Elizabeth line readiness
Maximising opportunity across London’s West End
Research for New West End Company, The Fitzrovia Partnership and Heart of London Business Alliance
Crossrail – the Elizabeth line

Crossrail is currently the largest construction project in Europe with an investment value of £14.8 billion. Opening in stages, it will start operating as the Elizabeth line from December 2018, with full service from December 2019. The line will stretch from Reading and Heathrow in the west to Shenfield and Abbey Wood in the east; it will serve 41 stations including ten new ones.

The Elizabeth line will bring an extra 1.5 million people to within 45 minutes of central London and carry an estimated 200 million passengers per year. When fully commissioned, central London stations will be served by 24 trains per hour in each direction; adding ten percent to London’s peak hour rail capacity.

Source: Crossrail Ltd.
The projected 42 percent increase in station entries and exits by 2021 will generate substantial benefits for local businesses and increase accessibility and demand for visitors and tourists. The main impact on the West End in terms of additional footfall will be felt at the end of 2019 when the line opens fully. The potential impacts for property owners and businesses are attractive. Previous research for New West End Company by HDH estimated the potential for an increase in turnover from £8.8 billion in 2014 to over £11.2 billion in 2020 (2014 prices). Given the increase in TfL entry / exit estimates since that report, Arup’s high-level estimates suggest this figure could grow up to £13 billion by 2021.

The Elizabeth line will have a major impact on the West End. The area’s three stations will see an increase in demand (entries and exits) of 42 percent between 2016 and 2021, which could rise to a total increase of 55 percent by 2031.

Bond Street and Tottenham Court Road stations will see the largest percentage increase in passengers. Entries and exit increase by a projected 74 percent at Bond Street and 72 percent at Tottenham Court Road over the 2016 – 2021 period.

Oxford Circus, although not served by the Elizabeth line, will remain the area’s busiest station (and London’s fourth busiest Underground station), with a predicted increase in passengers following opening of the line. This further strengthens the case for much needed capacity improvements at Oxford Circus Station.

New station entry and exit points will mean people will use streets in different ways but also increase demand on some of the area’s already crowded streets.

When the core section of the Elizabeth line opens in December 2018, the area will experience further change. The Mayor of London’s proposal to pedestrianise Oxford Street in partnership with Westminster, alongside Camden’s Tottenham Court Road/ Gower Street scheme (the West End Project) and private sector real estate investment will all create competition for space. These changes will increase the need for Travel Demand Management (TDM) and wayfinding during and following construction periods which may disrupt the normal routes of cars, cyclists and pedestrians.

Investment and coordination between public and private partners, along with BIDs and the West End Partnership will be critical in ensuring that the Elizabeth line is part of cementing the West End’s ongoing reputation as a world class shopping, leisure and commercial district and an attractive place to live and work.

The report highlights the importance of continued investment in the West End’s public realm and local infrastructure in order to ensure a healthy, clean, and enjoyable experience for the millions of people who live work and visit the centre of London.
Introduction

The Elizabeth line is currently Europe’s largest construction project with an investment value of £14.8bn.

Crossrail Limited is building the Elizabeth line on behalf of Transport for London and the Department for Transport. It will run from Reading and Heathrow in the west, through 42km of new tunnels under London to Shenfield and Abbey Wood in the east.

The new line will be fully integrated with London’s existing transport network and will be operated on behalf of Transport for London (TfL).

The Elizabeth line will transform rail transport in London and the South East, increasing central London rail capacity by 10 percent - the largest increase in more than 70 years. It will cut passenger journey times across the city, encourage regeneration and generate significant employment opportunities.

Once the Elizabeth line opens fully in 2019, 1.5 million more people will be able to get to central London within 45 minutes. Congestion at many London Underground stations should be eased, even for those that are not on the Elizabeth line route. Although, at Oxford Circus, an initial reduction in passengers may then be followed by increasing demand.

The Elizabeth line will improve the quality of journeys for customers and add value to the areas it serves, due to:

Better stations
• Additional bright, spacious ticket halls at a number of stations
• New lifts and footbridges where required to ensure step-free access at every station
• Platform extensions to accommodate 200m long trains
• New signage, help points, customer information screens and CCTV

More reliable journeys
• New overhead electrification equipment
• Upgrades to 70km of track

New trains
• High-performing and reliable new fleet of trains each with the capacity for up to 1,500 customers and fully accessible for wheelchair users
• Amenities including air conditioning, Wi-Fi and 4G

Taken together, the Elizabeth line will transform accessibility to and from central London, encourage new commercial and residential development, and improve transport infrastructure, station design.

