The A13
Riverside Tunnel

Road to Regeneration
The tunnel is essential to East London and Thames Gateway’s economic success.
The A13 Riverside Tunnel
Road to Regeneration

Thank you for taking the trouble to find out more about the proposed A13 Riverside Tunnel.

The tunnelling of a 1.3km stretch of the A13 will not only improve traffic flow along this key route, mitigating the two notorious bottlenecks at the Lodge Avenue and Renwick Road junctions, but will also transform a severely blighted area.

As well as creating a new neighbourhood of over 5,000 homes called Castle Green, the tunnel will act as a catalyst for the building of another 28,300 homes in London Riverside, while creating over 1,200 jobs and unlocking significant business and commercial growth in the surrounding area.

The tunnel is essential to east London and the Thames Gateway’s economic success and will stimulate growth along its route as well as easing congestion. It also signifies a new way of working in this country adapted from successful models from other European cities.

A large proportion of the scheme could be self-financing, with the majority of the funding being generated by the tunnel itself, through the land value uplift and sale of the homes, the community infrastructure levy and new homes bonus. If the government also supports our proposal for stamp duty devolution in Castle Green, then this would mean further significant funding for the scheme could be secured.

Cllr Darren Rodwell
Leader of Barking and Dagenham Council

Cllr Roger Ramsey
Leader of Havering Council
About the A13

The A13 is one of the busiest arterial routes into the capital, connecting the county of Essex with central London. One of two main roads through the historic East End, it passes through the London boroughs of Havering, Barking and Dagenham, Newham and Tower Hamlets.

The route also runs the length of the Thames Gateway, a national priority area for regeneration and growth. This makes the A13 strategically important not just for commuters but also for freight, providing a direct link from the Thurrock and Essex Ports and the M25 to the City.

Today, the road carries up to 100,000 vehicles a day at its peak, of which 47 per cent is freight and commercial vehicles.

But the route is also a serious barrier to growth. This heavily used artery physically cuts the borough of Barking and Dagenham in half and has led to low grade industry and a poor environment along its route, restricting opportunities for development.

**KEY FACTS**
- **Tunnel Length:** 1.3km
- **Road Type:** Dual carriageway
- **Lanes:** 3 per carriageway
- **Open:** 2026

*This image is for illustrative purposes only*
The Proposal
To address these issues, as well as congestion, Transport for London (TfL) and its partners are proposing to tunnel a 1.3km stretch of the A13 between the Lodge Avenue flyover and the Goresbrook interchange, mitigating two notorious bottlenecks: the Lodge Avenue and Renwick Road junctions; with three carriageways in each direction.

Road users would be able to join and leave the A13 at a western portal between the flyover on Alfred’s Way and the Lodge Avenue interchange, and at an eastern portal to the east of Renwick Road before the Goresbrook interchange.

As part of the development, new bus routes are planned and new walkways and cycle ways introduced, allowing better connection between the communities north and south of the A13.
The tunnel would act as a catalyst for regeneration by:

- Boosting the local and wider economy by re-zoning industrial land for mixed use development, creating over 1,200 jobs
- Helping to address London’s housing crisis by building over 5,000 homes in a new neighbourhood called Castle Green, adjacent to the proposed tunnel, and stimulating the development of a further 28,300 planned new homes across two boroughs by making the surrounding area more attractive to developers
- Improving transport links by easing congestion at two bottlenecks on the A13, cutting journey times for drivers. A new train station could also be built on the proposed London Overground extension to Barking Riverside at Castle Green
- Improving the poor environment by reducing noise and air pollution; creating new green space and high quality industrial and commercial areas alongside the new homes and removing the severance caused by the A13 to link communities on both sides of the road.

The proposal is actively supported by the Greater London Authority (GLA) and is featured in the London Riverside Opportunity Area Planning Framework, Transport for London (TfL), Barking and Dagenham Council, Havering Council and a host of other public and private sector organisations. It supports the GLA and TfL’s wider public policy objectives and complements local plans for regenerating Barking and Dagenham, Havering and the Thames Gateway area.
Cost and Funding
It is estimated the tunnel will cost £700m to construct and £260m to acquire the land.

Operational costs are estimated at around £1m per year, with a further £20m needed every 15 years to cover maintenance and renewal costs.

At this early stage, potential sources of funding are still being identified. However, it is anticipated that a significant portion of the funding could be generated by the tunnel itself and the housing it would enable.

This could include the land value uplift from the 5,000-plus homes, the community infrastructure levy and new homes bonus scheme. And if the government supports our proposal for stamp duty devolution on the new homes, then a large majority of the funding for the scheme could be secured.

There is a very strong business case for the tunnel scheme, with a cost benefit analysis showing £1.85 of benefits for every pound spent.1 In addition, the scheme will generate almost £800m Gross Value Added (GVA) through the associated development.

Timetable
The ambition is for the tunnel to open in 2026 (assuming it is given the go-ahead in 2016). There should be limited impact on current road users while construction is underway.

