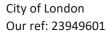
# All Change at Bank: Interim Equalities Analysis







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# 1 Introduction

- 1.1 This Equality Analysis (EA) relates to the City of London's (the City's) All Change at Bank scheme which currently has three shortlisted options.
- 1.2 The All Change at Bank scheme sits separate to the Bank on Safety scheme and the Bank Station Capacity Upgrades. For context, a short summary of each scheme has been provided.

#### **Bank Station Capacity Upgrades**

1.3 This Transport for London project is a reconstruction of Bank station and will upgrade station capacity to enable movement of 40% more passengers. In addition, a new step-free access, shown in Figure 1-1, will be constructed on Cannon Street, west of King William Street. This will provide access to the Northern Line and Docklands Light Railway. This project is expected to be complete in 2022.

Figure 1-1: New step-free access at Bank station

Source: Transport for London (<a href="https://tfl.gov.uk/travel-information/improvements-and-projects/bank-and-monument">https://tfl.gov.uk/travel-information/improvements-and-projects/bank-and-monument</a>)

#### **Bank on Safety**

1.4 The Bank on Safety scheme has restricted vehicle movements between Monday and Friday from 7am-7pm, allowing buses and cycles permission to cross Bank Junction or enter Cornhill in a westbound direction. Pedestrian crossings have been improved and footways widened at the junction along with cycle facility upgrades.



#### All Change at Bank

- 1.5 The All Change at Bank scheme sits separate to the Bank on Safety scheme and seeks to bring transformative change to Bank Junction for the longer term. The scheme has the following objectives:
  - An improvement in safety at Bank junction;
  - An improvement in air quality at Bank junction; and
  - An improvement in pedestrian experience at Bank junction (in terms of comfort and the experience as a place to spend time in).
- 1.6 The scheme is currently in the feasibility stage and has been narrowed down to three options for more detailed feasibility design. These options focus on further closing/restricting two to three arms of junction in order to help achieve project objectives. The three options are summarised in Table 1-1 below and shown in Figure 1-2 to Figure 1-4. Information on these options has been supplied by the City of London.

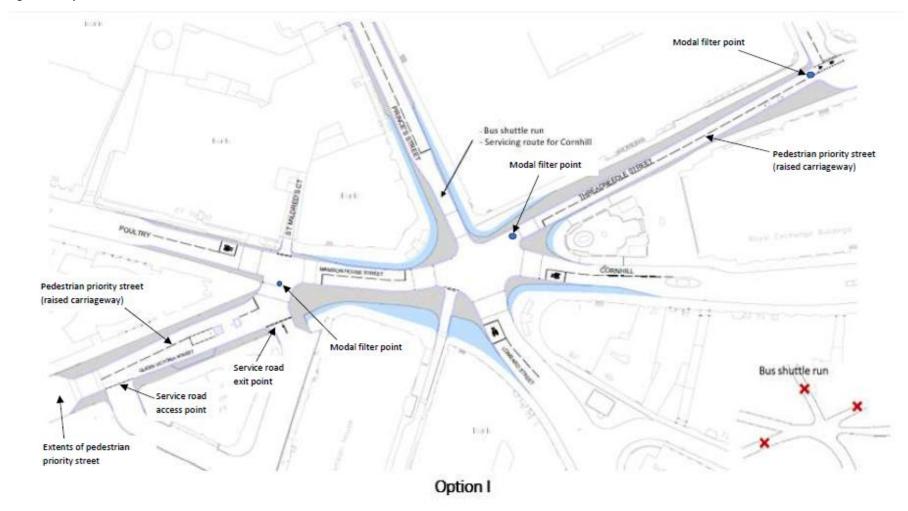
Table 1-1: All Change at	<b>Bank Options Summary</b>
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Option	Number of arms closed	Queen Victoria Street	Poultry	Princes Street	Threadneedle Street	Cornhill	Lombard Street/King William Street (KWS)
1	3	Х		х	х		
2	2	х			х		
3	3	Х	х			х	

- 1.7 The City of London has already completed a Test of Relevance for the All Change at Bank scheme. This identified the following four Protected Characteristic Groups (PCGs) for assessment: Age, Disability, Pregnancy/Maternity, and Race.
- 1.8 This EA has been produced to help inform the decision-making process as this project progresses. The information and recommendations provided will be used to focus design measures for reducing any negative impacts on PCGs identified and to focus discussions with groups representing those protected characteristics.
- 1.9 This EA is based on information supplied by the City of London as well as readily available data from other sources. This includes traffic counts, pedestrian and cyclist counts, bus journey time modelling and background information through the Bank on Safety scheme. At this stage, the transportation response to support Covid-19 recovery measures that are currently in place in the City have not been included as part of the All Change at Bank options or this analysis. This is because it is still unknown whether any of these measures will be made more permanent.



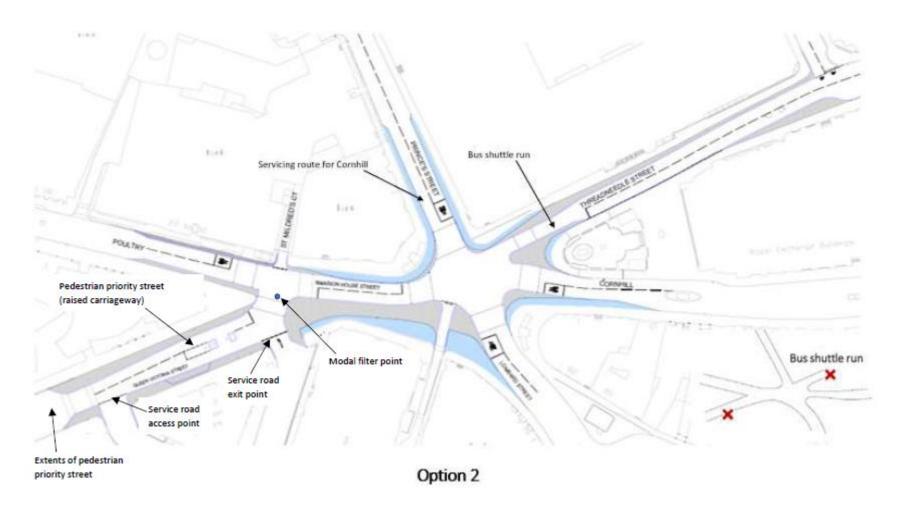
Figure 1-2: Option 1



Source: City of London



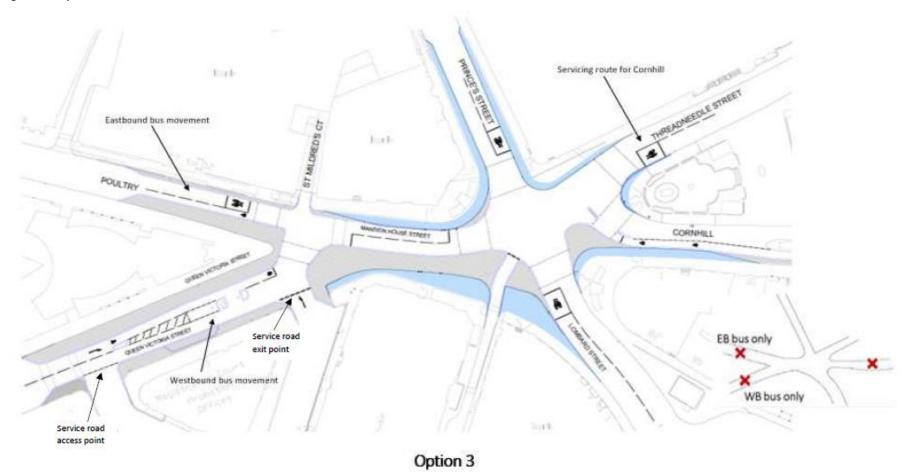
Figure 1-3: Option 2



Source: City of London



Figure 1-4: Option 3



Source: City of London

# 2 Baseline

#### **General**

- 2.1 The City of London (the City) has a very large workforce in comparison to its usual residential population. The 2011 Census recorded the residential population as 7,400 people and the work force as 357,000 people almost 50 times the usual residential population which demonstrates significant movement in and out of the City every day.
- 2.2 The workforce located within the Bank Junction Workplace Zone, as defined in the zone shown in Figure 2-1, amounts to 9,100 people. It can be seen in Figure 2-2 that the age profile for the Bank Junction Workplace Zone follows a similar trend to that of the City of London workforce, where the highest age group is those aged 30-34. The workforce in the Bank Junction Workplace Zone is lower when compared to those aged 55+ within the City.