To improve the West End’s public realm — so that passengers have a safe and comfortable end-to-end journey experience — that the new line presents to the West End’s businesses, local authorities, land owners and other stakeholders.

As with any modelling of unconstrained demand, a certain amount of “chicken and egg” needs to be borne in mind. Without the offices, residential development, entertainment and retail offer to attract and sustain visitors to Central London the numbers in question may not fully materialise. How Central London’s stakeholders choose to respond to the prospect of many tens of millions more visitors a year is inevitably a question of broader debate. Our analysis suggests that now is an opportune time for that debate to be reinvigorated so that the opportunities and pressures the line will create can be most effectively addressed.

Sources:
http://www.crossrail.co.uk/news/crossrail-in-numbers
https://www.networkrail.co.uk/our-railway-upgrade-plan/key-projects/crossrail/
London’s West End: the wider context

London’s West End is one of the most celebrated and exciting districts in the world. At the heart of a global city, the West End has a wealth and variety of talent, activity, character, public and private spaces, architecture, heritage and ambience.

Business Improvement Districts (BIDs) play an important role in managing and advocating for the business voice in the West End, including the New West End Company, The Fitzrovia Partnership and Heart of London Business Alliance.

The New West End Company BID area sits at the centre of London’s West End and is home to the premier retail and visitor destinations in the area. It encompasses the busiest shopping district in the world centred around Oxford Street, Regent Street and Bond Street.

The Fitzrovia Partnership sits on the eastern side of the West End. A residential neighbourhood in its own right, the area is well-known for its furniture and design retail centre for London. It also hosts world-renowned higher education and healthcare institutions. Fitzrovia’s mix of residents, students, businesses, shoppers and visitors make the area vibrant.

Heart of London Business Alliance’s district covers the Leicester Square, Piccadilly and St James’s areas. As an iconic destination at the heart of the West End, there is a unique mix of commerce and entertainment, side by side with some of the world’s most important cultural institutions.

The West End supports London’s £22 billion visitor economy. With 200 million visits a year, people spend an estimated £11 billion in its hotels, restaurants, bars and shops, supporting 200,000 jobs across the capital.

The large number of visitors, workers, tourists and residents place high demand on London’s infrastructure, in particular on its transport system, its streets and pavements, and its parks, squares and open spaces.

Improvements have been made, and more will be delivered shortly, including Bond Street public realm transformation, Camden Council’s West End Project, and the Elizabeth line and new station. These enhancements, though, will create greater demands on the West End’s businesses, local amenities and public space.

To continue to support London’s global competitiveness, the West End must accommodate growth sustainably. Westminster City Council and Camden Council will need to help manage that demand whilst recognising the West End’s unique character and enhancing its amenities. With these frameworks in place, the West End Partnership, West End BIDs and businesses stand ready to respond, complementing the enhanced frameworks with increased investment in public spaces, homes, offices, shopping and leisure, which will further help to secure the West End’s future.

Work programme summary

Arup was commissioned by New West End Company, The Fitzrovia Partnership and Heart of London Business Alliance to assess the impact of the Elizabeth line on the Oxford Street “district” and the wider West End.

The project includes two workstreams. Firstly, Arup assessed the impact of the Elizabeth line on footfall within the district. Secondly, Arup analysed the interplay between projects (e.g. Oxford Street Transformation), partners (such as TFL, Westminster, and private developers), place (the nine Oxford Street districts and peripheral areas), and their interdependencies with the delivery of the Elizabeth line and the footfall it will generate.

The outcomes of this work support the BIDs’ “One year to go” communications programme to ensure their members are equipped to make the most of the opportunities the Elizabeth line will bring.

Impact of Elizabeth line demand on the West End

Working with TFL and drawing on Harper Dennis Hobbs’ retail and tourism analysis for New West End Company, Arup’s analysis is aimed at answering three key questions:

• How many people are likely to come through Bond Street, Oxford Circus and Tottenham Court Road stations each year?
• Who are they, and how might their profile change over time?
• How will they disperse once they exit the stations?

