

Assessing the impact of new river crossings

About this section

We have designed this consultation to be as clear as possible on the impacts of each of those options we believe are the most suitable new crossings for east London.

We arranged for a number of studies to be carried out to determine the impact of each option on traffic flow, the environment and the prospects for growth and regeneration in east and south-east London. We thought that some people might be interested in knowing how these studies have been carried out. This is set out below.

All of the impacts have been calculated with the assumption that a new road tunnel will be built at Silvertown, to relieve congestion at the Blackwall Tunnel. Our previous consultation demonstrated that there is considerable support amongst the public for the Silvertown Tunnel – 76 per cent of respondents supported or strongly supported the proposed new tunnel. We therefore intend to progress an application for the new tunnel, although this will be subject to separate consultations.

The Silvertown Tunnel will have a significant effect on traffic flow in east London. The impacts of the new crossing options included in this consultation would be quite different if the Silvertown Tunnel were not in place. In order to most accurately show what impact the new crossing options might cause, we have calculated these on the basis that the Silvertown Tunnel will be in place before any new river crossing for east London is constructed.

Traffic impacts

Authorities across the country predict the impact of highway schemes by first building a traffic 'model'. TfL has used a traffic model to predict the impacts of the new river crossings on traffic flow.

The model we used is called LoRDM (London Regional Demand Model). The model has been built using population and employment growth forecasts supplied to TfL by the Greater London Authority, which includes demographic data on major residential and employment areas. We used the model to predict how much use would be made of the new crossings in future, as well as which routes traffic would take to reach them.

Environmental impacts

The traffic model also enabled us to identify the scale of change in airborne vehicle emissions associated with each proposed crossing option. We focussed in particular in the scale of change that might take place in areas where there are already high levels of airborne vehicle emissions or large concentrations of people.

We also commissioned Hyder Environmental Services to consider the environmental impacts of new river crossings.

We asked Hyder to consider the impact of each potential new crossing on the following factors:

- Whether it would be necessary for TfL to purchase any new land, or demolish any existing buildings, to build the new crossing;
- The effect of the new crossing on the ecology of the local area, including on land, in the river and on the shore;
- The extent to which the land on which we would build the new crossing is contaminated, and the potential for the construction to disturb these contaminants;
- The effect of the new crossing on water quality in the Thames;
- The extent to which each crossing option proposed would impact existing views;
- The effect that the construction and operation of the new crossing would have on journey times for local residents;
- The energy required to operate the new crossing.

Hyder used a number of tools to determine these impacts, including by visiting each site on a number of occasions and by using a number of tools or documents published by other organisations, including relevant local Boroughs, English Heritage and the Environment Agency.

Economic impacts

A new river crossing would make businesses in east London more easily accessible to their customers, suppliers and workforce. Businesses could expand their market and become more competitive, enabling them to grow and create new jobs. A new crossing would also increase the attractiveness of land to developers, which could increase the number of new homes and other developments being built.

We investigated the potential regeneration impacts of each option through detailed research. We commissioned market research with 800 employers throughout east and south-east London. Amongst a number of other questions, we asked each employer what impact each of the options we have proposed might have on their business.

We commissioned consultants Atkins to undertake research to determine what impact a new crossing might have on the scale, nature and location of development in east and south-east London as well as how each crossing option might affect the accessibility of businesses. Their work focussed on three areas:

- Research to understand the demand for and supply of land and property in east and south-east London, including a review of the local property market;
- Reviewing the development potential of land in east and south-east London, including meeting developers, local authorities and other key stakeholders to understand what are the main barriers to investment;
- Considering what impact the new crossing options might have on access to jobs, retail and leisure areas and the wider road network.