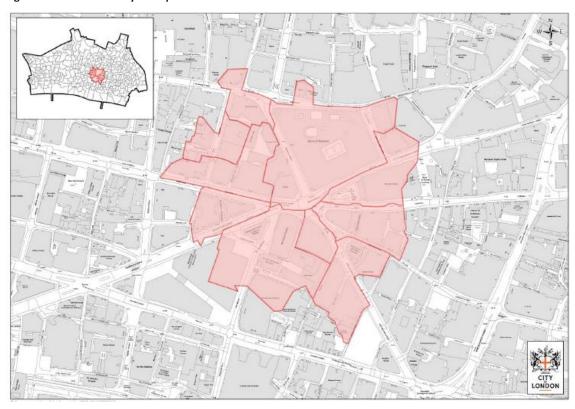


Figure 2-1: Bank on Safety Workplace Zone

Source: Bank on Safety Equality Analysis with data from Office for National Statistics



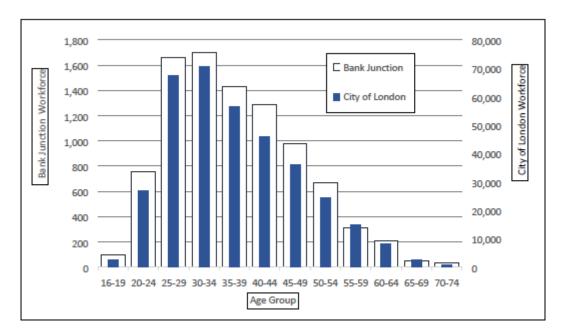


Figure 2-2: Age of daytime occupants within the Bank Junction Workplace Zone

Source: Bank on Safety Equality Analysis with data from Census 2011

- 2.3 More recently, the Office for National Statistics (ONS) mid-2019 estimates show an increase in the City of London residential population to 9,700 people while the 2018 workforce was estimated to be 522,000¹. The City shows the highest workplace density out of all boroughs in Greater London with the primary land use in the City being offices, which make up more than 70% of all buildings². In absolute terms, the City has the second greatest workforce after the City of Westminster, with a gender split of 64% males and 36% females in 2019³.
- 2.4 When compared to Greater London, the City of London has a higher proportion of professional occupations, associated professional and technical occupations, skilled trades occupations, and administrative and secretarial occupations. Professional and associate professional/technical occupations represent over half of occupations within the City.
- 2.5 Census data shows that of those travelling to the City of London for work, 38% have trips of 10km or less. 36% of trips are between 10km and 30km, while 16% are within 30km and 50km and 9% are 60km or more. Overall, 84% of the workforce uses public transport to travel to the City of London for work, shown in Figure 2-3.
- 2.6 Please note that these figures may change significantly due to the change in working arrangements and patterns attributed to Covid-19, however the CoL can only act on the latest data available.

<sup>&</sup>lt;sup>3</sup> <u>https://www.cityoflondon.gov.uk/business/economic-research-and-information/new-research/Documents/city-of-london-jobs-factsheet.pdf</u>



<sup>&</sup>lt;sup>1</sup> https://www.cityoflondon.gov.uk/business/economic-research-and-information/new-research/Documents/city-of-london-jobs-factsheet.pdf

<sup>&</sup>lt;sup>2</sup> https://www.cityoflondon.gov.uk/services/environment-and-planning/planning/development-and-population-information/Documents/census-information-reports-workforce-in-the-col.pdf

Work mainly at or from home

Train, underground, metro, light rail, tram, bus, minibus or coach
Driving a car or van

Bicycle

On foot

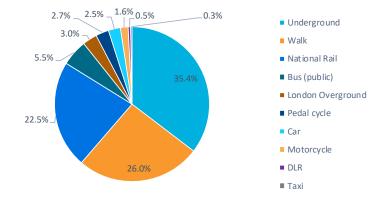
All other methods of travel to work

Figure 2-3: Method of travel to work for those with a workplace in the City of London

Source: 2011 Census

- 2.7 Data from Transport for London's (TfL) London Travel Demand Survey (LTDS) 2018/19 has been analysed to inform this EA, to understand any differences in the travel patterns exhibited by different Protected Characteristic Groups (PCGs). LTDS is a continuous household survey of the London area, covering all London boroughs, including the City of London. The survey records detailed information about the household, the people that live there, and the trips they make.
- 2.8 Every year, approximately 8,000 households take part in the survey which is then weighted using an interim expansion factor to approximate the data for the entire population of London, thus providing an insight into how Londoners travel on a weekly basis. For the purposes of this EA, trips that ended in the City of London have been analysed. Due to the London-wide nature of this survey, it has not been possible to limit the analysis to trips ending in the Bank junction area, as the low sample size means that it would not be appropriate.
- 2.9 When analysing LTDS for all trip purposes, the following mode split for travel into the City was obtained. As shown in Figure 2-4, of all trips ending in the City of London, 66.9% are made using public transport. 35.4% of trips are made using the Underground, 0.5% are made using Docklands Light Rail (DLR) and 5.5% are made by public bus. It can also be seen that walking has a much higher proportion for all trips (26.0%) when compared to the Census 2011 Travel to Work data (5%).

Figure 2-4: Method of travel to the City of London for all purposes

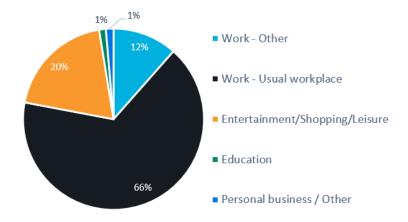


Source: LTDS 2018/19



2.10 Please note that this mode split involves other trip types in addition to 'travel to work' trips. The top 5 journey purposes are displayed in Figure 2-5 below. Based on trip analysis using LTDS data, 66% of trips made are for the purposes of travelling to their usual place of work.

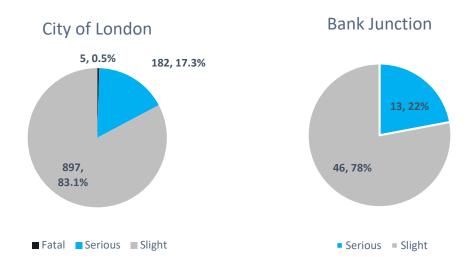
Figure 2-5: Top trip purposes for travel to the City of London



Source: LTDS 2018/19

2.11 Based on 2016-2018 STATS19 data (the United Kingdom's (UK) database containing a record of reported road traffic accidents), collisions across the whole of City of London involved 1,084 casualties, 5 of which resulted in a fatal casualty and 182 of which resulted in a serious injury, shown in Figure 2-6. At Bank junction, 59 collisions have occurred within the junction area from 2016 to 2018, of which 46 resulted in a serious injury.

Figure 2-6: Casualty severities



Source: STATS19 2016-2018

2.12 Figure 2-7 below shows the casualty travel mode splits in the City of London and Bank junction. It can be seen that casualties using active modes accounted for 62% and 57% of all casualties involved in collisions in the City of London and Bank junction, respectively. Bus or taxi casualties resulted in a higher proportion of casualties at Bank junction compared to the City of London. It should be noted that 'Single bus or coach' collisions are often described as passengers' falls due to sudden braking, and they rarely involve any vehicle impact.



34%

City of London

1%

Pedestrian

Pedal Cycle

Powered 2
Wheeler

Car

Taxi

Bus Or Coach

■ Goods Vehicle

Figure 2-7: Mode of travel for casualties involved in collisions

Source: STATS19 2016-2018

2.13 Figure 2-8 shows the proportion of Killed or Seriously Injured (KSI) and Slight casualties per mode of travel. KSIs account for 17% of all casualties involved in collisions from 2016-2018 in the City of London. Based on this, KSIs for pedestrians are much higher than the average at 27%.

100% 90% 80% 70% 220 60% 312 180 43 60 67 14 50% 1 40% 30% 20% 10% 60 0% Pedestrian Pedal Powered Car Taxi Bus Or Goods Other Cycle 2 Wheeler Coach Vehicle Vehicle ■ KSI ■ Slight

Figure 2-8: Proportion of KSI and Slight casualties per mode of travel in the City of London

Source: STATS19 2016-2018

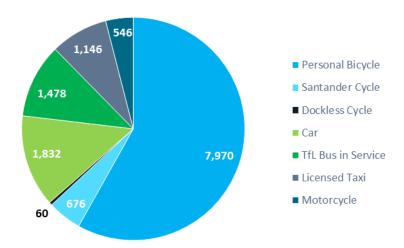
2.14 A traffic count was undertaken at Bank junction for the Bank on Safety project on 19 November 2019 between 5:00-10:00 and 16:00-21:00. This counted all vehicle movements and excluding pedestrian movements. During these timeframes, 14,351 movements were recorded. Figure 2-9 shows a breakdown of selected modes that may have an impact certain PCGs.



25%

2.15 It can be seen that based on movements only, with the Bank on Safety scheme in place, cyclists account for the majority of movements (8,706), followed by private car (1,832), in service TfL buses (1,478) and licensed taxis (1,146). Please note that these are vehicle movements and not the total number of passengers. These movements are shown by arm in Table 2-1.

Figure 2-9: Bank on Safety traffic counts – Passenger modes that may affect certain PCGs



Source: Tracsis Junction Turning Count Data, Bank on Safety (November 2019).

Note: This figure excludes non-passenger modes.

