

# Dulwich Village and East Dulwich, Southwark Streetspace measures

## Equality Impact Final Assessment

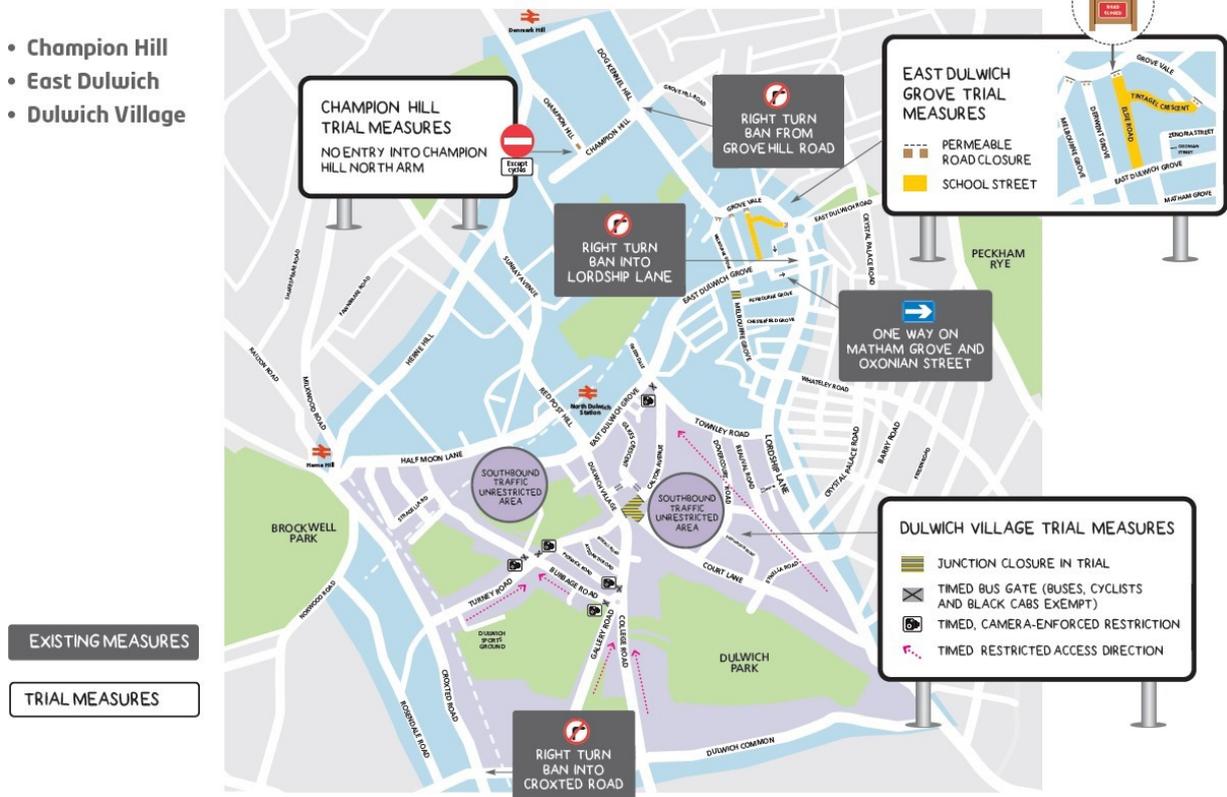
Date: 5<sup>th</sup> September 2021

Updated 30 November 2021

CAE reference: 2021J378

### Experimental measures overview map

- Champion Hill
- East Dulwich
- Dulwich Village



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## 1. Brief

The Centre for Accessible Environments (CAE) has been appointed by Southwark Council to undertake an Equality Impact Assessment (EQIA) of the impact of Dulwich Streetspace measures on protected groups under the Equality Act 2010 implemented in three locations in 2020 – Champion Hill, East Dulwich and Dulwich Village. This final EQIA report follows the initial desktop review by CAE published by Southwark Council in July 2021.

The Covid-19 pandemic required the government to introduce changes to society that have fundamentally altered people's travel patterns, ways of living and working and how they use Southwark's streets and spaces. Southwark Council identified an immediate need to safeguard local neighbourhoods from increases in traffic caused by public transport restrictions, enable safe and active travel and reallocate space for pedestrians to meet social distancing requirements. Dulwich was identified as a priority, as it receives a very high volume of through traffic and very high numbers of school pupils walking and cycling.

The purpose of this EQIA is to:

- Actively consider ways to advance equality and to identify unintended consequences and mitigate against them as far as possible.
- Foster good relations and community cohesion by identifying opportunities to work collaboratively with the council. This review is the start of a process of co-evaluation of the scheme with residents, Southwark Council and relevant stakeholders.

The initial EQIA report by CAE has been updated with the following;

- Public consultation feedback survey conducted by Southwark Council during July 2021 which included from protected groups: Sex, Race, Age, Disability, Religion and Pregnancy.
- Focussed consultation meetings with protected groups of Older people, Disabled people and Black, Asian, and Minority Ethnic groups conducted online in August 2021.
- Written feedback from individuals or organisations representing protected groups on the Streetspace scheme sent to Southwark Council.
- CAE scheme site visit (August 2021) to Champion Hill, East Dulwich and Dulwich Village.
- Dulwich School survey conducted by Southwark Council over June to July 2021.
- Monitoring report of air quality conducted by Cambridge Environmental Research Consultants for Southwark Council dated 4<sup>th</sup> August 2021.
- Monitoring report traffic trends on boundary roads by Southwark Council conducted during June 2021.
- Monitoring report of cycle traffic by Southwark Council conducted during June 2021.
- Monitoring report of bus journey times by Southwark Council conducted DATE
- CAE have also referred to assessments of similar schemes in London boroughs that were implemented prior to the COVID 19 pandemic.

\* Protected groups as defined under the Equality Act 2021

Note: CAE are not legal experts and, as such, this review is not a definitive legal view but rather an interpretation of whether the Streetspace measures impact on any of the protected characteristics under the Equality Act.

## **2. Executive Summary: Streetspace considerations for Dulwich area**

### **Travel to schools**

- Education is a key industry in Dulwich with many schools in the area including nurseries, kindergarten and primary schools. The Streetspace measures aimed to promote healthy, non-polluting active travel. Post implementation monitoring and surveys indicate only minor increases of traffic on boundary streets and increased levels of walking and cycling to schools. The school survey reported levels of walking and cycling up by 26% and a drop of 26% of use of car to travel to school, and young people found it safer and easier to cross the road.
- Measures to improve bus flows, such as restriction of on-street parking on bus routes at Dulwich Village, and the implementation of timed bus-gates (around school drop-off and pick-up times) have the potential to facilitate the smooth travel of mini-buses and coaches transporting children to schools. Post implementation monitoring indicates no significant changes to bus journey times except along East Dulwich Grove.
- Some disabled school children being dropped off by car could be potentially negatively impacted by increased car journey times due to detours, potential main road congestion or delayed bus journeys. The consultation has confirmed that some disabled children who need to be driven to school are significantly negatively impacted by longer journey times.

### **Impact on travel by bus**

- Walking and travelling by bus are the main means of travel for disabled and older people, low-income people, women, and people from a Black, Asian and ethnic minority background according to TfL travel survey data. The consultation indicated that many people felt bus journeys were now unreliable and impacted by congestion on boundary roads – people were having to wait longer at bus stops with increased pollution levels. Bus journey time analysis shows an increase in journey times along East Dulwich Grove and the South Circular in both directions, on Croxted Road northbound and on Red Post Hill southbound.
- Analysis of bus journeys shows an improvement in journey times has been recorded on Dulwich Village southbound and on Red Post Hill northbound, while in every other road only limited changes were recorded. An increase in bus journey times along East Dulwich Grove and the South Circular in both directions, on Croxted Road northbound and on Red Post Hill southbound is noted. Bus journey times need to continue to be monitored and bus routes prioritised.

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## Impact on walking and cycling

- Disabled, older people and those from Black, Asian or ethnic minority groups are more likely to walk for most journeys according to TfL travel data. Streetspace measures have the potential to increase levels of active travel by facilitating safe outdoor space (with respect to social distancing and also from traffic collisions) for socialising and travelling by foot. This will also assist some disabled and older people who may find it easier to cycle rather than walk.
- Although not broken down by protected groups most sites have seen an increase in cycling, with the largest being a 266% increase on Calton Avenue. The volume of cycles on internal streets had increased significantly by 95% around Dulwich Village, and 24% in East Dulwich and 17% on Champion Hill. The volume of cycles on external streets had also increased significantly by between 3% to 75%.
- Some wards in south Southwark have a high proportion of older people, and some like Champion Hill have a greater proportion of children who are overweight and obese<sup>3</sup>. Motor traffic restrictions could potentially assist both these groups by facilitating safer walking.
- Restriction of motor traffic needs to go hand in hand with improving the accessibility of the street environment. The public consultation indicated that the street environment in Dulwich is not conducive for walking in many areas – many obstructions such as bins and overgrown planting, poor surfaces, lack of seating; pedestrian crossing times provided are too short and many do not have audible signals; motor traffic idling increases pollution and makes walking more difficult. Disabled people often feel excluded from exercise and active travel. A site audit by CAE confirmed these findings.
- It is noted the Streetspace measures include public street seating on Dulwich Village, Calton Avenue, Elsie Road and Melbourne Grove. This is likely to have a positive impact for many mobility impaired people and people with neurodiverse conditions who need regular rest and seating points while traveling. Providing community seating also has the potential to encourage social interaction reducing loneliness and alienation and improving mental health. The consultation feedback reported more seating should be provided for people to rest if they struggle to walk far.
- Cycle traffic monitoring indicated that there was a 70% increase in cycle travel overall with higher increases on internal streets and increases on external streets between 3% to 75%. There is no breakdown on ages, abilities, gender or race of cyclists which should be further monitored to determine if there is more equal spread of cycling increase across protected groups.

## Impact on travel by car and air pollution

- The overall volume of motor traffic recorded across all streets in the Streetspace Dulwich schemes has decreased by 10% (compared to 8% across all of Southwark).

- The volume of motor traffic counted on internal streets in the Streetspace schemes had decreased by **33%** around Dulwich Village, and by a significant **83%** in East Dulwich. The volume of motor traffic counted on external streets had remained fairly static with a decrease of 1% around Dulwich Village, increase of **1%** around East Dulwich and by **5%** around Champion Hill.
- Post implementation increases in traffic flows of boundary roads have been observed on East Dulwich Grove, Burbage Road, Zenoria Street and Dovercourt Road, the largest of these being +28% on East Dulwich Grove.
- Vehicle speeds have not changed much. Whilst some variation has been observed, in general this has been very low
- Air Quality modelling shows the scheme to have had an overall positive impact on health. In most internal roads there has been a beneficial impact (reduction in NO<sub>2</sub> concentrations). East Dulwich Grove, near junction with Lordship Lane is the only location where there a slight adverse impact on air quality but still less than the NO<sub>2</sub> annual mean concentration of 40µg/m<sup>3</sup>
- The scheme is potentially likely to have a negative impact on disabled and older people, parents and carers with small children who need to use a car to travel, due to the length of detours required, unfamiliarity of new routes, and impact of increased congestion on any main roads where car travel has increased because of the changes.
- Potential negative impact on those residents whose work requires driving during night time (such as shift workers) and for security reasons may prefer to drive rather than walk or cycle.
- The consultation confirmed strong adverse effects on those dependent on cars including some business owners, older and disabled people. For many disabled people a car is a necessity with private space to carry out certain personal functions essential for them.
- Driving restrictions have made many essential services inaccessible to disabled people who needed to drive or be driven to appointments in medical centres that can be in another neighbourhood. In addition, carers and service providers reported finding it difficult to drive to their clients' homes. The exemption provided to Blue Badge and companion badge holders within schemes will mitigate the negative impact of these measures on disabled people and their carers.
- Timed closures on certain streets were confusing for people who drive, this was reported by some older people, and this causes increased anxiety and stress; multiple and unclear signage was also an issue for many.
- The blue badge exemption only extends to the specific scheme area and not beyond it and respondents have noted their essential car journeys extend across the borough and beyond it. Information about Blue Badge holder exemptions were not felt to be clearly conveyed to disabled people.

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## Impact on external streets

- In relation to air pollution, air quality monitoring indicates the impact of the predicted changes in annual average PM10 and PM2.5 concentrations are classed as 'Negligible' throughout the scheme area. East Dulwich Grove, near junction with Lordship Lane is the only location where there is a slight adverse impact but still less than the NO<sub>2</sub> annual mean concentration of 40µg/m<sup>3</sup>.
- With schemes of this type restricting motor traffic along residential streets while allowing traffic along main and boundary roads, there is potential there will be increased congestion on main roads due to traffic displacement. However, traffic monitoring indicates a drop in motor traffic of 10% overall in the Dulwich area and much higher drops within the scheme area. by 33% around Dulwich Village, and by a significant 83% in East Dulwich.
- The volume of motor traffic counted on external streets had remained much the same. It decreased by 1% around Dulwich Village, increased by 1% around East Dulwich and by 5% around Champion Hill. Post implementation increases in flows were observed on East Dulwich Grove, Burbage Road, Zenoria Street and Dovercourt Road, the largest of these being +28% on East Dulwich Grove.

It is worth noting that evidence compiled from previously implemented similar motor traffic reduction schemes in London and elsewhere, in an article<sup>1</sup> published by Living Streets, indicates that fears of traffic displacement problems almost always fail to materialise, and that significant reductions in overall motor traffic levels across an area can happen as a result of people making a wide range of behavioural responses to the new traffic configurations.

## Access to green space

- Lowering levels of motor traffic on streets has the potential to make it easier to get to parks and open spaces, such as Dulwich Park, by making street crossings safer and making it safer to walk and cycle along streets.
- Streetspace measures also provide planters on the street with planting. Greener street environments provide mental health benefits, which has a positive impact on disadvantaged groups especially who may not have access to outdoor space in their homes. Allowing local people to contribute to the planting and gardening would also have a positive impact on mental health.

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<sup>1</sup> Evaporating traffic? Impact of low-traffic neighbourhoods on main roads, article by Emma Griffin, London Living Streets, July 2019 <https://londonlivingstreets.com/2019/07/11/evaporating-traffic-impact-of-low-traffic-neighbourhoods-on-main-roads/>

### 3. Addendum to CAE EQIA report effective 29<sup>th</sup> November 2021

Following issue of this final EQIA report published on 1<sup>st</sup> October 2021 by London Borough of Southwark. The Streetspace measures were amended which are outlined below and published on the council website [here](#).

## Dulwich Streetspace proposal map

### Champion Hill / East Dulwich / Dulwich Village

#### Key issues addressed

- Allow access for emergency services: Calton Avenue/Dulwich Village/Court Lane junction, Derwent Grove and Melbourne Grove (South)
- Reduced length of timed closures to 8am to 9am and 3pm to 4.30pm
- Replaced all signs with map-based ones and improve signage
- Exemptions to be permitted (please see table below)
- Continue to monitor impact of the measures, share data and engage with the community
- Distribute traffic more evenly and minimise impact on East Dulwich Grove
- Relocate permeable closure on Melbourne Grove (North) on experimental basis

#### MEASURES WITHOUT CHANGES

- NO ENTRY INTO CHAMPION HILL
- PERMEABLE ROAD CLOSURES ON ELSE ROAD AND TINTAGEL CRESCENT

**KEY**

- PERMEABLE ROAD CLOSURE
- CAMERA CONTROLLED (24/7)
- TIMED CAMERA ACCESS (8AM TO 9AM AND 3PM TO 4.30PM)
- TIMED RESTRICTED ACCESS DIRECTION
- SCHOOL STREET

#### MEASURES WITH CHANGES

- CAMERA CONTROLLED 24/7 ON DERWENT GROVE
- PERMEABLE ROAD CLOSURE ON MELBOURNE GROVE (NORTH) RELOCATED
- REPLACE PERMEABLE CLOSURE WITH TIMED CAMERA ACCESS ON MELBOURNE GROVE (SOUTH)
- TIMED CAMERA ACCESS – HOURS OF RESTRICTION TO BE REDUCED ON TOWNLEY ROAD
- RETAIN LAYOUT AS PER TRIAL BUT ALLOW ACCESS FOR EMERGENCY SERVICES TO FROM DULWICH VILLAGE, CALTON AVENUE AND COURT LANE
- TIMED CAMERA ACCESS AT 4 SITES – HOURS OF RESTRICTION TO BE REDUCED ON BURBAGE ROAD, TURNEY ROAD AND DULWICH VILLAGE



Location	Signage	Restrictions	Exemptions
Dulwich Village (College Road roundabout) Burbage Road (College Road roundabout) Burbage Road Turney Road Townley Road		Monday to Friday 8am to 9am and 3pm to 4.30pm  West and northbound	Buses Taxis (Hackney Carriage) Rapid response health care workers Blue badge holders SEND vehicles Emergency services Refuse vehicles
Melbourne Grove (South)		Monday to Friday 8am to 9am and 3pm to 4.30pm	Taxis (Hackney Carriage) Rapid response health care workers Blue badge holders SEND vehicles Emergency Services Refuse vehicles
Derwent Grove		Not timed	Taxis (Hackney Carriage) Rapid response health care workers Blue badge holders SEND vehicles Refuse vehicles Emergency services
Calton Avenue, Dulwich Village, Court Lane		Not timed	Emergency services only

These amendments will mitigate some of the negative impacts on protected groups (as recommended in section 11 in this report ) and these are outlined below;

- assist all drivers, in particular emergency service vehicle drivers, and those assisting disabled people and students with Special Educational Needs by allowing access through Calton Avenue, Dulwich Village Court, Court Lane Junction, Derwent Grove and Melbourne Avenue (South).
- All drivers will benefit from reduced hours of operation of timed closures.
- The intended impact to distribute motor traffic more evenly and minimise impact on East Dulwich Grove will improve bus journey times, particularly assisting older and disabled people and Black and Ethnic Minority people who depend more on use of these services.
- Improved signage will help all motorists, particularly older and disabled motorists, who find it more difficult to read signs.

