



Mersey Tunnel tolls impact study

Executive Summary

Assessing the impact of the Mersey Tunnel tolls in the
Liverpool City Region

December 2015

Merseytravel

Context

The Mersey Tunnels, Kingsway and Queensway are a vital part of the Liverpool City Region's (LCR's) strategic highway network, connecting Liverpool to the Wirral underneath the River Mersey with around 25 million vehicles travelling through them annually.

The Mersey Tunnels have seen a steady increase in the number of users since they were first opened in 1935 and 1971 (respectively), although demand has remained relatively stable over the past ten years. The tolls to use the tunnels have also remained stable over the past ten years, rising with inflation and remaining the least costly option to cross the River Mersey (compared with rail, bus and ferry prices).



When asked what alternative route they would have taken had the tunnels both been closed for a day, over a quarter of those surveyed in the Mersey Tunnels Customer Survey (2015) said they would not have made the trip at all. The majority of users surveyed (around 80%) stated that closure of the tunnel would cause a great deal of inconvenience, with those traveling for work-related trips finding closure the most inconvenient.

These statistics illustrate the role the tunnels play in the LCR and how people use and view the tunnels. The high proportion of work-related journeys and the high level of perceived inconvenience from temporary tunnel closures indicate the importance of the tunnels for businesses and individuals in the LCR and beyond.

Policy Framework

The LCR's vision is to secure job growth of between 95-130,000 jobs over the next 5 to 15 years through supporting growth across a range of economic sectors. Schemes including the Liverpool 'Superport' and the Mersey Gateway Project should inject a total £1bn capital investment and are seen as 'strategic necessities' to build on the city-region's port, airport, rail and logistics assets to benefit the whole of the UK.

The LCR Transport Plan for Growth demonstrates how key priorities for transport relate to other strategically important areas of policy including economic development, employment, housing, air quality and health.

The Superport initiative – an investment to create the most effective and cost efficient environment for freight cargo logistics and passenger transit in the UK and to make the Superport a multimodal freight hub.

The increased logistics capacity has the opportunity to deliver a transformation of the sector and enhance the region's attractiveness for retail and manufacturing logistics operations, and with it the potential to create 30,000+ jobs in the next 20 years.

The Mersey Gateway - a major scheme to build a six-lane toll bridge over the River Mersey between the towns of Runcorn and Widnes to relieve congestion on the ageing Silver Jubilee Bridge.

The project will provide additional road connections to the LCR from the South, thereby improving connectivity and reducing congestion. The new road capacity will rebalance the transportation infrastructure within Halton towards delivering local sustainable transport and economic goals.

Economic Profile

Looking at the economic profile of the LCR today and in the recent past, we see patterns of close economic cohesion across the city-region.

The majority of people live and work within the LCR and commute within the area.

Wirral has the highest rate of people living in the local authority, yet working elsewhere (out-commuting).

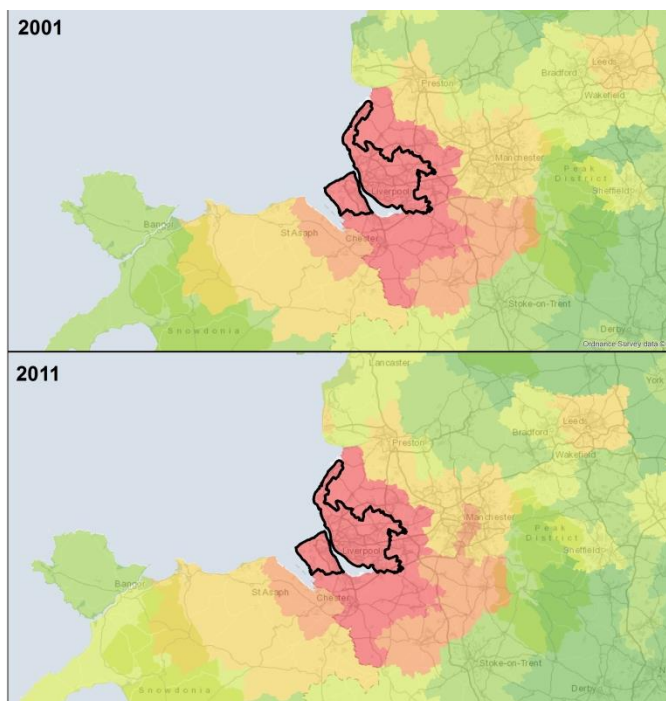
Both workplace and resident based mean earnings are lower than national average.