Table 2-1: Bank on Safety traffic counts by junction arm - Selected modes that may affect certain PCGs

Junction Arm	Cyclists	In Service TfL Buses	Licensed Taxis	Private Car
Princes Street	1,881	196	165	311
Poultry	841	171	163	90
Queen Victoria Street	1,549	142	312	412
Lombard Street / King William Street (KWS)	2,772	570	184	491
Cornhill	807	142	107	236
Threadneedle Street	853	305	215	290

Source: Tracsis Junction Turning Count Data, All Change at Bank (November 2019).

Note: This figure excludes modes that are not expected to have an impact on PCGs (ex. LGV, HGV). Please note these are vehicle movements and not the total number of passengers.

2.16 Pedestrian counts from the Bank on Safety project in 2018<sup>4</sup> show approximately 59,000 and 54,000 pedestrian movements in the AM (8:00-9:00) and PM (17:00-18:00) peak periods,

<sup>&</sup>lt;sup>4</sup> Bank on Safety – Pedestrian and Cyclist Movement Update, City of London (November, 2018).



respectively. The same study counted 2,200 cyclist movements in the AM Peak (8:00-9:00). Figure 2-10 shows the locations and counts of pedestrian movements while Figure 2-11 shows the existing pedestrian comfort levels as of November 2018. In both the AM and PM peak periods, the highest single flow occurred on Princes Street while the highest two-way flow occurred on the southern footway of Mansion House Street. The highest level of informal crossing in both the AM and PM peaks occurred at the Queen Victoria arm between the southern footway of Mansion House Street and Wallbrook.



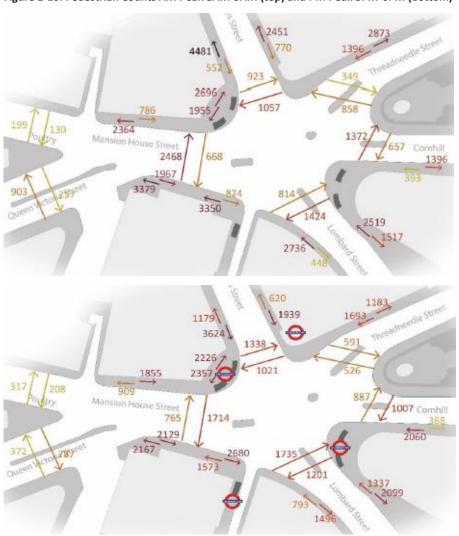


Figure 2-10: Pedestrian Counts AM Peak 8AM-9AM (top) and PM Peak 5PM-6PM (bottom)

Source: Bank on Safety – Pedestrian and Cyclist Movement Update, City of London (November 2018)

A - Very Comfortable
B - Recommended
C - Maximum Recommended Level
D - Very Crowded and uncomfortable
E / F - Extremely Crowded. Action required

Figure 2-11: Pedestrian comfort levels

2.17 The traffic and pedestrian counts demonstrate that Bank junction is most used by pedestrians, and when looking at vehicle movements, this is followed by cyclists, private car, TfL bus services and licensed taxis. At this time, we do not have exact bus passenger numbers. This demonstrates that the pedestrian priority measures to be implemented at Bank junction will benefit the people who use the junction most (pedestrians and cyclists) by providing a safer journey, better air quality, and improved pedestrian experience.

#### Age

- 2.18 Based on 2011 Census data, the City has approximately 7,400 residents, 55% of these being male and 45% of these being female. The majority of residents fall within the 25-29 and 30-34 age groups for both genders. When compared to Greater London, The City has proportionately more people aged between 25 and 69 living in the Square Mile. Conversely there are fewer young people<sup>5</sup>. Those aged over 60 represent 20% of the residential population.
- 2.19 When looking at Census data focusing on the workforce in the City, the majority of workforce ages again fall within the 25-29 and 30-34 age categories for both genders, making up 39% of the total workforce. Those aged between 16 and 24 only make up 9% of the workforce population. It can also be noted that as age increases, there is a steady decrease in the proportion of the workforce within each age category. The age categories of 60-64 and 65+ represents 2% and 1% of the workforce population, respectively.
- 2.20 The Census data for each age category shows that 78%-85% of the workforce relies on public transport to travel to work. The lowest percentage of people driving a car or van falls within the 25-29 age category (2%) and steadily increases as age increases. This proportion also is also slightly higher for the 20-24 (3%) and 16-19 (5%) age groups. A disproportionately high percentage of those aged 65 to 75 rely on driving a car or van (11%) to travel to work. Generally, as age increases, reliance on driving a car or van to travel to work increases.
- 2.21 The highest proportion of cyclists (5%) are within the 25-29 and 30-34 age categories. Cycling as a mode share decreases with age, falling to 1% by the age of 60 onwards. The proportion of people who walk to work fall within the younger age categories from 16 to 34 (ranging between 5% and 8%). The proportion of walkers remains steady at 3% from age 35 to 64 and increases slightly to 4% for those aged 65 to 74.
- As age increases, people are more likely to develop impairments relating to sight, hearing and mobility, therefore those above the age of 65 are more likely to be disproportionately affected by these potential impairments, though the absolute number of both residents and workforce fitting this description is expected to be quite low.
- 2.23 LTDS 2018/19 analysis for trips made for all purposes ending in the City shows the following mode shares, Figure 2-12, per age category.

<sup>&</sup>lt;sup>5</sup> https://www.cityoflondon.gov.uk/services/environment-and-planning/planning/development-and-population-information/Documents/census-information-reports-introduction-november-2012.pdf



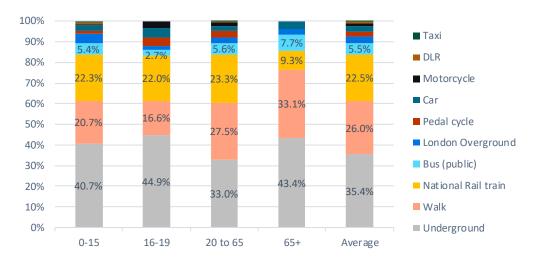
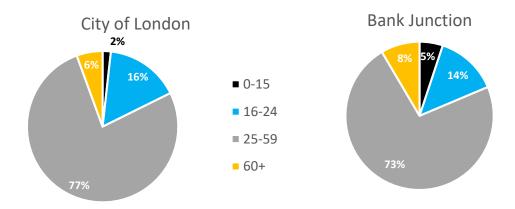


Figure 2-12: Mode split by age category for travel to the City of London

Source: LTDS 2018/19

- 2.24 Those aged 65+ have a higher mode split of walking, bus and Underground compared to the baseline, with no cycling and higher car use. Those aged 0 to 15 have a similar mode split to the baseline, however walking is lower while Underground use is higher. Those aged 16 to 19 show a higher proportion of car use and Underground, and a lower proportion for walk or bus services.
- 2.25 Figure 2-13 shows collision casualties by age category. It can be seen that compared to the City as a whole, those aged 60+ and those aged 15 and below account for a slightly higher proportion of casualties at Bank junction, at 8% and 5%, respectively. This is likely to reflect the lower proportions of people in these age groups moving around the City, relative to the predominant 25–59 age group.

Figure 2-13: Age of casualties involved in collisions



Source: STATS19 2016-2018

2.26 The proportion of KSI and Slight casualties per age category in the City of London is shown in Figure 2-13 below. On average across all age groups, KSIs account for 17% of all casualties involved in collisions from 2016-2018 in the City of London. Based on this, KSIs are higher than average for those age 60+ (30%) and those aged 16-24 (19%). A such, this indicates that these



age groups are disproportionate more likely to suffer more severe consequences if they are a casualty in a collision.

100% 80% 60% 40% 20% 3 33 133

16-24

■ KSI ■ Slight

Figure 2-14: Proportion of F&S and Slight casualties involved in collisions per age category

Source: STATS19 2016-2018

0-15

# **Disability**

0%

2.27 Day-to-day activities can be limited by disability or long-term illness. In the City of London as a whole, 89% of residents feel they have no limitations in their activities – this is higher than both in England and Wales (82%) and Greater London (86%). In the areas outside the main housing estates, around 95% of residents responded that their activities were not limited. 12% of the residential population stated that they were either in fair, bad or very bad health. The spatial distribution of health-based activity limitations can be seen in Figure 2-15 based on Census data<sup>6</sup>. Generally, areas to the east of the City and north of the City are more likely to have activities limited by disability or long-term illness.

