

Sustainable Transport Strategy- Evidence Base

Introduction

This report provides a summary of the data and evidence that will underpin the Council's Sustainable Transport Strategy.

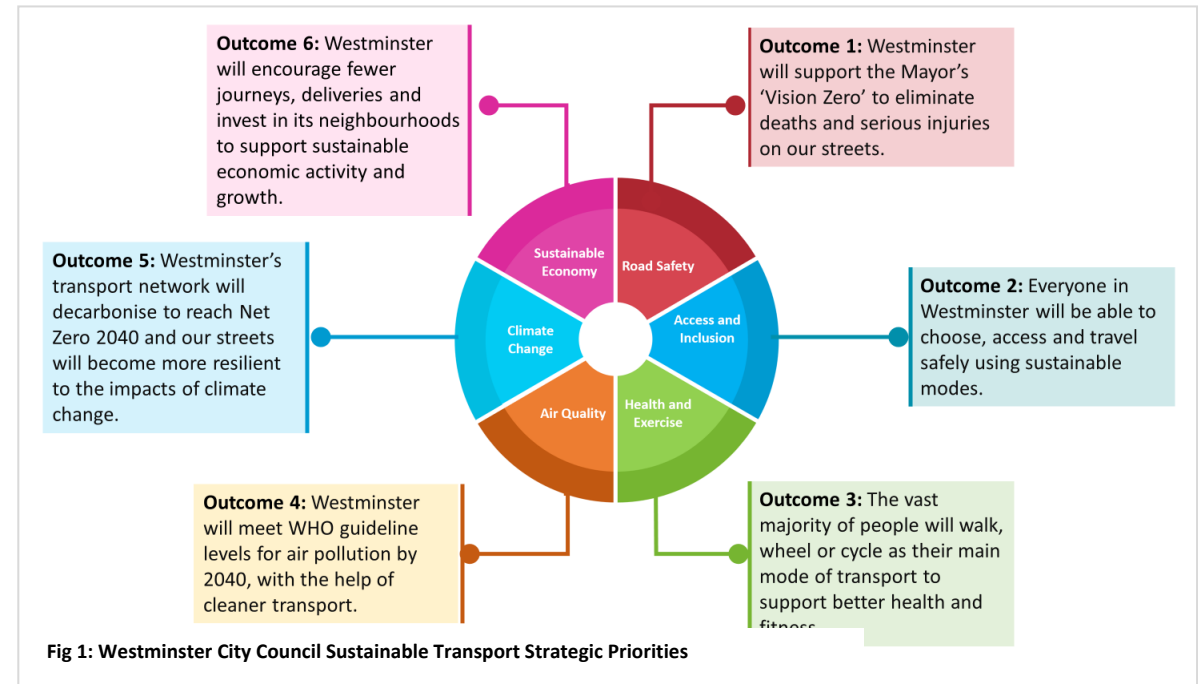
The Strategic Transport Strategy aligns with the Fairer Westminster ambitions and covers the following priorities:

- ❖ Road Safety
- ❖ Access and Inclusion
- ❖ Health and Exercise
- ❖ Air Quality
- ❖ Climate Change
- ❖ Sustainable Economy

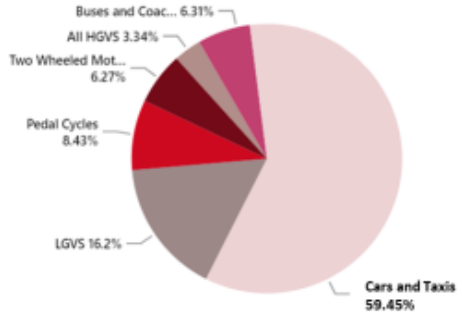
This report will provide analysis on available data for each priority, highlighting the main challenges.

Presently there are gaps in our knowledge for certain aspects and research is underway to address these (e.g. freight deliveries, The Air Quality Action Plan 2024-2029, a statutory requirement that must be completed by the end of the year).

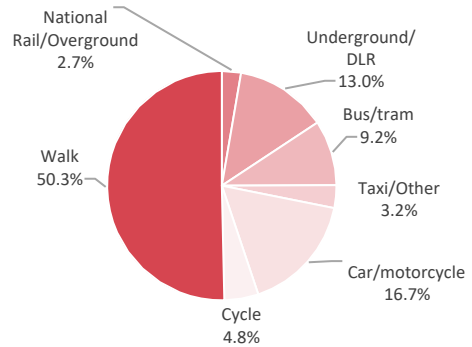
The process for writing the Sustainable Transport Strategy will be iterative, and we will access additional data and insights to ensure our Sustainable Transport Strategy and Delivery Plan are built on a sound evidence base.



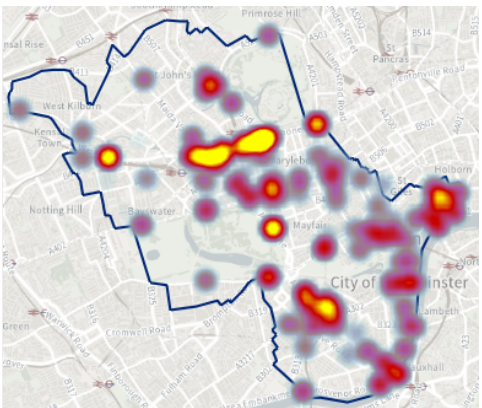
Annual average of traffic through Westminster: Vehicle type (%) 2022



Proportion of Westminster residents' trips per day by main travel mode (7-day week), 2022/23



Traffic through Westminster – 2022 Hotspots 2022



Overview

- ❖ **66%** of Westminster residents have stated they do not own a vehicle which indicates a significant proportion of vehicles on Westminster roads are workers, commuters and visitors.
- ❖ Westminster traffic hotspots include areas surrounding terminus underground and railway stations: e.g., Marylebone, Vauxhall, Victoria.
- ❖ Church Street, Little Venice are also traffic hotspots.
- ❖ Most trips made by Westminster residents in 2022/23 were either walking (**50.3%**) or cycling (**4.8%**). For Greater London, **3%** of trips were cycling and **39.8%**, walking.