The recommendations in section 11 which include continued engagement with protected groups, bus journey time monitoring, and improvements to the public realm for pedestrians,

wheelchair users and cyclists would further mitigate impacts of Streetscape measures on protected groups.

## 4. Consultation summary feedback from protected groups under Equality Act 2010.

### Public Consultation

The Council has carried out an extensive public consultation process and has sought to understand specific needs of people from groups with protected characteristics through targeted questions.

### Negative impact:

- Poor public transport: All expressed need for better public transport services.
- Older residents are more likely to favour outright removal of the scheme rather than modification of the measures or a different measure. The data indicates support for the 'Streets for People' aims and filter at Dulwich Village broadly declines with the age of the respondent.
- Older people and people with disabilities were moderately more interested in changing the overall scheme – with permit access or reducing timed closures – than in improving kerbs and crossings.
- People of Black and Asian and Minority Ethnic backgrounds tended to be more strongly against the measures and disagree with the 'Streets for People' aims. It is unclear from the data what the cause of this trend is – it could relate to the location, age profile or employment profile of respondents – this should be further investigated.
- The majority of young people (aged 16-24 years) report negative impact of the schemes.
- School survey of 196 school children indicated majority opposition to the scheme, many more (46%) did not like the changes compared to 29% who do.

### Positive impact

- The majority of pregnant women and those with new babies felt they were positively impacted by the changes.
- The majority of children and young people aged 16 years or under report positive impact.
- Results from the school survey of 196 school children: some reported they found it easier to walk and cycle to school, with levels of walking and cycling going up 26% and use of car to travel to school dropping by 19%, and easier to cross the road,

### Focus group consultation meeting outcomes

Southwark carried out three focus group consultation meetings involving groups with protected characteristics, these were with people from Black, Asian, and Minority Ethnic people, older and disabled people. These meetings were held via an online platform over August 2021. The

public consultation exercise indicates **significant dissatisfaction with the schemes with a smaller proportion of respondents report they have benefited from the schemes** as follows.

### **Negative impact:**

- Older and disabled people's groups have overwhelmingly reported negative impacts on their ability to travel by car, and corresponding increases in fatigue, pain, stress, anxiety, and mental health issues; this included essential visitors and service providers trying to reach them by car.
- For many disabled and older people, a car does not just assist with mobility issues. It is a necessity with private space to carry out certain personal functions and therefore essential for them. Information on Blue Badge holder exemptions was not clear for many disabled people and they requested area-wide exemptions; those who use hire cars rather than own private cars also need exemptions with reports of some hire cars refusing to come into the schemes or park further away for pick up/drop off.
- Older people reported signage is confusing with multiple and unclear signs about road closures, and timed closures on certain streets causing stress.
- Black, Asian and Minority Ethnic groups reported significant negative impacts on ability to drive to work (many were key workers).
- Black, Asian and Minority Ethnic groups who were local business owners reported negative impacts on their trading / local businesses.
- General Practitioners (GPs) reported difficulty to drive to work and some locum GP's were not accepting shifts in the area due to difficulties in driving to medical centres.
- Many respondents fed back a perceived perception of increased traffic on external boundary roads with congestion and increased levels of pollution.
- As a result of the changes there was an increased dependence on buses and public transport, but these were reported to be unreliable and impacted by congestion on boundary roads –people reported longer wait at bus stops with exposure to increased pollution levels.
- Increase in cycling levels is mainly reported as a disbenefit to older and disabled people's groups due to fear of cyclists' not following the highway code.
- Disabled people felt excluded from exercise and active travel. Not all disabled people are able to take up active travel and the street environment is not conducive for walking – reports of obstructions (bins and overgrown planting), poor surfaces, lack of seating; pedestrian crossing times too short and many do not have audible signals; motor traffic idling increases pollution and makes walking more difficult for some.

### **Positive impact**

- Reduced danger and less pollution: Local streets used to be traffic cut-throughs, and are much better now with less traffic,
- The Streetspace schemes have encouraged many to walk and cycle more, drive less and to shop locally.
- Children's travel to school is much easier due less danger and pollution from traffic, and more young people, including disabled children, can travel to school independently.
- Disabled and older cyclists find it much easier to get around (though obstructions are barriers for some non-standard cycles)

**Consultation recommendations from protected groups:**

- Majority advocated removing all the recent traffic restrictions while a minority advocated against removing any traffic restrictions.
- Provide all car using residents with exemptions to drive through all road filters, with consideration of extension of Blue Badge exemptions\* across the borough and to include hire vehicles used by disabled people.
- Buses and public transport need higher priority to minimise delays to journeys. Shuttle buses should be provided to key medical and shopping facilities.
- Promote cycling with linked up cycle routes and more segregation, provide cycle training and better access to bikes via 'Try before you Buy' and provide more secure bike hangars on streets.
- Barriers to walking should be addressed: Surfaces and quality of streets and footways need to be improved to allow easier walking and cycling; more seating and rest places should be provided for those with limited ability to walk long distances.
- Ensure safe, active travel corridors for all, including disabled people

\* Note: Since the implementation of the scheme Southwark Council have provided exemptions for Blue Badge holders to drive through camera enforced filters in their specific scheme (but not beyond it).

## 5. Southwark Streetspace measures in response to COVID-19

Before the Covid pandemic, Southwark Council already had a number of existing motor traffic restriction measures, with 52 modal filters installed pre 2020. From March to September 2020, 38 additional modal filters were installed, covering 1.2 sq kms across the borough which is 4.1% of the borough. During 2020, Southwark Council implemented a larger Streetspace scheme in Walworth in the North of the borough and has implemented a number of smaller schemes in Dulwich.

A recent study *LTNs for all?*<sup>10</sup> finds that Southwark, with a high level of deprivation (including living environment deprivation) has one of the highest levels of new modal filters per 100kms in London, impacting a higher proportion of its deprived residents compared to other London boroughs.

### Southwark Streetspace measures 2020

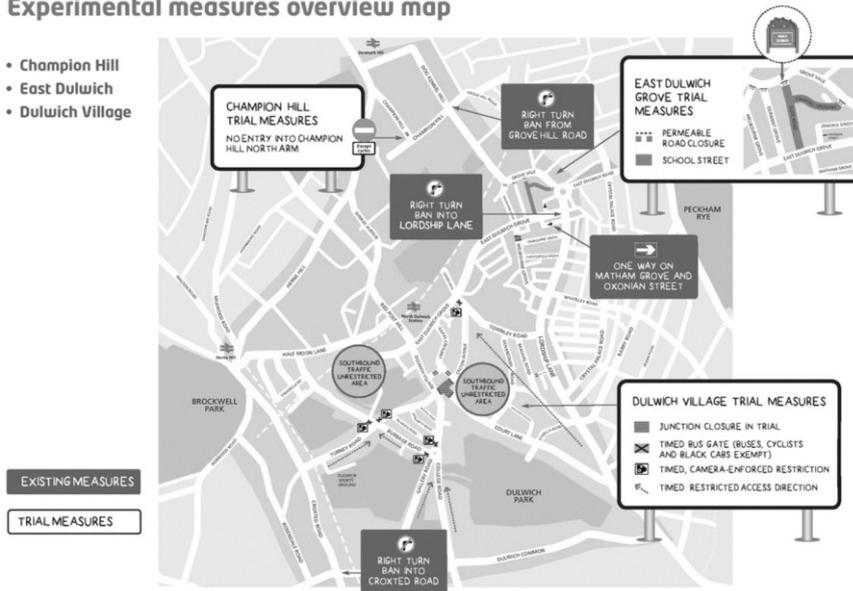
The road schemes introduced in the Dulwich area have the following aims:

- Improve road safety.
- Help tackle the climate emergency
- Make walking and cycling enjoyable, safe and easy ways of getting around.
- Reduce inequalities in health and wellbeing
- Reduce the amount of cut-through traffic
- Reduce parking pressure for local residents.

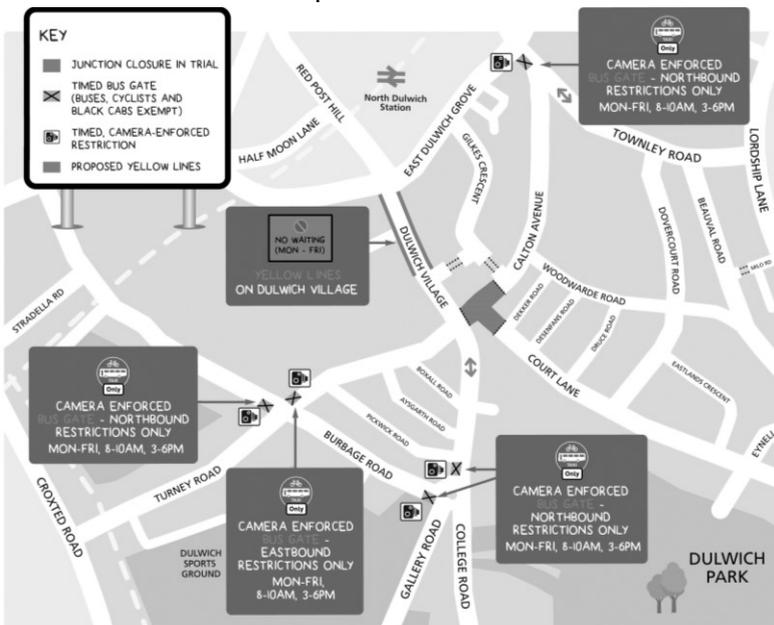
- Encourage people to shop local to help businesses and reduce car use.
- Create a greener and healthier environment by improving air quality and reducing pollution and noise levels.
- Make more space on our pavements for social distancing to help keep everyone safe from COVID-19.

The new Streetspace experimental measures implemented in Dulwich Village in 2020 are in Champion Hill, East Dulwich and Dulwich Village. The measures include a number of modal filters, five that are ANPR camera enforced and five physical barriers using planters that allow walking and cycling through, but do not allow cars through, requiring emergency vehicles and car users to make a detour. It is noted that the camera enforced filters do allow buses and emergency services through them.

**Experimental measures overview map**

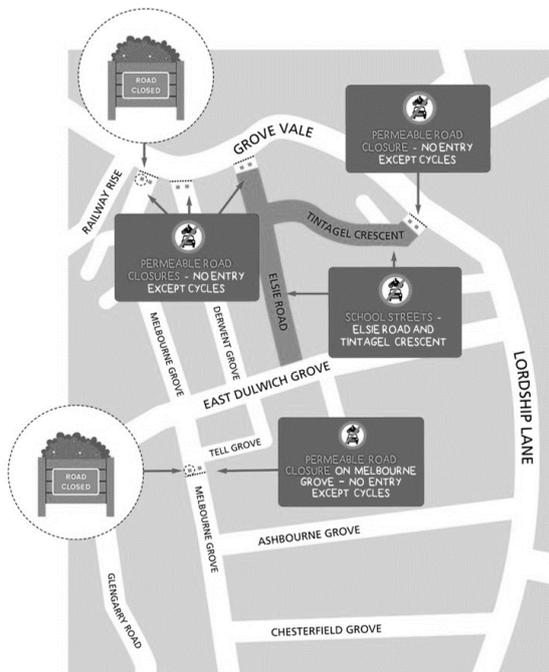


Traffic management measures are identified in the figures and text below for Dulwich Village, East Dulwich and Champion Hill.



## Dulwich Village Streetspace measures

Essentially these measures restrict through motor traffic within the zones of the schemes while still allowing each address to be reached by a motor vehicle, albeit via a detour around a motor traffic filter (with exemptions for Blue Badge holders within the schemes where camera enforced filters are provided).



**East Dulwich Streetspace measures**

Measures implemented in the Streetspace schemes for Dulwich include:

### Dulwich Village

- **Dulwich Village/Calton Avenue/Court Lane:** No access for motor vehicles between Dulwich Village and Calton Avenue/Court Lane, with full access for walking and cycling
- **Junction of Dulwich Village/Burbage Road with College Road/Gallery Road:** No motor vehicles permitted, except buses, and taxis northbound between the hours of 8am to 10am and 3pm to 6pm, Monday to Friday (camera controlled)
- **Junction of Burbage Road with Turney Road:** No motor vehicles permitted, except buses, and taxis northbound between the hours of 8am to 10am and 3pm to 6pm, Monday to Friday (camera controlled)
- **Junction of Turney Road and Burbage Road:** No motor vehicles permitted, except buses, and taxis eastbound between the hours of 8am to 10am and 3pm to 6pm, Monday to Friday (camera controlled)
- **Townley Road junction with East Dulwich Grove:** No motor vehicles permitted, except buses, and taxis northbound between the hours of 8am to 10am and 3pm to 6pm, Monday to Friday (camera controlled)
- **Melbourne Grove (South):** No access travelling north to East Dulwich Grove or Tell Grove for motor vehicles but full access for walking and cycling
- **Melbourne Grove (North):** No access to Grove Vale for motor vehicles but full access for walking and cycling

- **Tintagel Crescent:** No access for motor vehicles into Grove Vale but full access for walking and cycling
- **Elsie Road:** No access to Grove Vale for motor vehicles but full access for walking and cycling
- **Derwent Grove:** No access to Grove Vale for motor vehicles but full access for walking and cycling
- **Champion Hill:** No motor vehicles permitted northbound on Champion Hill

## Exemption for Blue Badge holders within Streetspace trial measures

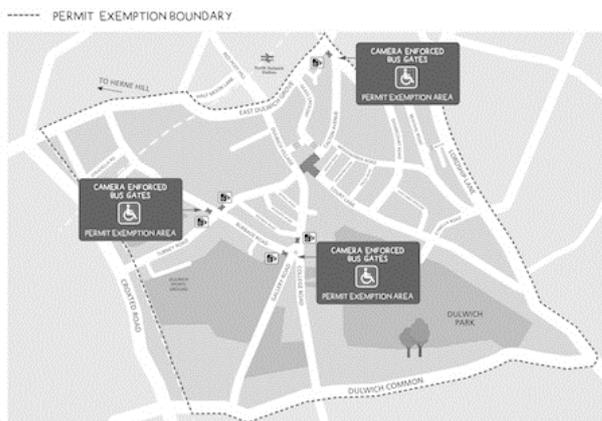
Southwark Council has provided an exemption for Blue Badge holders to travel through camera enforced bus gates within the specified boundary area of their neighbourhoods. This has been published on the website [here](#). Access to every property within the LTN remains available at all times for all road users.

Clear maps are provided to indicate the location of the bus-gates that are exempted and of streets with the location of modal filters.

This exemption for Blue Badge holders will benefit disabled people who depend on their cars to provide mobility, reducing detours and lengthy journeys that can cause physical discomfort, anxiety and stress. This allows one exempt car per Blue Badge - so could be applied to a carer instead.

A map is shown below of the neighbourhood in Dulwich where Blue Badge holders can apply for an exemption to travel through camera enforced bus gates.

Easier travel for blue badge holders in Low Traffic Neighbourhoods: Dulwich Village



It is noted that Blue Badge holding drivers need to drive across the borough through other neighbourhoods as their medical centre or destination may not be within their own neighbourhood. Providing Blue Badge exemptions to allow drivers to drive through other neighbourhoods is a strong theme that emerged from the consultation.

## Seating and rest areas provided as part of Streetspace

Public seating and meeting areas have been provided within Streetspace measures providing opportunities for older and disabled mobility impaired people to rest along their walking journeys. These also provide opportunities for safe outdoor social interaction reducing loneliness and social alienation and provide which can improve mental health. These include the following in photos below;



**Dulwich Square Parklet**



**Melbourne Grove Parklet**



**Elsie Road Parklet**

Further opportunities for providing public seating and meeting areas on streets should be identified and implemented.

## 6. Streetspace measures in relation to equity

It is noted that Southwark is one of the most deprived boroughs in England with a rank of 40 out of 326 local authorities. There are high levels of deprivation relating to the outdoor living environment across the borough. When looking at the sub-domain that focuses on air quality and road traffic collisions, all residents in Southwark live in communities ranked as the 20% most deprived in England<sup>2</sup>.

Reducing high motor traffic volumes, with consequent reduction in pollution, road danger, ill-health and inactivity in an equitable and fair way has potential to improve the poor quality of the

<sup>2</sup> Indices of Deprivation, JSNA Factsheet, Southwark 2019

outdoor living environment across Southwark. However, due to potential negative impacts of traffic displacement in neighbouring streets, main and boundary roads, it is essential motor traffic levels are monitored in these areas, so that mitigating action can be taken to ensure these areas are not affected by rising motor traffic levels.

## 7. Southwark public consultation with Protected Groups under the Equality Act

Due to the perceived urgency of the situation, these Streetspace measures were permitted by the government via new legislation and statutory guidance. These orders allow measures to be put in place on a trial basis with consultation happening concurrently during the implementation period. Southwark Council has been using online platforms for engagement with residents. People consulted include those living on boundary streets and neighbouring areas. The consultation and results of traffic monitoring and pollution monitoring will be published by Southwark Council.

The Council sought the views if residents supported the **aims of the Streets for People scheme** as below.

- Make the boroughs roads safer.
- Make walking and cycling an enjoyable, safe and easy way of getting around.
- Clean up our air, reducing pollution and noise levels
- Creating a greener and healthier environment for everyone.
- Reduce the amount of cut-through traffic.
- Encourage people to shop local, so people need to use their cars less and there is less need for delivery vehicles on our roads.
- Help tackle the climate emergency by reducing the carbon emissions from vehicles in Southwark.

