



## PROJECT HIGHLIGHT



### Anchorage District Group B

The November 2018 earthquake damaged infrastructure throughout Anchorage and Eagle River, and many of these damaged sites were included in the Anchorage District Group B project. The Seward Highway sustained damage at multiple locations, including north of the Dimond Boulevard overpass where lateral earthquake forces generated several transverse cracks across northbound and southbound lanes, as shown in the photo above. Emergency repairs were completed within days of the earthquake to restore the serviceability of the Seward Highway; however, permanent repairs are still needed.

Additional Group B repairs include restoring the Seward Highway pavement to its pre-earthquake condition at three locations between Anchorage and Indian and replacing guardrail to meet current standards; addressing damage to the culvert serving the South Fork Little Campbell Creek where it crosses the Old Seward Highway near 76th Avenue; replacing the outfall and storm drain pipe on Eagle River Loop north of Briggs Bridge; and repairing deep fissures in the embankment located on the south side of Dowling Road just west of C Street.

The Group B repairs will be completed during the 2021 construction season.

## EMPLOYEE HIGHLIGHT

### Daniel Dahms, DOWL Transportation Designer, EIT



Daniel started with DOWL as a Transportation Designer in 2020 after working for DOT&PF Materials since 2014. Daniel was one of the DOWL staff assigned to complete frequent field inspections of roadway sections damaged in the November 30, 2018 earthquake. These field inspections were completed to ensure that the damaged roads are still able to provide safe driving conditions until permanent repairs can be made. Daniel has been able to use much of that field inspection knowledge to aid in permanent repair designs for the Glenn Highway and sites across the Mat-Su and Kenai Peninsula. Outside of his love for engineering, Daniel also enjoys cross-country skiing, woodworking, and cooking French cuisine.

## FUN FACT | What is soil liquefaction?

Soil liquefaction is one of the main causes of infrastructure damage brought on by earthquakes, and roadways are not immune. Soil liquefaction occurs when the earthquake-induced shaking causes saturated soils to lose much of their strength and stiffness, and the wet soils behave like a liquid. Near Seward Highway milepost 50, the November 30, 2018 earthquake resulted in soil liquefaction that caused significant damage to the roadway section. DOT&PF completed emergency repairs at the site in summer 2019.