Proportion of residents' trips per (7-day week), 2022/23

	Cycle	Walk
Camden	6.7%	49.5%
Hammersmith & Fulham	4.3%	51.5%
Kensington & Chelsea	5.8%	48.5%
Westminster	4.8%	50.3%
Inner London	4.9%	47.2%
Greater London	3.0%	39.8%

Table 1: proportion of residents' cycling and walking trips for Westminster's neighbouring LAs

Key facts

66%

of Westminster residents
Do **NOT** own a vehicle

31%

of residents
feel heavy traffic is an issue

2.2m

Estimated vehicles
used Westminster major or minor
roads in 2022

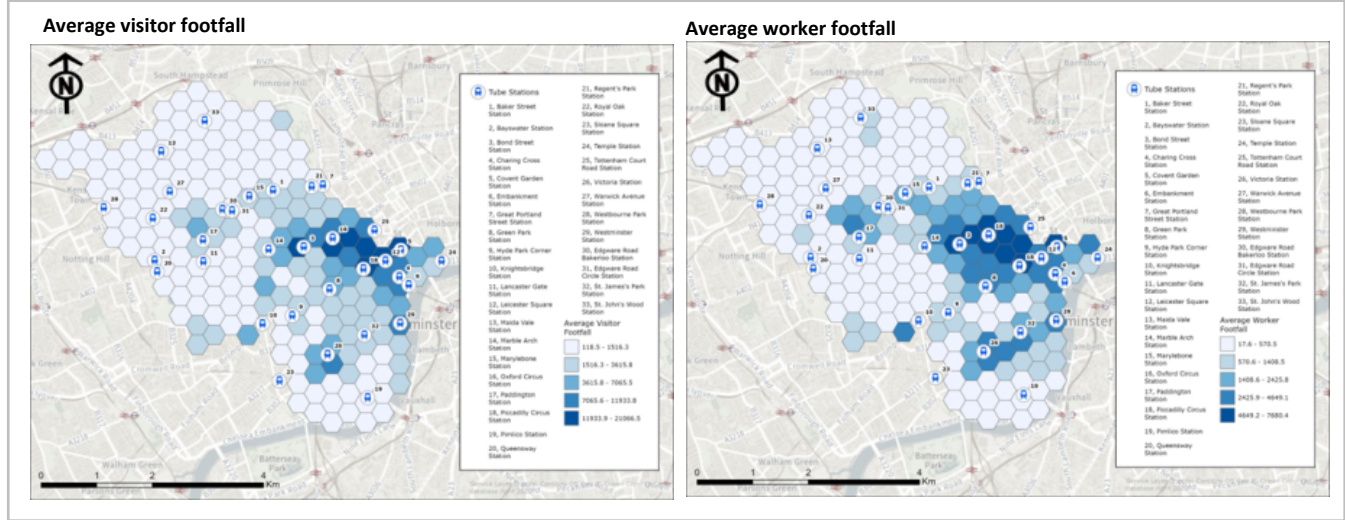
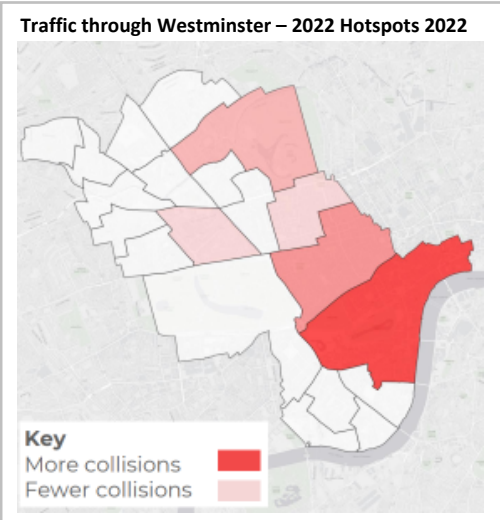
- ❖ Our evidence shows that between to meet our strategic priorities we should:
 - ❖ Develop and implement a plan to support the Mayor's 'Vision Zero' to eliminate deaths and serious injuries on Westminster streets.
 - ❖ Improve access to sustainable modes of transport and ensure that everyone in Westminster can choose, access, and travel safely.
 - ❖ Encourage walking, wheeling, and cycling as the main mode of transport to support better health and fitness.
 - ❖ Implement measures to meet WHO guideline levels for air pollution by 2040, with the help of cleaner transport.
 - ❖ Decarbonise Westminster's transport network to reach Net Zero 2040 and make streets more resilient to the impacts of climate change.
 - ❖ Encourage fewer journeys and deliveries and invest in neighbourhoods to support sustainable economic activity and growth.
 - ❖ Monitor progress towards achieving these outcomes and adjust the plan as needed to ensure success. -

Challenges:

- ❖ Potential decongestion of traffic in identified hotspots
- ❖ Reducing the number of cars and taxis traffic, encouraging more people (residents, workers) to use public transport, especially buses and coaches
- ❖ Addressing challenges under each strategic priority

Road Safety

The footfall maps show average footfall May 22 – Dec 23



❖ The top 5 wards where people have been killed or seriously injured between 2020 – 2022 were

- ❖ St James
- ❖ West End
- ❖ Regents Park
- ❖ Hyde Park
- ❖ Marylebone

❖ Our average footfall data (May 22 – Dec 23), shows that the areas with the higher collisions, correlate to areas with high worker and visitor footfall.

Challenges

- ❖ Our current cycle lanes are combined with our main roads - can we provide a safer cycle network away from main road traffic, preferably in cleaner, low emission areas?
- ❖ How do we encourage more of our residents to cycle or walk, influencing improved health outcomes in line with our Fairer Westminster and #2035 ambitions?
- ❖ Introduction of road-sharing and road safety education campaigns.
- ❖ Increase traffic lights crossing times in accident hotspot areas.

- ❖ Between 2013 – 2022 (excluding 2020 / 21 – pandemic years), Westminster had the highest number of road collisions and casualties each year, when compared to other London Local Authorities.
- ❖ During the same period Westminster has seen the proportion of our average pedal cycle traffic increase from **5.9%** to **8.4%**. This increase in pedal cycle traffic coincides with the introduction of the London-wide strategic cycle network.
- ❖ Paradoxically, the introduction of the London Strategic Cycle Network has seen a disproportionate increase in collisions and casualties involving cyclists in Westminster traffic from **24%** in 2013 to **32%** in 2022

