LIKE US ON FACEBOOK
FACEBOOK.COM/QMIGRAPHICS

IN 5 MINUTES News and events – visually

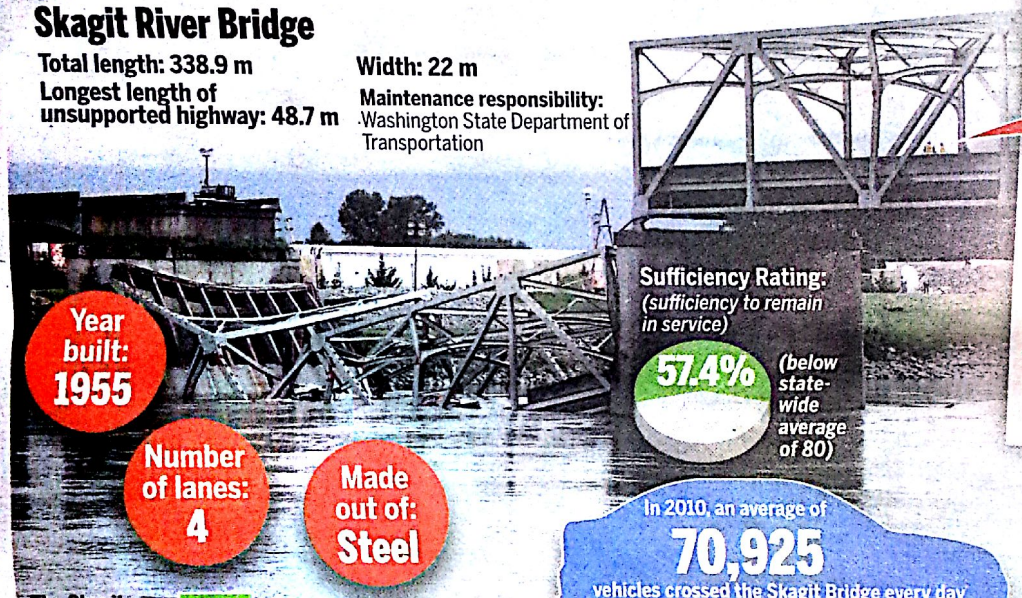
Bridge collapse

Three people were rescued from Washington's Skagit River after a span of the bridge fell into the water Thursday night. Officials are saying it may have been caused when a transport truck's oversized load struck the bridge's overhead truss.

Skagit River Bridge

Total length: 338.9 m
Longest length of unsupported highway: 48.7 m

Width: 22 m
Maintenance responsibility: Washington State Department of Transportation