Gap analysis and next steps

Arup analysed the extent to which existing and proposed programmes of activity by TFL, Westminster City Council, Camden and the West End Partnership Board will meet the BIDs’ objectives and requirements to make the most of the Elizabeth line. Topics include managing public space, Oxford Street Transformation, the West End Project, additional infrastructure requirements that may be required (e.g., public realm) and a communication strategy. The results will be used to define actions and activities for the three BIDs.
Commercial opportunity in the West End

By 2031, the Elizabeth line is projected to bring an additional **83 million people** to the West End in addition to growth on the Tube network.

Study area

The broader study area includes the wider West End, including BIDs as set out in Figure 3 below, focusing in on New West End Company, The Fitzrovia Partnership and Heart of London Business Alliance district areas.

Figure 3. West End area map

Source: Image generated by Movement Strategies, 2018
The Elizabeth line will increase entries and exits in the West End by 55% between 2016 and 2031

The West End underground stations are already some of the busiest in London. In 2016, they saw approximately 491,000 visitors each day -- 164 million each year.

With the introduction of the Elizabeth line, the total footfall in the area from the stations is projected to reach 799,000 per day -- 255 million a year -- by 2031, representing a total increase of 55 percent.

The bulk of this increase will occur between the opening of the first part of the line at the end of 2018 and for the three years following. This most likely represents latent (or pent-up) demand as well as the effect of an increase in accessibility to areas in outer London and beyond (into Reading and Essex).

Overall the West End will attract an additional 91 million entries and exits by 2031

Figure 5. Total entry and exit growth and Elizabeth line opening timetable

Projected Growth (2017-2031)

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<thead>
<tr>
<th>Year</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
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<th>2028</th>
<th>2029</th>
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<tr>
<td>Bond Street</td>
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<td>40,400,000</td>
<td>40,832,000</td>
<td>55,459,000</td>
<td>65,247,000</td>
<td>69,318,000</td>
<td>72,937,000</td>
<td>75,385,000</td>
<td>164,076,000</td>
<td>166,033,000</td>
<td>169,603,000</td>
<td>200,962,000</td>
<td>223,328,000</td>
<td>233,316,000</td>
<td>245,544,000</td>
</tr>
<tr>
<td>TCR</td>
<td>39,669,000</td>
<td>40,142,000</td>
<td>39,513,000</td>
<td>58,093,000</td>
<td>65,737,000</td>
<td>68,325,000</td>
<td>71,426,000</td>
<td>74,419,000</td>
<td>164,076,000</td>
<td>166,033,000</td>
<td>169,603,000</td>
<td>200,962,000</td>
<td>223,328,000</td>
<td>233,316,000</td>
<td>245,544,000</td>
</tr>
<tr>
<td>Oxford Circus</td>
<td>84,485,000</td>
<td>85,491,000</td>
<td>89,258,000</td>
<td>92,344,000</td>
<td>95,499,000</td>
<td>100,981,000</td>
<td>105,212,000</td>
<td>109,616,000</td>
<td>164,076,000</td>
<td>166,033,000</td>
<td>169,603,000</td>
<td>200,962,000</td>
<td>223,328,000</td>
<td>233,316,000</td>
<td>245,544,000</td>
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<tr>
<td>Total (3 stations)</td>
<td>203,077,000</td>
<td>216,533,000</td>
<td>227,793,000</td>
<td>306,389,000</td>
<td>366,462,000</td>
<td>401,039,000</td>
<td>430,085,000</td>
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<td>799,000,000</td>
<td>854,930,000</td>
<td>910,016,000</td>
<td>1,074,562,000</td>
<td>1,198,868,000</td>
<td>1,272,555,000</td>
<td>1,329,544,000</td>
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Source: TfL Railplan Data, Arup analysis

Note: TfL forecast numbers assume full year of operation. The future year figures presented above are therefore a result of multiple year forecast, weighted by currently monthly usage (e.g. current demand between Jan to April, plus future demand with new line between May to December).
Station entry and exit growth from 2016

Oxford Circus will remain the West End’s busiest station, but passenger growth will be the greatest at Bond Street and Tottenham Court Road.

Oxford Circus is currently the busiest station in the West End, serving just under 252,000 passengers per day or 84.5 million passengers per year in 2016. This accounts for just over 50 percent of all station demand to/from the West End.