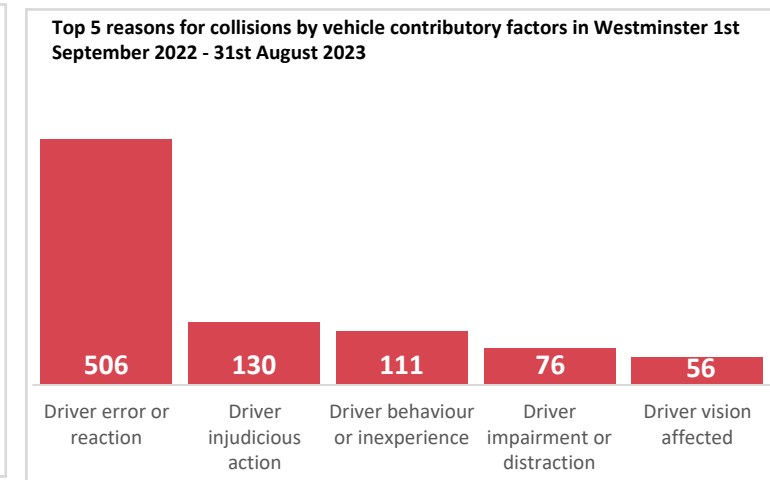
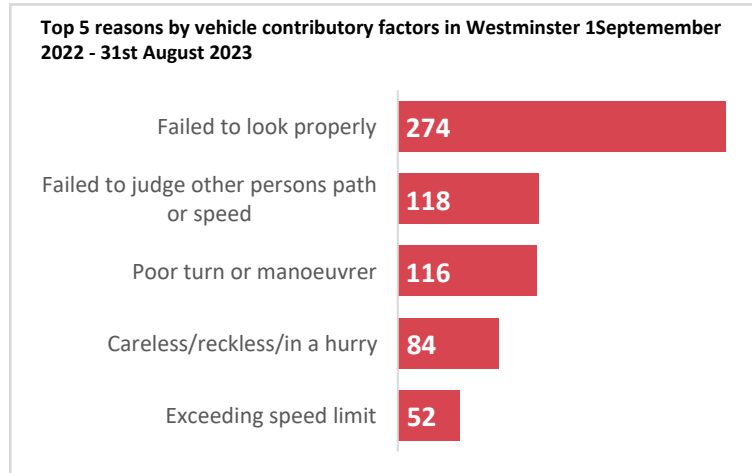
Percentage reduction for all ages killed or seriously injured in road traffic accidents (2020-22)	
Camden	6.9%
Hammersmith & Fulham	-4%
Kensington & Chelsea	-0.7%
Westminster	-2.7%
Minimum for All London Boroughs (excl City)	-0.89
Maximum for All London Boroughs (excl City)	12.3%

Westminster has seen an increase in the number of people seriously killed or injured (see table 2).

Table 2 is based on a 3-year (calendar) rolling average, up to the 2022, where a positive figure indicates improved performance (i.e. a reduction in the number of casualties compared with the previous 3-year rolling period).

Table 2: Percentage reduction for all ages killed or seriously injured in road traffic accidents (2020-22) for Westminster's neighbouring LAs

619 cyclist casualties (2022)	32% casualties in Westminster involve cyclists	1,794 road collisions in Westminster (2022)	1,935 road casualties in Westminster (2022)
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In recent years Westminster has faced the highest number of all types of collision of any London Borough - collisions involving Cyclists and Pedestrians being the greatest in number.

In Westminster the total number of collisions between 2019 and 2023 has marginally reduced. But this near flatlining needs to be addressed if the City Council, its stakeholders and all other road users wish to see the elimination of all Killed and Serious Injuries (KSIs) by 2041, as per London's Vision Zero Commitment.

Post-pandemic, all road casualties have reduced from between 1,700-1,900 a year to 1,100-1,400. The number of people killed on our roads has remained stable, whilst there has been a slight rise in those seriously injured. The number of slight injuries has decreased. Casualties are involved in collisions. More collisions occur on Westminster roads compared with TfL roads.

Most collisions occur in daylight hours and have increased since 2020. Collisions increase throughout the day, peaking between 6pm and 7pm on Westminster roads and at 5pm on TfL road

Summary

The top 5 contributory factors are (in order):

- ❖ Failed to look properly (stable)
- ❖ Failed to judge another person's path or speed (stable)
- ❖ Poor turn or manoeuvre (stable)
- ❖ Failed to look properly (pedestrian) (increasing)
- ❖ Careless/reckless/ in a hurry (stable)

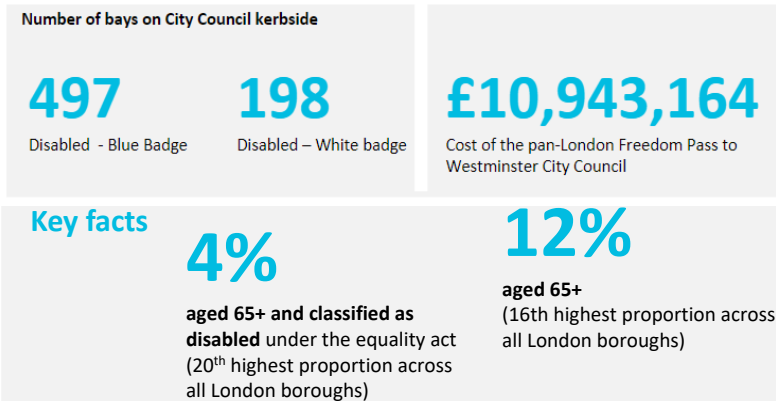
The top 5 overarching contributory factor categories are (in order)

- ❖ Driver error/ reaction (stable)
- ❖ Pedestrian (increasing)
- ❖ Driver behaviour/ inexperience (stable) - Driver injudicious action (stable)
- ❖ Driver impairment/ distraction (stable)

Access & inclusion

- ❖ Church Street has the highest proportion of disabled residents aged 65+ and disabled at **6.1%** followed by Pimlico South and Westbourne (**5%**)
- ❖ Potential isolation of disabled residents and residents aged 65+ who typically prefer to be close to home
- ❖ On average, those with disabilities do more of their shopping on their local high street than people without disabilities (58% vs 51%), and only do 20% of their shopping online.
- ❖ The City Survey shows that **28%** of residents surveyed aged 65+ and **32%** of disabled residents had not visited any of the following facilities in Westminster in the previous 12 months:

- ❖ Parks + open spaces
- ❖ Libraries
- ❖ Leisure Centres



Challenges

- ❖ Improved accessibility to Council service for our more vulnerable residents e.g. better use of the Council bus fleet, including trips to community hubs and other Council services.
- ❖ Encourage a shift from public transport with the provision of walking and cycling routes away from the main road network including more street furniture for rest spots on longer walks and cycling.
- ❖ Improve access to sustainable modes of transport and ensure that everyone in Westminster can choose, access, and travel safely.

