Bicycle Transportation + Sustainable Transportation Project Portfolio



Bicycle Transportation

Communities benefit from diverse bicycle transportation recommendations

From improving safety and fostering independence for kids riding their bicycles to reducing the impacts of climate change and greenhouse gas emissions, many communities are interested in promoting bicycling as a transportation option. Taught by Professor Marc Schlossberg, this course gives students the opportunity to explore the various elements involved in planning and advocating for increased utilization of bicycles as a form of urban transportation. The class focuses on three key areas:

- 1) policy and planning
- 2) design, safety, and legal issues
- 3) social change.



Sustainable Transportation

Varied sustainable transportation recommendations build community resiliency

Professor Marc Schlossberg's Sustainable Transportation course broadens recommendations from varied transportation modes such as walking, biking, micromobility and public transit, with the intent to reduce community-wide fossil fuel use.



What is the Sustainable City Year Program?

The Sustainable City Year Program is an innovative university-community partnership program founded by the Sustainable Cities Institute at the University of Oregon in 2009-10. In this unique model, existing courses, faculty, and students from across campus are purposefully directed toward a single Oregon community over an academic year to address vexing issues identified by the partner. SCYP and the students, faculty, and communities it engages with are an example of Oregon innovation, leadership, and how leveraging resources can contribute to meaningful, additional, and societywide value. SCYP creates a conduit for translating knowledge into practice, and provides significant workforce development opportunities for students, adding 'hard' and 'soft' skills and hands-on experience to all levels of students' education.



School of Planning, Public Policy and Management







Connecting Sisters, Oregon

Partner: City of Sisters Instructor: Marc Schlossberg

Project Description: Situated in northwest Deschutes County, the city of Sisters and nearby Sisters Country include beautiful natural surroundings, a variety of year-round recreational opportunities, and a vibrant local economy. Population and housing growth are anticipated to continue over the next decade, putting pressure on Sisters to accommodate new residents while maintaining its community livability. Influences such as a proposed downtown bypass road north of East Cascade Avenue, primarily to divert freight trucks from the city center, will reduce truck traffic through the heart of Sisters. Because of its small size, traveling within the city is relatively easy to do by foot, bicycle, or car.

Recommendations: Students examined a variety of challenges, perspectives, and possible solutions related to bicycle transportation in Sisters. Student recommendations support bicycle transportation opportunities that are safe, connected, and comfortable for all user types. Specific ideas included:

- Design multi-use paths and redesign current automobile-centric streets to be more bicycle-friendly, such as Larch Street, East Washington Avenue, and East Cascade Avenue.
- Promote Sisters' Safe Routes to School program with creative "safe route" signage, park and ride areas, and partnering with "Bikes4kids".
- Increase local and regional bicycle tourism opportunities through new wayfinding signage and new mobility hubs that include bicycle parking, bathrooms, and bicycle repair stations.
- Create bicycling-centered marketing with Sisters-branded murals, artwork, and merchandise.
- Increase bicycle accessibility through bikeshare and bicycle subsidy programs.









SPRING 2021 Bicycle Transportation in the City of Troutdale

Partner: City of Troutdale Instructor: Marc Schlossberg

Project Description: With its strategic location in the Portland region, Troutdale is uniquely positioned to develop its bicycle transportation infrastructure to offer numerous benefits, including a safer environment for cyclists and motorists, improving physical and mental health, reducing carbon emissions, benefiting local businesses, and strengthening Troutdale's sense of place. Students developed marketing campaigns and critically examined potential redesigns to existing infrastructure to promote higher rates of bicycle ridership relevant to Troutdale's needs and context.

Recommendations: The report organized recommendations in a tiered system of 'Gold', 'Silver', and 'Bronze'. For example, Gold recommendations require the highest level of investment, and contain what students identify as the most effective and comprehensive steps of implementation. Concepts and recommendations ranged from small, site-specific to larger, regional-scale ideas to include:

- Construct a dedicated two-way protected bike path on Main Street.
- Add a bike-accessible park and an off-street path to Halsey Street.
- Incorporate proposed paths, increased bicycling facilities, and increased bicycle parking capacity to create safe ways to access Glenn Otto Park.
- Utilize the 40-Mile Loop to offer scenic views, connect parks to a larger system of trails and outdoor opportunities, reduce vehicle use, stimulate social activities, improve safety to appeal to different kinds of cyclists, and uplift local businesses.
- Improve connectivity and hospitality toward cyclists on 2nd Street (e.g., promoting local art).