1 Cost benefit analysis undertaken by TfL using the Department for Transport’s transport appraisal guidance WebTAG.
Supporting London’s Economy

London is a global city and the UK’s main engine for economic growth.\textsuperscript{2} In 2013, the capital contributed 22 per cent of total UK Gross Value Added (GVA), generating £56,687 GVA per worker compared with a UK average of £41,088.\textsuperscript{3} It is currently ranked second in the world and first in Europe for competitiveness.

The GLA’s London Plan forecasts an additional 650,000 jobs and an increase in population of 1.2m between now and 2031. Of this, around 20 per cent of the additional employment and 40 per cent of the additional population will be in the east and south east sub-region.

However, London’s ability to attract new workers and create jobs will be hindered by the housing crisis. And significant investment in transport infrastructure is essential in order to support the predicted increases in employment and the population.

East London, and Barking and Dagenham in particular, can play a key role in meeting these challenges, and the A13 Riverside Tunnel is crucial to this.

Analysis by TfL and the Homes and Communities Agency has shown that the economic benefits of the tunnel are likely to be extensive and would include:

\begin{itemize}
  \item \textbf{Over 5,000 new homes on the site, with the potential to build thousands more in nearby areas}
  \item \textbf{A net additional GVA of around £800m over 60 years}
  \item \textbf{Over 1,200 new jobs created.}
\end{itemize}

The tunnel would act as a catalyst for regeneration, improving the quality of life for residents, enhancing the built environment and driving significant additional investment into the area.

\textsuperscript{2} Citi (2013) Hotspots 2025.
\textsuperscript{3} GLA Economics and Employment Forecasts, 2015
Easing London’s Housing Crisis

London’s economic growth is threatened by a chronic lack of affordable housing which increasingly affects whether or not businesses choose to invest and people choose to live here.

It’s estimated that London needs to build 49,000 new homes every year for the next 20 years to house the growing population and address the backlog of need – a 47 per cent increase on current levels of building.\(^4\)

This represents a level of house building not seen in the capital since the 1930s and can only be achieved by central government, local councils, the London Mayor and developers working together.

With a shortage of housing, sale and rental values are high, with many people on modest incomes - including key workers like teachers and nurses - now priced out of large parts of the capital.

Barking and Dagenham, along with its neighbours, is keen to play its part. But building is hampered here because land values are low and brownfield sites are not commercially viable for developers. The average house price in Barking and Dagenham is £274,467\(^5\), the lowest in London.

\(^4\) London Plan
\(^5\) Land Registry HPI March 2015
The London Plan sets out a housing supply target for Barking and Dagenham of 1,236 new homes per year. In 2013/14, there were just 876 net new housing completions. Yet with the right investment in transport infrastructure, Barking and Dagenham, along with its neighbours, can be part of the solution to London’s growing housing crisis. The borough is proposing in its review of its Local Plan to increase its housing target to 2,333 new homes a year.

The A13 Riverside Tunnel will increase land values in the borough and release 39 hectares of land, creating space for over 5,000 new homes in a new neighbourhood to be called Castle Green.

At the same time, routing the A13 underground will remove a significant physical barrier to people moving between the north and south of the borough. This will make other brownfield sites in the borough more attractive to developers, including Barking Riverside (10,800 homes), Creekmouth (3,000 homes), Thames Road (2,000 homes), Barking town centre (5,000 homes) and Beam Park and Ford Stamping Plant (3,500 homes).

The tunnel would also act as a catalyst for regeneration across the whole of this part of east London, including the potential for 4,000 homes at Beam Park and Rainham in Havering.

Barking and Dagenham, along with its neighbours, can be part of the solution to London’s growing housing crisis.
## The Tunnel as a Catalyst for Regeneration

<table>
<thead>
<tr>
<th>AREA</th>
<th>HOMES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Castle Green</td>
<td>5,000+</td>
</tr>
<tr>
<td>Barking Riverside</td>
<td>10,800</td>
</tr>
<tr>
<td>Barking town centre</td>
<td>5,000</td>
</tr>
<tr>
<td>Creekmouth</td>
<td>3,000</td>
</tr>
<tr>
<td>Thames Road</td>
<td>2,000</td>
</tr>
<tr>
<td>Beam Park and Ford Stamping Plant</td>
<td>3,500</td>
</tr>
<tr>
<td><strong>Total in Barking and Dagenham</strong></td>
<td><strong>29,300+</strong></td>
</tr>
<tr>
<td>Beam Park and Rainham (Havering)</td>
<td>4,000</td>
</tr>
<tr>
<td><strong>Total homes across two boroughs</strong></td>
<td><strong>33,300+</strong></td>
</tr>
</tbody>
</table>
Improving London’s Transport Links

The A13 is one of the busiest and most strategically important roads in the capital, providing a direct link from the M25 and beyond into central London. It’s a key link in the TfL network, connecting the City with east London and the east of England.

TfL estimates that between 80,000 and 100,000 vehicles use the A13 every day, including 47 per cent freight and commercial vehicles - a higher than average proportion of heavy goods vehicles.

However, the A13 suffers from severe congestion, with bottlenecks at the Lodge Avenue flyover and the Renwick Road junction as well as at other locations towards central London. This results in longer journeys for drivers and freight vehicles travelling into central London.

