

Featuring the Forth Road Bridge

The [Institution of Civil Engineers](#) (ICE) features the [Forth Road Bridge](#) as one of the top [200 influential people and projects](#), past and present, which show how civil engineering has shaped the world and transformed people's lives for the better.

They are now marking their 200th anniversary by drawing attention to 200 inspirational and world-changing projects around the world during 2018.

These projects have been nominated by ICE's members and selected by an expert panel, the projects illustrate the breadth and depth of civil engineering's impact on our daily lives.

This video features engineers who look after the bridge :

Completed in 1964, the Forth Road Bridge replaced the well-loved but old ferry service which carried vehicles, cyclists and pedestrians across the Firth of Forth. More private cars resulted in lengthy delays on the ferry and the new bridge transformed how people travelled between the North and South of Scotland.

One of the world's most significant long span suspension bridges, it was the fourth longest in the world and the longest outside the United States when it opened. Over 2.5 km long, the bridge carried up to 80,000 vehicles a day at its peak, considerably in excess of its design capacity. The bridge's length meant the supporting cables had to be particularly strong; each cable is made up of 11,618 high tensile wires with a diameter of 4.98mm – more than enough

wire to go all the way around the earth. As well as being immensely strong, the bridge is also highly flexible: in high winds, it moves up to 7m horizontally and 2m vertically, when traffic is heaviest.



Sara Thiam, Regional Director ICE Scotland, said : “When the bridge had to close for urgent repairs in December 2015 its closure caused significant disruption to commuters and businesses with a 33 mile diversion for over 70,000 vehicles each day. The cost to the economy was estimated at £1m/day – an event of national significance. Now that the replacement crossing is open its reuse as a sustainable transport corridor means that this beautiful bridge will continue to serve Scotland for many years to come.”

Ewan Angus, Major Bridges Director, Forth Bridges said : “Civil engineering gives you a chance to change the world; there aren’t many jobs where you can make a difference by changing people’s lives and changing the world for the better.”

The Forth Road Bridge joins the 200 projects which will be published throughout the year on *What is Civil Engineering?* pages of the ICE website. The pages are a useful tool for young people thinking about a future career in civil engineering, whatever their qualifications. The platform has been designed to promote a better understanding of the

profession after it was revealed that only 45% of adults know what the career entails and only 35% of young people could tell you what a civil engineer does.