With the arrival of the Elizabeth line, Tottenham Court Road and Bond Street stations will become much busier. Yet Oxford Circus will continue to sustain growth in passenger numbers as well, staying ahead as the busiest station in the West end.

The diagram below shows that of the 55 percent projected increase in footfall from the stations by 2031, 39 percent of the increase will to come from growth at Tottenham Court Road Station; and 38 percent from Bond Street Station. Tottenham Court Road Station will be 88 percent busier than it was in 2016; whilst Oxford Circus will be 25 percent busier by 2031.

Bond Street and Tottenham Court Road will see transformational growth in passengers over the study period.

Historic growth of West End station passengers

Figure 7 shows growth in station entries and exits at Bond Street, Oxford Circus, and Tottenham Court Road over the ten years to 2016. The overall demand for all stations remained fairly stable with a few exceptions.

Without the Elizabeth line, the usage of the stations would probably have remained relatively constant with perhaps slight uplift as a result of new development and redevelopment in the area and any provision of additional services. Further explanations for large increases or decreases in entries and exits in a given year is provided in the table below.

As a high level analysis, any additional demand projected going forward can therefore be assumed to be a result of the Elizabeth line in attracting new passengers to the West End. By 2031, the West End will therefore see an extra 83 million passengers on the Elizabeth line, or 51% increase of passengers from the 2016 level.

Source: TfL Railplan Data; Arup analysis

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Table: Explanation for increase or decrease

<table>
<thead>
<tr>
<th>Station</th>
<th>Date</th>
<th>Explanation for increase or decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bond Street</td>
<td>2014</td>
<td>Increase due to Victoria line non-stopping, new entatue non-stopping for 7 months in total</td>
</tr>
<tr>
<td></td>
<td>2013</td>
<td>Increase due to Victoria line train service improvements</td>
</tr>
<tr>
<td>Oxford Circus</td>
<td>2016</td>
<td>Decrease due to station control measures being implemented during evening peak and also morning peak (where gates are plunged open)</td>
</tr>
<tr>
<td>TCR</td>
<td>2011</td>
<td>Decrease because Northern line was non-stopping for 7 months</td>
</tr>
<tr>
<td></td>
<td>2012-13</td>
<td>Increase from opening of Primark at TCR in Sept 2012</td>
</tr>
<tr>
<td></td>
<td>2015</td>
<td>Decrease because the Central line was non-stopping for 11 months</td>
</tr>
</tbody>
</table>

Source: TfL data, Arup analysis
The estimated change in total station footfall following the opening of the Elizabeth line

When the Elizabeth line becomes fully operational in 2020 more than 20 million extra passengers will use the Elizabeth line to travel to the West End. Growth is projected to stabilise from 2022 onwards, with an increase of around 1.2 million extra passengers every year.

Figure 8. Projected annual passenger growth

Who is coming to the West End?

The diagrams below show the origins of visitors to the West End and the stations they use to travel. It shows that visitors from the East and South East London (near Tower Hamlets, Newham, Greenwich, and Southwark) are most likely to switch from underground lines and use the Elizabeth line instead to travel to the West End in the future. This switch is less pronounced in other parts of London and the Greater South East.

Figure 9. Origins of West End visitors before and after opening of the Elizabeth line

The Elizabeth line will bring shoppers, visitors, workers, and residents to the West End.
The Elizabeth line, its new stations, and new commercial and residential developments will help shape the future land use of the West End.
Future land use around the West End

The location of businesses, homes and leisure activities will influence people’s movements in the West End. The map below shows the concentration of different land uses which will draw different groups of people (tourists, workers or residents) through the district in varying routes.

Figure 11. Existing and planned development by primary land use through 2021

Source: Co-Star and Arup analysis. Note: includes land use in Camden in proximity to Tottenham Court Road.
How people move through the West End

Understanding how people will move through the West End

The following section provides an analysis of movements of passengers currently entering and exiting each of the study area’s underground stations and looks at the different types of station users.

Using land use data – information on the density of homes, offices, retail, leisure and other buildings in the area – Amp estimate the potential flows of passengers from the three stations.

West End footfall can be split into four key types of users based on the New West End Company-commissioned Harper Dennis Hobbs survey conducted in 2015. The different types of passengers are distributed to the local street network from their origin stations based on their likely destinations in the West End (i.e. generated using existing and future land use data).

