



## PAVEMENT ENGINEERING SERVICES

## FIRM OVERVIEW

Employee-owned and founded in 1997, GeoDesign provides integrated pavement design, geotechnical engineering, and environmental services from offices in Portland and Salem, Oregon; Vancouver, Longview, Tacoma, and Seattle, Washington; and Anaheim, California. From planning and design through construction, our experience covers transportation, utility infrastructure, and building projects throughout the Pacific Northwest, California, and Nevada.

GeoDesign's team understands the applicable codes relating to right-of-way permit acquisition, clearing, grading, erosion control, foundation preparation, geotechnical reporting, and special inspection. In addition, we are accustomed to working on projects with logistical challenges involving difficult construction access, busy city streets, and fast-track schedules.

*"GeoDesign has been a very an important part of the City of Eugene Pavement Preservation Program. Their analyses are consistently complete and well thought out, taking into account the City's methods and priorities. GeoDesign is routinely prompt in their responses and in submitting their work product."*

— **Jenifer M. Willer, PE**

*Pavement Preservation Program Manager  
City of Eugene Public Works*

## PAVEMENT DESIGN

Since GeoDesign's inception, we have heavily invested in our pavement design capabilities. For the private and public sectors, we have a wide range of experience with all types of rural and urban pavement projects, from county gravel roads to interstate highways, and from commercial parking lots to large intermodal industrial facilities. We help our clients with project-specific

pavement solutions for various pavement types, including asphalt, concrete, and composite pavements under low- to high-volume traffic conditions, with construction methods varying from conventional to pervious pavements.



H-FWD load plate

H-FWD sensors



With the FWD's non-destructive testing capabilities, we provide an accurate measurement of pavement capacity, which reduces the risk of under-designed rehabilitation.

GeoDesign's in-house tools include our extensive geotechnical laboratory capabilities, as well as a significant array of field testing tools, including Falling Weight Deflectometer (FWD), Ground Penetrating Radar (GPR), and Dynamic Cone Penetrometer (DCP). We have personnel accredited for distress surveys through the Metropolitan Transportation Commission (MTC). Our engineers and technicians link field data through Global Information Systems (GIS) for analysis and creation of visual tools.

GeoDesign maintains geotechnical and materials testing laboratories in our Portland, Seattle, and Anaheim offices, which enables us to deliver prompt, efficient service while maintaining high quality assurance and quality control. As part of our services, we offer resilient modulus testing on subbase and subgrade materials for pavement design procedures.

With GeoDesign's suite of pavement evaluation and analysis tools, we work with our clients to tailor pavement investigations and analyses that address project-specific conditions and fit within available budgets. We provide deliverables that improve cost estimating, allow for clear plan development, and generate accurate specifications.

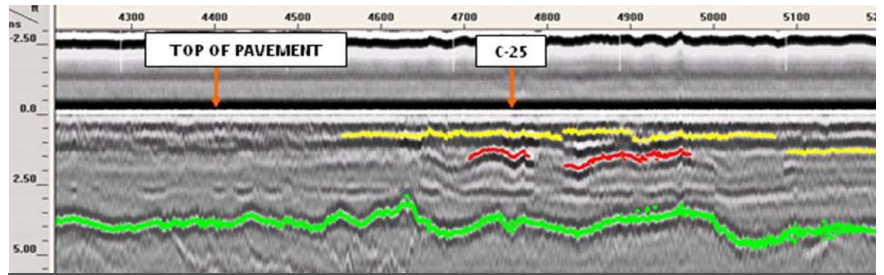
## AGENCY EXPERIENCE

### In Oregon

- City of Beaverton
- City of Cornelius
- City of Eugene
- City of Gresham
- City of Hillsboro
- City of Lake Oswego
- City of Oregon City
- City of Portland
- City of Roseburg
- City of Salem
- City of Tigard
- City of Tualatin
- Clackamas County
- Marion County
- Polk County
- Washington County
- Oregon Department of Transportation

### In Washington

- City of Langley
- City of Milton
- City of Normandy Park
- City of Redmond
- City of Seattle
- City of Shoreline
- City of Snoqualmie
- City of Tacoma
- City of Tukwila
- City of Vancouver
- City of Washougal
- Washington State Department of Transportation



### BENEFITS OF GPR

- Determines Pavement Layer Thickness
- Identifies Stripping Zones within Asphalt
- Detects Subsurface Voids
- Analyzes Rutting Mechanisms
- Detects Subsurface Anomalies
- Locates Utilities



### BENEFITS OF DCP

GeoDesign routinely uses the results from our Dynamic Cone Penetrometer testing to provide inexpensive yet accurate rehabilitation and reconstruction designs.



### BENEFITS OF CEMENT AMENDMENT

GeoDesign helps its clients with solutions to the challenges of wet and soft subgrade conditions. Cement amending on-site soil or full depth reclamation of existing streets results in cost savings over conventional soil removal and replacement, in turn shortening the construction schedule. It is an especially effective tool for allowing construction to proceed in wet weather conditions.

## CONTACT

To learn more about how GeoDesign can help with your project, please contact:



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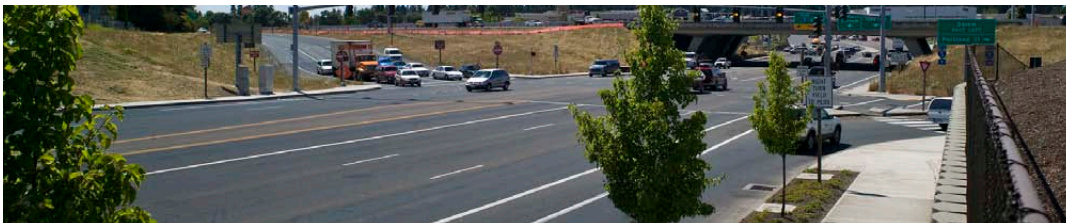
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*“It is obvious that GeoDesign puts a great deal of individual attention into each pavement design; these are not boilerplate reports. Washington County delivers \$40- to \$60-plus million in road projects every year and we demand the best. GeoDesign is very creative in finding economical and practical solutions to special problems. We truly appreciate their professionalism and technical expertise. They have an unmatched depth of experience with paving over the difficult soils in this area.”*

— **Russell Knoebel, PE**, Principal Engineer, Washington County Department of Land Use & Transportation

## CONTACT US

### Oregon

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503.968.8787	503.385.8439
<b>Hood River</b>	
503.726.3106	

### Washington

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<b>Tacoma</b>	<b>Seattle</b>
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### California

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