Night travel

- ❖ When asked what would make women feel safer in Westminster between 5pm and 6am, **63%** of respondents stated that well-lit areas would make them feel safer. This increased to **70%** amongst female respondents, compared to **43%** for males and **61%** of worker / volunteers
- ❖ **73%** of women perceived travelling by private car to be the safest transport option at night.
- ❖ Women mentioned Leicester Square and Victoria Coach Station as areas where they feel particularly unsafe
- ❖ Concentration of criminal incidents predominantly theft related between Piccadilly Circus and Leicester Square tube station. The key times for crimes occurring at locations of interest to the night-time economy are predominantly overnight Friday/Saturday and Saturday/Sunday. British Transport Police data also shows that there is a clear shift to West End stations at night.
- ❖ Insufficient signage is a challenge for residents, visitors and tourists which contributes to feeling unsafe and confused.

22%

Stated cheaper transport would encourage them to stay in Westminster after 6pm

36%

better availability of late-night transport would make people feel safer in Westminster

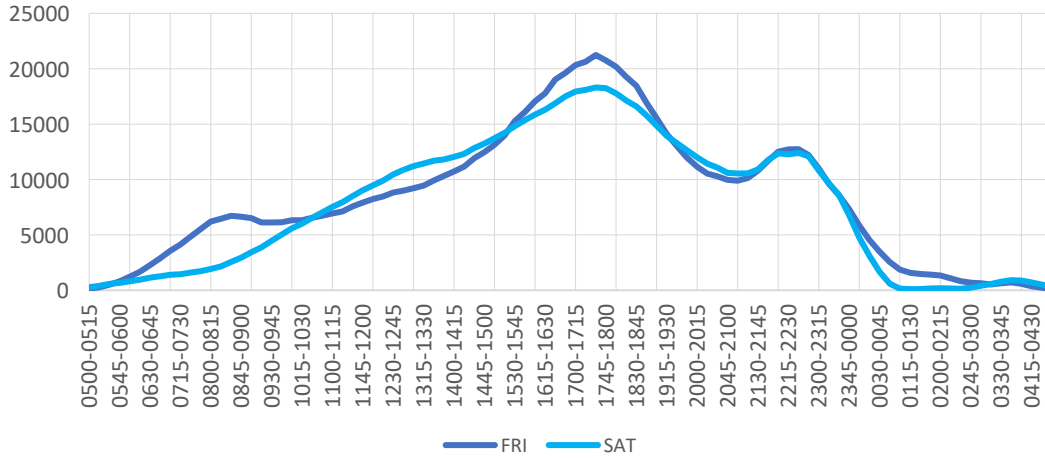
Challenges

- ❖ Need to create a safer and secure travelling infrastructure and environment especially for women.
- ❖ Investigate designated Westminster pickups / drop offs for taxis
- ❖ Additional safety measures at high crime areas
- ❖ Improved signage for walking routes

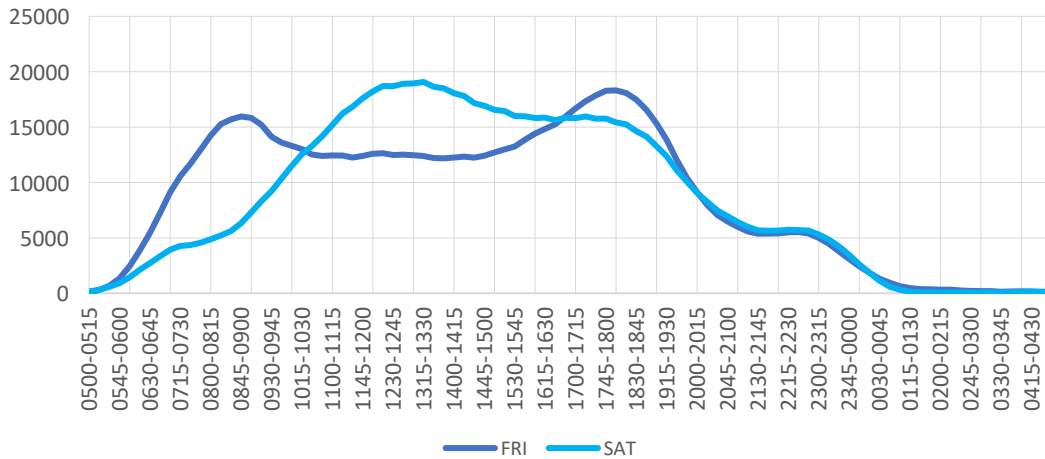
Night travel

Underground station gate numbers for all Westminster Stations over 22:00pm to 5.00am period (2020)

Entries by 15-min (NBT22)



Exits by 15-min

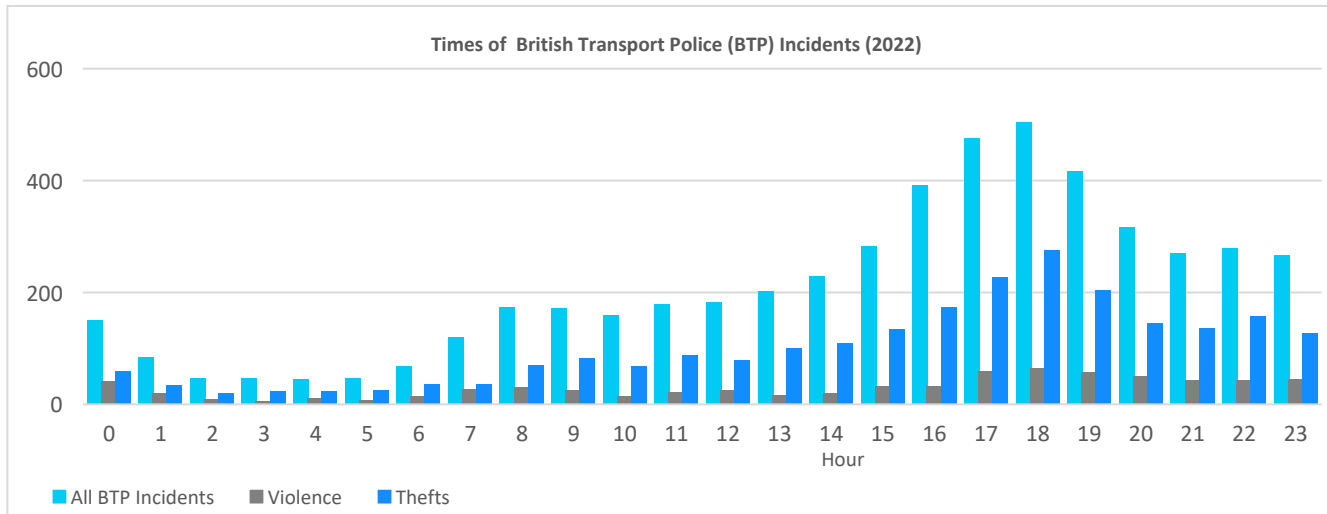


Night tubes (Friday and Saturdays) operate through on Central, Jubilee, Northern, Piccadilly and Victoria Lines.