Net business creations have increased over the past 10 years, but at a slower rate than England.

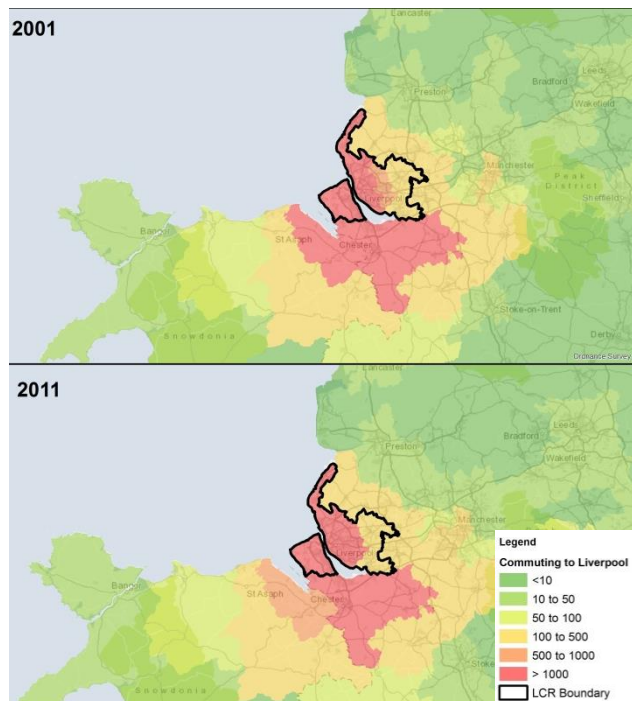
Every district in the LCR has seen a reduction in the rate of residents claiming Jobseeker's Allowance from August 2005 to 2015; however most figures are still higher than the national average (1.6%). The claimant rate in Liverpool is 2.4%, the highest in the LCR, whereas the Wirral has the lowest claimant rate in the LCR at 1.4%.

The majority of those commuting into Liverpool and the Wirral come from the LCR and the North West, showing there is good business connectivity in the region. This signifies the role of the Mersey Tunnels in accessing Liverpool's labour market. Between 2001 and 2011, the only significant change is an increase in people originating in North Wales.

Commuting into Liverpool



Commuting into the Wirral



The interrelated employment patterns across the LCR, and particularly in Liverpool and the Wirral, indicate that there is strong economic integration in the city-region. This is reinforced by the data on business growth in the LCR. Output per head and the net number of business creations has exhibited positive growth in recent years across all six districts in the LCR. This growth across the city-region and on both sides of the Mersey shows that the city-region is a functional economic area and not made up of separate entities.

The Mersey Tunnels play an important role in this economic integration as they connect Wirral and Liverpool and the rest of the LCR. The tunnels serve to reduce the distance between the Wirral and the rest of the LCR by increasing the transport options and reducing the time and cost required to make the journey. In this way, the tunnels are key to ensuring economic growth and labour market mobility.

Social Profile

The geography of the LCR serves to emphasise the importance of the Mersey Tunnels for the economy and community of the Wirral and other LCR districts. The tunnels continue to be an important part of the transport system for all sections of society and any measures that support people to travel by the most affordable and convenient means should be considered. In this way, the tunnels can support people to affordably access employment, leisure and community facilities in all parts of Merseyside, including the Wirral. This is in accordance with the social policy ambitions of national government, LCR and the districts.

This assessment has identified that retaining the tolls will do less to support the achievement of these ambitions and may fail to address the existing potential negative consequences of the tolls, particularly around affordability, accessibility and severance.

The removal of the tolls would likely provide greater positive social impacts and help to address some of the disproportionate impacts. It is likely to contribute to lessening many of the adverse impacts highlighted (with the notable exception of noise and air pollution impacts, which would most likely be exacerbated). This would have the overall effect of improving the economic and social inclusion of communities on either side of the Mersey.