Overall, the consultation with protected groups aimed to ensure the changes benefited the whole community and reduce inequalities in health and wellbeing.

### Profile of respondents in public consultation of protected groups (Equality Act)

Self-declared disability

Hearing/ vision impaired	163
Physical/mobility impairment	319
Mental health condition	117
Learning impairment	99
Long term illness	303
Other	78
Total	1079

Sexual orientation

Bi-sexual	91
Gay man	120
Heterosexual/straight	4489
Lesbian/Gay woman	63
Other (please specify)	38
Prefer not to say	965
Total	5766

## Sex

Female	3190
Male	2791
Other (please specify if you wish)	15
Gender identity the same as sex recorded at birth- No	32
Prefer not to say	323
TOTAL	6351

## Age breakdown of respondents (where given)

Under 16	114
16 - 17	40
18 - 24	137
25 - 34	742
35 - 44	1701
45 - 54	1779
55 - 64	1291
65 - 74	769
75 - 84	304
85 - 94	36
95+	2

## Religion or belief

Buddhist	50
Christian	1960
Hindu	68
Jewish	62
Muslim	63
Sikh	9
No religion	2928
Other	471

## Household income

under £20,000	257
£20,000 to £30,000	331
£30,001 to £40,000	359
£40,001 to £50,000	351
£50,001 to £60,000	340
£60,001 to £70,000	274
over £70,000	1954

**Online public consultation**

Residents were asked a standard set of questions relating to protected characteristics. Specific questions were asked relating to the experiences of older people and disabled people.

Older and disabled respondents were more likely disagree with the aims of the scheme rather than to agree compared to non-disabled respondents who were more likely to agree with the aims.

Disabled respondents:

- 40% agreed or strongly agreed with the aims of the scheme
- 46% disagreed or strongly disagreed with the aims of the scheme
- 14% were not sure

Non- disabled respondents:

- 58% agreed or strongly agreed with the aims of the scheme
- 31% disagreed or strongly disagreed with the aims of the scheme
- 9% were not sure

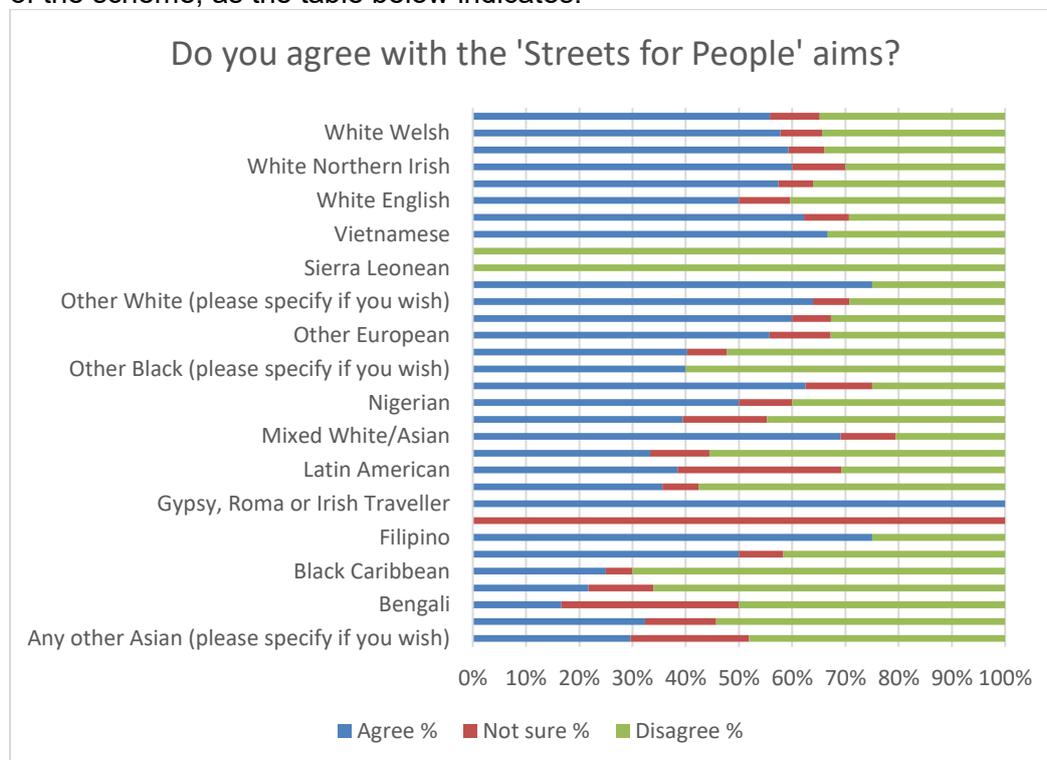
Older people (65-74 years):

- 46% agreed or strongly agreed with the aims of the scheme
- 42% disagreed or strongly disagreed with the aims of the scheme
- 12% were not sure

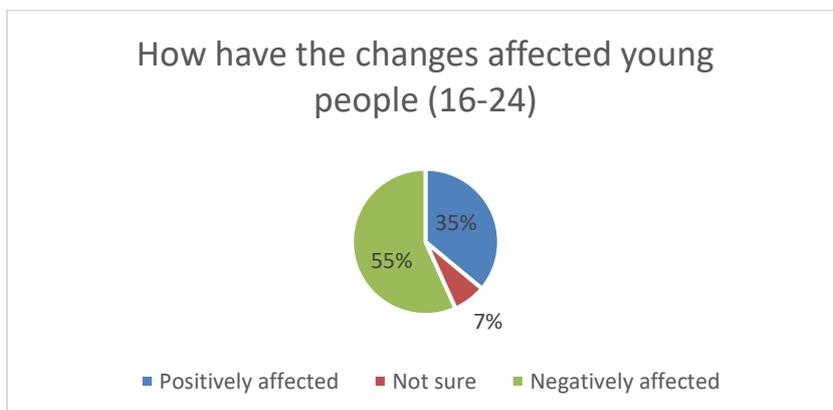
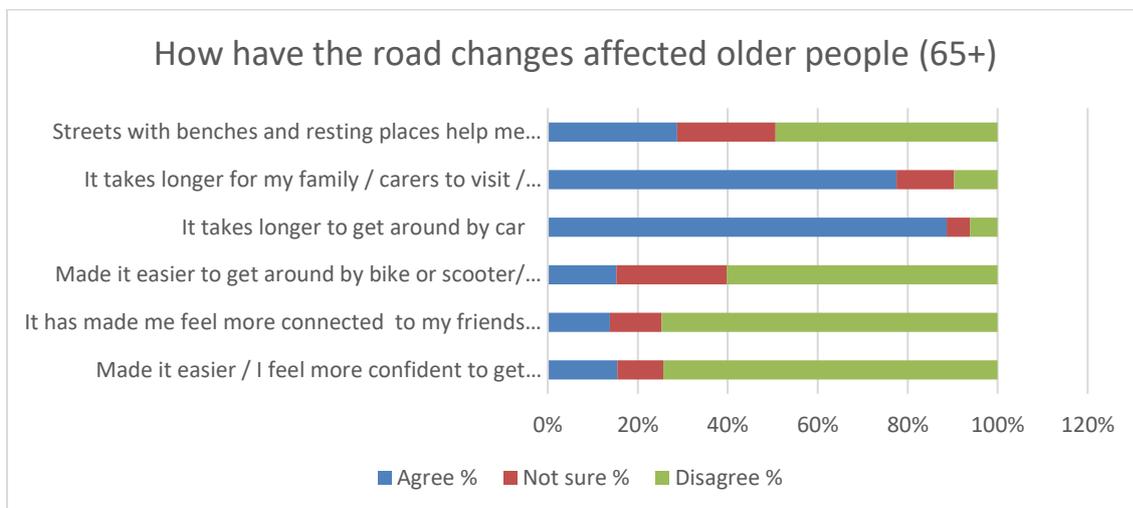
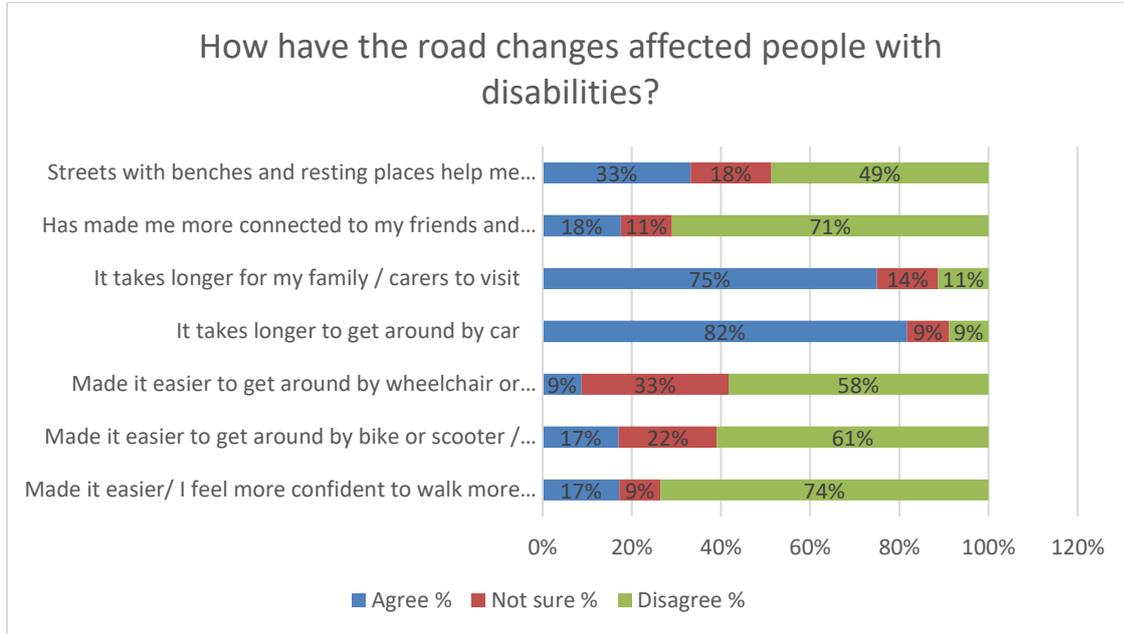
Older people (75 + years):

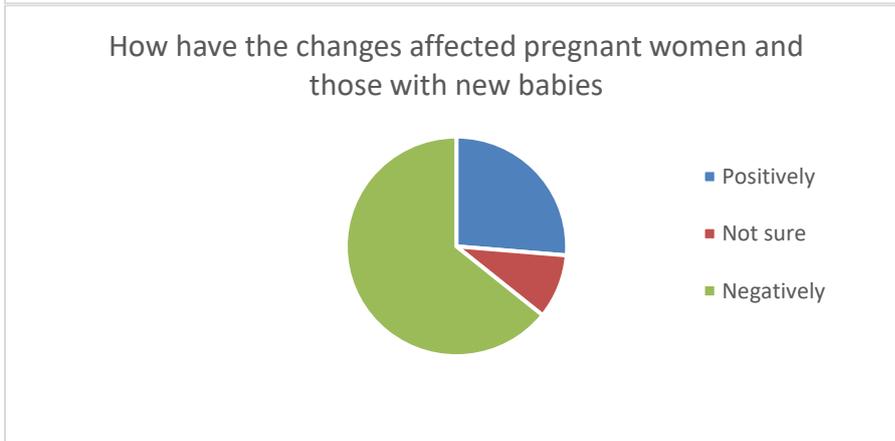
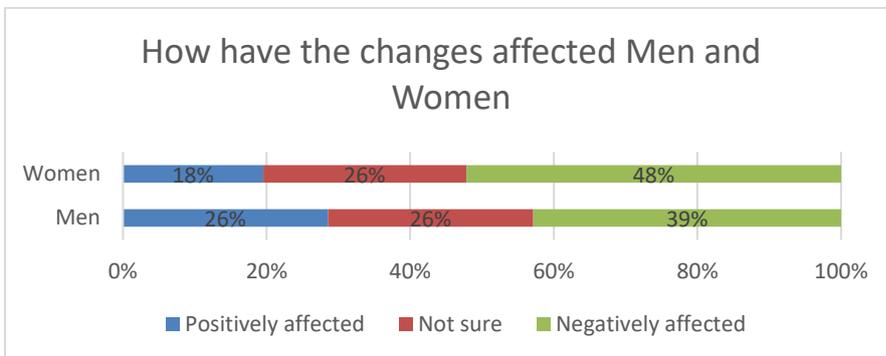
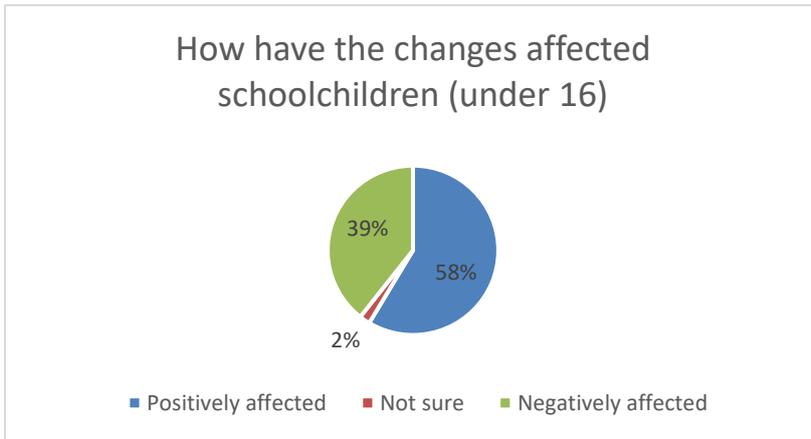
- 39% agreed or strongly agreed with the aims of the scheme
- 46% disagreed or strongly disagreed with the aims of the scheme
- 14% were not sure

People from Black, Asian and Minority Ethnic groups were more likely to disagree with the aims of the scheme, as the table below indicates.



### How changes have affected people from protected groups





**Future preference of Streetspace scheme as expressed by Protected Groups**

**Disabled people**

Return to original	<b>65%</b>
Retain it as it is	9%
Install different type of measure	7%
Modify/enhance retained measure	7%
Not answered	11%

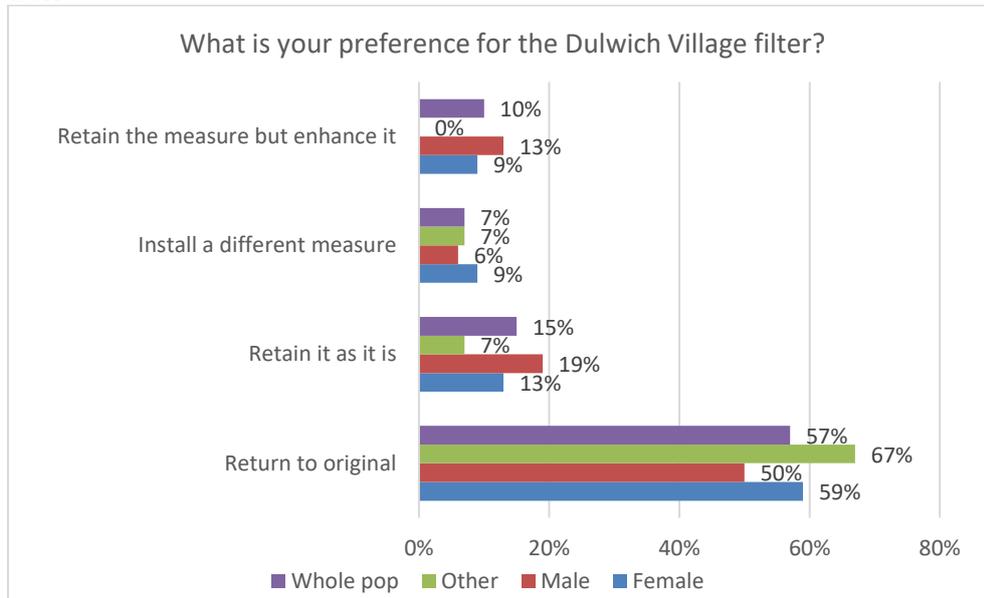
**Older people**

Return to original	<b>70%</b>
Retain it as it is	8%
Install different type of measure	6%
Modify/enhance retained measure	6%

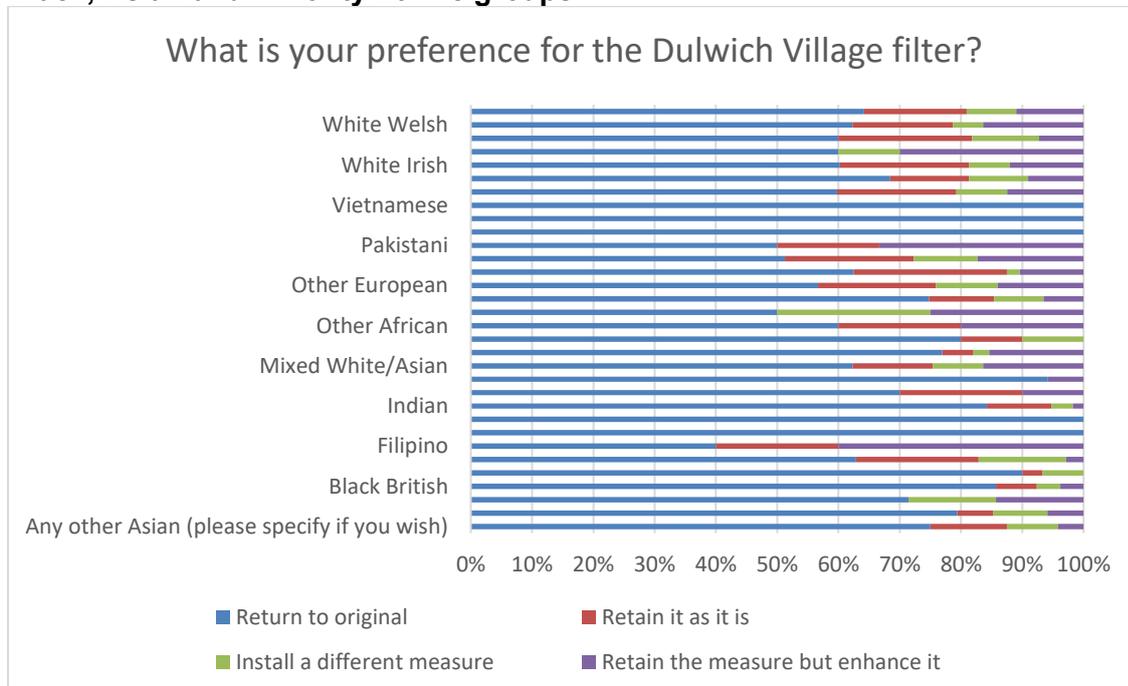
Not answered 10%

As the data clearly suggests, support for the ‘Streets for People’ broadly declines with the age of the respondent. Older residents are also more likely to favour outright removal rather than modification of the measures or a different measure.