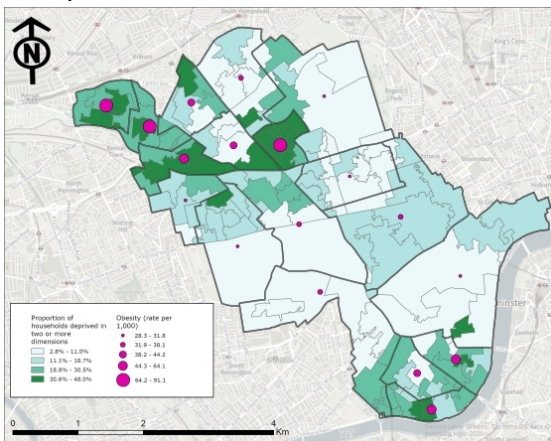
Our incident pattern analysis of crime in Westminster illustrates that there is a concentration of offending in the West End and near to transport hubs. Over 2022 there were **5,111** crimes recorded by British Transport Police (BTP) in Westminster. Theft accounted for nearly **48% (2,440)** of all of incidents, followed by violence (**14% 719**), public order (**14% 730**) and drugs (**5% 253**).

The key times for crimes occurring at locations of interest to the night-time economy are predominantly overnight Friday/Saturday and Saturday/Sunday. BTP data also shows that there is a clear shift to West End stations at night.

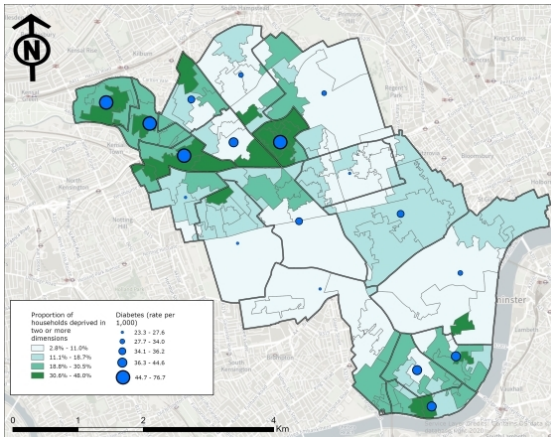
There is a concentration of criminal incidents predominantly theft related between Piccadilly Circus and Leicester Square tube station. There are further smaller concentrations crimes around Charing Cross train station and the Embankment area at the west end of the strand and close to Trafalgar Square.



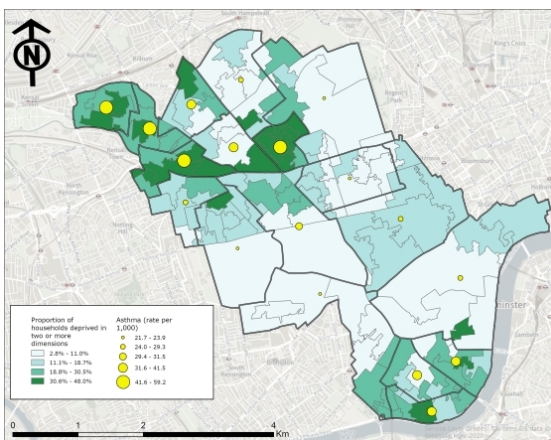
Obesity



Diabetes



Asthma



Health and exercise

- ❖ The proportion of households with asthma, diabetes or obesity tend to be highest in the Council's most deprived wards, Westbourne, Queens Park, Church Street, Pimlico.
- ❖ Westminster can encourage walking, wheeling, and cycling as the main mode of transport to support better health and fitness by providing healthy and inclusive environments and a safe and secure infrastructure especially for shorter journeys
- ❖ Other issues often acting as a deterrent to more active travel include high traffic volumes; parking on footways and in cycle lanes; fear of crime/collisions; and poorly maintained and cluttered footways.

Active Lives Survey –2021 / 2022

	Physically Active (At least 150 mins per day)	Fairly active (30-149 mins per week)	Physically inactive (less than 30 mins per week)
Camden	71.1%	9.5%	19.4%
Hammersmith & Fulham	73.0%	7.1%	19.9%
Kensington & Chelsea	62.4%	13.3%	24.3%
Westminster	70.4%	8.8%	20.9%
Inner London	68.5%	10.5%	21.0%

Table 3: Active Lives Survey 2021 / 22 Activity levels of Westminster's neighbouring LAs

- ❖ The Active Lives Survey indicates that Westminster residents have become more active since 2015 /16 when **63.2%** stated that they were active for at least 150 minutes per day, to **70.4%** in 2021 / 2022.
- ❖ Table 3 below shows how we compared with neighbouring inner London LAs in 2021 . 2022

Challenges

- ❖ Securing the extension of the Mayor of London's and/or other Cycle Hire Schemes to the Council.
- ❖ Create healthy and inclusive environments that encourage Westminster residents, visitors and workers to choose walking or cycling within the Council.
- ❖ How can we encourage more cycling and walking all year round?
- ❖ Better lit streets, better parking for bikes.
- ❖ Need to develop an understanding of the impact transport has on the mental wellbeing of users.