In recognising the cost of frequent use of the tunnels, Merseytravel has implemented a discount scheme for which all drivers are eligible. The Fast Tag system which discounts the toll for regular users and was used by 54% of tunnel users in the 2015 Customer Survey, mitigates personal affordability impacts and is non-discriminatory as all users are eligible.

Retail Sector Profile

We have compared two of the LCR's main retail areas, Liverpool city centre and Birkenhead town centre. Our findings show that the retail sector is important for Liverpool and Wirral. However, the retail centres differ significantly in type, offering and target market.

Liverpool has received much public investment and has grown as a retail offering, covering all qualities of retailer. As such, Liverpool has a large catchment area extending beyond the LCR.

Birkenhead is a major retail centre for those in the Wirral, it is generally mass-market led, with less than 10% premium retailing. This is reflected in the more local catchment area, with the majority of shoppers coming from the Wirral, with few coming from outside the LCR.

These key differences are reflected in the different geodemographic profile of the areas and of the areas and the different retail offer at each location.



The Mersey Tunnels play a key role in enabling people to travel between the two retail centres according to the type of retail offering they require. However, the costs of crossing the River Mersey, also incentivise people to shop locally. As such, this encourages more people to shop in Birkenhead town centre instead of travelling across the Mersey to Liverpool and thus provides a strong level of local demand in Birkenhead.

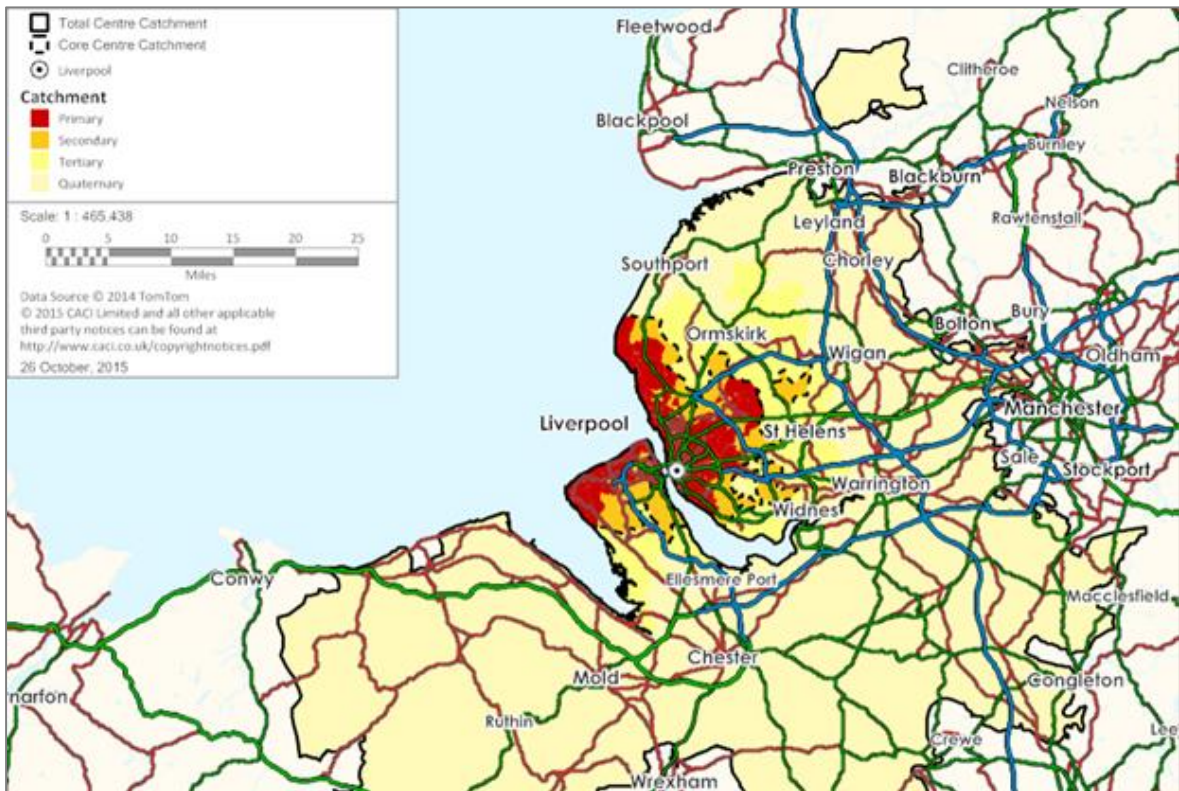
The Mersey Tunnels therefore play a key role ensuring there is sufficient demand for Birkenhead to remain a viable retail centre, while still enabling people to travel between Liverpool and Wirral according to the type of retail offering they require.