25-59

60+

<sup>&</sup>lt;sup>6</sup> https://www.cityoflondon.gov.uk/services/environment-and-planning/planning/development-and-population-information/Documents/Census-information-reports-health.pdf



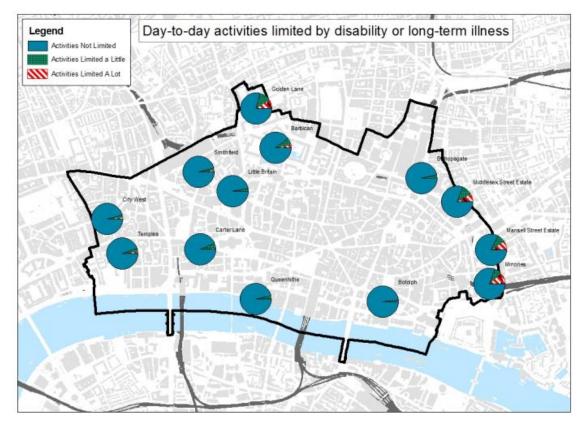


Figure 2-15: Day-to-day activities limited by disability or long-term illness

Source: Census 2011

- 2.28 1.7% of the residential population in the City are blue badge holders, which is in the bottom five local authorities for the number of blue badges across the United Kingdom<sup>7</sup>.
- 2.29 Across the UK focusing solely on cyclists who have a disability, the Wheels for Wellbeing annual survey<sup>8</sup> shows that 72% of disabled cyclists use their bike as a mobility aid, and 75% found cycling easier than walking. Survey results also show that 24% of disabled cyclists bike for work or to commute to work and many found that cycling improves their mental and physical health. Inaccessible cycle infrastructure was found to be the biggest barrier to cycling.
- 2.30 LTDS 2018/19 analysis shows that 1.8% of trips made into the City of London are made by someone who has a mental or physical disability affecting daily travel (including old age). The mode split for these trips is shown in Figure 2-16.

<sup>&</sup>lt;sup>8</sup>Wheels for wellbeing annual survey 2018: <a href="https://wheelsforwellbeing.org.uk/wp-content/uploads/2019/04/Survey-report-FINAL.pdf">https://wheelsforwellbeing.org.uk/wp-content/uploads/2019/04/Survey-report-FINAL.pdf</a>



https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/759944/blue-badge-scheme-statistics-2018.pdf

11%

4%

Bus

Car passenger

London Overground

National Rail train

Underground

Walk

Figure 2-16: Mode split by people with a physical or mental disability affecting daily travel (including old age)

Source: LTDS 2018/19

2.31 When comparing to the LTDS mode split of trips made by all people, bus use for those with disabilities is twice as high (11% compared to 5%), car trips are higher and used as passenger only (4% compared to 2.5%) and walking is significantly higher (35% compared to 25%). Disability types stated by those who have a disability affecting daily travel (including old age) is shown in Figure 2-17 below.

8%
3%
4%
Mental Health
Mobility
Mobility/Mental Health
Serious Long Term Illness
Other

Figure 2-17: Disability types stated by those who have a disability affecting daily travel

Source: LTDS 2018/19

2.32 It can be seen that mobility impairment represents the highest proportion followed by impairment due to serious long-term illness. It should be noted that this data is based on a very small sample (1.8% of sample size for trips ending in the City of London), therefore results should be taken as general. It is important to note that various physical and mental disabilities can lead to travel limitations.



## Pregnancy / maternity

- 2.33 The birth rate in the City of London was 7.9 births per 1000 people in 2016, approximately 33% below the national average that year of 11.9. Therefore, there are statistically less likely to be pregnant and maternal people who reside in the City. However, this represents only the residents of the City, and not the 522,000 people who work in the Square Mile, principally a working population. A proportion of this workforce will be pregnant and/or have infants or small children at any point in time.
- 2.34 Considering that the residential population of the City of London is quite small, it is unlikely that there will be a significant number of pregnant women and parents with infants and/or small children residing in the City at any given time. However, the numbers of pregnant women or parents with infants and/or young children that travel in and out of the City for work or leisure purposes may be higher.

#### **Race**

- 2.35 68% of the City's residential population hold a UK passport and 14% hold non-European passports. When looking at race per area in the City, 79% of the residential population is 'White'. There is a higher proportion of Asian population (47%) on Mansell Street, to the east of the study area, when compared to other areas in the City where the Asian population across the City is 13%.
- 2.36 The Asian population is approximately evenly split between Asian-Indian, Asian-Bangladeshi, Asian-Chinese and Asian-Other. The City has the highest and second-highest population of Asian-Chinese in Greater London and England/Wales respectively. The 'Black' population is low compared to Greater London and England/Wales at 2.6%. The remaining population identifies as mixed ethnicity (4%) or other.
- 2.37 TfL data, for Greater London, shows that bus use among Black, Asian or Ethnic Minorities (BAME) Londoners is higher at 65% compared with 56% of white Londoners who use the bus at least once per week. Black Londoners using the bus at least once per week is significantly higher at 73%<sup>10</sup>.
- 2.38 Mode split by ethnicity, based on LTDS 2018/19 analysis is shown in Figure 2-18.

<sup>&</sup>lt;sup>10</sup> http://content.tfl.gov.uk/travel-in-london-understanding-our-diverse-communities-2019.pdf



<sup>&</sup>lt;sup>9</sup> https://www.cityoflondon.gov.uk/services/environment-and-planning/planning/development-and-population-information/Documents/census-information-reports-ethnicity.pdf

■ Taxi 100% DLR 13% 90% 4% 18% Motorcycle 8% 13% 80% 23% Car 26% 70% 21% 60% 27% ■ Pedal cycle 45% 50% 48% 26% ■ London Overground 8% 28% 40% Bus 30% 53% ■ National Rail train 20% 39% 35% 34% 30% 26% ■ Walk 10% 0% Underground Asian or Asian Black or Black Other Ethnic White Mixed or Average British British multiple ethnic Group groups

Figure 2-18: Mode split by ethnicity

Source: LTDS 2018/19

2.39 Based on average travel modes to the City of London from the 2018-19 LTDS data, Black or Black British, Mixed or Multiple Ethnic Groups, and Other Ethnic Groups are more likely to use public buses. Asian or Asian British are more likely to drive (6%). Mixed or Multiple Ethnic Groups are more likely to cycle (7%). Both Mixed Multiple Ethnic groups and Other Ethnic Groups are much more likely to walk (45% and 45%, respectively). Again, it should be noted that these percentages may not be precise due to low sample sizes.



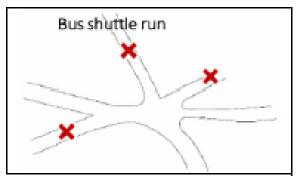
# 3 Overall impact on Bank junction movements

- 3.1 This section outlines the overall impact on vehicular and pedestrian movements at Bank junction for each of the three options. Consideration is given as to how the proposed designs would affect movement for the following users:
  - Pedestrians;
  - Cyclists;
  - Buses;
  - Taxis; and
  - General motor traffic.

### **Option 1**

- 3.2 Option 1 involves restricting access to Princes Street, with only buses and cyclists permitted using a shuttle run, as well as essential servicing. Both Threadneedle Street and Queen Victoria Street would be closed to motorised vehicles, with access permitted for cyclists only. Pedestrians, as in all options, are not restricted in their movements across, between or through any of the junction arms.
- 3.3 These restrictions are illustrated in Figure 3-1 below.

Figure 3-1: Option 1 vehicular restrictions



#### **Pedestrians**

3.4 Movement of pedestrians is not expected to be restricted in any way. Both Threadneedle Street and Queen Victoria Street would become pedestrian priority streets with widened footways and a raised carriageway. No through traffic would be permitted to motor vehicles, other than for essential servicing. Footways would also be widened on Princes Street, Poultry, Lombard Street and Cornhill.



#### **Cyclists**

- 3.5 As with pedestrians, cyclists would not have any restrictions imposed on their movements with this option. However, Threadneedle Street and Queen Victoria Street would become pedestrian priority streets and cyclists would be permitted access at all times. Princes Street would only permit access to buses, cyclists, emergency vehicles and servicing vehicles.
- 3.6 Modelling has looked at the following six key cycling routes:
  - King William Street Northbound;
  - Princes Street Southbound;
  - Poultry Eastbound;
  - Cornhill Westbound;
  - Queen Victoria Street Eastbound; and
  - Threadneedle Westbound.
- 3.7 The cycling journey time changes in both AM and PM peak on these routes is negligible, with journey times affected by no more than 1 minute.

#### **Buses**

- 3.8 Buses would be restricted from using both Threadneedle Street and Queen Victoria Street, enforced through a modal filter. Buses would continue to have access to all other arms of the junction.. These restrictions would impact c.4.6k passengers per day<sup>11</sup>.
- 3.9 Preliminary VISSIM modelling for this option demonstrated a high increase in journey time between Great Swan Alley and Monument Station and between Monument Station and London Wall<sup>12</sup>. In order to lessen this delay along with other bus journey delays modelled in Option 1, the design has been reviewed and revised to mitigate increases in bus journey times while continuing to account for improved pedestrian movement.
- 3.10 This review resulted in the introduction of a bus shuttle run on Princes Street. This shuttle run removes a diversion for three services (six routes in both directions) that is approximately 1km in length and passes through four to five extra junctions, dramatically improving journey times versus a scenario whereby buses are forced to divert around Princes Street.
- 3.11 With the bus shuttle run mitigation, modelling shows that all bus routes are expected to have a journey time increase of less than two minutes with the exception of bus routes 11 and 26, which will experience an increase of up to five minutes due to a diversion of approximately 500m and having to pass through an additional three junctions.