Cycling in Coburg for Recreation, Transportation, and Tourism: A Visioning Process

Partner: Lane Transit District Instructor: Marc Schlossberg

Project Description: In collaboration with Lane Transit District, the city of Coburg examined and explored concepts to increase bicycle transportation, applying community member insights from the 2017 Coburg Community Visioning Project. Students addressed multi-use paths, transitioning streets from auto-centric to more bicycle friendly, creating opportunities for safe routes to school, improving bicycle tourism, and developing bicycling marketing materials and outreach campaigns.

Recommendations: To grow Coburg's community feel and presence as a cycling destination, student recommendations included:

- Support for cycling events (e.g., "Gran Fondo" and self-guided tour of Coburg's history) and youth focused programming (e.g., bike mechanic school clubs, bike rodeos, and Safe Routes to School).
- Development of Pavilion Park as a bicycle and transit hub to include a sheltered "fix-it" station for DIY bike repair and community message boards.
- Investment in transportation infrastructure, including traffic calming measures, condensing traffic lanes to increase the safety of cyclists, and expanding the connectivity of current bicycle networks.

School of Planning, Public Policy and Management







La Pine Multi-Use and Pedestrian Connectivity Plan

Partner: City of La Pine Instructor: Marc Schlossberg

Project Description: To increase bicycle ridership for residents and visitors in the city of La Pine, students developed proposals for local and regional networks, street and intersection redesigns, Safe Routes to School programs, land development code revisions, and methods to promote both placemaking and tourism. A central tenet guiding the work promoted ways people could feel comfortable and safe using their bicycles and by doing so, increase the health and happiness of La Pine residents, grow its economy, and reduce its environmental footprint.

Recommendations:

- Increase bicycle usage on Highway 97 by pairing it with already scheduled projects to improve trail connectivity, improve stormwater management and water quality by installing bollards and bioswales, narrow traffic lanes, and increase sidewalk space.
- Redesign and install infrastructure projects on Huntington Road to include cycle tracks, bike boxes, intersection scramble crossings, separate bike signals, loop detectors, street markers, and traffic calming devices.
- Incorporate more navigational signage and a mural onto one side of the La Pine Central Station that features the multiple ways of commuting around La Pine and the Central Oregon region, including outdoor recreation opportunities.
- Improve safety and connectivity around elementary schools such as a Rectangular Rapid Flashing Beacon (RRFB) pedestrian crosswalk at Rosland Elementary School.



ON School of Planning, Public







Bicycle Transportation in the City of Albany

Partner: City of Albany Instructor: Marc Schlossberg

Project Description: The city of Albany desires to create and expand its bicycle network with a focus on safety, connectivity, and accessibility for community members of all ages. Students collaborated with city staff to create proposals and recommendations that will increase bicycle transportation, which will ideally lead to improved health, a boost for the economy, and environmental benefits. Recommendations focused on the following goals:

- 1. Provide a safe and efficient transportation system.
- 2. Provide a diversified transportation system that ensures mobility for all community members and provides alternatives to automobile travel.
- 3. Provide a transportation system that balances financial resources with community livability and economic vitality.

Recommendations: Themes focused on: 1) bicycle infrastructure and street redesign, 2) connectivity and bicycle networks, and 3) city events to promote bicycle transportation. Recommendations included:

- Redesign First Avenue in three phases to reposition bike lanes, remove parking, and include bioswales and trees.
- Complete Periwinkle path to improve safety and connectivity.
- Redesign Lyndon Corridor in three phases to implement a buffered bicycle lane, curb cut-outs, relocation of loading zones, and bicycle amenities.
- Improve infrastructure in Sunrise and Oak neighborhoods through design recommendations, including a two-way cycle track, painting bike lanes green, introducing small traffic delineators, shifting the location of vehicle parking, sharrows, stop lines, and bicycle boxes at intersections.
- Develop bicycle-friendly events and programs for residents that include pop-up bike lanes, bike-in movie theater, bike-aholic tour, bike maintenance events, educational children's programs, summer camps, and a kid's bike map.









Bike the Hub: Creating a Family-Friendly Bike System in Redmond

Partner: City of Redmond Instructor: Marc Schlossberg

Project Description: Ideas, methodologies, and proposals for the city of Redmond focused on a family-friendly bicycle network that included school connectivity and the redesign of several auto-centric corridors. Project scopes were generally open-ended, but students made recommendations that could be used in future city transportation projects. Students conducted site visits; analyzed GIS data; and reviewed federal, state, and regional transportation regulations and requirements, as well as local comprehensive and bicycle master plans.