Key facts

71%

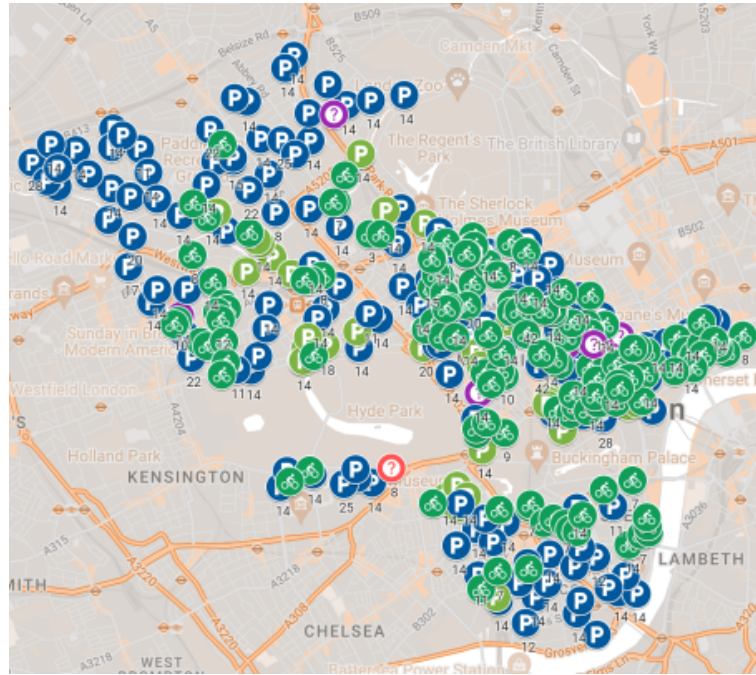
physically active residents

21%

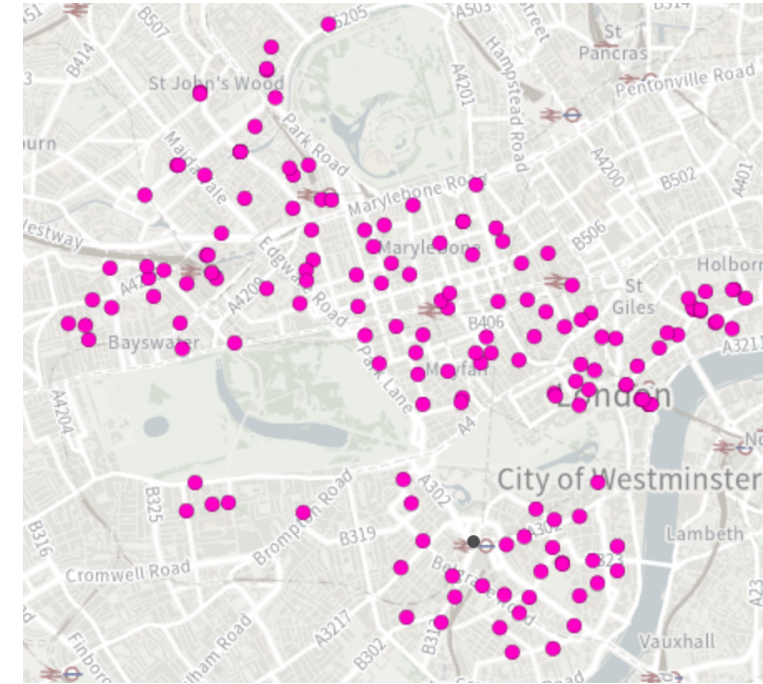
physically inactive residents

- ❖ [Strava Metro](#) is a free activity app that monitors the cycling and walking activity of its users
- ❖ 340.1K people using the app, walked and 86.8K cycled in / through Westminster in the last year.
- ❖ Strava Westminster data show seasonal trends with users being more active on both activities during the spring and summer months.
- ❖ Santander docked bikes do not have a great presence in the more deprived northern wards in the council.
- ❖ From an accessibility standpoint, it shows that 50% of London's dockless e-bikes are in areas with higher levels of deprivation. This demonstrates that the vehicles are available for the general population, not just in higher income areas, therefore improving access to transport services for a wide range of people. Over 1.25m dockless riders have taken more than 12m e-bike trips. Usage has increased on average by 10% each month.
- ❖ Dockless e-bikes also played a significant role in encouraging people to cycle again or for the first time in London, particularly among female users.
- ❖ In the spring/summer, weekly trips for dockless bikes and scooters in Westminster can exceed **100,000**. The average distance travelled on any given day by dockless bikes in Westminster is around **2.8km** which equates to roughly 14 minutes of cycling time.

Dockless bicycles and scooter stations



Santander cycles docking stations in Westminster



Dockless e-bikes extend the reach of public transport – on a typical weekday morning 97% of the population within the operating zone are within two minutes' walk of a bike. Around 7% of Londoners live within the same distance to tube and rail stations.”