## Taxis and general motor vehicle traffic

3.12 All other motorised vehicle traffic would be restricted from using Threadneedle Street, Queen Victoria Street and Princes Street. Access would remain unchanged on all other arms of the junction. Due to these restrictions, motorised vehicle drivers may choose alternative routes to divert around the Bank junction restrictions which could increase congestion and journey times elsewhere.

<sup>&</sup>lt;sup>12</sup> Bank Junction Shortlist Option Assessment, Norman Rourke Pryme (August 2020).



<sup>&</sup>lt;sup>11</sup> Busto analysis, Transport for London data (February 2018).

- 3.13 Preliminary VISSIM modelling shows that permitting taxis through Bank junction would have a small benefit to general traffic journey times away from the junction, but a small disbenefit to bus journey times through Bank junction.
- 3.14 At this stage, modelling has looked at general traffic journey times on four key routes:

  Bishopsgate, Cannon Street, London Wall and New Change/Newgate Street gyratory. Option 1
  with mitigation in both the AM and PM Peak are expected to have negligible effect on journey times for general traffic.

#### Summary of access to each junction arm

3.15 Table 3-1 presents a summary of access to each junction arm by each user.

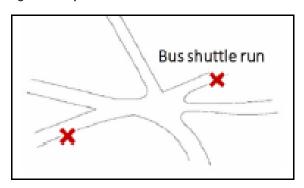
Table 3-1: Option 1: User access to each junction arm

User	Access to each Arm					
	Princes Street	Thread needle Street	Cornhill	Lombard Street / KWS	Queen Victoria Street	Poultry
Pedestrians	<b>√</b>	✓	✓	✓	✓	✓
Cyclists	<b>✓</b>	✓	✓	✓	✓	✓
Buses	<b>✓</b>	Х	<b>√</b>	✓	X	✓
Taxis & general motor traffic	X	Х	<b>✓</b>	✓	Х	✓

# **Option 2**

- 3.16 Option 2 involves restricting access to Queen Victoria Street and Threadneedle Street. Queen Victoria Street would be closed to all motorised traffic (including buses), though open to essential servicing. Threadneedle Street would be open to buses and cyclists using a shuttle run. Pedestrians are not restricted in their movements across, between or through any of the junction arms.
- 3.17 These restrictions are illustrated in Figure 3-2 below:

Figure 3-2: Option 2 vehicular restrictions



#### **Pedestrians**

3.18 Movement of pedestrians is not expected to be restricted in any way. Queen Victoria Street would become a pedestrian priority street with widened footways and a raised carriageway. No through traffic would be permitted to motor vehicles, other than for essential servicing. Footways would also be widened on Poultry, Lombard Street, Threadneedle Street and Cornhill.

#### **Cyclists**

- 3.19 As with pedestrians, cyclists would not have any restrictions imposed on their movements with this option. However, Queen Victoria Street would become a pedestrian priority street with cyclists permitted access at all times. Threadneedle Street would only permit access to buses and cyclists, operating as a shuttle run.
- 3.20 Modelling has looked at the following six key cycling routes:
  - King William Street Northbound;
  - Princes Street Southbound;
  - Poultry Eastbound;
  - Cornhill Westbound;
  - Queen Victoria Street Eastbound; and
  - Threadneedle Street Westbound.
- 3.21 The cycling journey time changes in both AM and PM peak on these routes is negligible, with journey times affected by no more than 1 minute.

#### **Buses**

- 3.22 Buses would be restricted from using Queen Victoria Street, enforced through a modal filter. Buses would continue to have access to all other arms of the junction. This restriction would impact c.900 passengers per day<sup>13</sup>.
- 3.23 Preliminary VISSIM modelling for this option demonstrated high increases in journey times between St Pauls Cathedral and Great Winchester Street, and between King Edward Street and Bishopsgate<sup>14</sup>. In order to lessen these delays along with other bus journey delays modelled in Option 2, the design has been reviewed and revised to mitigate increases in bus journey times while continuing to account for improved pedestrian movement.
- 3.24 This review resulted in the introduction of a bus shuttle run on Threadneedle Street. The bus shuttle run removes a diversion for two services (four routes in both directions) that is up to 900m in length and passes through an extra three to five junctions. This results in all bus routes passing through Bank junction having a journey time increase of less than 2 minutes. This minor increase in journey time is due to services having a minimal diversion from their existing routes.

<sup>&</sup>lt;sup>14</sup> Bank Junction Shortlist Option Assessment, Norman Rourke Pryme (August 2020).



<sup>&</sup>lt;sup>13</sup> Busto analysis, Transport for London data (February 2018).

#### Taxis and general motor traffic

- 3.25 All other motorised vehicle traffic would be restricted from using Threadneedle Street and Queen Victoria Street. Access would remain unchanged on all other arms of the junction. Due to these restrictions, motorised vehicles may choose alternative routes to divert around the Bank junction restrictions which could increase congestion and journey times elsewhere,
- 3.26 Preliminary VISSIM modelling shows that permitting taxis through Bank junction would have a small benefit to general traffic journey times away from Bank junction, but a small disbenefit to bus journey times through Bank junction.
- 3.27 At this stage, modelling has looked at general traffic journey times on four key routes:
  Bishopsgate, Cannon Street, London Wall and New Change/Newgate Street gyratory. Option 2
  with mitigation in both the AM and PM Peak are expected to have negligible effect on journey times for general traffic.

#### Summary of access to each junction arm

3.28 Table 3-2 presents a summary of access to each junction arm by each user.

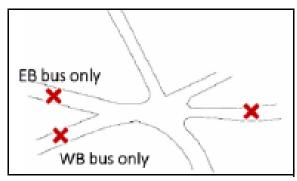
Table 3-2: Option 2: User access to each junction arm

User	Access to each Arm					
	Princes Street	Thread needle Street	Cornhill	Lombard Street / KWS	Queen Victoria Street	Poultry
Pedestrians	✓	✓	✓	✓	✓	✓
Cyclists	✓	✓	✓	✓	✓	✓
Buses	✓	✓	✓	<b>✓</b>	X	✓
Taxis & general motor traffic	✓	Х	✓	✓	X	✓

# **Option 3**

- 3.29 Option 3 involves restricting access to Queen Victoria Street, Poultry and Cornhill. Poultry would become accessible for eastbound buses only with a contraflow for cyclists; Queen Victoria Street would become accessible for westbound buses and essential servicing only with a contraflow for cyclists; and Cornhill would be closed to all motor traffic, with the exception of essential servicing.
- 3.30 These restrictions are illustrated in Figure 3-3 below.

Figure 3-3: Option 3 vehicular restrictions





#### **Pedestrians**

3.31 Movement of pedestrians is not expected to be restricted in any way. No through traffic would be permitted to motor vehicles on Cornhill from Bank junction, with footways widened on the southern side of the carriageway, improving the pedestrian environment and facilitating an easing of crossing. Footways would also be widened on Poultry, Lombard Street and Queen Victoria Street.

#### **Cyclists**

- 3.32 As with pedestrians, cyclists would not have any restrictions imposed on their movements with this option. Queen Victoria Street would become a pedestrian priority street with cyclists permitted access at all times while Poultry would only permit access to buses and cyclists, operating as a shuttle run.
- 3.33 Modelling has looked at the following six key cycling routes:
  - King William Street Northbound;
  - Princes Street Southbound;
  - Poultry Eastbound;
  - Cornhill Westbound;
  - Queen Victoria Street Eastbound; and
  - Threadneedle Westbound.
- 3.34 The cycling journey time changes in both AM and PM peak on these routes is negligible, with journey times affected by no more than 1 minute.

#### **Buses**

- 3.35 Buses would be restricted from using Cornhill, along with all other motor traffic. Buses would retain access on all other arms of the junction, though Poultry would become eastbound bus access only while Queen Victoria Street westbound bus access only. This restriction would impact c.3.3k passengers per day<sup>15</sup>.
- 3.36 Preliminary VISSIM modelling for this option demonstrated a high increase in bus journey time between St Pauls Cathedral and Great Winchester Street<sup>16</sup>. In order to lessen these delays along with other bus journey delays modelled in Option 3, the design has been reviewed and revised to mitigate increases in bus journey times while continuing to account for improved pedestrian movement.
- 3.37 This review resulted in the introduction of a mitigation measure of westbound access for buses and cyclists only on Queen Victoria Street, and eastbound access only on Poultry. These two access restrictions create a small gyratory system for four bus services.
- These mitigation measures result in journey time improvements for buses compared to the non-mitigated Option 3 scenario, with all but one of the routes having their journey time reduced in the AM/PM peaks. The 25, westbound between Bank Station and St Paul's Station, would have the same journey time increase (3-5 minutes) as the non-mitigated scenario.