Recommendations: Four project themes emerged: bicycle networks, family-friendly bicycle corridors, family-friendly biking to and from school, and marketing. Recommendations included:

- Redesign First Avenue in three phases to reposition bike lanes, remove parking, and include bioswales and trees.
- Connecting the Redmond Bicycle Network to Safety and Recreation: The proposal involved three phases for reimagining Redmond's streets and included infrastructure improvements, artistic community connections, and safety measures for improving intersections and bicycle lanes.
- Family-Friendly Bicycle Corridors: Projects presented best practices for redesigning major, auto-centric corridors that accommodate bicyclists of all ages and skill levels.
- Family-Friendly Bicycle Connections to and from Schools: Proposals included redesign of several corridors to demonstrate techniques for upgrading current streets, paths, and crosswalks around schools.
- Marketing and Safe Routes to School: Recommendations included how to build a bicycle and pedestrian advisory group, suggestions for outreach, information and budgets for events, and best practices for implementing Safe Routes to School.









Bicycle Transportation in Medford: Connections to the Bear Creek Greenway

Partner: City of Medford Instructor: Marc Schlossberg

Project Description: Students examined critical elements of an urban bikeway system and proposed projects that would encourage and increase bicycle ridership and safety in areas surrounding Medford's Bear Creek Greenway. Students considered current bicycle parking capacity, average daily traffic counts, neighborhood demographics, the local economy, and nearby destinations. Students collaborated with city staff to identify locations where the Greenway intersects key Medford streets. Recommendations varied from straightforward changes that complemented existing infrastructure to more challenging road redesigns and treatments.

Recommendations:

- Improve bicycling routes on neighborhood streets that connect to the Bear Creek Greenway and add wayfinding signage with consistent branding.
- Identify vital arterials where creating complete streets would have the greatest impact such as: implementing a two-way cycle track along the east shoulder of Riverside Avenue/OR-99, extending existing bicycle lanes from Central Avenue through downtown to Hawthorne Park, and eliminating on-street parking along the north side of 8th Street and Main Street in favor of a buffered bike lane for cyclists.
- Pursue an opportunity for a Rails-with-Trails path that could greatly contribute to Medford's bicycling infrastructure as a north-south corridor connector.
- Create events and incentives, which could include free or discounted concessions at sporting events for those who bicycle, a 'Car Free' street event, and discounts at participating businesses.











FALL 2011

Cycling Towards a Sustainable Future: A Plan for the Implementation of Bicycle Networks in Springfield

Partner: City of Springfield Instructor: Marc Schlossberg

Project Description: Students considered how new and existing bicycle infrastructure could encourage bicycle ridership in the city of Springfield. City documents and goals informed student work products that focused on: the Gateway to RiverBend Connection, the Virginia/Daisy Bicycle Boulevard, and the conversion of Weyerhaeuser Haul Road into a multi-use path. Proposals fell into four general categories: A Bicycle-Friendly Main Street, the Gateway to RiverBend Connection, Bicycle Infrastructure for Future Development: Weyerhaeuser, and Increasing Neighborhood Connectivity.

Recommendations:

- Apply the principles of Complete Streets to address the issue of transforming Main Street into a more accommodating environment. Suggestions included infrastructure and bicycle design as well as raising public awareness to encourage bicycling as a form of transportation within Springfield.
- Improve the connection between the Gateway Transit Center and Springfield's largest regional hospital, Sacred Heart Medical Center at RiverBend. Recommendations for physical improvements along this route include narrowing the roadway and adding bike lanes, sharrows, wayfinding signage, and traffic calming elements such as roundabouts on residential streets.
- Encourage bicycle infrastructure in neighborhoods and residential areas including a bicycle boulevard on the Virginia/Daisy corridor and connectivity analysis in an area just south of Highway 126, at the intersection of Pioneer Parkway and Centennial Boulevard. Both projects include public education to raise awareness and use of the bicycle infrastructure.
- Redesign Weyerhaeuser Haul Road into a multiuse path in anticipation of future urban growth and development in the Jasper Natron Area including increasing accessibility to the path for adjacent neighborhoods through design elements such a bicycle traffic light and a park-and-ride area.









Bicycle Transportation

Partner: City of Salem Instructor: Marc Schlossberg

Project Description: The city of Salem desired to fix missing or inadequate links in the bicycle (and pedestrian) routes through and around downtown and its parks system. Students referenced suggestions from city of Salem staff, local bloggers, and residents as well as city data to recommend bicycle transportation improvements that respond to Salem's challenges.