The tunnels thus facilitate a more balanced retail sector in the LCR and subsequently a more balanced demand for labour in retail in Liverpool and the Wirral, and the LCR more widely .

Retail Sector Profile

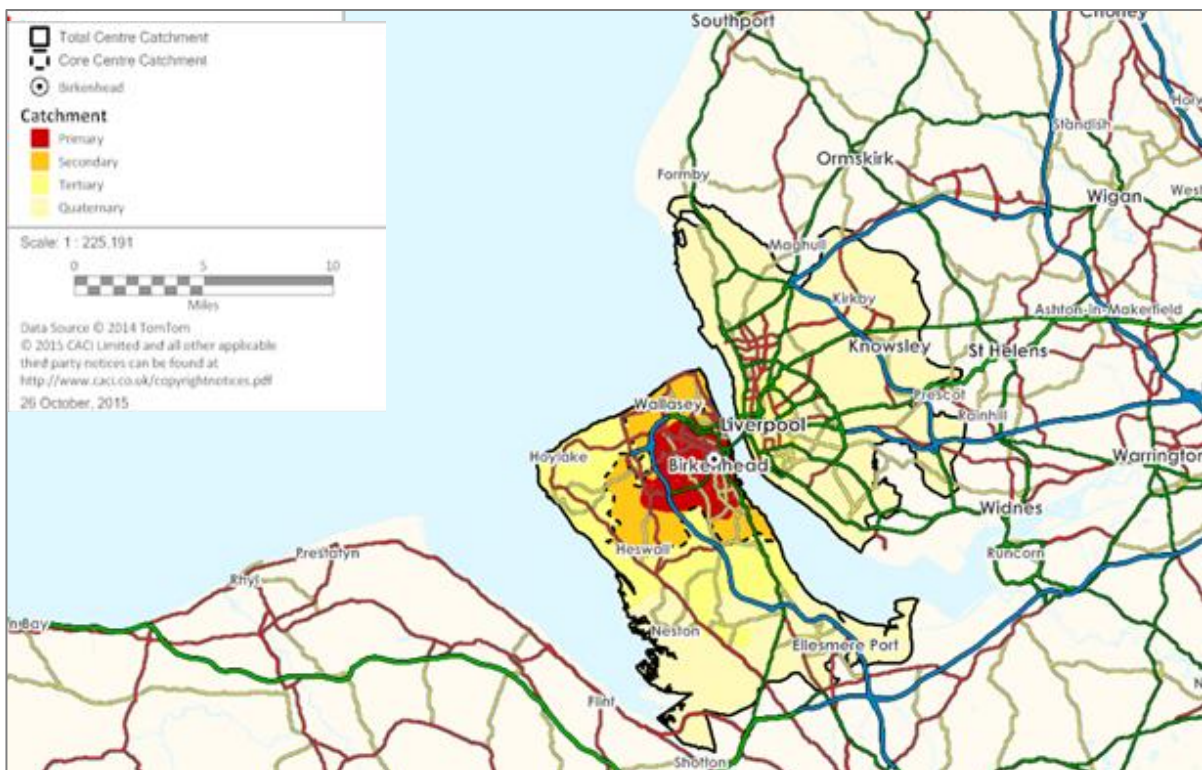
As indicated by Liverpool's high Retail Footprint score, Liverpool has a large catchment area which extends beyond the LCR.