<sup>&</sup>lt;sup>16</sup> Bank Junction Shortlist Option Assessment, Norman Rourke Pryme (August 2020).



<sup>&</sup>lt;sup>15</sup> Busto analysis, Transport for London data (February 2018).

#### Taxis and general motor traffic

- 3.39 All other motorised vehicle traffic would be restricted from Cornhill, Queen Victoria Street and Poultry. Access would remain unchanged on all other arms of the junction. Due to these restrictions, motorised vehicles may choose alternative routes to divert around the Bank junction restrictions which could increase congestion and journey times elsewhere.
- 3.40 Preliminary VISSIM modelling shows that permitting taxis through Bank junction would have a small benefit to general traffic journey times away from Bank junction, but a small disbenefit to bus journey times through Bank junction.
- 3.41 At this stage, modelling has looked at general traffic journey times on four key routes:
  Bishopsgate, Cannon Street, London Wall and New Change/Newgate Street gyratory. Option 3
  with mitigation in both the AM and PM Peak are expected to have negligible effect on journey times for general traffic.

#### Summary of access to each junction arm

3.42 Table 3-3 presents a summary of access to each junction arm by each user.

Table 3-3: Option 3: User access to each junction arm

User	Access to each Arm					
	Princes Street	Thread needle Street	Cornhill	Lombard Street / KWS	Queen Victoria Street	Poultry
Pedestrians	✓	✓	✓	✓	✓	✓
Cyclists	✓	✓	✓	✓	✓	✓
Buses	✓	✓	X	✓	<b>√</b> *	<b>√**</b>
Taxis & general motor traffic	<b>√</b>	<b>√</b>	X	<b>√</b>	X	X

<sup>\*</sup> Westbound access only



<sup>\*\*</sup> Eastbound access only

# 4 Impacts on equalities

4.1 This chapter considers the equalities impacts of the measures being proposed as part of the All Change at Bank Scheme options. Each option is described briefly followed by comparison tables showing the impacts on equalities, both positive and negative, along with recommended mitigations for any potential negative impacts.

## **Option 1**

- 4.2 Option 1 involves restricting access to Princes Street, with only buses and cyclists permitted using a shuttle run, as well as essential servicing. Both Threadneedle Street and Queen Victoria Street would be closed to motorised vehicles with access permitted to cycles only. Queen Victoria Street would also permit essential servicing vehicles. Pedestrians, as in all options, are not restricted in their movements across, between or through any of the junction arms.
- 4.3 Introducing pedestrian priority streets and widening footways will benefit all pedestrians and restricting motorised vehicle movements will benefit all cyclists. By restricting motorised vehicle movements, it is likely that both perceived and actual road danger is expected to decrease. There is not expected to be any impact on Blue Badge parking spaces.

## **Option 2**

- 4.4 Option 2 involves restricting access to Queen Victoria Street and Threadneedle Street. Queen Victoria Street would be closed to all motorised traffic (including buses), though open to essential servicing. Threadneedle Street would be open to buses and cyclists using a shuttle run. Pedestrians are not restricted in their movements across, between or through any of the junction arms.
- 4.5 Introducing a pedestrian priority street and widening footways will benefit all pedestrians and restricting motorised vehicle movements will benefit all cyclists. By restricting motorised vehicle movements, the perceived or actual road danger should decrease. There is not expected to be any impact on Blue Badge parking spaces.

#### **Option 3**

- 4.6 Option 3 involves restricting access to Queen Victoria Street, Poultry and Cornhill. Poultry would become accessible for eastbound buses only with a contraflow for cyclists; Queen Victoria Street would become accessible for westbound buses and essential servicing only with a contraflow for cyclists; and it is assumed that Cornhill would facilitate motor vehicles for servicing needs (from Threadneedle Street) in an eastbound direction.
- 4.7 Widening footways around the junction will benefit all pedestrians and restricting motorised vehicle movements will benefit all cyclists. By restricting motorised vehicle movements, the perceived or actual road danger should decrease. There is not expected to be any impact on Blue Badge parking spaces.



# **Option Comparisons**

- 4.8 The general impacts resulting from each option are quite similar, which is to be expected when taking into consideration that each option was developed with the same objectives in mind. As stated in the introduction, these objectives are as follows:
  - An improvement in safety at Bank junction;
  - An improvement in air quality at Bank junction; and
  - An improvement in pedestrian experience at Bank junction (in terms of comfort and the experience as a place to spend time in).
- 4.9 Table 4-1 has been structured in order to review general impacts on PCGs that are similar across each option in addition to any differentiating impacts.



Table 4-1: Impacts on Equality Groups

	Similar Across All Options	Option 1	Option 2	Option 3
Overview – mode volumes affected	<ul> <li>Queen Victoria Street experiences the highest volume of licensed taxis (312*)</li> <li>Following Lombard Street/KWS, Queen Victoria experiences the highest volume of private cars (412*)</li> <li>A key objective of the Mayor of London's Healthy Streets programme is to improve the quality and safety of streets by implementing new or improved infrastructure. This includes measures such as improvements to crossings, addressing maintenance issues, providing more places for people to stop and rest. As older people (65+) undertake the highest proportion of their trips by foot and cite addressing physical barriers as important for encouraging them to travel more, improvements to the street environment facilitate navigation, leading to a better experience with the potential for more active travel among this group. Given that there are more pedestrians than motor vehicles during peak hours, there is a strong case for reallocating road space for their comfort and benefit.</li> <li>People of young and old age are more vulnerable</li> </ul>	<ul> <li>The highest 2-way pedestrian flow occurs at the southern footway of Mansion House Street. The majority of informal pedestrian crossings occurs at the Queen Victoria Street arm between the southern footway of Mansion House and Walbrook. Providing pedestrian priority in this area would increase safety and experience for a large number of pedestrians.</li> <li>Princes Street and Queen Victoria Street see the highest volume of cyclists – 1,881 and 1,549*, respectively (following Lombard Street/KWS). Restricting traffic and improving cycle infrastructure would benefit all cyclists.</li> <li>Following Lombard Street/KWS, Threadneedle has the highest volume of in-service TfL buses (305*) followed by Princes Street (196*). Queen Victoria sees 142* buses.</li> <li>This option is expected to displace or 'impact' approximately 4,600 bus users daily.</li> <li>The pedestrian priority streets on Threadneedle Street and Queen Victoria Street will greatly increase the amount of space usable by pedestrians. As such, improvements for pedestrians will disproportionately benefit those aged 65+.</li> <li>The restrictions on Queen Victoria Street and Threadneedle Street will require some bus stop relocation. This could disbenefit those of older age who rely on mobility aids if they are now required to walk further than previously required.</li> <li>Overall, Option 1 and 2 are likely to have the most positive impact on reducing inequalities for this PCG. Princes Street</li> </ul>	<ul> <li>The highest 2-way pedestrian flow occurs at the southern footway of Mansion House Street. The majority of informal pedestrian crossings occurs at the Queen Victoria Street arm between the southern footway of Mansion House and Walbrook. Providing pedestrian priority in this area would increase safety and experience for a large number of pedestrians.</li> <li>Queen Victoria Street sees a high volume of cyclists – 1,549* (following Lombard Street/KWS and Princes Street). Restricting traffic and improving cycle infrastructure would benefit all cyclists.</li> <li>Following Lombard Street/KWS, Threadneedle has the highest volume of in-service TfL buses (305*) while Queen Victoria sees 142* buses. Introducing a bus shuttle run on Threadneedle will significantly reduce bus impacts related to road restrictions.</li> <li>This option is expected to displace or 'impact' approximately 900 bus users daily.</li> <li>The pedestrian priority street on Queen Victoria Street will greatly increase the amount of space usable by pedestrians. As such, improvements for pedestrians will disproportionately benefit those aged 65+.</li> <li>The restrictions on Queen Victoria Street will require some bus stop relocation. This could disbenefit those of older age who rely on mobility aids if they are now required to walk further than previously required.</li> <li>Overall, Option 1 and 2 is likely to have the most positive impact on reducing inequalities for this PCG. This option</li> </ul>	<ul> <li>The highest 2-way pedestrian flow occurs at the southern footway of Mansion House Street. The majority of informal pedestrian crossings occurs at the Queen Victoria Street arm between the southern footway of Mansion House and Walbrook. Restricting motor traffic here would increase safety for a large number of pedestrians, however the westbound bus shuttle run may negate this.</li> <li>Queen Victoria Street sees a high volume of cyclists – 1,549* (following Lombard Street/KWS and Princes Street). Restricting traffic and improving cycle infrastructure would benefit all cyclists.</li> <li>Poultry sees 171* buses, Queen Victoria sees 142* buses and Cornhill sees 142* buses</li> <li>This option is expected to displace or 'impact' approximately 3,300 bus users daily.</li> <li>The restrictions on Cornhill, Queen Victoria Street and Poultry will require some bus stop relocation. This could disbenefit those of older age who rely on mobility aids if they are now required to walk further than previously required. With Poultry and Queen Victoria Street becoming eastbound and westbound bus access only, respectively, walking distances to and from roundtrip bus trips are likely to differ.</li> <li>Overall, this option is likely to have the least positive impact on reducing inequalities for this PCG. This</li> </ul>
	to poor air quality <sup>17</sup> . For young children negative air quality can lead to reduced lung development and for the elderly this can lead to a range of long-term health problems, therefore a reduction in emissions from private vehicle use and increases in active modes of travel will disproportionately benefit these age groups through improved air quality and increased physical activity.	and Queen Victoria Street (southern footway of Mansion House and Walbrook) see the most pedestrian activity.  Option 1 benefits more pedestrians with the restrictions but displaces a higher volume of bus users (4,400 daily).	benefits the large number of pedestrians who cross informally on Queen Victoria Street (southern footway of Mansion House and Walbrook). Option 2 displaces a significantly lower volume of bus users (900 daily) but does not benefit as many pedestrians compared to Option 1.	option benefits a lesser number of pedestrians and is expected to displace a comparatively high number of bus users (3,300 daily) when compared to Option 1. Queen Victoria Street has the highest number of cyclists (following King William Street), and therefore this option would not benefit cyclists as much due to the bus shuttle option, when compared to Option 2.