**Sex**

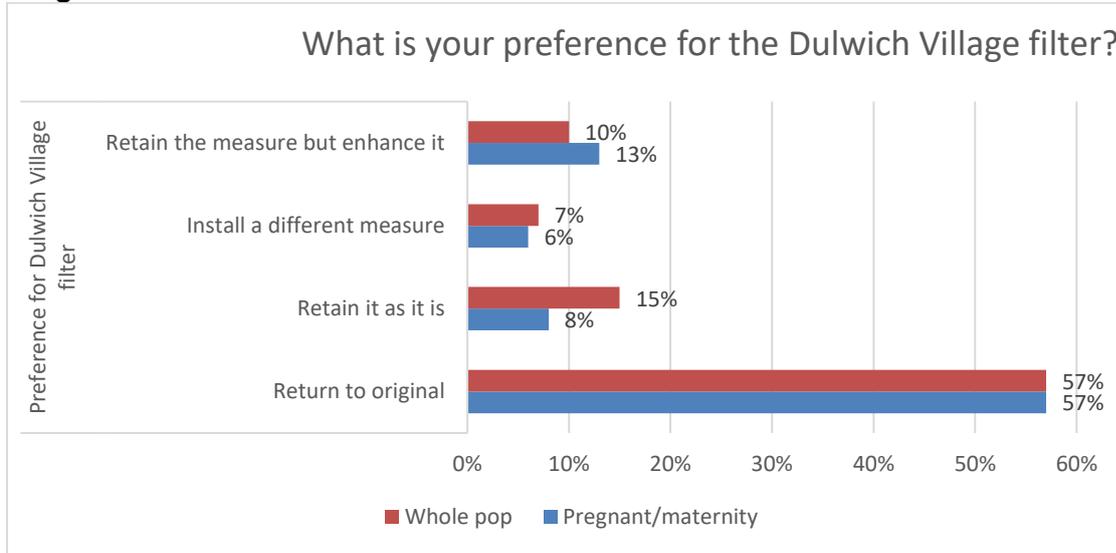


**Black, Asian and Minority Ethnic groups**

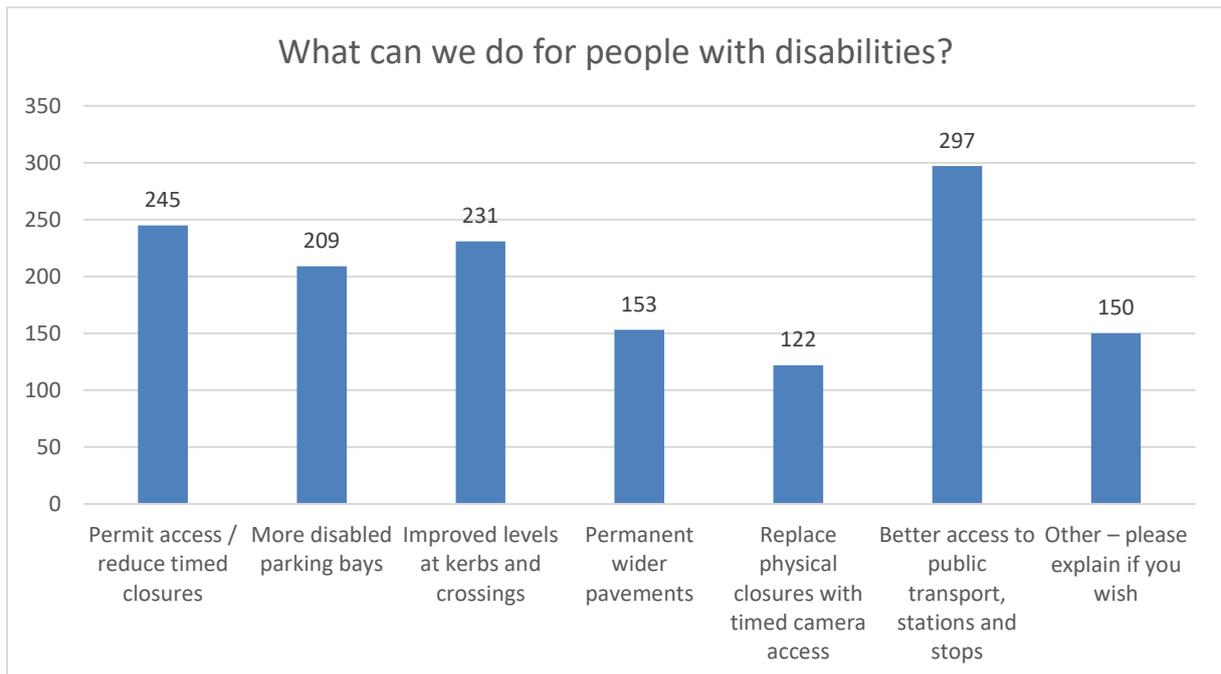


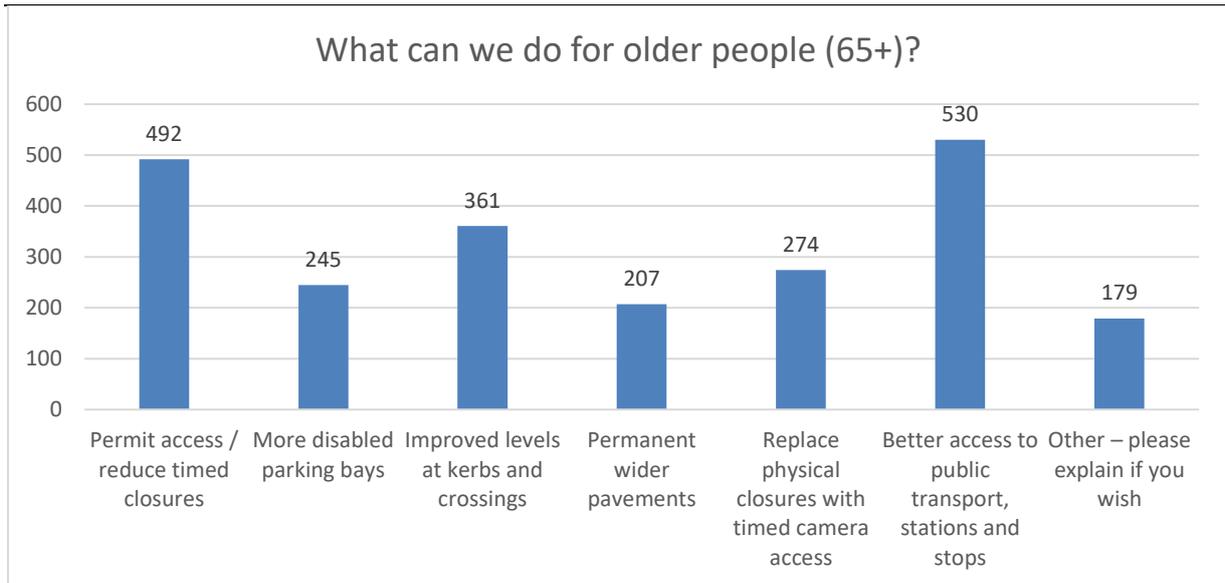
People of Black and Asian ethnic backgrounds, where there were sufficient responses to be statistically relevant, tended to be more strongly against the measures and to disagree with the ‘Streets for People’ aims. It is unclear from the data what the cause of this trend is – it could relate to the location, age profile or employment profile of respondents – and it is worth further investigation.

**Pregnant women and those with small children**



**What can we do to support older and disabled people?**





All sections expressed an interest in better public transport services. Older people and people with disabilities were moderately more interested in changing the overall scheme – with permit access or reducing timed closures – than in improving kerbs and crossings.

### Focus group meetings with protected groups

The London Borough of Southwark has conducted three focused consultation meetings involving groups with protected characteristics under the Equality Act during August 2021 including:

- Black, Asian and Minority Ethnic communities, 4<sup>th</sup> August with 16 attendees
- Older people focus group meeting, 5<sup>th</sup> August with 75 attendees
- Disabled people focus group meeting, 8<sup>th</sup> August with 44 attendees

These consultations were held online, and written statements were also taken. There were complaints made about lack of consultation at the start of the scheme and the timing of the on-line consultation events which did not suit all those who wanted to attend. The following is a summary from the consultation group discussions.

### Consultation meeting with Black, Asian and Minority Ethnic residents

16 people attended the virtual meeting on 5<sup>th</sup> August.

The majority of attendees reported increased difficulties including:

- Difficulty for business owners to drive to and park near their local businesses. Herne Hill was mentioned by few as now difficult to drive through.
- Taking public transport is not an option for some. One business owner says she needs to travel by car as otherwise need to take 3 buses which is not viable, especially as she has to get back sometimes at early hours in the morning.
- Underhill Road was felt to have increased motor traffic, pollution and road rage with the P13 bus often caught in traffic.

- Some key workers, including GPs, are Minority Ethnic and one attending the meeting reported finding it difficult to drive to work due to restrictions and congestion on main roads. They have canvassed other GPs who have the same difficulties in driving to work. They report that some GP locums are not accepting shifts in the area due to difficulties in driving to medical centres.
- Boundary roads such as Croxted Road, Lordship Lane, Herne Hill, South Circular and Burbage Road were mentioned by many residents as a concern as traffic levels were felt to have increased. Herne Hill was described as a 'disaster'. It was now difficult to drive in and out of Burbage Road.
- Some wanted driving restrictions to be fully removed or timings of restrictions to be reduced.
- It was noted that Black, Asian and Minority Ethnic people were more likely to live in areas outside of Dulwich Village, such as East Dulwich and Peckham – therefore not benefitting from the low traffic measures and potentially experiencing higher traffic volumes, congestion and air pollution.
- Buses were mentioned as a particular concern as commutes to central London were affected with longer journey times.

On the other hand, some residents were pleased with the restrictions which had brought many benefits:

- The Streetspace scheme has encouraged many to walk and cycle more and to shop locally.
- Children's travel to school is much easier due less danger and pollution from traffic, and they can travel to school on their own.
- As a family they have increased cycling and walking and drive less. Lots of what they do is within 1 mile or so. Year 6 reported ability to travel safer to school independently, great initiative, more public transport use, changing our behaviour with positive impact for our family.

Recommendations included:

- Some advocated providing all car using residents with passes to drive through all road filters.
- Most advocated to remove all traffic restrictions.
- Some advocated against removing any traffic restrictions.
- Reducing timing of closure on Burbage Road to allow drivers through at more convenient times for them.
- Prioritise bus lanes and bus journeys.
- Promote cycling further with linked up cycle routes and more segregation, provide cycle training and better access to bikes via 'Try before you Buy'.
- Bike storage is a problem, more bike hangars need to be provided on streets.

### **Consultation with older residents (65 years and over)**

75 older people attended the virtual meeting on 6<sup>th</sup> August 3pm to 4:30pm, and some sent in email responses. A wide range of responses were recorded.

Most consultees reported negative impacts of the scheme as follows:

- Many residents have to use a car to travel due to health, mobility or safety issues and their car journeys have increased in length and complexity, raising stress levels and distress.
- 'Adversely affected' and 'life is made much more difficult' due to restrictions on driving were among comments made.
- Residents feel 'kettled in' as they can no longer easily use their cars, taxis are too expensive, it is too hilly to cycle and not possible to carry shopping on foot or cycle.
- 'It feels like a police state', people cannot drive where they want.
- 'It is terrible, you cannot park your car near your own home';
- Multiple and unclear signage about road closures, and timed closures are a particular problem for older and forgetful drivers who are now afraid of taking their car to go out as they may get fined for inadvertently driving through closures. This causes loss of confidence, increased anxiety and stress and consequent mental health problems.
- Others felt permanent 24/7 filtered roads are preferable as are clearer and unambiguous unlike timed closures.
- Many residents are unable to make medical and other critical appointments on time as their driving times have increased.
- Residents feel cut off and isolated as carers and other service providers cannot drive easily to their homes, and taxis are reluctant to drive through the area.
- Many can no longer get prescriptions delivered, as pharmacists cannot drive to deliver prescriptions as they used to previously.
- Among roads that had become more congested and difficult to drive along, Burbage Road, Croxted Road and Court Lane were often mentioned.
- Many felt the scheme had torn communities apart of people who used to find it easy to drive to each other's neighbourhoods. A resident reported losing contact with friends on nearby streets as can no longer drive to meet them.
- Grandparents cannot now easily drive their cars to meet their grandchildren or provide childcare.
- Bus journeys were now unreliable and impacted by congestion on boundary roads – people were having to wait longer at bus stops with increased pollution levels.
- Increased levels of cycling caused fear among older residents due to the danger posed by cyclists to them while out walking; increased speeds, intimidation and illegal road behaviour by cyclists were reported.
- Many felt the scheme's primary purpose was to promote cycling which was not practical for many older residents, especially those in the older age group over 70 years.
- Walking is unsafe due to increased number of cyclists, is not practical if you have to carry heavy shopping and is not possible over long distances.
- Some feel the driving restrictions are unfair on those who may be frail and need to drive, but who are not Blue Badge holders
- Many streets have inaccessible walking environments with narrow footways and other access barriers.
- There is a perception that air pollution has increased around Dulwich, especially around Lordship Lane and South Circular, can smell pollution when walking and cycling.

An open letter from Age Speaks, a group of 70 car-dependent older people in Dulwich, emphasised and reiterated the negative impacts of the scheme on their group, as outlined below.

*“The road closures and restrictions affect not just physical but mental health. The difficulties in visiting or meeting friends, or having friends and family to visit, has increased the social isolation of some of our members. Members have reported losing contact with friends as a result of the restrictions placed on them by the LTNs.*

*Stress caused by the LTNs include worrying about being late for medical appointments, the length of journeys, carers being delayed, the strain of planning journeys around the restrictions, and anxiety about getting fined. Our members talk about how they fear the increased effect of the LTNs on their lives as they get older, even those who do not currently have any physical impairment.”*

Positive impact of the Streetspace scheme from older respondents included:

- Residents now use their cars less as walking and cycling is easier; health and fitness levels have improved due to increased walking.
- They could still drive where they wanted even if it takes slightly longer, but the increase in active life has been a benefit.
- Burbage Road traffic used to be appalling, closing (restricting traffic) has made it easier.
- Much easier now to walk and cycle – this is a ‘godsend’; ‘terrific benefits; ‘an absolute delight to cycle through Dulwich Village now’;
- People are increasingly shopping locally or online.
- It has brought the community together.
- Calton Avenue junction is now much safer.
- Local streets used to be traffic cut-throughs, and are so much better now with less traffic, less danger and less pollution. Husband with asthma is affected by pollution and very much hopes restrictions will remain.
- Some older people have more flexibility in when they travel, except for medical appointments and other timed commitments, so they can often choose to travel at times when motor traffic is light.
- Some felt that these changes were necessary. Everyone needed to make changes where possible, and they felt their generation should lead by example.
- One considers selling her car to buy an electric tricycle as streets are safer.
- Another has been encouraged to try out a tricycle, drives much less, walks much more, and feels much freer and healthier.

### **Views from school children**

- Happy at being able to walk or cycle to school on their own or with parents, rather than being driven in a car.
- Children ability to cycle on the road rather than on the pavement as streets is safer.
- Being able to cross the roads on their own.

Recommendations included:

- Provide all car driving residents with passes to drive through all road filters.
- Reducing timing of closures.
- Some advocated removing all traffic restrictions.

- Others advocated against removing any traffic restrictions.
- Buses need higher priority.
- More seating and rest places should be provided.
- Lift needed at Peckham Rye station.