The maps presented in this section estimate the intensity for which those using the three West End stations will use public spaces. A number of streets and parks with relatively low levels of visitors today will see a significant increase in people visiting and passing through the area. Many smaller streets and sides streets may also become more lively.

TfL and Westminster’s proposals for Oxford Street District Transformation and investments in the West End Project along Tottenham Court Road could go a long way to ensuring the area is a pleasant, safe and world-class destination for decades to come. Continued investment in Regent Street will also be required to ensure sufficient space and quality placemaking for the district.

Increased passenger demand following the Elizabeth line will create new footfall trends from the three West End stations.
Oxford Street, Regent Street and Tottenham Court Road show the highest intensity of pedestrians moving through the area. Sections of these streets will see more than 20 million visitors per year or over 50,000 per day coming to or from the three West End stations.

Tourists (those living outside London and visiting the West End) are drawn to retail, leisure, food and beverage, and tourist attractions. Given that they are less familiar with the area, they may be more dependent on wayfinding to get around and are more likely to use main thoroughfares.
Distribution of Londoners

Londoners (those living in London, but not living or working in the West End area) are drawn to the same buildings and along the same route as tourists including retail, leisure, food and beverage, and tourist attractions. These people may be more likely to deviate from the better-known routes and take more side streets if they are more comfortable with the area.

Figure 14. Distribution of Londoners using multiple exit model from all stations in 2021

Distribution of workers

Many north-south streets intersecting Oxford Street will also see high levels of footfall. The distributions of workers is particularly dispersed along these streets as they not only go to shops but also go to many of the offices which lie beyond the major shopping and visitor streets.

Figure 15. Distribution of workers using multiple exit model from all stations in 2021
Distribution of residents

Local residents (those who live in W1 postcode) are more likely to use neighbourhood streets and walk north-south in the district, reflecting the location of housing.

Figure 16. Distribution of residents using multiple exit model from all stations in 2021

Source: TfL data; Arup analysis
Implications

Changing passenger movements in the West End
What does this mean for the West End?

Following the opening of the Elizabeth line, people will use more side streets with greater intensity. And the draw east-west across Oxford Street and north-south along Regent Street, Bond Street and Tottenham Court Road will increase the importance of taking radical steps to allocate more space to pedestrians, improve the quality of the public realm and deliver a network of safer and navigable pedestrian routes throughout the West End.

The likely shift of passenger demand to Tottenham Court Road Station in the east and Bond Street Station in the west, supports the case for accelerating the Oxford Street Transformation to include pedestrianisation of the entire length of Oxford Street, from Tottenham Court Road to Marble Arch.

It also helps to make the case for significant footway widening or pedestrianisation along the whole of Oxford Street as well as public realm improvements across the wider district.

The large increase in passengers at Tottenham Court Road station underlines the important role the West End Project will play in ensuring that Tottenham Court Road has more space for pedestrians.

In addition to supporting the case for pedestrianisation along the whole of Oxford Street, the increase in passenger numbers emphasises the need for reallocation of space to pedestrians on smaller West End streets and the development of proposals to radically reduce traffic on Regent Street. This latter proposal could also encourage footfall between Oxford Street and the entertainment and hospitality areas of Heart of London Business Alliance BID.

Oxford Circus will remain the West End’s busiest station, but the district’s other stations will grow at a much faster rate. Consequently, this iconic gateway to the West End needs to be planned as a coherent place, encouraging exploration on foot of both Oxford Street and Regent Street and also the wider district.

It is important that forward planning of the public realm improvement work across the area is supported by:

- Delivery of Healthy Streets, specifically the reallocation of road space to match the 42 percent uplift in station entry and exit numbers, while supporting cyclists and bus users as well
- Informal (including lighting, materials and access improvements and formal wayfinding (intensification of Legible London)
- High quality place management and delivery
- Investment in creating and improving places in which design and space is primarily for people, specifically including Hanover Square, Cavendish Square and the numerous streets of the commercial, leisure and retail area.
- Night time strategy, lighting, animation and safety planning and delivery, and;
- Distinction and protection of residential streets.