<sup>&</sup>lt;sup>17</sup> https://www.london.gov.uk/sites/default/files/air\_quality\_for\_public\_health\_professionals\_- city\_of\_london.pdf

	Similar Across All Options	Option 1	Option 2	Option 3
Age cont.	<ul> <li>Creating additional space for pedestrians and cyclists is likely to improve conditions for these people by creating a safer, less crowded environment. This will disproportionately benefit those aged 65+, as a third of trips made by this age group are by walking (higher than for any other age group) and those aged 60+ also have a higher than average likelihood of being killed or seriously injured if involved in a collision within the City.</li> <li>Improvements for pedestrians will benefit both older and younger people who use public transport, as they are likely to walk to/from the nearest public transport stop.</li> <li>Older people are more likely to suffer from slight mobility impairments due to aging, which do not fall under the disability PCG. This can include slower movement and reaction time, and some may use mobility aids for walking. Additional space for walking is likely to be particularly beneficial for those who find it difficult to navigate narrow and crowded footways.</li> <li>A disproportionately high percentage of those aged 65 to 75 living in the City of London rely on driving a car or van (11%) to travel to work. As each option will restrict general motor traffic access to some extent, it is likely that a number of journeys may be extended to avoid passing through Bank junction, leading to increased journey times and additional cost. However, it should be noted that general motor traffic access to Bank junction is currently restricted Monday-Friday, 7AM to 7PM, as part of the Bank on Safety improvements. As such, any permanent closure of the junction arms to motor traffic accus to bank junction is currently restricted Monday-Friday, 7AM to 7PM, as part of the Bank on Safety improvements. As such, any permanent closure of the junction arms to motor traffic would only affect those currently driving through the junction outside of peak hours or on weekends where traffic flow is lower, and delays are less likely to occur. Given that there are more pedestrians than motor vehicles during pe</li></ul>			

an Change at Bank. Internit Equalities Ana	Change at Bank: Interim Equalities Analysis   Equality Analysis							
	Similar Across All Options	Option 1	Option 2	Option 3				
Disability	This scheme is aimed at improving conditions for all pedestrians and cyclists, therefore this will benefit those with disabilities who use the street, particularly those with mobility impairments that require mobility aids, such as wheelchairs and walking canes, as more space will be provided. The introduction of pedestrian priority streets with access closed to motor traffic will create significantly more space for pedestrians and reduce crowding around the junction.  The Royal National Institute of Blind People (RNIB) has raised concerns regarding the safety of visually impaired users in shared spaces, particularly with regard to feeling of safety and inclusion. Pedestrian priority areas have the potential to increase collision risk between pedestrians and cyclists, particularly given the high flows of both users in peak periods. Careful consideration should be given to the design of the street to ensure that all users feel welcome and safe in the space.  Bus use for those with disabilities makes up 11% of the mode share, which is double the overall bus mode share for travel into the City of London (5.5%). As such, the delays to buses will disproportionately impact those with disabilites. The soon-to-open step-free access at Bank Station will provide another step-free public transport option within walking distance of Bank junction. While this would not directly alleviate the issue of bus delays, it will potentially open up another method of public transport that has previously been inaccessible for disabled users and could facilitate modal shift away from bus.  The TfL 2019 Travel in London report highlights that those who identify as disabled and those who do not have the same rate of car use as passengers. Additionally, they have slightly lower rates of use of taxi and private hire vehicles. Therefore, any impact to those with mobility requirements would not be disproportionate compared to those who do not. At this time, special vehicle access to restricted roads has not yet been decided.	<ul> <li>The restriction of all motor traffic on Threadneedle Street and Queen Victoria Street is likely to create a safer environment to cycle, with fewer motor vehicles to interact with and a reduction in the percentage of turning vehicles. As such, this is likely to benefit all cyclists, and could potentially encourage people with disabilities to try cycling, if their disability permits.</li> <li>The ability of taxis and minicabs to drop-off and pick-up passengers will be reduced as access will not be permitted on Threadneedle Street, or through Queen Victoria Street or Princes Street. In addition, the 7AM-7PM taxi rank on Princes Street will need to be relocated. Therefore, those with mobility disabilities who rely on taxis may have to travel further to their final destination or to a taxi rank than previously required. Taxi journey times may increase due to more indirect routing, though based on modelling, this is expected to be negligible.</li> <li>Overall, this option is likely to have the second most positive impact on reducing inequalities for this PCG, after Option 2. This option provides pedestrian priority areas which will benefit those with disabilities, however it involves the relocation of a 7AM-7PM taxi rank which may disproportionately negatively impact those with disabilities who rely on taxis.</li> </ul>	<ul> <li>The restriction of general motor traffic on Threadneedle Street and Queen Victoria Street is likely to create a safer environment to cycle, with fewer motor vehicles to interact with and a reduction in the percentage of turning vehicles. As such, this is likely to benefit all cyclists, and could potentially encourage people with disabilities to try cycling, if their disability permits.</li> <li>The ability of taxis and minicabs to drop-off and pick-up passengers will be reduced as access will not be permitted through Queen Victoria Street or Threadneedle Street. Therefore, those with mobility disabilities who rely on taxis may have to travel further to their final destination or to a taxi rank than previously required. Taxi journey times may increase due to more indirect routing, though based on modelling, this is expected to be negligible.</li> <li>Overall, this option is likely to have the most positive impact on reducing inequalities for this PCG. This option provides pedestrian priority areas which will benefit those with disabilities.</li> </ul>	<ul> <li>The restriction of general motor traffic on Queen Victoria Street, Poultry and Cornhill is likely to create a safer environment to cycle, with fewer motor vehicles to interact with and a reduction in the percentage of turning vehicles. As such, this is likely to benefit all cyclists, and could potentially encourage people with disabilities to try cycling, if their disability permits.</li> <li>The ability of taxis and minicabs to drop-off and pick-up passengers will be reduced as access will not be permitted through Poultry or Queen Victoria Street. Therefore, those with mobility disabilities who rely on taxis may have to travel further to their final destination than previously required. Taxi journey times may increase due to more indirect routing, though based on modelling, this is expected to be negligible.</li> <li>With Poultry and Queen Victoria Street becoming eastbound and westbound bus access only, respectively, people with learning disabilities who take the bus may find it difficult to navigate to/from their arrival and departure bus stops as they will be located on different streets, which is less intuitive.</li> <li>Overall, this option is likely to have the least positive impact on reducing inequalities for this PCG. This option provides pedestrian areas which will benefit those with disabilities. In addition, the eastbound and westbound bus shuttle runs on Poultry and Queen Victoria Street is more likely to negatively impact those with learning disabilities when compared to Options 1 and 2.</li> </ul>				
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	Similar Across All Options	Option 1	Option 2	Option 3
Pregnancy/Maternity	<ul> <li>The majority of journeys in the City of London involve walking, either because they are completely walked or as part of a walking leg to access a public transport stop. This option would improve walking for all pedestrians across Bank junction by providing more space on footways, and reallocating road space for pedestrian usage. This is likely to disproportionately benefit those travelling with prams, who may find it difficult to negotiate crowded and narrow footways. It will also benefit those walking with infants or small children, enabling them to walk side-by-side more easily.</li> <li>There is growing evidence showing that prenatal exposure to air pollution is associated with a number of adverse outcomes in pregnancy<sup>18</sup>. Therefore, a reduction in emissions from private vehicle use and increases in active modes of travel will disproportionately benefit pregnant women.</li> </ul>	<ul> <li>Due to the restrictions on taxis being unable to pick-up or drop-off passengers on Threadneedle Street, pregnant people or those with prams may have to walk longer distances and cross over additional roads to reach their final destination, or a designated pick-up area.</li> <li>Overall, this option is likely to have the second most positive impact on reducing inequalities for this PCG, following Option 2. This option provides pedestrian priority areas which will benefit those travelling with prams or young children, however it involves the relocation of a 7AM-7PM taxi rank which may disproportionately negatively impact those under the Pregnancy/Maternity PCG who rely on taxis. Option 1 benefits more pedestrians with the restrictions but displaces a higher volume of bus users.</li> </ul>	<ul> <li>Due to the restrictions on taxis being unable to pick-up or drop-off passengers on Threadneedle Street, pregnant people or those with prams may have to walk longer distances and cross over additional roads to reach their final destination, or a designated pick-up area.</li> <li>Overall, this option is likely to have the most positive impact on reducing inequalities for this PCG. This option provides pedestrian priority areas which will benefit those travelling with prams or young children. Option 2 displaces a significantly lower volume of bus users but does not benefit as many pedestrians compared to Option 1.</li> </ul>	<ul> <li>Due to the restrictions on taxis being unable to pick-up or drop-off passengers on Poultry, pregnant people or those with prams may have to walk longer distances and cross over additional roads to reach their final destination, or a designated pick-up area.</li> <li>This option provides pedestrian areas which will benefit those travelling with prams or young children. This option benefits a lesser number of pedestrians and is expected to displace a comparatively high number of bus users when compared to Options 1 and 2.</li> </ul>
Race	<ul> <li>The majority of journeys in the City of London involve walking, either because they are completely walked or as part of a walking leg to access a public transport stop. This option would improve walking for all pedestrians across Bank junction by providing more space on footways, and reallocating road space for pedestrian usage. Improvements for pedestrians will directly benefit those groups who are more likely to use public transport, as they are likely to walk to/from the nearest public transport stop.</li> <li>Improvements to cycle safety are likely to disproportionately benefit Mixed or Multiple Ethnic Groups. It will also encourage more cycling by ethnic groups that are currently less likely to cycle through increasing the safety of cyclists with motor traffic reduction and reducing the amount of turning vehicles.</li> <li>BAME groups are more likely to use buses than other groups, therefore would be disproportionately affected by any increases in bus journey times.</li> </ul>	<ul> <li>With the bus shuttle run mitigation, modelling shows that all bus routes are expected to have a journey time increase of less than two minutes with the exception of bus routes 11 and 26, which will experience an increase of up to five minutes due to a diversion of approximately 500m and having to pass through an additional three junctions.</li> <li>Overall, this option is expected to have the second most positive impact on reducing inequalities for this PCG, following Option 2. This option provides pedestrian priority areas which will benefit those travelling by foot or cycle. Princes Street and Queen Victoria Street (southern footway of Mansion House and Walbrook) see the most pedestrian activity. Option 1 benefits more pedestrians with the restrictions but is expected to displace a higher volume of bus users (4,400 daily).</li> </ul>	<ul> <li>With the bus shuttle run mitigation, this removes a diversion for two services (four routes in both directions) that is up to 900m in length and passes through an extra three to five junctions. This results in all bus routes passing through Bank junction having a journey time increase of less than 2 minutes. This minor increase in journey time is due to services having a minimal diversion from their existing routes.</li> <li>Overall, this option is likely to have the most positive impact on reducing inequalities for this PCG. This option provides pedestrian priority areas which will benefit those travelling by foot or cycle. This option benefits the large number of pedestrians who cross informally on Queen Victoria Street (southern footway of Mansion House and Walbrook). Option 2 displaces a significantly lower volume of bus users (900 daily) but does not benefit as many pedestrians compared to Option 1.</li> </ul>	<ul> <li>The mitigation measures result in journey time improvements for buses compared to the non-mitigated Option 3 scenario, with all but one of the routes having their journey time reduced in the AM/PM peaks. The 25, westbound between Bank Station and St Paul's Station, would have the same journey time increase (3-5 minutes) as the non-mitigated scenario.</li> <li>Overall, this option is likely to have the least positive impact on reducing inequalities for this PCG. This option benefits a lesser number of pedestrians and is expected to displace a comparatively high number of bus users (3,300 daily) when compared to Option 2. Queen Victoria Street has the highest number of cyclists (following King William Street), and therefore this option would not benefit cyclists as much due to the bus shuttle option, when compared to Option and 2.</li> </ul>

