This project utilized three FAA grants, two ConnectOregon grants, and a share of local City of Bend funding to construct one of the largest helicopter-specific facilities in the West.
RH2 donated professional engineering services for the water, sewer, stormwater and site design to Bethlehem Inn, a homeless shelter in Bend.

The redevelopment resulted in the shelter doubling its capacity and increasing the number of services provided.
The Blackburn Center delivers a unique, integrated approach to treating homelessness by offering housing, health care, and employment under one roof, and provides a template for future projects.
The size and complexity of this project, with its adverse conditions and scheduling conflicts, among other challenges, would have taken as many as five years to complete.

Instead, it was substantially complete one month ahead of an ambitious two-year schedule, and $1 million under budget.
A unified design and construction team having a common goal to bring greater public access to a spectacular scenic area can spark innovative engineering and deliver an ambitious project with limited funding and resources.

In 1901, a tramway was constructed between Chetco Point and neighboring islands to load lumber by cable onto vessels. A timber wharf was built to provide railroad access to the vessels. The wharf and tram eventually deteriorated, and access to Chetco Point was limited to a treacherous hiking trail.

In 2016, an anonymous donor searched the coastline of the Pacific Northwest and selected the Chetco Point peninsula as the destination of choice for a privately funded new bridge and trail improvement project. The City of Brookings assembled an ambitious project team that worked through multiple constraints to make the vision a reality. The project challenges included difficult site conditions with very steep terrains and unstable slopes, complex geology, limited access for construction equipment, limited funding, and a sensitive coastal environment.

The team selected a timber bridge to span the rock outcrop ridge onto the outer peninsula to resemble the materials historically exported and used for the wharf structure. The bridges are supported on rock anchors to mitigate landslide hazards. The new bridge, paved walkways, and gentler grades have greatly improved public access to the stunning natural beauty of the Chetco Point peninsula.
This project meets the expected transportation needs of Clackamas Community College for the next 25 years. The parking lot doubles the number of parking stalls, provides ADA access and a location for personal vehicle drop-off.
Earthquake Ready Burnside Bridge Feasibility Study

The Northwest experiences large earthquakes at regular intervals, and experts say there is a 1 in 3 chance of a magnitude 8 earthquake occurring within the next 50 years in our region. Oregon is located in the Cascadia Subduction Zone (CSZ). This puts the area at risk of a major earthquake that will cause widespread damage to buildings, utilities, roads and bridges.

Portland’s aging downtown bridges are not expected to withstand a major earthquake. It’s likely no downtown bridge will be usable for at least several weeks to months after a CSZ earthquake. We need to create a resilient lifeline crossing that will continue to serve our community for generations. That is why Multnomah County is taking the lead on making at least one bridge earthquake ready.

To help achieve this goal a feasibility study was conducted from the fall of 2016 to the winter of 2018. The feasibility study included a broad public and stakeholder outreach campaign and analysis of over 100 Willamette River crossing options including tunnels, ferries and other bridge options. The on-time, on-budget study recommended four bridge alternatives for further evaluation. A preferred alternative is expected to be chosen in 2021 and construction beginning in 2024.

The on-time, on-budget Burnside Bridge Seismic Feasibility Study was completed in winter 2018, providing Multnomah County with a plan to retrofit the century-old bridge to withstand—and be operable after—a magnitude 8.0 earthquake.
This project illustrates how a small town can revitalize its economy by enhancing and refining their downtown corridor, inviting future development and growth.
The Grabhorn Reservoir Replacement shows that progressive design-build delivery results in cost savings and spurs innovation for complex and challenging projects.
This innovative team came together to develop a highly efficient and sustainable, yet also visually appealing, pump station that complements the natural environment in which it’s found.
Cornforth Consultants worked with FHWA and ODOT to recreate a roadway consistent with Samuel Lancaster’s vision of America’s first scenic byway and brought the partner agencies one step closer to re-establishing a continuous route from Troutdale to The Dalles.
Through immense teamwork, coordination, and innovation the project team was able to deliver this highly complex project, which helped (in part) to secure $5.3 billion of future transportation funding over 10 years as part of Keep Oregon Moving (House Bill 2017).
The Kellogg Creek Bridge Emergency Replacement was subtle in nature, yet deep in complexity.