Given the scale of the opportunity, what does this mean for the West End?
Implications for business, placemaking and working in partnership

As we have highlighted, the influx of new workers, visitors and residents will change the dynamics of the West End.

The Elizabeth line will increase the labour catchment of businesses. It will also bring more people into the public spaces of the West End, potentially increasing crowding or generating demand for new routes.

The BIDs will work to ensure that stakeholders in the West End can make the most of the opportunities the line will bring whilst mitigating some of the challenges associated with increasing demand on the district.

Looking forward

This report has outlined the potential impacts the arrival of the Elizabeth line on West End businesses, accessibility, public realm and interactions with other major projects. The findings from this work will be used by the BIDs to develop a programme for making the most of the Elizabeth line’s opportunities. This will include three major themes: collaborating, influencing, and leading.

Leading
Preparing Bond Street, Hanover Square and the Oxford Street district – including Oxford Circus – for the Elizabeth line through better public realm

Collaborate
Working with business stakeholders, the Mayor, TfL, Westminster City Council and London Borough of Camden on delivery of Oxford Street District Transformation

Influence
Responding to major consultations on transport, public realm and land use policy

The BIDs will advocate for and work with public sector partners to invest in public spaces

Collaborate: Coordinate a coherent approach to placemaking in the West End

The BIDs, businesses, Mayor’s office, TfL, Westminster City Council, Camden Council and a wider range of partners are shaping the future of the West End.

They are transforming the West End into a distinctive, attractive and World class place to visit, work and invest.

The BIDs will work to create closer co-ordination of activities across West End projects, where BID members might be affected, and how any adverse impacts can be minimised and opportunities maximised.

For example, the West End Project (WEP) is a £3.5bn partnership project to improve the Tottenham Court Road area in preparation for the opening of a new Crossrail station.

The project will transform the Tottenham Court Road area, making it into a pedestrian, cycle and bus only street during the daytime. This makes it safer and more attractive for residents, workers and visitors. It has already boosted business with significant changes to the retail and food beverage offer.

The case for end-to-end transformation of Oxford Street is compelling, as is the case for greater pedestrian space and improved public realm on Regent Street to fulfil the transformation of the West End.

Increase in local businesses turnover and retail demand

The Elizabeth line will have positive impacts for local businesses, in particular entertainment, retail and food and beverage. The West End catchment area will increase by 28 percent, bringing more customers closer to Europe’s premier shopping district. Almost 60 percent of people are anticipated to visit the West End more frequently due to the Elizabeth line.

Following full operation of the Elizabeth line, turnover could increase from £8.8bn (2014) up to £13 billion by 2021 (in 2014 prices). This is equivalent to a daily West End figure of over £35 million (2021).

Increase in need for high quality public space

From the station forecourts to pavements to new areas for rest and wayfinding, more people will be sharing the public spaces of the West End. This means that new space may need to be created or existing spaces will need to be used in innovative and intensified ways.

In line with Westminster City Council’s Walking Strategy and the Mayor of London’s Healthy Streets strategy, more space is likely to be needed to be allocated to pedestrians across the West End.

Greater disabled access and amenities for families can make the area more accessible and desirable for visitors, residents and the West End workforce, increasing dwell time and return visits to the district.

Managing interactions with other public projects

Major projects will need to be managed carefully, including the proposals for Oxford Street District Transformation, West End Project, Bond Street and Hanover Square improvements, changes to bus routes, and development of new offices, homes and retail.

The construction phases of major projects will restrict public space for pedestrians (and potentially road users) and generate noise and disruption to businesses. Mitigating these challenges will be crucial to managing increased people volumes in the short to medium term. Approaches such as Travel Demand Management, successfully deployed during the 2012 Games, are critical to ensuring the West End continues to function well during the construction phase of the next few years.
Appendix

Methodology and principal assumptions

Data received: modelling Crossrail impact
Crossrail Station Passenger Final Draft and Addendum (July 2015)
• WEP West End Station Forecast 2015
• Crossrail - Identifying New Shoppers & Analysing their Impact (August 2015) – Harper Dennis Hobbs
• Other relevant data: LUL Multi Year Station Entry and Exit Figures (up to 2016)
• Updated West End Station Forecast (received from TfL, February 2018)

Visitor Forecast Methodology
TfL provided average peak weekday forecast for the Oxford Street stations (2013-2031)
• Using existing monthly and weekend station usage figures, the weekday forecast was factored down to show estimated Saturday and Sunday forecast usage, and variation of station usage by month.
• Forecast figures were then annualised to give estimated yearly usage.