<sup>18</sup> https://www.london.gov.uk/sites/default/files/air\_quality\_for\_public\_health\_professionals\_-\_city\_of\_london.pdf

Similar Across All Options	Option 1	Option 2	Option 3
<ul> <li>Consider relocation of a taxi rank in close proximity to the new Bank Station step-free access on Cannon Street.</li> <li>Ensure that any additional space created for pedestrians is accessible to all users, including those with mobility impairments and parents with prams, for example by ensuring that new space is flush with existing footways, or alternatively that dropped kerbs or ramps are provided.</li> <li>The City is presently developing the City of London Accessibility Standard (COLAS) with expert consultancies, which is to go above and beyond existing national standards. If this standard becomes available before the design period of this scheme has ended, it should be used for design considerations.</li> <li>Work in collaboration with TfL Buses to identify opportunities elsewhere on the network to improve bus priority in order to offset bus journey time increases.</li> <li>Ensure that any relocated bus stops, taxi ranks or pick up/drop off designated areas are designed with standard kerbs for step-free access from bus and for taxi/car access ramps to function properly. Consideration should also be given to proximity to key destinations to minimise walking distances.</li> <li>Ensure that access points for modal filtering are accessible to all users, including those with visual or mobility impairments and parents with prams.</li> <li>Ensure that widened pavements are clear of obstacles such as street furniture and signage so that those with visual impairments are not restricted in their movements.</li> <li>Ensure that the design of measures is legible and navigable for those with sensory impairments, for example through the use of appropriate visual, audible and tactile cues.</li> <li>Ensure that facilities for cyclists are designed to accommodate adapted cycles.</li> <li>The design of the pedestrian priority area(s) should be looked at in detail in collaboration with disability representatives to ensure a solution is found that works safely and efficiently for all users.</li> </ul>	<ul> <li>If space permits, design Princes Street to have cycle lanes segregated from buses to improve safety as Princes Street has a high cycle flow.</li> <li>Relocation of taxi rank on Princess Street should be as close to its current location as possible, taking into account key destinations.</li> </ul>	<ul> <li>Consider permitting licenced taxis to drop off passengers on Threadneedle Street to mitigate for loss of access to Queen Victoria Street. It is recommended that a solution is sought with engagement with TfL Taxi and Private Hire (TPH) and trade associations.</li> <li>If space permits, design Threadneedle Street to have cycle lanes segregated from buses to improve safety as Threadneedle Street has a high cycle flow.</li> </ul>	<ul> <li>If space permits, design Poultry and Queen Victoria Street to have cycle lanes segregated from buses to improve safety.</li> <li>To account for people with learning disabilities who may find the one-way bus access difficult to learn, measures should be reviewed to provide clear communication. Mobile phone apps such as iBus or visual orientation maps should be considered.</li> </ul>



# 5 Conclusions

- 5.1 The All Change at Bank scheme focuses on improving pedestrian safety, air quality, and pedestrian experience by restricting motor traffic on two to three arms at Bank junction and implementing pedestrian/cyclist priority areas. This EA has reviewed the three shortlisted All Change at Bank options in order to highlight impacts that may positively or negatively affect certain PCGs and any mitigation recommendations to help inform the more detailed feasibility designs and to assist with decision making. Each option has the same project objectives and therefore many similarities are shared between options relating to potential impacts on certain PCGs. Where possible, differences between each option have been highlighted.
- This scheme will not only benefit those making trips entirely on foot but will also benefit the large share of trips made by public transport, given the likely need to access public transport stops by walking. The Bank Station Capacity Upgrades project focuses on increasing station capacity to enable movement of 40% more passengers, making the Bank on Safety project even more pertinent to provide safe and pleasant pedestrian priority areas around Bank junction. This will disproportionately benefit those groups who are more reliant on walking (such as those as 65+), as well as those who may find narrow and cluttered footways particularly difficult to negotiate (such as disabled people with mobility impairments or people walking with prams or with young children).
- 5.3 Overall, the number of people who will benefit from the All Change at Bank project is likely to greatly outweigh those under certain PCGs who may be negatively impacted by any changes that are implemented under the scheme. Impacts related to each option that may negatively or positively affect certain PCGs have been identified within this EA. Where negative impacts have been identified, recommendations have been provided to mitigate these and will be used to help inform the more detailed feasibility designs and to assist with decision making. It is recommended that a collaborative approach be taken to the next steps in the project, working with stakeholders to ensure that the final design seeks to maximise benefits and minimise negative impacts on PCGs. The design should also be informed by the City of London Accessibility Standard which is currently under development.



# **Control Information**

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