

## Tunneling in Seattle Soils

Numerous tunnel machines, including several in Seattle, have successfully excavated ground conditions similar to those anticipated for the SR 99 bored tunnel.

More than 150 tunnels have been constructed in Seattle since 1890, mostly in glacial soils. Examples include:

- Sound Transit Beacon Hill Tunnel, Metro Transit Tunnel and Mercer Street wastewater tunnel (Seattle):
  - Ground conditions of glacial sand, silt, clay and other soils similar to the hard and dense soils along most of the proposed SR 99 bored tunnel alignment.

### Speaker

- While the soils along the waterfront are susceptible to liquefaction in an earthquake, the soils elsewhere in Seattle are fine to dig or bore in.
- The Sound Transit Beacon Hill and Mercer Street wastewater tunnel are good examples of tunneling success elsewhere in Seattle.