Transport for London estimates a 31 per cent increase in junction delays on the A13 by 2021, compared to 2011 levels with the highest amount of heavy goods vehicles on any road in London. Along with proposed new river crossings at Gallions Reach, Belvedere and Tilbury Docks/Gravesend, the congestion looks set to worsen, without further improvements made at key sections along the route. Estimates show that the severe congestion on this stretch of the A13 will cost businesses over £450m by 2030.
Within Barking and Dagenham, the A13 acts as a physical barrier for pedestrians and cyclists and causes high levels of pollution and noise.

By literally cutting the borough in half, the road has blighted the surrounding area and is hampering the emerging urban development of 33,300 homes in Barking and Dagenham and Havering. Studies by TfL demonstrate that more than 11,000 residents would benefit if the area was ‘joined up’.

The new tunnel would be complemented by other TfL plans for the area, including a London Overground extension to support the development of Barking Riverside, with a potential new station at Castle Green, by Renwick Road Bridge. This would improve the accessibility of the new neighbourhood at Castle Green and help to make residential development more viable.
Cleaning up London’s Environment

The A13 is one of the five most polluted roads in London for air quality and also suffers from high levels of noise, reaching daily noise levels of 75+ decibels.8

The most recent government data covering 2010-13 shows Barking and Dagenham, like some other London boroughs, routinely breaches European Union air pollution limits.9

This makes for an unpleasant environment for pedestrians, cyclists and those living nearby and limits the attractiveness of the area for residential developers.

The tunnelling of the A13 will reduce traffic above ground, resulting in lower levels of noise and air pollution. It will also allow the public realm to be reconfigured, with new walkways and cycle routes and opportunities to create open, green space for recreation and leisure.

Overall, the tunnel is expected to significantly cut road noise for hundreds of people currently living along the A13, producing a net present value of around £13m.

---

8 DEFRA Noise Mapping England.
9 Evening Standard, Clean London Special Report, p22, 7 July 2015
About Barking and Dagenham

With London experiencing a surge in growth and investors increasingly moving east, Barking and Dagenham is perfectly placed to be the capital’s next big growth area. However, there are real barriers to that growth which need addressing by public and private sector organisations working together. The A13 Riverside Tunnel and planned Overground extension to Barking Riverside are key to unlocking this.

People
The borough’s population is forecast to increase from 185,000 in 2011 to 250,000 in 2031, an increase of 35 per cent. As a place, it’s unique in becoming more diverse and getting younger; a rich and growing pool of potential employees and home buyers.

At the same time, the complex demographic profile of the borough presents some significant challenges. The latest data shows Barking and Dagenham is now the 12th most deprived local authority area in England and the third most deprived borough in London.10 Long-term unemployment was 15.9 per cent in 2014, compared with an England average of 9.9 per cent.11 This is a trend the council is determined to reverse.

Land
Barking and Dagenham has huge potential for growth with 300 hectares of undeveloped land, mainly large brownfield sites – more than anywhere else in London. However, land values are the lowest in London, deterring developers from investing, while the low-grade environment around the A13 inhibits house prices – despite Barking being just 14 minutes by train from the heart of the City.

Planning permission has been granted for 10,800 homes on land to the south of the A13 at Barking Riverside, with a further 5,000 homes planned in Barking town centre and 7,500 at Beam Park, Rainham and the Ford Stamping Plant on land straddling Barking and Dagenham and its neighbour Havering. There is also capacity for 5,000 more at Creekmouth and Thames Road, adjacent to Barking Riverside.

However, despite its proximity to central London, the severance and low grade environment spawned by the A13, along with the lack of good transport links, is currently a major barrier to growth in the area.

If the lack of accessibility and severance caused by the A13 can be resolved it will help realise the massive potential of London Riverside as set out in the London Riverside Opportunity Area Planning Framework (which includes Barking Riverside) to support over 26,000 new homes and 16,000 new jobs.

---

10 Indices of Deprivation, Department of Communities and Local Government, October 2015
11 Indices of Deprivation, Department of Communities and Local Government, 2010
The Partners

The poor urban environment and the congestion on the A13 require a new way of thinking if we are to tackle a decades-old problem.

The London boroughs of Barking and Dagenham and Havering, as well as the Barking and Dagenham and Rainham MPs, have formed a strong partnership with the Greater London Authority and Transport for London to find an innovative solution, which should see the area totally transformed through a largely self-funding scheme.

While not unique in Europe, the solution proposed here is believed to be new to the UK and a potential model of good practice for others to learn from.

Although the proposed tunnel is in Barking and Dagenham, the neighbouring borough of Havering is fully supportive of the scheme as it will stimulate growth in their borough and bring significant economic and environmental benefits to residents.

Over the coming months, the partners will work together and with other stakeholders to ensure the A13 Riverside Tunnel project is further developed, and that it delivers maximum benefits for Barking and Dagenham, east London and beyond.
Contact

For more information on this document and the A13 Riverside Tunnel proposal, please Call 020 8227 3929 or Email transportpolicy@lbjd.gov.uk