### **Consultation with disabled residents**

44 disabled residents attended the virtual meeting on 6<sup>th</sup> August

- Life for those using cars has been made more difficult. For many disabled people a car is a necessity as it provides private space to carry out certain personal functions and essential for them; this is especially applicable as they feel more vulnerable due to Covid.
- The effects of disability are on a very wide spectrum, even within disabling conditions themselves. What works for one might not work so well for someone else, therefore not all disabled people can benefit from active travel.
- Additional length of car journeys due to congestion and longer travel distances cause pain and discomfort.
- Many felt the consultation was inadequate and did not give them enough information about the restrictions, or about Blue Badge holder exemptions.
- Some disabled people who do not live in the scheme area drive do not qualify for a Blue Badge exemption, but are inconvenienced by longer journeys, more congestion and pollution.
- Other disabled people reliant on cars are not entitled to Blue Badges and exemptions do not apply to them.
- A disabled respondent with asthma finds it much more difficult to drive as streets are congested and they find it difficult to breathe when their car is stuck in traffic.
- Driving restrictions have made many essential services inaccessible to disabled people who needed to drive or be driven to appointments in medical centres that can be in many different locations and outside of Dulwich such as Guys Hospital and other specialist medical centres.
- People reliant on cars find it more difficult to visit family and friends with the additional and unpredictable driving time causing pain, stress, and feelings of isolation.
- Increased levels of cycling and e-scooter use cause fear and anxiety among many disabled people when out walking, due to cyclists' illegal behaviour, many shout at pedestrians causing danger for hearing impaired pedestrians; more enforcement against cyclists is felt to be needed.
- A disabled employee using private taxis to get to work cannot get an exemption to go through the closures which is unfair; Access to Work provision does not cover Black Cabs which are too expensive to use otherwise.
- Parent with disabled son with complex needs says they cannot shop locally due to lack of facilities such as Changing Places toilets available only at large shopping centres.
- Sense of isolation as carers and other service providers cannot drive easily to their homes and taxis are reluctant to drive through the area.
- Parents with disabled children who need to be driven to school find restrictions very difficult as increases journey times considerably – from 10-15 minutes to 45 minutes each way.

- Not enough Blue Badge parking bays on shopping street and often these are too small for disabled drivers.
- Increased congestion causing pollution on boundary roads which is adversely affecting disabled people; Lordship Lane traffic, can smell pollution when walking or cycling.
- Bus journeys adversely affected and lack of ventilation on buses is a concern.
- Street environment is not conducive for walking – many obstructions such as bins and overgrown planting, poor surfaces, lack of seating; pedestrian crossing times provided are too short and many do not have audible signals; motor traffic idling increases pollution and makes walking more difficult. Disabled people often feel excluded from exercise and active travel.
- A cyclist with a long tandem used as a mobility aid is inconvenienced by badly located street furniture on the street.
- It was felt Transport for All had done a good job of outlining the issues of traffic restriction measures for disabled people.

Positive impact of the Streetspace scheme from respondents included:

- An autistic child for whom changes have been transformative for his mobility and independence. Due to no through traffic they can now travel independently. The child rides a bicycle and finds it much easier to get around.
- Another parent has a wheelchair using son who can now cross the road more easily due to less traffic. Less pollution means an improvement in his health condition. He can more easily travel to college.
- A representative from Wheels for Wellbeing for disabled cyclists spoke about the benefits of the scheme, - people with disabilities are helped by having less traffic to travel on their own steam more easily, which is better for health and well-being, including mental health; for some seizures have reduced and it has brought many mobility benefits.
- A regular traveller through the streets of Dulwich and East Dulwich throughout the day and week noted that local roads are not gridlocked for hours and hours every day with only East Dulwich Grove experiencing more traffic.
- There was recognition that many disabled people do not own or have access to a private car (58% compared to 33% of non-disabled Londoners);
- Some did not feel that the scheme was increasing the number of cyclists who broke the rules of the road. It was noted that the two biggest cycling clubs that cycle through Dulwich Village - Velo Club Londres (VCL) and Dulwich Paragon - have very strict rules about obeying the Highway Code. Members can be thrown out of those clubs if they are found to be in breach of those rules.
- The effects of disability are on a very wide spectrum, even within disabling conditions themselves. What works for one might not work so well for someone else. However, many disabled people are active, or capable of being active, and some wish to become more active. Streetspace schemes provide one way of enabling disabled people to remain active or become more active in a safer, outdoor environment.

Recommendations included:

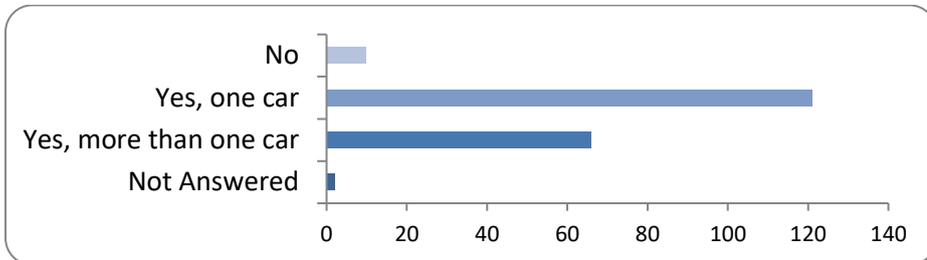
- Shuttle buses should be provided to key medical and shopping facilities and to schools.

- Active travel should be accessible travel. The involvement of disabled people is crucial to inform the design of these and future traffic calming measures. Barriers to walking should be addressed. Surfaces of streets and footways need to be improved to allow easier walking and cycling.
- Permeable barriers need to be wide enough to accommodate non-standard bikes that some disabled people use.
- More seating and rest places should be provided.
- Provide all car driving residents with passes to drive through all road filters.
- Reduce timing of closures.
- Buses need higher priority.
- Private hire vehicles used by disabled people should be exempted from restrictions.
- Provide complementary measures: make the junction of East Dulwich Grove and Lordship Lane more pedestrian friendly; and restrict parking on the Northbound section of the Lordship Lane bus lane to free up space for buses.
- It would be good if the Streetspace measures, as implemented, could be more joined up with other similar schemes to provide safe, active travel corridors for all, including disabled people.

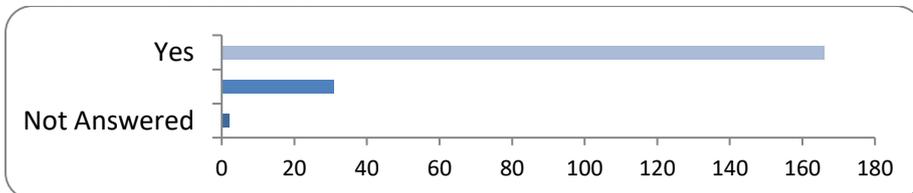
## 8. Southwark consultation survey with Dulwich schools

The survey consultation ran from 17/06/2021 to 18/07/2021 and 199 school children responded. Responses to questions asked are noted in charts below:

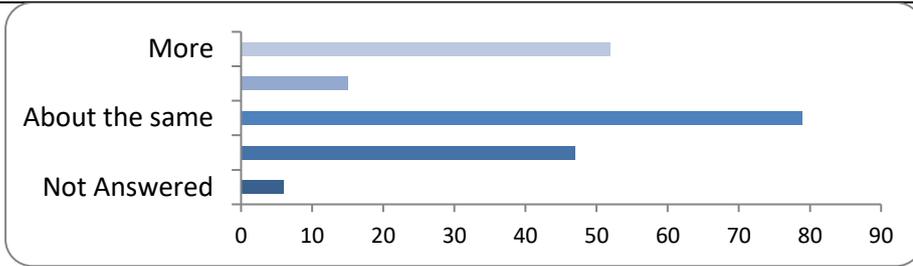
Does your household own a car?



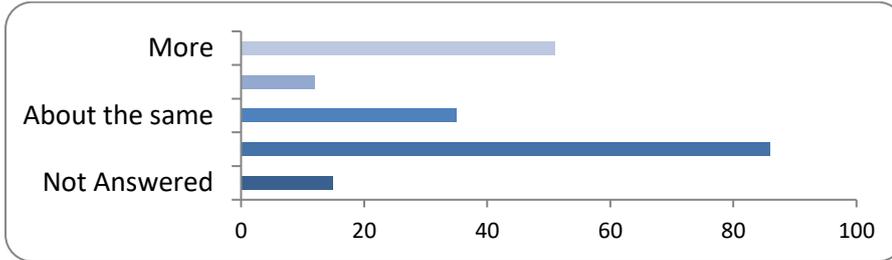
Do you have a bike or scooter?



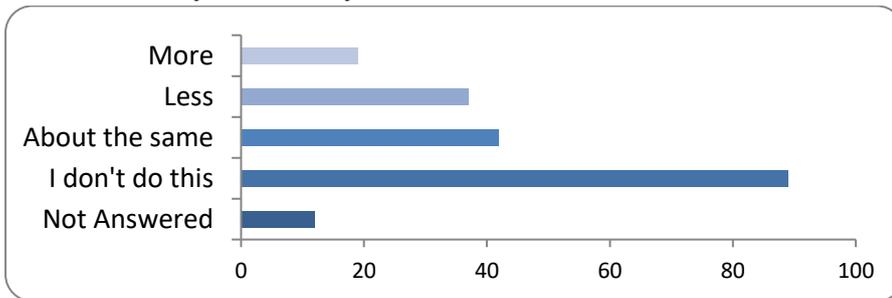
Modal shift – Nowadays I walk to school



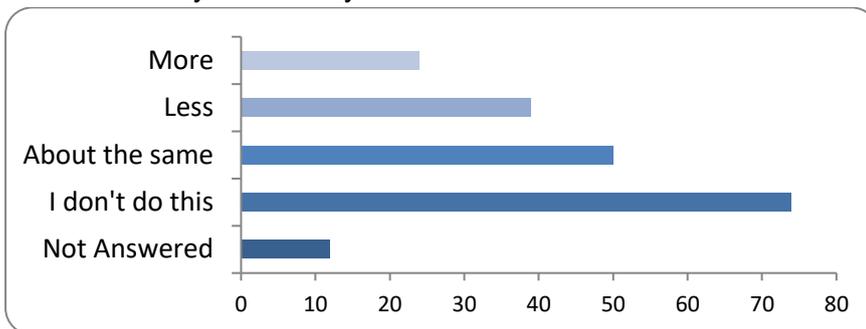
Modal shift – Nowadays I cycle or use a scooter



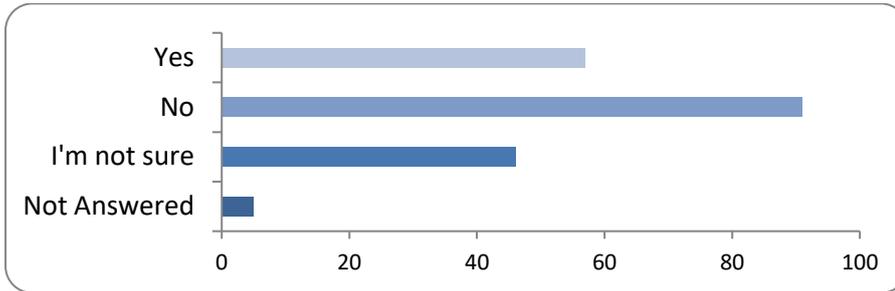
Modal shift – Nowadays I travel by car or taxi



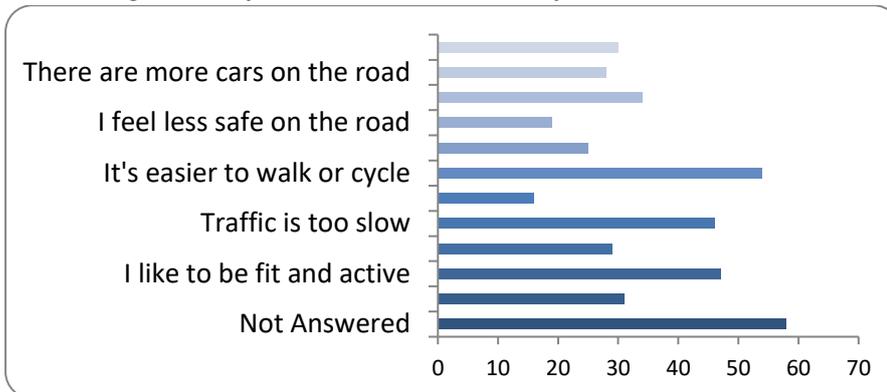
Modal shift – Nowadays I travel by bus or train



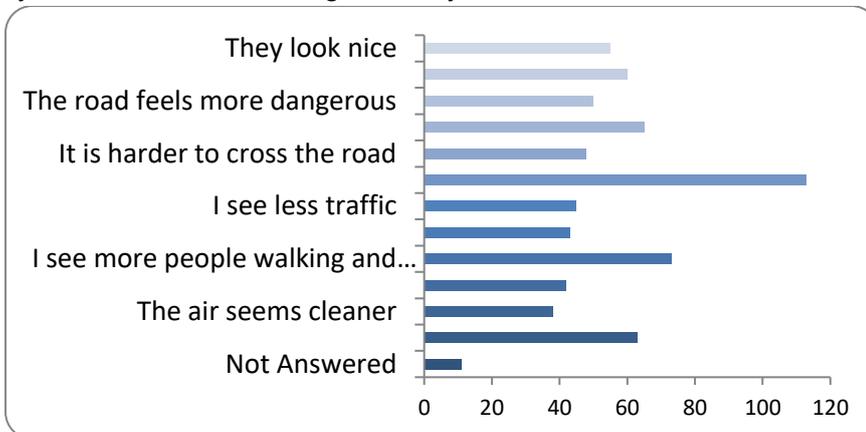
**Overall, do you like the road changes on your journey to school?**



**If you have changed how you travel to school, why is this?**



**How do you feel about the changes near your school?**



The survey indicates that both walking and cycling to school has gone up by 26% among respondents.

Travel to school by car has gone down by 19% and bus and train by 20% which should be further investigated in case bus journey times are a factor.

While some respondents report it is easier to walk and cycle to school and easier to cross the road, many more (46%) do not like the changes compared to 29% who do.

Summary	Baseline Total	Baseline (%)	2021 Total	2021 (%)	Diff
School Bus/taxi (actual)	878	10%	901	10%	0.8%
Park and stride (actual)	241	3%	187	2%	-0.5%
Car share (actual)	242	3%	125	1%	-1.2%
Car/motorbike (actual)	1322	14%	881	10%	-4.2%
River (actual)	4	0%	5	0%	0.0%
Walking (actual)	2819	31%	2530	29%	-1.5%
Public Bus (actual)	1338	15%	1158	13%	-1.2%
Tram (actual)	11	0%	5	0%	-0.1%
DLR (actual)	3	0%	5	0%	0.0%
Tube (actual)	26	0%	17	0%	-0.1%
Rail/Overground (actual)	1178	13%	1321	15%	2.4%
Cycling (actual)	736	8%	983	11%	3.3%
Buggy (actual)	11	0%	23	0%	0.1%
Scooting (actual)	382	4%	540	6%	2.1%
	<b>9191</b>		<b>8681</b>		

It is noted that car/ motor bike share of school travel has gone down by 4.2%, while train/Overground and cycling have gone up slightly by 2.4% and 3.3%. Scooting has gone up by 2%.

## 9. Air Quality, School Travel trends, Bus Journey Times and Traffic Monitoring

The London Borough of Southwark has been monitoring air quality, school travel trends, traffic levels (vehicular and cycle traffic), and bus journey times since implementation of the Streetspace scheme compared to pre-implementation times.

The following are the results of the monitoring exercises:

### Air quality modelling

Air quality modelling is being used because live air quality measurements are subject to many different variables that are not motor traffic related e.g. cooking, wind, temperature. Air Quality modelling has the ability to extract specifically impact from traffic-induced pollution using the traffic data collected as a base for this.

Southwark Council commissioned Cambridge Environmental Research Consultants Ltd (CERC) to carry out air quality modelling to assess the impact of three Streetspace schemes in Dulwich.

Two scenarios, pre-scheme and post-scheme, were modelled to assess the current air quality impact of the schemes, based on April 2021 traffic monitoring. Concentrations of NO<sub>2</sub>, PM<sub>10</sub> and PM<sub>2.5</sub> were modelled for assessment against national air quality objectives.

For both scenarios, the air quality objectives are met throughout the scheme area with the exception of the following areas, which are predicted to exceed the air quality objective of 40 µg/m. for annual average NO<sub>2</sub> concentrations:

- Approximately 100 m section of Lordship Lane between East Dulwich Grove and East Dulwich Road; and
- Junctions for Half Moon Lane and Norwood Road close to Herne Hill railway station.

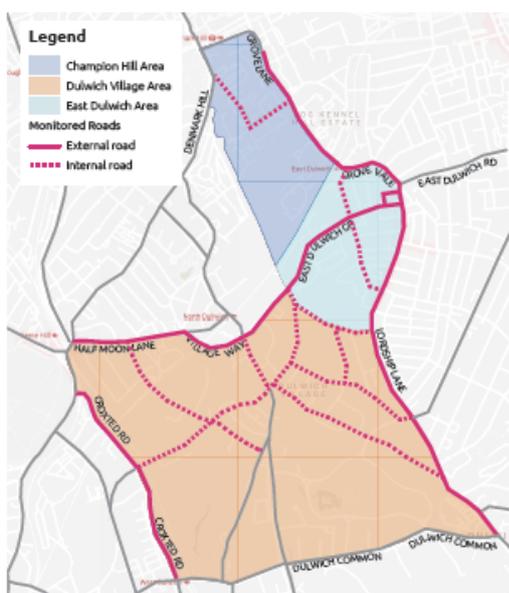
The Air Quality Modelling report outlines the areas with benefits or adverse impacts for NO<sub>2</sub> as follows:

1. In most locations there has been no impact of the scheme at building façades
  - There are several locations where there is a slight or moderate beneficial impact (reduction in NO<sub>2</sub> concentrations)
1. East Dulwich Grove, near junction with Lordship Lane is the only location where there a slight adverse impact but still less than the NO<sub>2</sub> annual mean concentration of 40µg/m<sup>3</sup>
  - The impact of the predicted changes in annual average PM<sub>10</sub> and PM<sub>2.5</sub> concentrations are classed as Negligible throughout the scheme area.
  - The predicted changes in concentrations at school locations in the scheme area are classed as Negligible.
  - In addition, for the majority of building façade locations along scheme roads the predicted changes in concentrations are classed as Negligible;

### Traffic monitoring

Traffic monitoring data has been collected by Systra, commissioned to produce an independent traffic monitoring report on behalf of London Borough of Southwark. The latest monitoring report compares the situation in June 2021 with equivalent figures in 2019 across the three Streetspace schemes in Dulwich in:

- Champion Hill
- East Dulwich
- Dulwich Village



Streets where measures implemented restrict or prevent through traffic are defined as **internal**, whilst those with no change has been made to throughflow are defined as **external**.