It took a host of engineering, environmental, and economic solutions to design and build this robust and sustainable bridge project in one year.
The new roundabout improves mobility and safety in a rapidly growing area of Washington County. Increased traffic associated with a new high school and several residential developments now travels smoothly through the intersection, reducing pollution associated with idling cars.
Communities throughout Oregon are increasingly becoming urbanized and placing various needs on the transportation system. This trend has caused the Oregon Department of Transportation (ODOT) to re-evaluate how to establish multimodal transportation facilities within an urban context. In response, ODOT developed the *Blueprint for Urban Design*. 

The *Blueprint for Urban Design* links planning and design. Designing projects based on the urban context allows transportation facilities to contribute to the prosperity of a community—economically, socially, and environmentally. The Kistelton team’s willingness to listen and their flexibility were greatly appreciated. Their patience, professionalism, and knowledge of best practices was instrumental in completing the *Blueprint for Urban Design*. They were very easy to work with that always brought a positive attitude.

—Rich Coussler-Laid, ODOT
Significant capacity and process improvements were made to the wastewater treatment plant to bring it into compliance and provide additional capacity for growth, all while keeping the plant operational throughout the entire process.
At your next Thorns or Timbers game, while you are enjoying protection from the drizzle and a spectacular view of each shot fired and juke performed on the field, give a thought to the engineers and designers who held your experience at the center of their project goals.
The one thing you should know about this project is that with some creative engineering, it is possible to weave a nearly 1-mile-long, 10-foot diameter pipe over, under, and around major obstacles with extremely tight hydraulic constraints.

Where there’s a will, engineers will find a way.
For two years in a row, the City of Ridgefield, WA has been the fastest growing city in the state, and needed a space where the community could gather for sports and other events. This project successfully meets those needs, while minimizing environmental impact.
Local agencies came together with a common vision and shared funding strategy to increase employment opportunities, improve transportation safety, establish water supply resiliency, and reduce congestion along the corridor.

This new corridor is helping keep the economy growing, people moving, and water flowing!
The ground-breaking design of Phase A of the Tualatin Interceptor and Siphon set the new record for the tightest radius curve tunnel for a pipe of this diameter in North America, demonstrating that trenchless construction for a gravity collection system under highly constrained conditions can be accomplished with collaboration of designers and constructors.
This project revitalized the City of Tillamook and brought an economic boost to the community. With a focus on urban renewal, the city was able to free up traffic along a busy bridge entering downtown and improve access to historic buildings and business.

Traffic congestion through the City of Tillamook has been an issue for several years. Due to high peak traffic in the summer, there have been many accidents in the narrow travel lanes. Traffic was slowsignificantly during the peak summer season along a four-lane with two traffic signals entering the city. The Quincy team managed a diverse group of subconsultants and provided a project that helped improve the community it was placed in.

Final Results: Quincy was not only able to improve the speed of traffic and access through a busy thoroughfare, but also help revitalize the City through urban renewal and bring an economic boost to the community. The City was able to rebrand to “The Dairies” during the process with a new logo and colors that help show the history of the City.

Photos: 1st and Pacific intersection (top right), Festival Square (bottom left), Pioneer Museum (bottom right)
The council’s primary goal is protecting the public’s welfare and advancing the professional quality of consulting engineers and land surveyors in private practice.

ACEC Oregon works to ensure legislative and agency leaders receive information and opinions from consulting professional engineers and professional land surveyors on issues affecting the public and our professions.

ACEC promotes infrastructure investment and other issues important to the profession.

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