Liverpool Retail centre catchment (Source: CACI)



Birkenhead's primary and secondary catchment areas are in the Wirral, with some tertiary and quaternary catchment extending to elsewhere in the LCR and beyond

Birkenhead Retail centre catchment (Source: CACI)

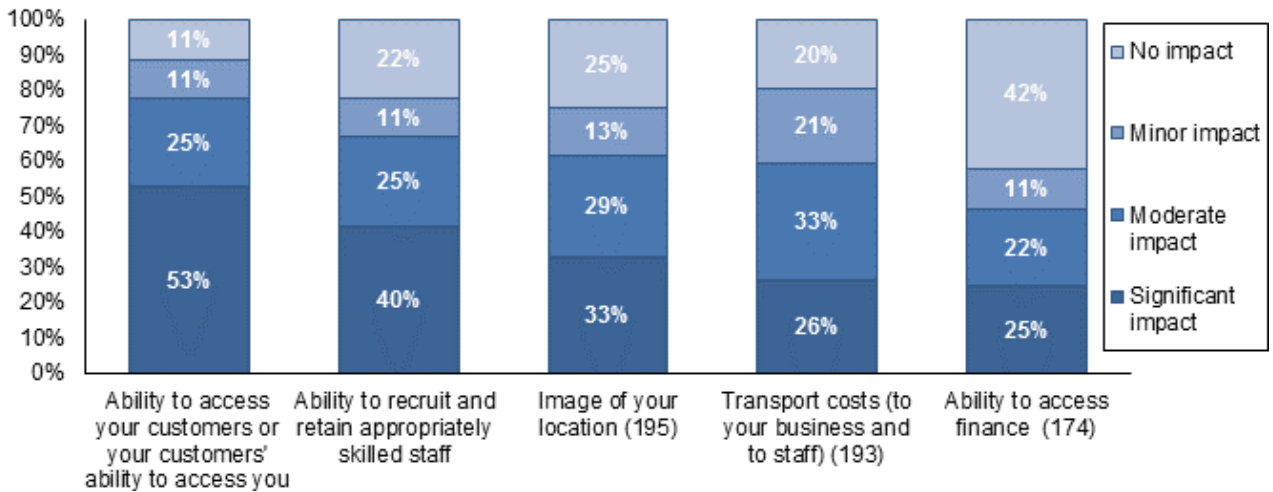


Business Survey

Businesses who participated in the survey were located on both sides of the River Mersey, and represented a broad range of sectors. The majority were small to medium sized enterprises (SMEs), with fewer than 200 employees, and most anticipated that their staffing levels would remain consistent in the coming year.

Accessibility was highlighted as a key factor which impacts upon business performance, highlighting the importance of both customers being able to access businesses and vice versa, as shown below.

To what extent do the following factors affect your organisation's performance?



Business location was highlighted as a key strength for businesses in both Liverpool and the Wirral, whilst most could not identify any specific weaknesses regarding their site or the impact of this on their ability to do business.

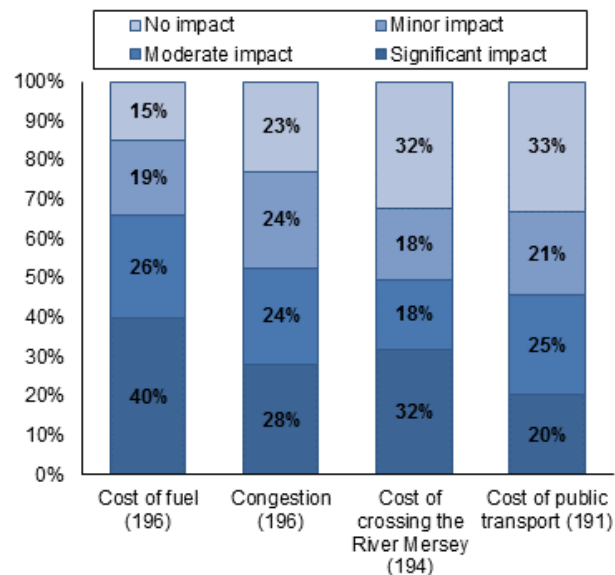
The cost of fuel and congestion were both highlighted as issues which businesses felt had a significant or moderate impact upon both their organisational and individual staff transport costs, as shown below.