- Twenty-three (23) Automatic Traffic Counters (ATCs) have been installed - most of these date from 2019 and before.
- Bus journey times have been separately analysed.
- Cycle movements have been separately analysed using Active Movement Sensors

It is noted results should be considered in the context of overall motor traffic levels being lower across Southwark from June 2019 to June 2021 by 8% overall due to the impact of Covid 19.

### **Motor traffic**

- The volume of motor traffic counted on internal streets in the Streetspace schemes had decreased by **33%** around Dulwich Village, and by a significant **83%** in East Dulwich.
- The volume of motor traffic counted on external streets had remained much the same. It decreased by **1%** around Dulwich Village, increased by **1%** around East Dulwich and by **5%** around Champion Hill.
- The overall volume of motor traffic recorded across all streets in the Streetspace Dulwich schemes has decreased by 10% (compared to 8% across all of Southwark);
- Post implementation increases in flows have been observed on East Dulwich Grove, Burbage Road, Zenoria Street and Dovercourt Road, the largest of these being +28% on East Dulwich Grove.

### **Pre implementation situation**

Traffic patterns before the pandemic indicated a high volume of 'through traffic'. A survey carried out in 2019 showed that on a typical day more than 7000 journeys entered and exited the area within 15 minutes. Most vehicles use the main arterial roads such as Lordship Lane, Dulwich Village, Dulwich Common, East Dulwich Grove and Croxted Road.

The highest motor traffic flows had been recorded on peripheral roads such as Half Moon Lane, Grove Lane, East Dulwich Grove (South), Lordship Lane and Dulwich Village, all of which carried over 10,000 vehicles per day.

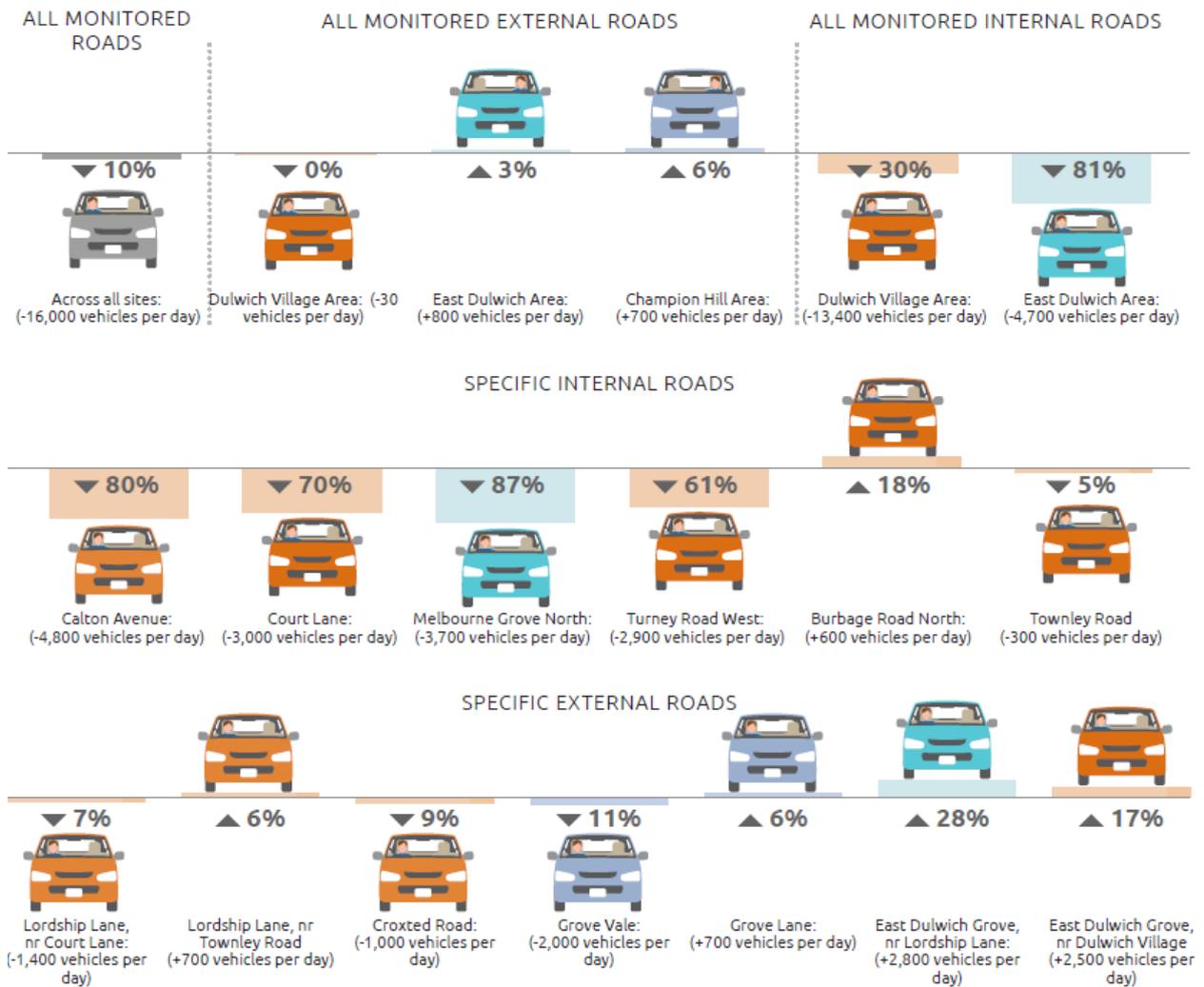
Vehicle flows were also high (exceeding 4,000 vehicles per day) along Turney Road, Calton Avenue and Croxted Road.

Smaller residential roads generally recorded lower vehicular flows (below 3,000 vehicles per day).

### **Post implementation (from Jun 19 to June 21)**

Traffic is down -10% (-16,000 vehicles per day) across the whole area with mixed impact across individual streets as indicated below.

## Motor Vehicles : cars, LGVs, HGVs, buses and motorbikes



### Increases in motor traffic post implementation

Traffic has increased on some key roads.

- East Dulwich Grove has the highest level of motor traffic increase at 28% and is of concern in relation to both motor traffic and pollution levels. It also is most affected in relation to bus journey times being slower due to congestion.
- Champion Hill area recorded 6% increase
- Burbage Road North recorded 18% increase
- East Dulwich Grove South recorded a 17% increase
- Champion Hill area recorded 6% increase
- Grove Lane recorded a 6% increase

It is noted that peripheral streets mentioned by car drivers as having got more congested including Herne Hill are in Lambeth and any mitigations will be subject to cross-borough agreement.

## Decreases in motor traffic

- Lordship Lane near Townley Road has recorded a slight increase (+6%) in flows but further south at Court Lane, Lordship Lane has recorded a slight decrease in flows (-7%). Additional monitoring of traffic levels on roads east of Lordship Lane, including Barry Road and Underhill Road has shown no large change against pre-pandemic volumes.
- Melbourne Grove North recorded 87% decrease
- Melbourne Grove North recorded 66% decrease
- Calton Avenue recorded 80% decrease
- Court Lane East recorded a 70% decrease
- Turney Road West recorded 61% decrease
- Turney Road East recorded 6% decrease
- Woodward Road recorded 49% decrease
- Eynella Road recorded a 43% decrease
- Grove Vale West recorded a 11% decrease
- Croxted Road recorded a 9% decrease
- Dulwich Village North recorded 9% decrease
- Half Moon Lane recorded 7% decrease
- Townley Road recorded 5% decrease

## Walking and cycling monitoring

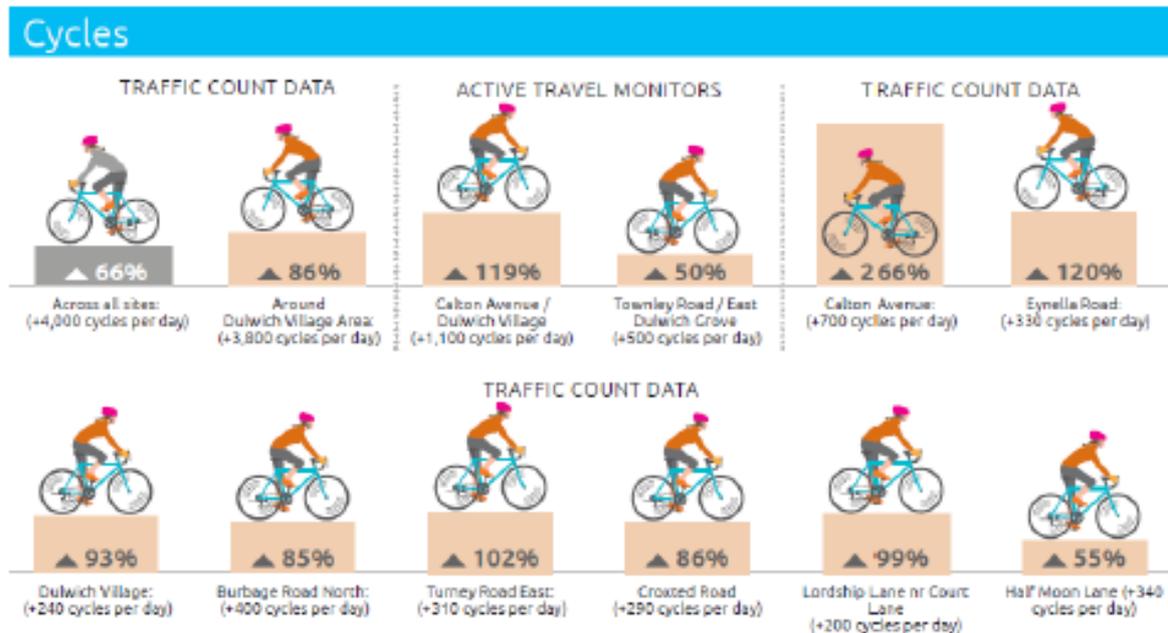
### Pre implementation

- The highest flows recorded were on Half Moon Lane (611 average cycles per day) and on Townley Road (506 average cycles per day).
- Cycle flows on roads leading to Dulwich Village were between 250 and 350 cycles per day.

### Post implementation

- 1,200 people walking through the new space at the junction of Calton Avenue / Dulwich Village in the busiest hour.
- Across all sites cycling has increased by **66% and 86%** around Dulwich village area. The largest being a 266% increase on Calton Avenue.
- Up to 40% of people cycling through Calton Avenue during peak times were children, a much higher proportion than the London average.
- Children make up over 20% of people cycling between 7:45 -9:00 am and 3:15 - 5:30 pm.
- The volume of cycles on internal streets had increased significantly by **86%** around Dulwich Village area.
- The volume of cycles on external streets had also increased significantly by between **3% to 75%**.
- Other sites around Dulwich Village have also seen large increases in cycle counts, such as on Dovercourt Road (+134%) and Eynella Road (+120%).

- A higher increase in flows compared to April 2021 has also been recorded on some boundary roads, such as on Lordship Lane South (+99%) and East Dulwich Grove West (+77%).
- Data from Vivacity Sensors shows increases in the number of cycles counted of 119%, 50%, 77%, 79% and 247% on Calton Avenue, Townley Road, Burbage Road, Melbourne Grove and Champion Hill respectively.



## Vehicle speeds

Vehicle speeds have not changed much. Whilst some variation has been observed, in general this has been very low, or related to low vehicle flows. Some sites where greater changes have been recorded are:

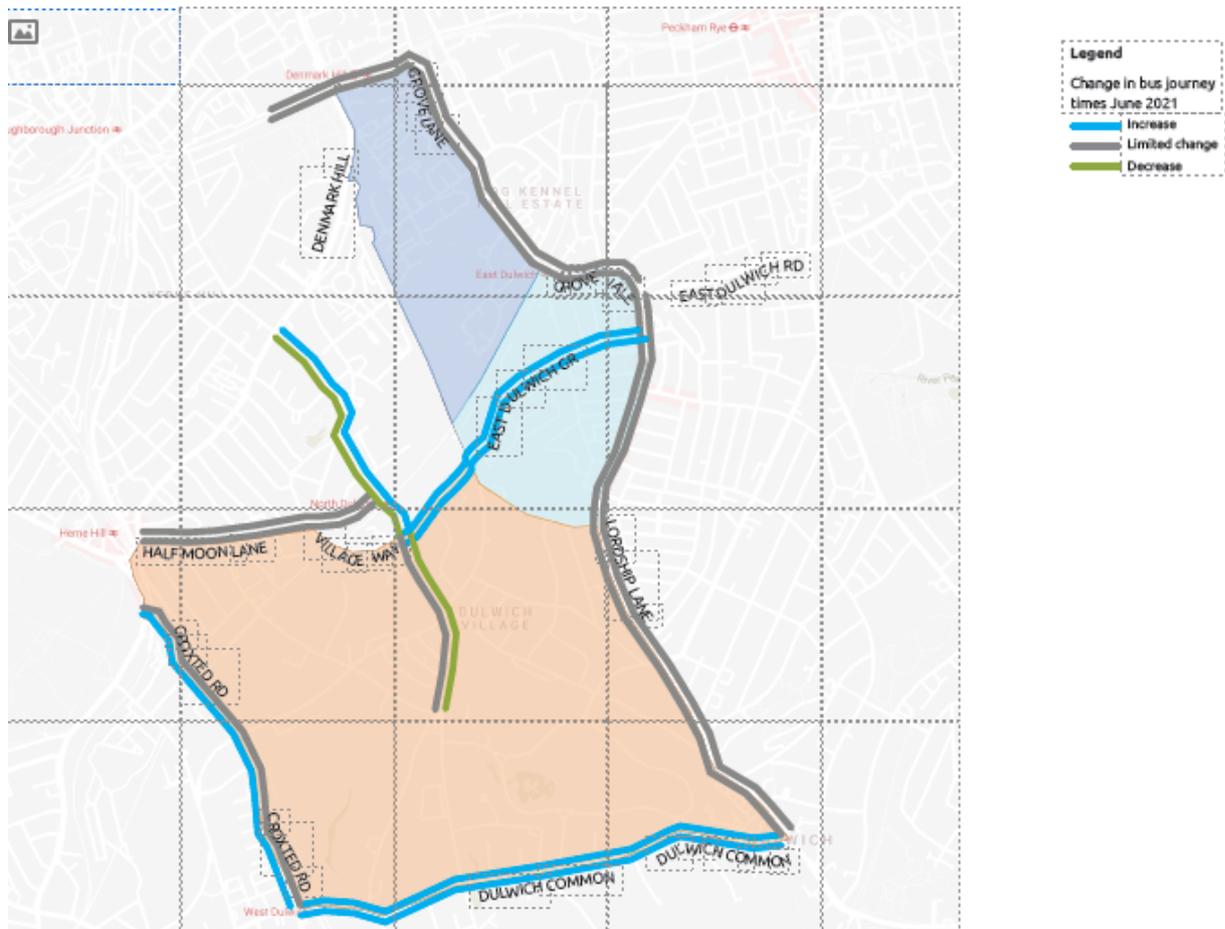
- Croxted Road - average speed has dropped from 24mph pre-implementation to less than 20mph
- Dovercourt Road – increase in % of drivers above speed limit from less than 5% to over 20%. This represents a roughly 1mph increase in average speeds.
- Lordship Lane South – decrease in % of drivers above speed limit from over 70% to less than 60%
- East Dulwich Grove South – average speed has dropped from 22mph pre implementation to 19mph

## Change in bus journey times (June 2021)

Within Dulwich, 2021 journey times have been compared to the average journey time in the 12 months prior to March 2020 for each bus corridor around or through Dulwich. Bus journey time monitoring shows that bus speeds within Southwark significantly increased in the first lockdown, and again in the second, before slowly returning towards pre-COVID levels.

- Decreased northbound on Red Post Hill and southbound on Dulwich Village

- Increased in both directions on East Dulwich Grove and the South Circular
- Increased northbound on Croxted Road and southbound on Red Post Hill
- No major change on other routes in June



## 10. Potential impacts on Protected groups under Equality Act 2010

The section outlines potential impacts on Protected Characteristic Groups that were not highlighted within the consultations but are relevant for assessment in this study. These are Age, Disability, Gender, Pregnancy/ Maternity and Race. Levels of deprivation and income levels are also considered.

### Protected Characteristic: Age

- Motor traffic restrictions are likely to make certain private car journeys more indirect and longer. This may disproportionately affect those in the younger 65+ age category who rely on cars more than other age groups.
- Improving the walking and cycling environment by reducing vehicle movements has the potential to create a safer environment, benefiting older people who are more likely to be pedestrians.
- Safer streets may also encourage more older people to cycle. However, this may not be a possible option for some people in older age categories with limited mobility.

- Bus filters prioritise bus users. These impacts may benefit those aged 65+, who are more reliant on buses.
- Older age groups are more vulnerable to poor air quality and traffic collisions. This can lead to a range of long-term health problems; Careful monitoring of air quality is needed.
- Increased walking is dependent on a good quality walking environment to encourage walking. This includes wider and well-surfaced footways, fewer obstructions, many more crossing points and buildouts, street greening and seating to create welcoming streets.
- School children could potentially benefit from traffic restrictions creating safer streets to cycle or walk to school, or to provide easier movement for school coaches or mini-buses.
- Disabled children who are driven to school may be impacted by longer car journeys.

