creative wayfinding signs and host pop-up events to promote walkability
- Expand accessory dwelling parking and detached unit access

Barbur Boulevard: Designing a Model Civic Corridor

**Project Description**
Students developed concepts that blend the idea of Main Street as the “connective tissue” that enhances the assets, character, and heritage of adjacent neighborhoods.

**Selected Recommendations**
- Reduce automobile congestion and improve safety for all modes
- Increase neighborhood connectivity
- Integrate stormwater facilities, trees, and public green spaces into streetscapes
- Develop a town center and station area

Active Transportation for Portland Neighborhoods

**Project Description**
Students developed active transportation plans for two MAX Station project areas, Barbur Boulevard/19th Avenue, and Baylor/Clinton.

**Selected Recommendations**
- Short- and long-term bicycle and pedestrian networks for the Tigard Triangle
- Design guides for various roadway types and complete street design elements
- Policy options and implications, such as updated pricing for parking
## Paid Parking Strategies

**Professor:** Aaron Gobul, Portland State University  
**Partner Lead:** Jeb Doran, TriMet  
**Discipline:** Planning

### Project Description
Students examined implementing a metered parking program for Southwest Corridor Park & Rides in the City of Tigard with an on-street metered parking program.  

### Selected Recommendations
- A Park & Ride facility will be necessary to meet projected demand for transit parking in the next 20 years, and that it will be most effective in conjunction with an on-street metered parking program and shared parking in downtown Tigard parking lots.

## Lair Hill-Synagogue Historic Preservation

**Professor:** Jim Buckley, UO Portland  
**Partner Lead:** Dave Aulwes, TriMet  
**Discipline:** Historic Preservation

### Project Description
Students explored repurposing the synagogue on Marquam Hill and produced design concepts and strategies for historic preservation.  

### Selected Recommendations
- Update historic district information  
- Summarize site features for placemaking  
- Identify neighborhood needs and develop guidelines for wayfinding, traffic calming, energy-efficiency and light rail line impacts  
- Develop concepts for the reuse of the historic synagogue

## Community Profiles and Product Design Stories

**Professors:** Maya Lazaro, Ed Madison  
**Partner Lead:** Jeb Doran, TriMet; Amber Espinoza, Metro  
**Discipline:** Journalism, Allen Hall Studios

### Project Description
Using advanced media principles students produced and managed creative projects that conveyed the opportunities and constraints on the proposed Southwest Corridor light rail station project and a transit app development project.
**Southwest Barbur Boulevard Stormwater Plan**

**Professor:**
Pat McLaughlin, Portland State University

**Partner Lead:**
Ali Al Sahaf, TriMet

**Discipline:**
Engineering

**Project Description**
Engineering Capstone groups assessed existing conditions, collected data, worked through alternatives, and created a selection matrix to choose a preferred option for stormwater facilities on Barbur Boulevard. The report also includes cost estimates.

**Selected Recommendations**
- Planters that treat water quality in a planting strip
- Basins that detain and treat water
- Open space ponds that detain/treat water

**Southwest Barbur Boulevard Stormwater Plan**

**Sustainable Urban Design Studio and Seminar**

**Professor:**
Nico Larco, UO Portland

**City Staff:**
Jeb Doran, TriMet; Gary Pagenstecher, City of Tigard

**Discipline:**
Architecture

**Project Description**
Using the Sustainable Urban Design framework, students created plans and graphics to demonstrate a range of urban design concepts for the Downtown Tigard station area that incorporated development visions, streetscape and organization of connective grids, and various typologies (housing, commercial, and industry) within the station area.

**Tigard Transit Station Real Estate Development Potential**

**Professor:**
Ian Carlton, UO Portland

**Partner Lead:**
Jeb Doran, TriMet

**Discipline:**
Real Estate

**Project Description**
Students engaged the urban real estate development process, particularly urban infill development, through recognition of the fundamental concepts and techniques used in the real estate development profession. Students also used financial modeling to assess actual real estate investments. Students generated a financial analyses of real estate developments in Downtown Tigard, including a pro forma analysis of a hypothetical development project in the Southwest Corridor station area.
**Green Infrastructure & Transit Projects as Habitat Corridors**

**Project Description**
Students generated plans and graphics demonstrating the fundamental benefits of integrating green infrastructure best practices on urban ecology management. Student concepts cover a range of scales to provide a holistic benefit to urban natural resources within large transit infrastructure projects.

**Professor:** Dave Elkin
**Partner Lead:** Jeb Doran, TriMet
**Discipline:** Landscape Architecture

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**Tigard Civic Ecology, Planning, and Urban Design**

**Project Description**
PSU Planning and Urban Design students aimed to create an urban design vision and framework plan to guide the future development of central Tigard, its commercial core, and the areas impacted by the proposed light rail alignment and station area. Student proposals provided new means of integrated transport, gave shape and connectivity to the public environment, and designed concepts for places that afford rich and vibrant neighborhood life.

**Professor:** Tim Smith, Portland State University
**Partner Lead:** Jeb Doran, TriMet; Gary Pagenstecher, City of Tigard
**Discipline:** Planning and Urban Design

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**Clean Energy Solutions: TriMet Community Solar**

**Project Description**
Students examined the viability of TriMet as an anchor tenant for a community solar project using the soon-to-be completed community solar pathway being developed by the Oregon Public Utility Commission. Final products demonstrate the viability of community-scale energy production projects that aggregate a variety of business and/or residential buyers and use the investor-owned utility as a guaranteed off-taker.

**Professor:** Joshua Skov
**Partner Lead:** Bob Hastings, TriMet
**Discipline:** Business
Project Description
Students highlighted the area’s transit-oriented redevelopment potential to energize the new station.

Selected Recommendations
- Configure the Park & Ride to provide joint development opportunities
- Plan for Red Rock Creek riparian conservation and expansion, improved water quality treatment, and floodplain enhancements
- Provide pedestrian connectivity with access to natural trails
- Create new open space parks and plazas
- Design point source energy production for sustainable station area development