



### Building a Floating Bridge

#### *Why it is best at the Hood Canal*

The Washington State Department of Transportation is a pioneer in designing and building floating bridges, and holds the record for the first and the longest floating bridges. Four of the 11 permanent floating bridges in the world are located in the Puget Sound region.

A floating bridge floats on the surface of the water and is held in place by anchors. The pontoons are made up of hollow, rebar-reinforced concrete cells. The roadway is constructed on top of the pontoons. While a floating bridge might seem unusual, it is the only cost-effective solution for spanning the Hood Canal. Although the bridge is located at one of the narrowest points of the canal, the channel is still about 1.5 miles wide and up to 340 feet deep (with several hundred feet of mud above the bedrock).

The east-half of the bridge is nearing the end of its structural life. The time has come to replace it. The safety of the bridge, and most importantly drivers, is a major concern due to large storms that can cause mechanical and structural damage. The bridge is kept in excellent working order, but like an old car, it is becoming more costly to maintain and it is harder to find parts. The draw span is not as reliable, and the pontoons and anchor cables do not meet current design criteria.

The benefits to drivers include wider lanes and a larger shoulder for stalled vehicles. These improvements increase driver safety and keep traffic moving.



*The Hood Canal Bridge serves as a vital economic and social link between the greater Puget Sound and the Olympic Peninsula.*