Most respondents from both Liverpool and Sefton and the Wirral respectively indicated that a quarter of their staff or less travelled across the River Mersey to get to work.

Car was a popular mode of travel to work, with businesses in both Liverpool (42%) and the Wirral (53%) indicating that over three quarters of their staff travel in this way. Around two thirds of respondents also indicated that, if required to travel across the River Mersey to do business, they would do so by car (Liverpool/Sefton: 68%; Wirral: 66%).

Tunnel costs were highlighted as a barrier to doing businesses across the River Mersey by around three in ten respondents (Liverpool/Sefton: 31%; Wirral: 38%); however a similar proportion indicated that there was nothing in particular which presented a barrier to doing businesses across the river (Liverpool/Sefton: 34%; Wirral: 36%).

How would you rate the following in terms of their impact on your organisation's transport costs?

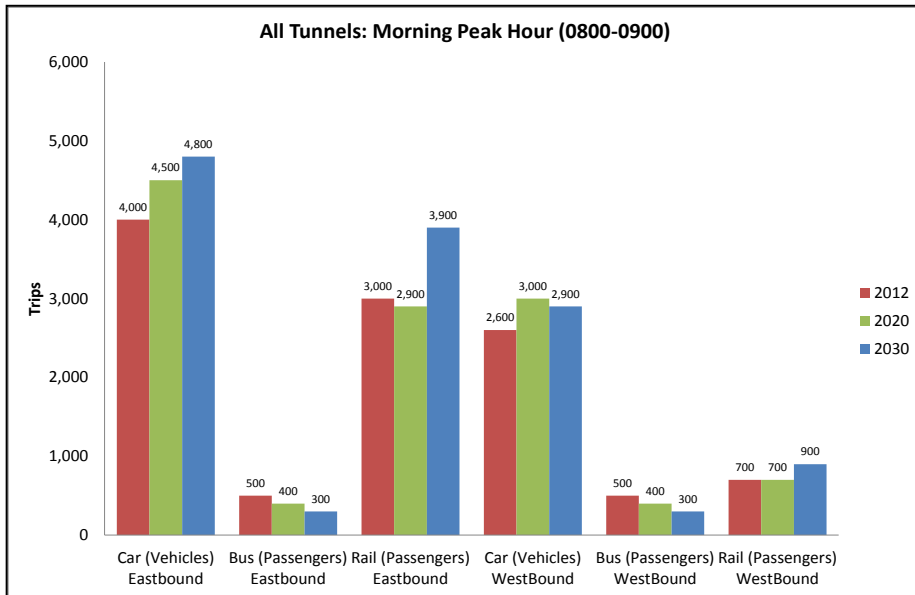


Current and Future Travel Demand

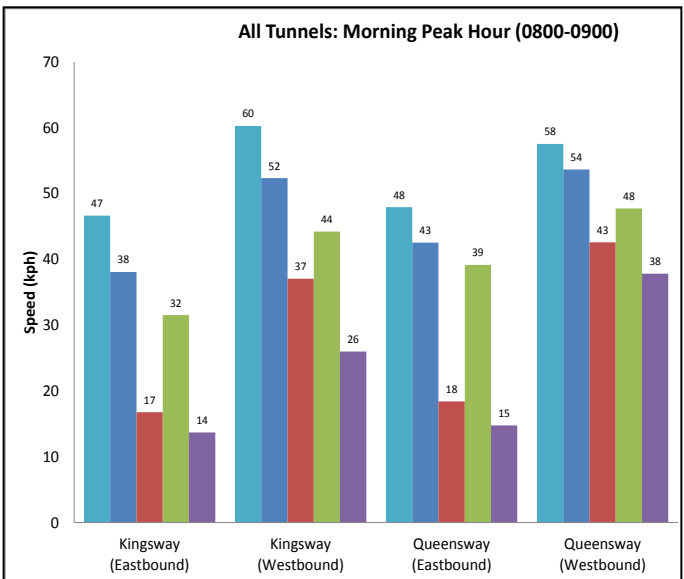
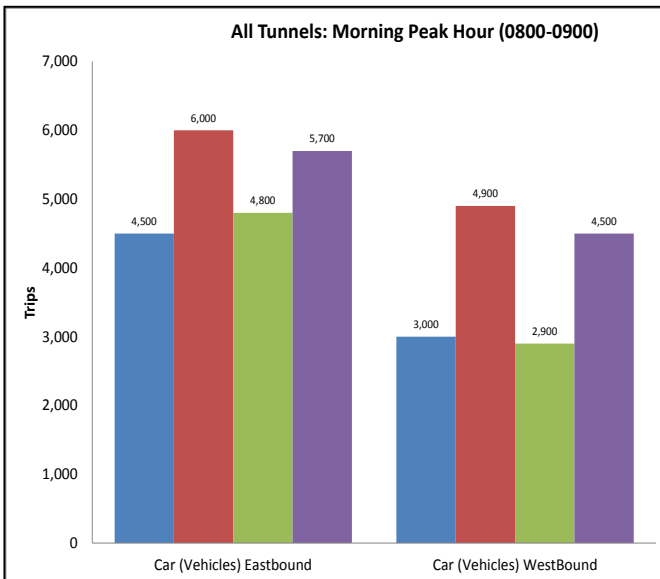
Mott MacDonald examined current and future travel demand for the Mersey Tunnels; along with testing the impact of removing the tunnel tolls using the LCR Transport Model (LCRTM).

The LCRTM has been used to examine existing and future travel demand for the Mersey Tunnels along with testing the impact of removing the tunnel tolls.

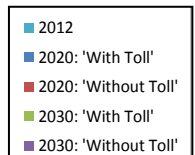
Analysis of current and future travel demand indicates that the pre-dominant means of travel through the tunnels is by car, followed by rail, with significantly fewer bus passengers. There is forecast to be significant growth in car traffic in the tunnels with around 10,000 additional cars per day in 2020 and 12,000 in 2030.



Removal of the tunnel tolls leads to increased car usage of the tunnels. Congestion in the tunnel increases significantly when the toll is removed and traffic speeds slow.



The net economic impact of removing the toll has been examined and there is an estimated cost to the economy of **£1.0 billion** over the 60-year assessment period.



Conclusions

