

## Forth Road Bridge



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# Introduction

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This unit focuses on the Forth Road Bridge that connects Edinburgh with Fife. This suspension bridge continues to face a number of problems regarding its deteriorating condition. The short video included in this unit illustrates some of the major structural issues facing bridges and examines some of the proposed changes to the use of the Forth Road Bridge to help increase its lifespan.

This OpenLearn course provides a sample of Level 1 study in [Technology](#)



# Learning Outcomes

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After studying this course, you should be able to:

- understand the basic structural issues of the Forth Road Bridge
- give examples of how engineers are trying to alleviate the wear and tear on the bridge.



# 1 The Forth Road Bridge

Edinburgh reaches over the Firth of Forth with two great bridges – the photogenic Victorian Forth Rail Bridge and the slender 1960s Forth Road Bridge. The latter suspends the road from cables, but it is being threatened by rust. Water has found its way inside the cables, causing them to rust and weaken. It is predicted that in 2014 they may have to stop heavy goods vehicles using it and possibly close it altogether in 2019.

The following video, an extract from BBC's *Coast* Series 3, examines many of the issues facing the Forth Road Bridge.

## Activity

0 hour(s) 30 minutes(s)

The deteriorating condition of the Forth Road Bridge has led to the Scottish Government recommending the development of a new cable-stayed bridge to the west of the existing Forth Road Bridge. There is some opposition to the construction of a second crossing rather than a replacement bridge because it is felt that this will lead to an increase in road traffic.

Watch the video extract from *Coast*, linked below, and consider:

1. the risks associated with an increase in road traffic (for example pollution and congestion on arterial routes);
2. the effect on local communities of building a new bridge;
3. what measures could be taken to reduce road traffic over the Forth, for example, investment in public transport alternatives and reducing the number of single occupancy cars and HGVs.

You may wish to share these thoughts with fellow learners by posting your ideas in the Comments section below.

Click to view the video extract (8 minutes).

Video content is not available in this format.

[Forth road bridge](#)



## 2 Conclusion

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The Forth Road Bridge, connecting Edinburgh with Fife, continues to face a number of problems regarding its deteriorating condition. Both structural issues and the increasing wear and tear of the traffic upon the bridge are causes of concern for the engineers who maintain it.

## Acknowledgements

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