Transition period
• Passenger growth during the transition period was estimated based on the following assumptions:
  - The Elizabeth line Timeline
  - London Population Projection (as published by GLA)

Assumptions
Assumptions with TfL 2015 Forecasts
• Revised population growth with the release of 2011 Census – with 2011 to 2031 population growth up from 1m to 1.6m.
• GLA updated their employment forecasts and revised the spatial distribution.
• Updates to the specification of Crossrail services, and increase in the expected capacity from LU upgrades.
• Increases in the capacity of other rail services, and representation of long-distance rail
• demand growth in line with DfT recommendations.
• Improved data on transport trends.

Disclaimer

The information contained in this report is supplied to any person, other than our client, on the condition that Arup and any employee of Arup are not liable for error, or inaccuracy contained therein whether negligently caused or otherwise, or for any loss or damage suffered by any person due to such error, omission, or inaccuracy, as a result of such supply. This review takes into account the particular instructions and requirements of our client. It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

Much of the analysis in this report is based on analysis of data supplied by Transport for London and Westminster City Council. We have satisfied ourselves, so far as possible, that the information presented in our report is consistent with published information and the information provided to us, however, we have not sought to establish the reliability of the sources by reference to other specific evidence.

We emphasise that any forward-looking projections, forecasts, or estimates are based upon interpretations or assessments of available information at the time of writing. The realisation of any prospective financial information is dependent upon the continued validity of the assumptions on which it is based. Actual events frequently do not occur as expected, and the differences may be material. For this reason, we accept no responsibility for the realisation of any projection, forecast, or estimate.

Findings are time-sensitive and relevant only to current conditions at the time of writing. We will not be under any obligation to update the report to address changes in facts or circumstances that occur after the date of our report that might materially affect the contents of the report or any of the conclusions set forth within.

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Limitations
We note that our approach provides only an indicative projection of future demand based upon a series of assumptions and factored relationships. These projections carry an intrinsic level of uncertainty. The resulting analysis only can provide an indication of the level of demand and impact that may occur through 2031.

We have made a number of simplifying assumptions in order to complete our work. These assumptions have been necessary in order to build upon previous work completed by Crossrail Ltd. In extending projections to off-peak periods, modelling seasonality, and projecting demand beyond 2016, to 2031, only limited comparability exists between our projections and Crossrail’s previous forecasts.

We derived our projections based on Transport for London’s (TfL) actual station entry and exit counts; and the latest strategic forecasts and assumptions around timescale supplied by TfL to illustrate the Elizabeth Line impact. Reference was also made to the recently published GLA housing-led population projections for London to estimate the increased demand as a result of population growth. Nevertheless, our forecast may not wholly account for other factors that could influence future station demand such as changes to bus services and Crossrail 2.

It should be noted that TfL forecast numbers assume full year of operation. The future figures presented are therefore a result of multiple year forecasts, weighted by current monthly usage (e.g. current demand between Jan to April; plus future demand with new line between May to December). Similarly, our approach does not account for the effects on the surrounding network or on other Underground stations, such as Marble Arch, Piccadilly Circus, Holborn or Oxford Circus.

Inevitably for a study of this scale and timing, there have been considerable limitations to our ability to model walking routes from stations and to project the distribution of onward journeys. We have not drawn conclusions about the future profile of station users or their journey purpose. There may be opportunities to understand potential future users based on emerging TfL analysis.

Finally, as with any modelling of unconstrained demand, a certain amount of “chicken and egg” needs to be borne in mind. Without the offices, residential development, entertainment and retail offer to attract and sustain visitors to Central London the numbers in question may not materialise. How Central London’s stakeholders choose to respond to the prospect of many tens of millions more visitors a year is inevitably a question of broader debate. Our analysis suggests that now is an opportune time for that debate to be reinvigorated so that the opportunities and pressures the line will create can be most effectively addressed.
New West End Company, The Fitzrovia Partnership and Heart of London Business Alliance collectively represent over 1400 businesses across London’s West End. This report reflects our deep commitment to working cooperatively, creating a better trading environment and championing the district as the world’s first choice for visitors, businesses and investors.