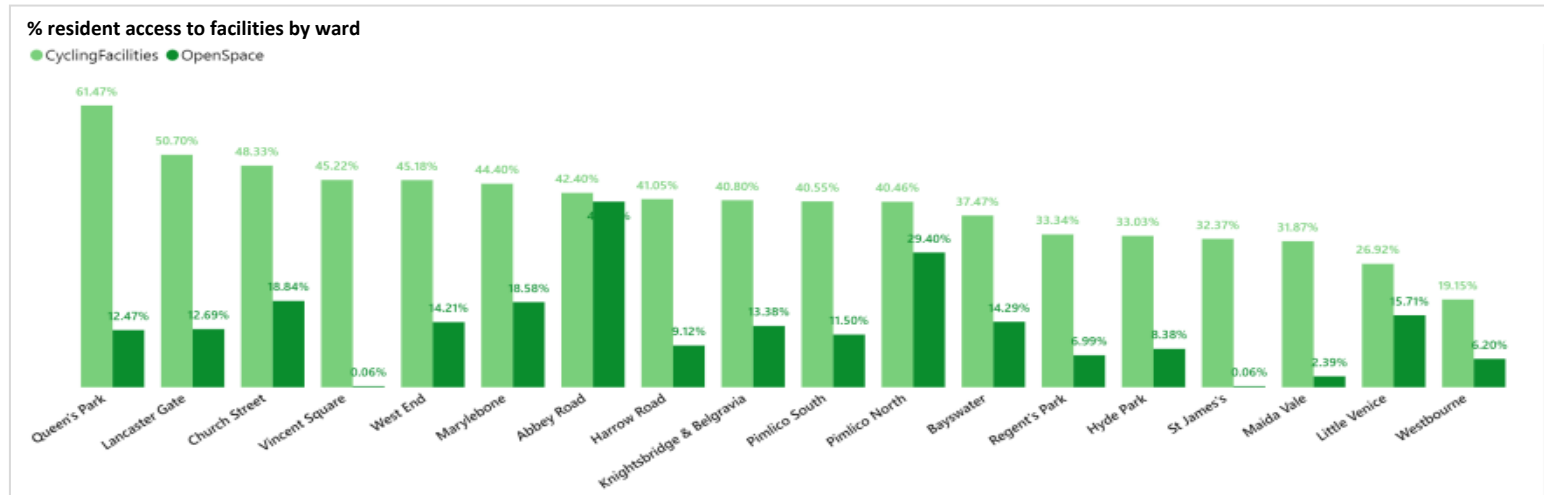
Key facts

250,000

trips entering Westminster bays using dockless bikes and scooters
December 2023

56%

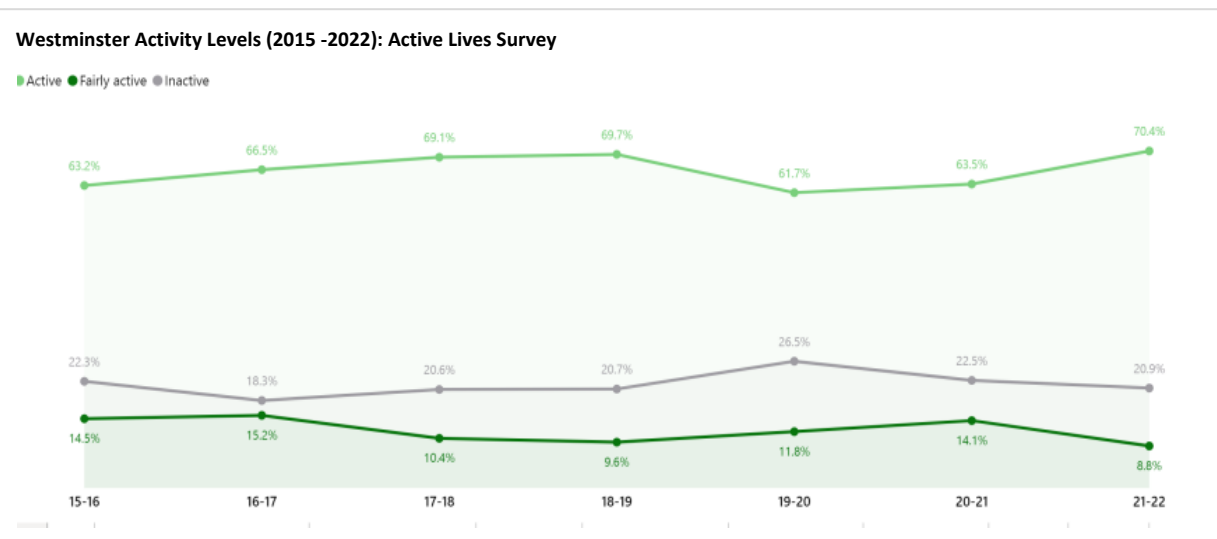
dockless bikes and scooter trips in Westminster start and end in the borough
December 2023



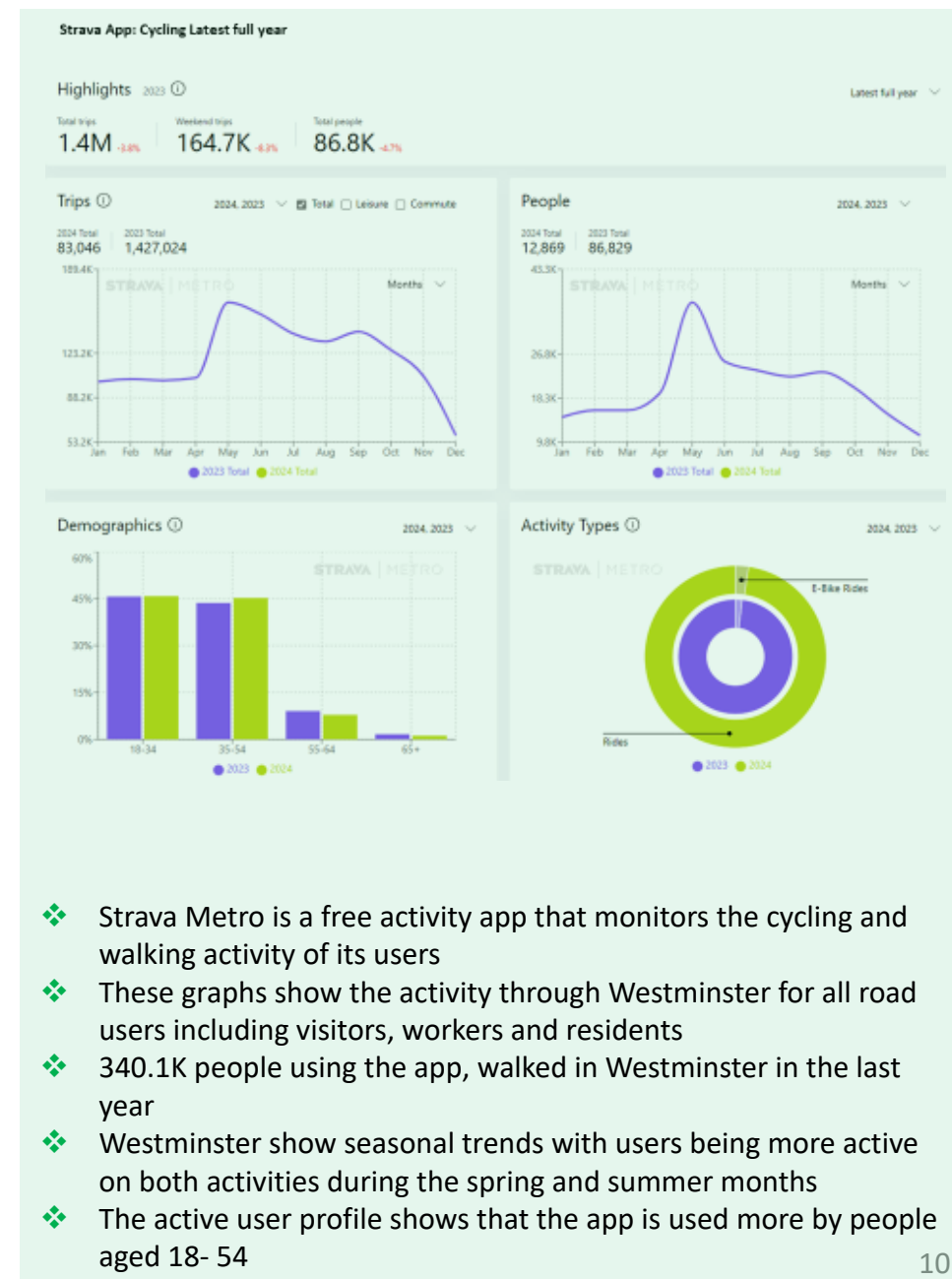
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Table 3: Active Lives Survey 2021 / 22 Activity levels of Westminster’s neighbouring LAs