The Mersey Tunnels play a key role in the economy of the LCR, including in the retail sector, helping to ensure it is one large economy with economic growth across the city-region and integration of businesses and a mobile labour market.

The geography of the LCR serves to emphasise the importance of the Mersey Tunnels for the economy and community of the Wirral and other LCR districts. In this way, the tunnels can support people to affordably access employment, leisure and community facilities in all parts of Merseyside. However, our assessment identified that retaining the tolls will do less to support the achievement of social policy ambitions and may fail to address the existing potential negative consequences of the tolls, particularly around affordability, accessibility and severance. The removal of the tolls would likely provide greater positive social impacts and help to address some of the disproportionate impacts.

Our business survey showed accessibility was a key factor impacting business performance, highlighting the importance of both customers being able to access businesses and vice versa. Business location was highlighted as a key strength for businesses in both Liverpool and the Wirral, whilst most could not identify any specific weaknesses regarding their site or the impact of this on their ability to do business.

The LCRTM analysis found that, compared with the current toll scenario, removing the tolls would yield a net financial and economic cost to the LCR. The economic impact of removing the toll has been examined and there is an estimated cost to the economy of **£1.0 billion** over the 60-year assessment period.



Benefit to the wider economy from removing the tolls in terms of some social impacts



Congestion in the tunnels increases significantly as traffic speeds fall (by an average of 20kph in the morning and evening peak hours)



Increased car usage of the tunnels due to changes in the route people use



Increased greenhouse gases; a direct consequence of the increase in vehicle kilometres



Economic value is more than offset by the dis-benefits of increase in travel time and vehicle operating costs



Combing the net present value of the transport user benefits and the total wider economic benefits from removal of the tolls presents a **significant net cost to the economy of approximately £1.0 billion over the 60-year assessment period**