### **Protected Characteristic: Disability**

- Dulwich has a higher proportion of disabled and older people with a comparatively high car ownership rate and car dependency.
- Dulwich has a high proportion of older disabled people likely to be reliant on their car journeys. The Streetspace scheme restrictions increase car journey times and includes transport services such as Dial- A-Ride or taxis.
- Buses provide a more accessible form of public transport than rail or Underground for disabled people. Bus journey times will need to be monitored to ensure minimal delay causing stress and inconvenience.
- The Streetspace scheme will potentially benefit those with disabilities who use the street on foot, particularly those with mobility impairments that require mobility aids as more safe space will be created, less affected by traffic speed and pollution.
- Increased walking by disabled people is dependent on a good quality inclusive and accessible walking environment. This includes wider, level and smooth well-surfaced footways, fewer obstructions, many more well-designed crossing points and buildouts, street greening and seating to create welcoming streets.
- Safer streets will benefit disabled cyclists and could potentially encourage more people with disabilities to try cycling, if their disability allows.

### **Protected Characteristic: Sex**

- Women as car passengers or drivers are likely to be negatively impacted by longer car journeys. This is likely to include women with child-caring responsibilities and those who need to make frequent household related journeys while carrying shopping and equipment.
- Making walking safer by reducing levels of motor traffic will potentially benefit women in particular as it is most commonly used mode of transport; it will also encourage parents to accompany children to school on foot.
- More women may be encouraged to take up cycling with a safer environment created.

### **Protected Characteristic: Race - Black, Asian and Ethnic Minority groups**

- The measures are likely to improve conditions for pedestrians, by reducing motor traffic and therefore conflicts with motorised vehicles.

- Improvements for pedestrians will also benefit those groups who are more likely to use public transport, as they are likely to walk to/from the nearest public transport stop.
- Improved safety and space for cycling is likely to benefit Black, Asian and ethnic minority Groups as it will encourage more cycling by ethnic groups that are currently less likely to cycle-
- Motor traffic restrictions reduce road traffic injury risk. London's Black children are more at risk from pedestrian injury than white or Asian children, while Black Londoners are less likely to own cars than white or Asian Londoners. Streetspace measure may help redress these inequalities and provide safer environments and public space for those most disadvantaged by the current situation.

### **Impact on lower income groups**

- The measures are likely to improve conditions for pedestrians, by reducing conflicts with motorised vehicles. This will benefit low-income groups who are more likely to walk and less likely to own a car.
- Improvements for bus movements are also likely benefit low income groups who are more likely to use buses.

## **11. CAE accessibility overview of Dulwich Streetspace measures**

A site visit was carried out by CAE in September 2021. In general it was noted the street environment was not conducive for walking due to traffic danger and pollution on main roads, lack of seating and resting points, narrow, obstructed and uneven footways and scarcity of crossing opportunities.

The main accessibility issues with main and residential streets are outlined below.

### **Main streets and shopping streets**

1. These have wide streets with generally narrow footways, lack of seating, greening and pedestrian amenities.



*Village Way*

2. Dulwich Village and East Dulwich Grove crossing provides a hostile vehicle dominated environment for walking and cycling with narrow footways and long crossing points.



*Dulwich Village – very narrow space provided for school children*

3. Shopping streets have poor crossing points, narrow footways and environment dominated by traffic noise, pollution and danger when approaching.



4. **Boundary streets** such as East Dulwich Grove were very busy with large volumes of traffic and very obvious opposition to the scheme from the signs in the homes along this busy road.



5. Many schools are located on East Dulwich Grove likely to be affected by pollution and road danger.



6. Main road junctions are very hostile, polluted and vehicular-dominated junctions such as the East Dulwich Grove and Dulwich Village junction. School children were observed waiting to cross for a long time. Waiting times for pedestrians were observed to be very long, with many children rushing to cross when the lights changed.



7. Main road junctions, narrow footways, wide carriageways and large road splays encouraging vehicle speeding which makes them hostile for pedestrians



8. Café seating is sometimes provided on the carriageway, but sometimes on the footway obstructing pedestrian access.



9. **Street trees** on main and residential roads are large, with rising roots causing uneven and hazardous surfaces and narrowing of the footway. In many places this has been addressed by the Council with a layer of tarmac to smoothen the surface but this creates a mound that is too steep for some and does not address the narrow width. It is suggested that a build-out is created on the other side of the trees as the carriageway is not affected by rising roots.



10. Many main roads are provided with seating and this is well used.



11. The vehicle restriction drums between Calton Avenue and Court Lane are used extensively as seating even though not intended as seating and being uncomfortable. Suitable seating could be considered here.



12. The junction of Calton Avenue/ Dulwich Village is now cycling and pedestrian friendly used by people of all ages.





13. **Residential streets** within scheme areas are quiet with many people walking, wheeling and cycling.



However, many residential streets are unattractive and provide barriers for walking, especially for disabled people due to the following:

14. **Vehicular domination:** Street environment is primarily given over to car parking and car movement with wide vehicular provision and narrow footways.



15. **Too many crossovers:** There are many vehicular crossovers along the footway into private drive-ways creating a roller coaster effect on the footways.



16. **Few crossing points:** There is continuous car parking provision to both sides of the road and very few informal crossing points provided along the streets. Continuous car parking makes it more difficult for children to be seen as they cross or enter the road from the footway



17. **Footways are obstructed** by street furniture such as posts and postboxes which could be located at footway buildouts.



18. Vehicular crossovers are the only dropped kerbs available to allow wheelchair users to cross the road, but these do not provide safe or suitable crossing points, as there may not be a corresponding dropped kerb to the other side.



19. **Side road crossings** have wide curves and poorly formed steep dropped kerbs making them longer and more difficult to cross. A tighter radius with a raised crossing providing pedestrian priority should be the norm. Blister tactile paving for visually impaired people is often not provided.





*Dekker Road side road crossing blocked by parked cars -no tactile paving provided*

20. There are many long straight residential streets with no areas of interest such as footway buildouts providing street trees, or pedestrian amenities. These could be used to provide SUDS, greening, seating or street art.



21. Entrance to Dulwich Park – poor walking environment at entrance gates



## 12. Conclusion and recommendations

This review is the start of co-evaluation of the scheme with Southwark Council, residents and relevant stakeholders. The monitoring reports show some of the aims of the measures are on track such as an uptake in cycling and a reduction of traffic across the area. However, the consultation feedback from residents from protected groups was overwhelming against the Streetspace measures in Dulwich. It is worth noting that

- some of the perceived impacts reported in the consultation such as negative impact on air quality, increased traffic on boundary roads and longer bus journeys were not evidenced in the monitoring reports with negligible or marginal increases. Southwark Council will need to continue working with protected groups to share monitoring reports and mitigate the impacts of the experimental measures if they are kept.
- People who responded to the consultation were predominantly car owners who perceived they were negatively impacted by the traffic restrictions. It should be noted that older, disabled, Black, Asian and Minority Ethnic people and those on lower incomes are less likely to be car owners<sup>3</sup>, and more likely to walk and use public transport.

The recommendations below are aimed to advance equality and mitigate against reported and potential negative impacts on protected groups of the Dulwich Streetspace measures.

### Recommendations

1. Continued engagement with protected groups in particular, older, disabled and Black, Asian and Minority Ethnic people's representatives to ensure that their concerns are being heard, understood and addressed. It is good practice to establish an 'Access Panel' to work collaboratively with Southwark Council to mitigate any negative impacts and enhance positive impacts. This panel can also input into future schemes.
2. Active travel should be accessible travel for all. The involvement of disabled people is crucial to inform the design of these and future traffic calming measures. Barriers to walking and cycling within the existing street environment should be addressed. The public consultation indicated that the street environment in Dulwich is not conducive for walking in many areas – many obstructions such as bins and overgrown planting, poor surfaces, lack of seating; pedestrian crossing times provided are too short and many do not have audible signals; motor traffic idling increases pollution and makes walking more difficult. Disabled people often feel excluded from exercise and active travel. A street accessibility assessment is recommended to identify barriers to active travel. The audit can also identify areas of potential conflict between cyclists and pedestrians and make recommendations on providing more seating.
3. Continued effective monitoring by Southwark Council of;
  - motor traffic levels
  - Active travel: walking, and cycling levels
  - bus journey times
  - school bus journey times

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<sup>3</sup> TfL Travel in London: Understanding our diverse communities, 2019

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Monitoring reports should include a breakdown of impact on protected groups.

4. Extension of the Blue Badge exemption across the borough to allow holders to reach essential or specialist services more easily round the borough.
5. Provide good signage and maps to assist people who need to drive to navigate detours and unfamiliar routes. This would help shorten delays and ameliorate anxiety and stress.
6. Ensure that Dial-a-Cab, taxi and private hire drivers are aware that they can access all streets for the purposes of dropping-off and picking up passengers with particular care to be taken with disabled and vulnerable people. This could include creating maps for distribution to drivers, as well as engagement through TfL Taxi and Private Hire (TPH) and trade associations.
7. Better provision of accessible facilities at local shopping centres including suitable accessible car and cycle parking for disabled people, accessible toilets and consideration of an adult Changing Places toilets.
8. Spaces around schools to be prioritised to promote active travel by children and low traffic pollution levels.
9. Greater awareness of and provision of targeted cycle training and cycle storage to make it easier for those protected groups who are able to cycle.
10. Liaison with neighbouring boroughs to address problems on boundary streets, including Herne Hill, Underhill Road and South Circular.
11. Further engagement with essential workers, private transport hire and night-time workers, needs to be considered to mitigate impact on their travel modes
12. Interventions should consider the differential deprivation levels within the Borough and prioritise areas of higher deprivation, as Streetspace schemes can particularly benefit people living without access to private green space or local safe public spaces for playing and socialising. Streetspace measures can make residential streets safer for play, socialising, and exercise. This is particularly important in areas with overcrowded housing and without private green space. Increased walking, cycling and meeting people socially outdoors are expected to benefit mental and physical health.

It should be noted that the outcome of this EQIA report is work in progress, the start of a process of co-evaluation of the scheme with residents, Southwark Council and relevant stakeholders. A traffic scheme can take three or four years to bed in and establish itself before any permanent change in behaviour or traffic pattern is observed and clear evidence obtained.

These measures if implemented carefully, with effective monitoring of motor traffic levels and potential traffic displacement, monitoring of walking and cycling levels and bus journey times, with active engagement of local people and addressing negative impacts, could be a positive response to the Covid-19 pandemic crisis that impacts most on disadvantaged communities and groups.

## APPENDICES

## 13. Appendix 1 Streetspace measures – evidence from similar schemes

A number of studies have looked at the impact of Streetspace measures across London including previous and more recent motor traffic restriction measures. Some of these are summarised here.

### Equity impact on deprived areas of location of new Streetspace measures

A spatial analysis of new traffic measures that was conducted in February 2021<sup>4</sup>, concludes that modal filters implementation has been broadly equitable at the city level and at the micro level. Deprived areas in London are considerably more likely than affluent neighbourhoods to receive new Streetspace measures as in the table (from the study) below.

Table 3: Alternative comparison of deprivation metrics by district: mean deprivation percentile inside versus outside LTNs

	A: mean deprivation percentile inside LTN	B: Mean deprivation percentile outside LTN	Difference A minus B
Enfield	24%	62%	-37%
Greenwich	32%	60%	-27%
Lewisham	48%	66%	-17%
Ealing	41%	55%	-14%
Hammersmith & Fulham	47%	53%	-6%
Sutton	25%	29%	-4%
Newham	70%	74%	-4%
Waltham Forest	59%	61%	-2%
Islington	66%	67%	-1%
Hounslow	52%	51%	0%
Hackney	80%	79%	2%
Lambeth	65%	62%	3%
Merton	35%	31%	4%
Camden	52%	47%	6%
Southwark	72%	63%	9%
Harrow	43%	32%	11%
Tower Hamlets	82%	68%	14%
Croydon	71%	51%	19%
Westminster	67%	46%	20%
Brent	81%	60%	20%

Deprivation percentiles are calculated by ranking each LSOA from 0 to 100 across London as a whole, with 100 corresponding to the highest level of deprivation.

Across London as a whole, people in the most deprived quarter were 2.7 times more likely to live in a new modal filtered area, compared to Londoners in the least deprived quarter.

### Response of disabled people to recent Streetspace measures in London (*Pave the Way, Transport for All, Jan 2021*)

<sup>4</sup> Equity in new active travel infrastructure: a spatial analysis of London's new Low Traffic Neighbourhoods, February 2021

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The disabled people's charity, Transport for All, conducted a survey of disabled people affected by traffic restriction measures across London and came to the following conclusions, summarised in their report *Pave the Way*<sup>5</sup>:

### **Negative impacts of measures**

These include:

- Lack of consultation and information about implemented measures has led to dissatisfaction and confusion.
- Longer car journey times for residents, as well as their visitors who provide care and support. This leads to travel becoming more exhausting, expensive, complicated or difficult with negative impacts on mental health. Taxi journeys are also more difficult with drivers unwilling to take the circuitous routes and journeys being more expensive.

### **Positive impacts of measures**

Many disabled people experienced genuine and meaningful benefits from the LTNS including:

- easier or more pleasant journeys.
- an increase in independence.
- a decrease in traffic danger and
- benefits to physical and mental health.

The conclusion is that ripping out the traffic restrictions measures and returning to normal isn't the solution either. "Normal - what we had before was not accessible enough either".

The most immediate barrier facing disabled people to make active travel journeys is the inaccessibility of the street (footways and cycle paths). For walking journeys this includes:

- Obstructed footways cluttered with obstacles – bins, car charging points, signs and A-boards, dock-less cycles and scooters left on the footway.
- Footways that are steep, uneven, and bumpy are difficult to traverse in a wheelchair.
- Lack of dropped kerbs at side road junctions and to cross the street. Sometimes kerbs are too high for mobility impaired people to step up or down to.
- Lack of seating and shelter means people are unable to stop and have a rest.
- Confusing layouts with too many bollards, space shared with other modes and poor signage.
- Crossings with no tactile warnings or dropped kerbs and obstructed by signs and clutter.

*Pave the Way* report recommendations include:

- Engaging with and listening to the perspectives of disabled people.
- A series of immediate measures and long-term solutions to address the many barriers that disabled people face to Active Travel.
- Encourage walking, wheeling and cycling; and create an accessible public transport system as a viable alternative to car use.

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<sup>5</sup> *Pave the Way: The impact of low traffic neighbourhoods on disabled people, and the future of accessible travel*, Transport for All, January 2021

## **Evidence on impact on levels of active travel, injury risk and street crime**

Evidence from post-implementation survey in 2020<sup>6</sup> from similar motor traffic restriction measures undertaken in the London Borough of Waltham Forest three years earlier, found that these were associated with more active travel, reduced car ownership, lower road injury risk, and reduced street crime. The survey found that:

- Residents increased their walking and cycling relative to people living elsewhere in Outer London (by 115 minutes for walking and 20 minutes for cycling after three years);
- Levels of car or van ownership decreased by 7% after three years.

Additional research found

- no increase in emergency service response times,
- an 18% reduction in street crime after three years, and
- a 75% reduction in the risk of being injured in a road traffic collision within modal filtered areas.

## **How motor traffic has affected residential streets compared to main roads in London**

Data from the London Travel Demand Survey 2017/8 to 2019/20 and quoted in a study<sup>7</sup> on impact of Streetspace measures, indicates that the majority (around 90%) of Londoners live on residential streets rather than in main roads or high streets (around 5% each) which are usually outside Streetspace schemes.

London's residential (minor) streets have seen an increase of 72% in motor traffic over the past decade, while traffic on its major roads fell by 3% (DfT, 2020). This is often attributed to the rise in satellite navigation use among drivers over the past decade which allows them to bypass main roads and use residential short cuts.

The need to reduce through motor traffic through residential streets provided an additional justification for Streetspace schemes, introduced during Covid-19 in the UK capital through emergency provisions allowing expedited implementation with concurrent consultation.

Studies show that differences between residential street and main road/high street residents by age group, income group, ethnic group, and disability status are relatively small, and apply more to outer than to inner London. Therefore, implementing Streetspace schemes in itself is not likely to pose major social equity issues (by benefiting those living on residential streets more than those living on main roads).

However, it is important that the 5% of residents living on main roads and the 5% of residents living on high streets also benefit from improvements that reduce the impact of motor traffic and increase their access to safe and pleasant active travel options.

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<sup>6</sup>*The Impact of Low Traffic Neighbourhoods on Active Travel, Car Use, and Perceptions of Local Environment during the COVID-19 Pandemic*, Aldred and Goodman, 2020

<sup>7</sup> *LTNs for all? Mapping the extent of London's new low traffic neighbourhoods*: a report by Possible and the Active Travel Academy, Aldred R, Verlinghieri E. 2020.

## Evidence of traffic evaporation

Evidence from previously implemented similar motor traffic reduction schemes reveals that fears of traffic displacement problems almost always fail to materialise, and that significant reductions in overall motor traffic levels across an area can happen as a result of people making a wide range of behavioural responses to the new traffic configurations<sup>8</sup>.

The most comprehensive study<sup>9</sup> of the phenomenon of disappearing or “evaporating” traffic was carried out by Sally Cairns, Carmen Hass-Klau, and Phil Goodwin in 1998 and followed up in 2002.

This brought together experience from 70 case studies of road space reallocation from general traffic, across 11 countries, with opinions from 200 transport professionals. It shows that traffic does not behave like water moving through pipes, finding an easier path as another narrows. Instead it is a force of human choice, driven by people making all sorts of different decisions when driving conditions change. The respondents in the Cairns study, for example, changed their mode of travel, chose alternative destinations, or the frequency of their journey, consolidated trips, took up car sharing or didn't make the journey at all.