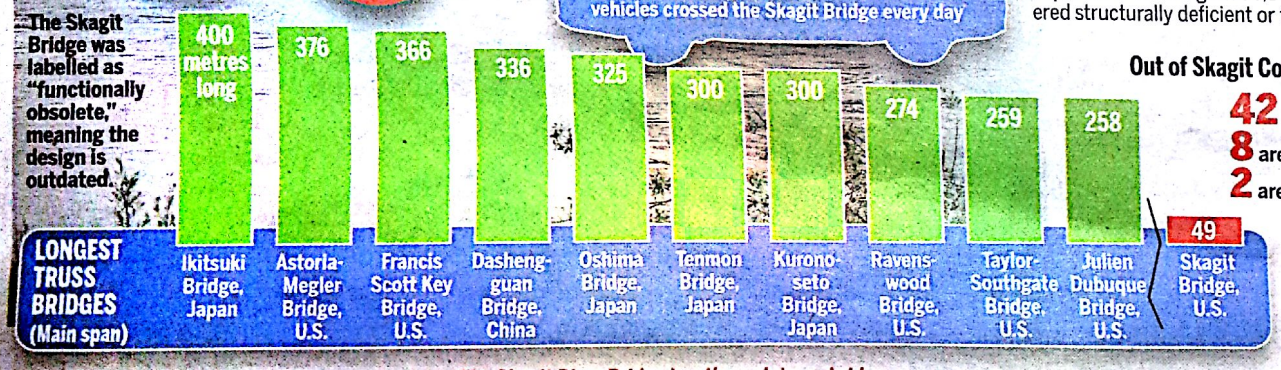


Located on the I-5 in Washington State, between Burlington and Mount Vernon

In 2010, an average of **70,925** vehicles crossed the Skagit Bridge every day

Washington was given a C- for its state's bridges in the American Society of Civil Engineers' 2013 infrastructure report card. The group said more than a quarter of Washington's 7,840 bridges are considered structurally deficient or functionally obsolete.

The Skagit Bridge was labelled as "functionally obsolete," meaning the design is outdated.



Out of Skagit County's 108 bridges:

42 are 50+ years old
8 are 70+ years old
2 are 80+ years old

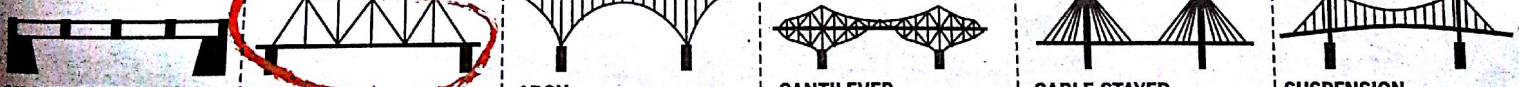
Sources: Reuters wire stories; Wikipedia

Photo: Cliff DesPeaux/Reuters

SUSAN BATSFORD, GRAPHICS EDITOR, TWITTER @SBATS1; INFOGRAPHIC BY MEGAN DINNER/QMI AGENCY

BRIDGE TYPES

The Skagit River Bridge is a through truss bridge



GIRDER/BEAM
The most basic bridge, an example being a log across a creek

TRUSS
Simple skeletal structure; made up of small beams that can support weight

ARCH
Curve has high resistance to bending forces; needs no centre piers

CANTILEVER
Modified beam bridge; support is in the middle of the span

CABLE-STAYED
Cables stretch down diagonally, supporting the girder from towers

SUSPENSION
Allows for longest spans; continuous girder with one or more towers

WORLD WATCH

CLIFF DESPEAUX/REUTERS

A span of highway bridge sits in the Skagit River yesterday after collapsing near the town of Mt. Vernon, Wash., late Thursday. The bridge collapse sent cars and drivers tumbling into a frigid river in Washington state.

Tumblin' down

Truck eyed in bridge collapse

JONATHAN KAMINSKY
Reuters

OLYMPIA, Wash.— A bridge collapse that sent cars and drivers tumbling into a frigid river in Washington state appears to have been caused when a semi-trailer truck carrying an oversize load struck a bridge support beam, officials said on Friday.

The truck crossed the bridge safely before a portion of the structure collapsed, sending two vehicles and a mass of concrete and steel into the Skagit River Thursday evening. Three people had to be rescued, officials said.

While no one was killed, the collapse of the bridge, built in 1955, puts a spotlight on the dangers posed by the nation's aging infrastructure, and follows calls by engineers and some public officials to invest in infrastructure and upgrade bridges.

U.S. National Transportation Safety Board investigators were probing the cause of the collapse, which occurred on the four-lane Interstate 5, the principal highway between Seattle and Vancouver, Canada. The bridge links the towns of Mount Vernon and Burlington.

"It's very obvious to us that the one thing that initiated that whole sequence of events was when the load the truck was carrying struck the support girder," Washington State Patrol spokesman Sergeant Kirk Rudeen said.

Washington state Governor Jay Inslee declared a state of emergency in Skagit County and two neighboring counties, citing the disruption of normal traffic, and said it would cost an estimated $15 million to repair the bridge.

Officials said the bridge, 55 miles (90 km) north of Seattle, was not among the spans listed by the state as "structurally deficient," which in some cases relates to bridges that cannot carry their intended traffic loads.