

Pinehurst Station: LEED Case Study

Sound Transit's Pinehurst Station is pursuing LEED certification under the USGBC LEED v4 Transit rating system. LEED certification confirms a building's innovation and sustainability accomplishments and is the most widely used green building rating system in the world.

Buildings that earn LEED certification have been proven to decrease carbon emissions, improve resilience, increase efficiency, and meet Environmental, Social, and Governance (ESG) goals.

Pinehurst Station is just one example of Sound Transit's success in sustainable and environmentally friendly station and building design, with features that prioritize community connection, water and energy efficiency, sustainable materials, and social equity.

Connecting communities: The Importance of Accessibility and Public Transit

Pinehurst Station connects Link light rail to local and regional buses and other transportation networks such as new and improved bike lanes. This expanding system enables residents to reach essential services by providing affordable, environmentally friendly public transit that connects residents to where they live, work, and play.

Sound Transit also prioritizes universal accessibility. At Pinehurst Station, all access points are designed to be gently sloped to be equally accessible for all. Passengers can reach this station through various modes of environmentally friendly transportation such as walking, biking, and public bus service (Figure 1).



Figure 1: Pinehurst Station's primary entrance is accessible by walking, biking, and public bus service. This will be a new landmark in the Pinehurst community.

Water efficiency: Reducing Water Use

The station and landscaping were designed to use water efficiently and responsibly. This station is landscaped with drought-tolerant and native plants, which can save thousands of gallons of water each year. Keep an eye out for flora such as blueblossom, red flowering currant, and the red osier dogwood — plants that further improve water efficiency while looking beautiful around the station.

Sound Transit also implemented bioretention planting areas at this station to utilize runoff that waters these native plants, further improving water efficiency. On rainy days, riders can see these features in action (Figure 2)! Pinehurst Station also uses ultra-water-efficient plumbing features for its transit operator restroom to ensure that Sound Transit is mindful with water use.



Figure 2: Pinehurst Station's north entrance includes a stormwater feature that will provide animated water flow into a bioretention planter during rain events.

Energy efficiency: Reducing Energy Use

This station conserves energy to use fewer fossil fuels, protecting the atmosphere along with the local environment. Maximizing energy efficiency has countless benefits, including cost savings for taxpayers, increased energy system reliability, and improved local air quality. This station's use of Building Management Systems as well as energy-efficient lighting equipment helps this station meet LEED certification requirements and conserve valuable energy.



Pinehurst Station utilizes long-lasting LED lighting to conserve energy and reduce maintenance cycles. A Building Management System is also used to manage and monitor the station's mechanical and electric equipment, which greatly improves energy efficiency and enables the project to achieve LEED's energy-focused credits.

The station also uses lighter-colored surfaces for natural temperature control. Lighter-colored surfaces reflect more solar radiation and are much cooler than darker surfaces (such as asphalt). According to the EPA, buildings, roads, and other similar infrastructure absorb and re-emit the sun's heat more than natural landscapes such as forests and bodies of water. Urban areas, where these structures are highly concentrated and greenery is limited, become "islands" of higher temperatures relative to outlying regions. By implementing lighter-colored surfaces along with green landscaping and specifying lighter-colored roofing and paving, the station remains cooler during the hot summer months.

Low Carbon, Healthy Materials, And Waste Diversion

Climate resilience is how infrastructure, communities, and individuals mitigate and adapt to the effects of climate change, which can include urban heat islands as well as extreme weather events. The design of Pinehurst Station purposefully models climate resilience by decreasing the public's exposure to the urban heat island effect and responsibly managing extreme rain events through stormwater retention landscaping.

This station also uses recycled and locally harvested and manufactured materials. By using recycled materials, we conserve resources, reduce pollution, and lessen the amount of waste that ends up in landfills. Locally harvested and manufactured materials also support our local economy and decrease the environmental impact of construction by minimizing carbon emitted from transportation of materials.

Pinehurst Station also uses nontoxic, low-emitting building materials, such as low VOC paints. These materials reduce the concentration of chemicals that can contaminate air quality and the surrounding environments. These materials protect the health, productivity, and comfort of transit passengers and employees.

Social Equity: Affordable Fares and Living Wages

Sound Transit actively works to create an equitable transit system in our region. The agency has implemented reduced fare programs for groups including youth, seniors, riders with disabilities, and riders with lower incomes. Sound Transit also provides local living-wage jobs in construction and operations. Within the construction industry, between 12.4% and 20.5% of workers are misclassified or paid under the table. Sound Transit actively works against this discrimination, paying our construction and operation workers a fair, livable wage to protect these workers and their families from unfair discrimination practices.



Moving Forward

Sound Transit's sustainability efforts are constantly evolving. Our mission of connecting more people to more places is centered around maintaining sustainable operations in all areas, prioritizing people, planet, and prosperity while we do so. To learn more about our sustainability approach throughout the agency, please visit our sustainability webpage here: [Environment and Sustainability](#).