



## Portland, Oregon Pollinator Corridor Bikeway

### Challenge

Bicycling is one of the main non-fuel-consuming, non-polluting forms of transportation in the United States. Not only does bicycling reduce fossil fuel emissions that would otherwise be caused by vehicle trips, but it can also reduce congestion and noise resulting from vehicular traffic.<sup>1</sup> All bicycle routes connecting the Lloyd neighborhood in northern Portland, Oregon with the downtown and adjacent neighborhoods lacked separated bike infrastructure, and the most direct route along Multnomah Parkway had four lanes of traffic, posing safety concerns for bicyclists.

Pollinator populations, especially those in urban areas, are declining primarily due to habitat loss, invasive pests, loss of genetic diversity, and climate change.<sup>2</sup> Pollinators are responsible for pollinating over 1,200 varieties of food crops, adding \$10 billion in annual value to the United States agriculture industry as a whole.<sup>3</sup> Beyond agricultural benefits, pollinators support overall ecosystem health by pollinating over 180,000 different types of plants worldwide.<sup>4</sup> Plants that support pollinators can be incorporated in corridors, roadways, parks, and bikeways as a way to connect fragmented and shrinking habitat.

### Solution

In 2016, the Lloyd EcoDistrict partnered with several Portland organizations to design and construct Portland's first pollinator corridor bikeway; project partners included the Portland Bureau of Transportation (PBOT), Go Lloyd (the Lloyd District Transportation Management Association), Portland Parks and Recreation, and City Repair (a local nonprofit that supports community building and placemaking).

The pollinator corridor bikeway, located on Multnomah Parkway, combines ecology, community engagement, and design. The roadway alignment originally held four lanes of vehicle traffic, which were reduced to two lanes of traffic with bus pullouts, parking on both sides of the street, and separated bike lanes



*The pollinator bikeway buffer contains large cement planters with plants preferred by pollinators. Image source: Lloyd EcoDistrict*

<sup>1</sup> Federal Highway Administration, [https://safety.fhwa.dot.gov/ped\\_bike/docs/case15.pdf](https://safety.fhwa.dot.gov/ped_bike/docs/case15.pdf)

<sup>2</sup> U.S. Department of Agriculture, <https://www.usda.gov/media/blog/2020/06/24/pollinators-crossroads>

<sup>3</sup> U.S. Forest Service, <https://www.fs.fed.us/wildflowers/pollinators/importance.shtml>

<sup>4</sup> Pollinator Partnership, <https://www.pollinator.org/pollinators>

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buffered by perennials in large planters to provide a physical barrier between bicyclists and vehicles, all resulting in reduced vehicle speeds.<sup>5</sup>

Complete Streets are streets that are safe, and feel safe, for everyone using the street, designed to give equal consideration and accessibility to all users regardless of age, ability, or mode of transport. Pollinator corridors link large areas of fragmented pollinator habitat. The pollinator corridor bikeway combines these approaches by embedding a pollinator corridor within a Complete Streets design by using pollinator plants as buffers for a separated bike lane, which supports pollinator population health and separates cyclists from vehicles. Pollinator plants have the potential to revitalize even the most urban ecosystems while providing streetscape improvements and community placemaking. Pollinator bikeways put pollinator benefits and sustainable transportation on display.

The pollinator corridor bikeway was spearheaded by PBOT and Go Lloyd to create an improved active transportation and human scale environment through the implementation of Complete Streets principles. Lloyd EcoDistrict, a nonprofit organization that aims to make Lloyd a more sustainable neighborhood by setting goals, aggregating resources, and catalyzing action, became involved in the project and proposed the installation of large pots filled with perennials that attract pollinators within the bike lane buffer as a way to incorporate additional ecological benefits. The pollinator corridor bikeway promotes sustainability by combining active transportation and ecological benefits.

The project was primarily funded using the [Oregon Metro Metropolitan Planning Organization's Regional Transportation Options \(RTO\) Program](#), provided by the Federal Transit Administration. Go

Lloyd administered \$10,000 in PBOT funding during the development of the pollinator corridor and continues to provide ongoing maintenance funds.



*Neighborhood volunteers, including residents and employees, help to maintain and care for the pollinator bikeway. Image source: Lloyd EcoDistrict*

Portland Parks and Recreation, City Repair, and several corporate partners also supported Go Lloyd and Lloyd EcoDistrict with the development and implementation processes. Portland Parks and Recreation selected plants, which were potted in unused planters leftover from a previous PBOT project. City Repair provided community outreach about the benefits of pollinator corridors and pollinator plants. Corporate partners sponsored planters and provided volunteers that assisted with filling the

<sup>5</sup> Though not explicitly mentioned in the Manual on Uniform Traffic Design or the American Association of State Highway Transportation Officials' Green Book, the [FHWA Separated Bike Lane Planning and Design Guide](#) recommends planters as a way to separate bicycle lanes from traffic. The guide notes that planters increase bicyclist comfort and are appropriate for streets with slower vehicle speeds.

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planters and providing maintenance and plant care.

Go Lloyd collaborated with the partner organizations to carry out the project's stakeholder engagement process, first holding several input sessions for residents and office workers along the Multnomah Parkway who would be impacted by the new traffic pattern. Members of the public generally expressed concerns about reduced parking capacity and traffic congestion created by stopped buses.

### **Conclusion**

The Portland pollinator corridor bikeway, begun in 2016 and expanded in 2017 and 2018, improves roadway safety for all users by reducing vehicle speeds and providing a separated bicycle lane. The pollinator plants support declining, yet critical, pollinator populations while also strengthening the neighborhood's relationship with nature and educating residents on the importance of pollinators and sustainability. Since the installation of the pollinator corridor bikeway, residents have been eager to act as ambassadors for the project by volunteering to help maintain the planters in front of their buildings, and businesses continue to provide financial and volunteer support as needed. Communities looking to implement similar projects can utilize [FHWA resources on pollinators](#).

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