Recommendations:

- Address current and future connections from West Salem, via parks and the Union Street Pedestrian and Bicycle Bridge (Union Street Railroad Bridge), to the core downtown area. Also considered were the many existing trails within the complex of centrally located parks (Wallace Marine, Riverfront, MintoBrown Island, and Bush's Pasture Parks).
- Invest in two new bicycle and pedestrian bridges to connect a larger area of the Salem core to decrease congestion while providing more cycling options across town.
- Improve bicycle infrastructure on north/south corridor connections to the downtown core with the introduction of bike boxes, bicycle lanes with hard separation from vehicular traffic, bicycle priority signs, and shared use paths.
- Encourage, educate, and address attitudes and behaviors related to bicycling in Salem, including events that enrich and promote cultural change. For example, issues confronted by women as bicyclists are primarily about safety, requiring thoughtful consideration when planning infrastructure.



TTY OF School of Planning, Public







FALL 2019

Promoting Sustainable Transportation in the Coburg Corridor, Lane Transit District (LTD)

Partner: Lane Transit District Instructor: Marc Schlossberg

Project Description: As Coburg Road densifies as a transportation corridor, distances between residences, economic centers, and recreation spots will decrease, making walking, cycling, scootering, and transit trips more desirable. Students proposed a mobility hub to facilitate the movements of community members in comprehensive and inclusive ways to achieve the future goals for Eugene and Lane Transit District. Each mobility hub recommendation focused on increasing safety and making riders and walkers feel more comfortable. Five proposed mobility hubs along different parts of Coburg Road are summarized below Support for cycling events (e.g., "Gran Fondo" and self-guided tour of Coburg's history) and youth focused programming (e.g., bike mechanic school clubs, bike rodeos, and Safe Routes to School).

Recommendations:

- Construct a mobility hub "Coburg Connect" to increase mobility for people visiting the Oakway Shopping Center area to include reclaiming part of the large parking lot, adding infrastructure to improve safety, and incorporating rideshare and bikeshare locations.
- Repurpose land adjacent to the intersection at Coburg Road and Harlow Road for a mobility hub to include a protected cycle track, floating EmX station, dedicated bus lane, higher visibility crosswalks, and decreased speeds and motor lanes.
- At the intersection of Coburg Road and Willakenzie Road add narrowed vehicle lanes, dedicated bus lane, and protected bicycle lane through a former parking lot.
- Incorporate multimodal transportation improvements near Sheldon High School to include visibility and safety essentials such as speed bumps, light fixtures, stop signs, widened crosswalks, and designated parking spaces for a ride-share and park-and-ride.
- Repurpose the Shopko parking lot as a mobility hub to consist of a network of carless streets, plaza for event space, alteration of existing traffic flows, and redesigned transit stops and intersections.









FALL 2017

Sustainable Transportation in the City of Tualatin

Partner: TriMet, City of Tualatin Instructor: Marc Schlossberg

Project Description: Tualatin's increase in population and successful economic development has led to more people and industry, as well as congested streets. Based on city ideas for suggested improvements, site visits, students reinforced city goals to:

- 1. Increase accessibility for employers and employees.
- 2. Reduce congestion felt by the entire city and its neighbors.
- 3. Design (or redesign) transportation systems to accommodate an aging population and children.

Recommendations: Students focused on three themes: walking, biking, and transit to emphasize pedestrian and cyclist safety, redesign of streets, and prioritizing alternate non-automobile centric infrastructure. Recommendations included:

- Improve infrastructure to focus on safety and traffic calming, such as narrowing car travel lanes and expanding bike lanes on priority streets.
- Focus on building bicycle network connectivity to include connections to Bridgeport Village via Tualatin Commons and the Fanno Creek Trail, upgrading the Tualatin River Greenway Trail, and converting 57th Avenue into a bicycle boulevard.
- Connect the eastern neighborhood of Tualatin and the Westside Express Service (WES) Station and increase cyclist activity though improved bicycle infrastructure.
- Utilize technology to increase bicycle ridership, such as promoting the bikeTualatin App and implementing a bike share system.
- Improve the MAX system safety, walkability, bicycle storage, and quality of experience for pedestrians and cyclists to include greenery, noise reduction, protected pedestrian pathways, and improved multimodal options. Add a bus rapid transit (BRT) system to connect Tualatin Commons and Bridgeport Village.