In half of the case studies, there was a 11% reduction in number of vehicles across the whole area where road space for traffic was reduced, including the main roads.

This research shows that motor traffic restriction schemes do not simply shift traffic from one place to another but lead to an overall reduction in the numbers of motor vehicles on roads. In Waltham Forest this meant there were considerable reductions on streets within the neighbourhood – some streets have seen 90%+ reductions in motor traffic and 56% on average. On the surrounding roads there have been increases, but they have not taken all the displaced traffic<sup>10</sup>.

King's College London research<sup>11</sup>, based on modelling work where traffic volume is used as one of the inputs to determine air quality, suggests that there has not been a decrease in air quality on main roads following introduction of LTNs.

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<sup>8</sup> Evaporating traffic? Impact of low-traffic neighbourhoods on main roads, article by Emma Griffin, London Living Streets, July 2019 <https://londonlivingstreets.com/2019/07/11/evaporating-traffic-impact-of-low-traffic-neighbourhoods-on-main-roads/>

<sup>9</sup> Disappearing traffic? The story so far, S Cairns, S Atkins and P. Goodwin, [https://nacto.org/wp-content/uploads/2015/04/disappearing\\_traffic\\_cairns.pdf](https://nacto.org/wp-content/uploads/2015/04/disappearing_traffic_cairns.pdf)

<sup>10</sup> Walthamstow Village area wide scheme: 2020 Comparison of vehicle numbers before and after the scheme and during the trial <https://enjoywalthamforest.co.uk/work-in-your-area/walthamstow-village/comparison-of-vehicle-numbers-before-and-after-the-scheme-and-during-the-trial/>

<sup>11</sup> Air Quality: concentrations, exposure and attitudes in Waltham Forest, David Dajnak, Heather Walton, Gregor Stewart, James David Smith and Sean Beevers, 2020

## Relationship of car traffic and population health

A BMJ report<sup>13</sup> in Feb 2019 *Low traffic neighbourhoods and population health* reported that car use harms health, the environment, and society in many ways;

- Motor traffic is a major contributor to air pollution, which is estimated to cause 28,000-36,000 deaths in the UK annually.
- Traffic noise pollution is an under-recognised health harm, associated with increased risk of stroke and premature death.
- Car travel increases sedentary time and is a major opportunity cost in terms of the physical and mental health gains that could have been achieved by walking or cycling instead.
- In 2019, 1,752 people were killed by vehicle collisions in Great Britain, with another 25,945 seriously injured.

Research has shown how **negative impacts of motorised transport are usually unevenly distributed**, with vulnerable communities disproportionately affected by transport-related air pollution, traffic collisions and ill-health due to lack of exercise.

## Road safety relevance to ethnic minorities and low-income households

A recent study by Agilysis and Living Streets, *Road traffic and injury risk in ethnic minority populations*, May 2021 showed that deprived ethnic minority pedestrians are over three times more likely to be a casualty on Britain's roads than White non-deprived pedestrians. Ten years of police reported personal injury collision data from Great Britain was analysed to identify correlations between risk and community deprivation and ethnicity. The findings show that deprivation plays a significant role in the likelihood of a pedestrian being injured in a collision, and that being from an ethnic minority plays an additional part.



## Impact of Introducing Low Traffic Neighbourhoods on Road Traffic Injuries

Another recent study in January 2021<sup>12</sup> on the impact of introducing low traffic neighbourhoods on road traffic injuries examines the impact on road traffic injuries of introducing low traffic neighbourhoods in Waltham Forest, London.

Using Stats19 police data 2012-2019, they find a three-fold decline in number of injuries inside low traffic neighbourhoods after implementation, relative to the rest of Waltham Forest and the rest of Outer London.

They further estimate that walking, cycling, and driving all became approximately 3-4 times safer per trip. There was no evidence that injury numbers changed on boundary roads. Their findings suggest that low traffic neighbourhoods reduce injury risks across all modes inside the neighbourhood, without negative impacts at the boundary.

## 14. Appendix 2 References

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## 15. Appendix 3 Legislative context

### The Equality act 2010

Part 3 of the Equality Act 2010 covers the duties for service providers and public functions. These measures were initially legislated for in the Disability Discrimination Act 1995, as amended by the Disability Discrimination Act 2005, and the Regulations made under it.

The Disability Discrimination Act 1995 (DDA) made it unlawful for service providers to discriminate against disabled people in certain circumstances. From 1 October 2004 service providers had to take reasonable steps to remove, alter or provide a reasonable means of avoiding, a physical feature which made it impossible or reasonably difficult for disabled people to use a service.

On 1 October 2010, the Equality Act 2010 (EA) replaced most of the DDA. The duty on providers of goods, services and facilities was replaced with a duty to make **reasonable**

**adjustments**<sup>13</sup> in order to avoid a disabled person being placed at a **substantial disadvantage**<sup>14</sup> compared with non-disabled people when accessing services and facilities.

The EA replaced all previous anti-discrimination laws (nine major pieces of legislation and over 100 smaller pieces of legislation) including the DDA and protects people with the following nine 'protected characteristics':

- 1) Disability
- 2) Age
- 3) Gender Reassignment
- 4) Pregnancy and Maternity (including breastfeeding)
- 5) Marriage and Civil Partnership
- 6) Race
- 7) Religion or belief
- 8) Sex
- 9) Sexual Orientation

The principles of access to the built environment remains largely unchanged and the terms "DDA", "DDA regs" and "DDA compliant" are still widely used and generally interpreted as pertaining to access for disabled people even though the legislation is subsumed into the Equality Act.

### **Duties under the Equality Act**

The following information focuses on the law with regard to treatment of disabled people but may also apply to some of the other protected characteristics.

The Act contains provisions on direct discrimination, harassment and indirect discrimination. The law protects anyone who has, or has had, a disability. All service providers<sup>15</sup> must treat everyone accessing their goods, facilities or services fairly, regardless of any protected characteristic (e.g. age, gender, race, sexual orientation, disability, etc.), and should guard against making assumptions about the characteristics of individuals.

Service providers also have an obligation to make reasonable adjustments to help disabled people access their goods, facilities and services. The legal duty to make reasonable adjustments applies only for disabled people, and not to people with other protected characteristics.

Discrimination can arise if:

- A disabled person is treated less favourably, is provided with a lower standard of service or is refused service
- Reasonable adjustments to the delivery of a service have not been made in order to allow disabled people to use them

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<sup>13</sup> The EA does not prescribe what a reasonable adjustment might be – this is to be determined by the particular circumstances in each case.

<sup>14</sup> Anything that is more than minor or trivial

<sup>15</sup> Southwark Council is a service provider under the Equality Act

Different treatment can sometimes be justified and will be lawful if it can be shown that it is intended to meet a legitimate objective in a fair, balanced and reasonable way. This means that a service provider must strike a careful balance between the negative impact of a provision on the disabled person and any lawful reason for applying it.

What is 'reasonable' will depend on a number of circumstances, including the cost of an adjustment. The Equality Act 2010 requires that service providers must think ahead (anticipate) and take steps to address barriers that impede disabled people. Providers should not wait until a disabled person experiences difficulty using a service, as this may make it too late to make the necessary adjustment. It is no longer necessary to show that the provider's practice etc. makes it 'impossible or unreasonably difficult' to access the service - **the test is whether the practice places the disabled person at a "substantial disadvantage"**; legally this is a lower threshold for action.

In summary, service providers are required to:

1. Make 'reasonable' changes to the way things are done – such as changing practices, policies or procedures where disabled people would be at a 'substantial disadvantage' e.g. amend a 'no dogs' policy.
2. Make 'reasonable' changes to the built environment - such as making changes to the structure of a building to improve access e.g. fitting handrails alongside steps.
3. Provide auxiliary aids and services - such as providing information in an accessible format, an induction loop for customers with hearing aids.

Above and beyond the service provider duties, the Public Sector has an **additional Equality Duty** (section 149) which has three aims. It requires public bodies to have 'due regard' to the need to:

- eliminate unlawful discrimination, harassment, victimisation and any other conduct prohibited by the Act;
- advance equality of opportunity between people who share a protected characteristic and people who do not share it; and
- foster good relations between people who share a protected characteristic and people who do not share it.

Having 'due regard' means consciously thinking about the three aims of the Equality Duty as part of the process of decision-making. The Equality Duty also explicitly recognises that disabled people's needs may be different from those of non-disabled people. Public bodies should therefore take account of disabled people's impairments when making decisions about policies or services. **This might mean making reasonable adjustments or treating disabled people better than non-disabled people in order to meet their needs.**

Compliance with the Act can only be legally determined through a Civil Action in a Court of Law.

### **Other relevant legislation**

The Equality Act is not the only legislation that is applicable to the provision of an accessible environment and service and it should, therefore, be considered in conjunction with other legislative requirements, such as:

- Planning & Highways legislation
- Listed Buildings Consent
- Building Regulations
- Health and Safety Regulations
- Licensing Laws
- The UN Convention on the Rights of Persons with Disabilities\*\*

Note: this is a guide and not a complete list.

\*\*The Convention on the Rights of Persons with Disabilities (CRPD) is an international legal agreement. It exists to protect and promote the human rights of disabled people. The UK signed the treaty in 2009 – a commitment to promote and protect the human rights of disabled people. On accessibility ([Article 9](#)), the Convention requires countries to identify and eliminate obstacles and barriers and ensure that disabled people can access their environment, transportation, public facilities and services, and information and communications technologies. Courts have treated regard to the CRPD as being part and parcel of the duty to have 'due regard' to the equality enhancing aims of s149 Equality Act 2010.

### **Scope of Report**

This report is based on information and access provided to the consultant at the time of audit. Any recommendations are based upon evidence seen. While every care is taken to interpret current Acts, Regulations and Approved Codes of Practice, these can only be authoritatively interpreted by Courts of Law. Undertaking the recommendations in the report may assist with meeting obligations under the Equality Act 2010 but does not guarantee this, as further adjustments may be needed as and when an individual's particular disability requires. The Act does not contain prescriptive standards to improve accessibility or inclusion. As such, compliance with the Act cannot ultimately be determined. Only tangible standards set out in guidance documents can be referred to for compliance.

## 16. Appendix 4 CAE Terms and conditions

### Terms and Conditions

1. The advice and recommendations provided in our audit reports or appraisals does not guarantee legal compliance. There may be other changes required, such as amendments to management practices, staff training in disability awareness and the provision of printed and electronic information in accessible formats
2. The reports and work issued by us are specifically intended for the client, and any reliance on the content by any third party shall be at their sole risk, unless otherwise expressly agreed by us in writing. Unless specifically agreed otherwise, there will be no rights of assignment.
3. CAE access consultancy and /or training advice and recommendations do not specifically make financial allowance for moving, alteration, diversion or adaptation of existing building services, and you may wish to commission feasibility studies or detailed investigation prior to implementing our recommendations where building services are adjacent to recommended works
4. All recommendations in audit reports should be reviewed prior to implementation of any works to ensure validity at the time as case law is likely to further clarify the interpretation of legislation over time and legislative changes may occur.
5. CAE retain the copyright in and ownership of all reports and other documents presented to the Client under the contract, unless specifically otherwise agreed. Clients may not make any alterations to the content of any reports or other documentation prepared by us without prior consent in writing. Any alteration that the Client wants to make to the original documentation must be reviewed by the Auditor/Consultant and all changes must be expressly agreed in writing
6. Habinteg does not accept any responsibility for any loss occasioned by reason of non-compliance with legislation, including the Equality Act 2010 and any subsequent amendments. All advice is given in good faith and based upon information and knowledge available at the time of the audit.
7. Supply of Services. Habinteg shall from the date set out in the Order and for the duration of the Contract supply the Services to the organisation in accordance with the terms set out in this proposal.
8. In providing the Services, the organisation will : co-operate with Habinteg in all matters relating to the Services, observe all health and safety rules and regulations and any other security requirements that apply on site visits at premises;
9. Charges and payment. Habinteg may at any time, without notice to the Supplier, set off any liability of the Supplier to Habinteg against any liability of Habinteg to the Supplier. Any exercise by Habinteg of its rights under this clause shall not limit or affect any other rights or remedies available to it under the Contract or otherwise.
10. Intellectual property rights. All Habinteg Materials are the exclusive property of Habinteg. All intellectual property rights arising out of or in connection with the Services shall be the property of Habinteg unless otherwise agreed in writing by the parties.
11. Indemnity. The Supplier shall indemnify Habinteg against all liabilities, costs, expenses, damages and losses (calculated on a full indemnity basis) suffered or incurred by Habinteg arising out of or in connection with: (a) any claim made against Habinteg for actual or alleged infringement of a third party's intellectual property rights arising out of, or in connection with, the manufacture, supply or use of the Goods, or receipt, use or supply of the Services (excluding Habinteg Materials); (b) any claim made against Habinteg by a third party for death, personal injury or damage to property arising out of, or in connection with, defects in the Goods, as delivered, or the Deliverables; (3) and any claim made against Habinteg by a third party arising out of or in connection with the supply of the Goods, as delivered, or the Services. This clause 9 shall survive termination of the Contract.
12. Insurance. Habinteg holds professional indemnity insurance of £10m. No liability shall attach to the Auditor/Consultant in respect of the duties executed except such liabilities as are covered by that insurance. The level of liability will be limited to the amount covered by professional indemnity insurance.
13. Confidentiality. Each party undertakes that it shall not at any time disclose to any person any confidential information concerning the business, affairs, customers, clients or suppliers of the other party, except as permitted by this clause. Each party may disclose the other party's confidential information: (a) to its employees, officers, representatives, subcontractors or advisers who need to know such information for the purposes of carrying out the party's obligations under the Contract. Each party shall ensure that its employees, officers, representatives, subcontractors or advisers to whom it discloses the other party's confidential information must comply with this clause 11; and (b) as may be required by law, a court of competent jurisdiction or any governmental or regulatory authority. Neither party shall use the other party's confidential information for any purpose other than to perform its obligations under the Contract.
14. Termination. Without affecting any other right or remedy available to it, Habinteg may terminate the Contract: (a) with immediate effect by giving written notice to the Supplier if: (i) there is a change of control (defined in section 1124 of the Corporation Tax Act 2010) of the Supplier; or (ii) the Supplier's financial position deteriorates to such an extent that in Habinteg's opinion the Supplier's capability to adequately fulfil its obligations under the Contract has been placed in jeopardy; or (b) for convenience by giving the Supplier [one] month written notice.
15. Without affecting any other right or remedy available to it, either party may terminate the Contract with immediate effect by giving written notice to the other party if: (a) the other party commits a material breach of any term of the Contract which breach is irremediable or (if such breach is remediable) fails to remedy that breach within a period of 14 days after being notified in writing to do so (b) the other party takes any step or action in connection with its entering administration, provisional liquidation or any composition or arrangement with its creditors (other than in relation to a solvent restructuring), being wound up (whether voluntarily or by order of the court, unless for the purpose of a solvent restructuring), having a receiver appointed to any of its assets or ceasing to carry on business or (c) the other party suspends, or threatens to suspend, or ceases or threatens to cease to carry on all or a substantial part of its business.
16. Force majeure. Neither party shall be in breach of the Contract nor liable for delay in performing, or failure to perform, any of its obligations under it if such delay or failure results from events, circumstances or causes beyond its reasonable control. If the period of delay or non-performance continues for [12] [weeks], the party not affected may terminate this agreement by giving [30] [days] written notice to the affected party.
17. Notices. Any notice or other communication given to a party under or in connection with the Contract shall be in writing and shall be delivered by hand or by pre-paid first-class post or other next working day delivery service at the address shown on the Order. A notice or other communication shall be deemed to have been received: on signature of a delivery receipt or, if sent by pre-paid first-class post or other next working day delivery service, at 9.00 am on the second business day after posting. This clause does not apply to the service of any proceedings or other documents in any legal action.
18. Severance. If any provision or part-provision of the Contract is or becomes invalid, illegal or unenforceable, it shall be deemed modified to the minimum extent necessary to make it valid, legal and enforceable. If such modification is not possible, the relevant provision or part-provision shall be deemed deleted.
19. Waiver: A waiver of any right or remedy is only effective if given in writing and shall not be deemed a waiver of any subsequent breach or default. A failure or delay by a party to exercise any right or remedy provided under the Contract or by law shall not constitute a waiver of that or any other right or remedy, nor shall it prevent or restrict any further exercise of that or any other right or remedy.
20. No partnership or agency. Nothing in the Contract is intended to, or shall be deemed to, establish any partnership or joint venture between the parties, constitute either party the agent of the other, or authorise either party to make or enter into any commitments for or on behalf of the other party.
21. Entire agreement. The Contract constitutes the entire agreement between the parties and supersedes and extinguishes all previous agreements, promises, assurances, warranties, representations and understandings between them, whether written or oral, relating to its subject matter. Third party rights. The Contract does not give rise to any rights under the Contracts (Rights of Third Parties) Act 1999 to enforce any term of the Contract.
22. Variation. Habinteg may vary these Conditions in order to comply with any legal, regulatory or statutory duty or obligation. Except as set out in these Conditions, no variation of the Contract, including the introduction of any additional terms and conditions, shall be effective unless it is agreed in writing and signed by the parties or their authorised representatives.
23. Governing law. The Contract, and any dispute or claim (including non-contractual disputes or claims) arising out of or in connection with it or its subject matter or formation shall be governed by and construed in accordance with the law of England and Wales. Each party irrevocably agrees that the courts of England and Wales shall have exclusive jurisdiction to settle any dispute or claim (including non-contractual disputes or claims) arising out of or in connection with the Contract or its subject matter or formation