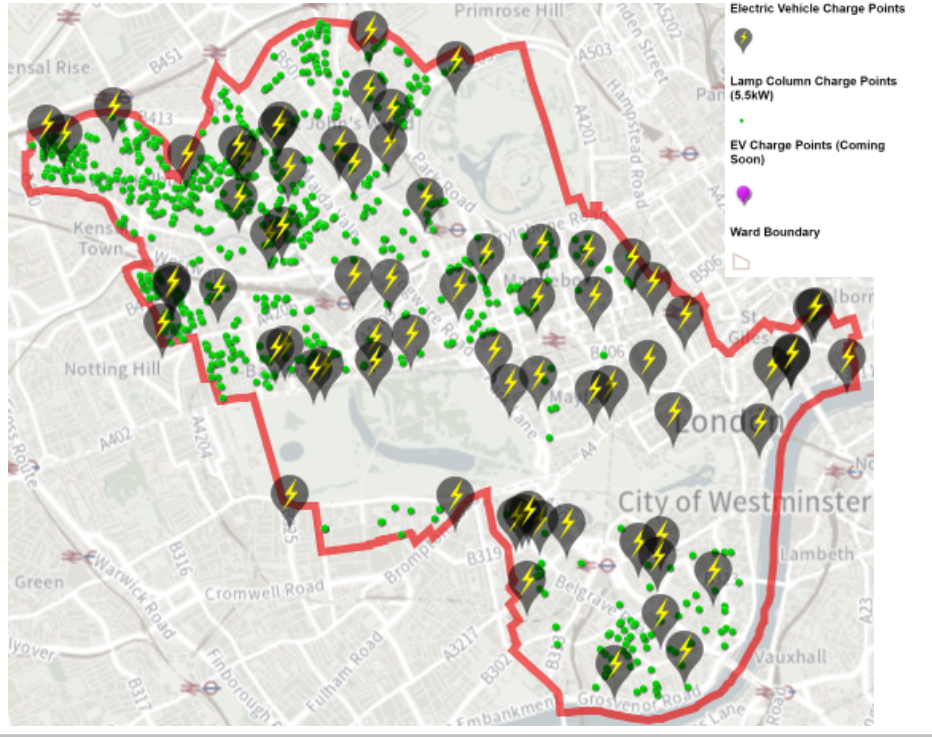
- ❖ The Active Lives Survey indicates that Westminster residents have become more active since 2015 /16 when **63.2%** stated that they were active for at least 150 minutes per day, to **70.4%** in 2021 / 2022.
- ❖ Table 3 below shows how we compared with neighbouring inner London LAs in 2021 . 2022



- ❖ Strava Metro is a free activity app that monitors the cycling and walking activity of its users
- ❖ These graphs show the activity through Westminster for all road users including visitors, workers and residents
- ❖ 340.1K people using the app, walked in Westminster in the last year
- ❖ Westminster show seasonal trends with users being more active on both activities during the spring and summer months
- ❖ The active user profile shows that the app is used more by people aged 18- 54

Climate change

Electrical Vehicle Charge points in Westminster

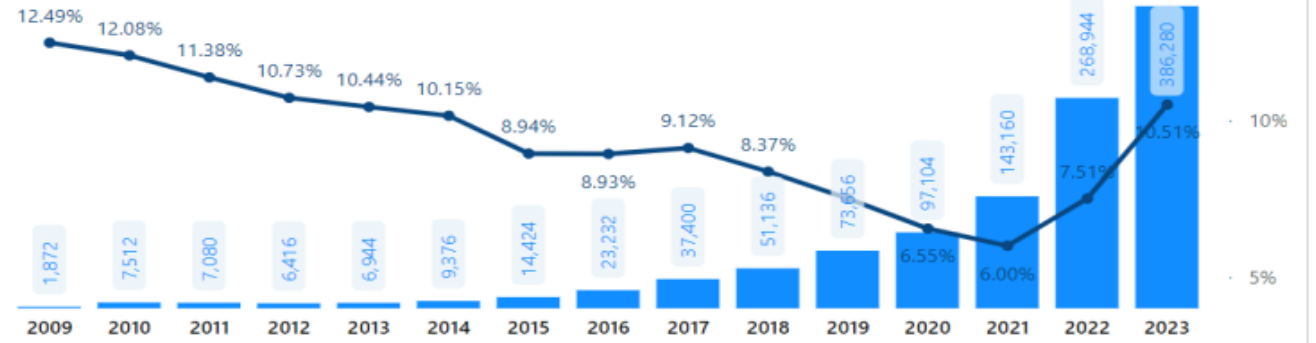


Challenges

- ❖ Council will need to work closely with the London Mayor's office to meet a potential growing demand for charging points.
- ❖ By the end of March 2023 Westminster housed 10% of all electrical vehicles in London. This number has steadily been increasing.
- ❖ The impact of additional charging points in Westminster will need to consider other kerbside priorities.
- ❖ We will also need to ensure EV charge points are in locations where drivers feel safe.

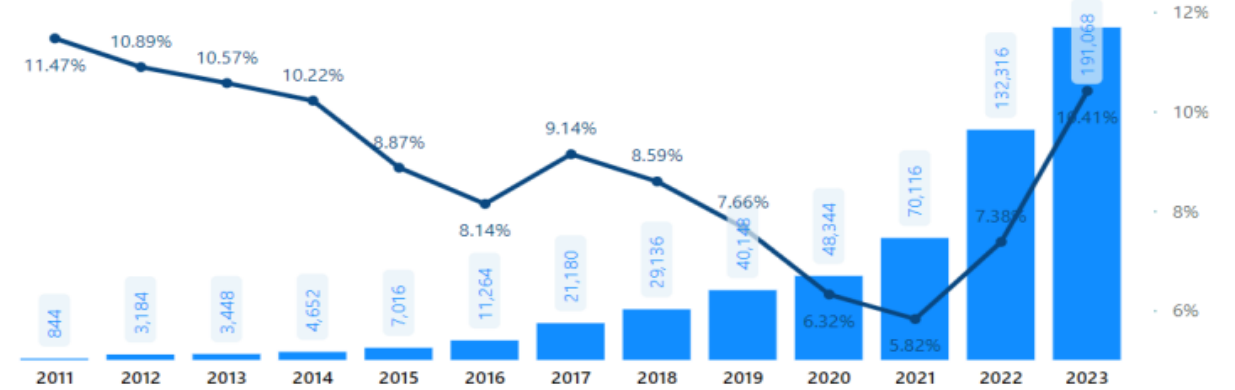
No of Electrical vehicles in Westminster

● Total Plug-in Vehicles ● % against London



No of Ultra Low vehicles in Westminster

● ULEV Total ● %ULEV against London



Key facts

386,280

registered electrical vehicles in Westminster

2,500

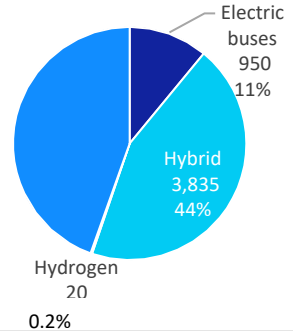
Electric vehicle charging points

88.5%

have chosen not to use a charge point because they felt unsafe at the location.

Source: HonestJohn.co.uk survey of 500 drivers Jan 23

TFL bus fleet March 2023; Proportions by bus type in a total fleet of 8,643 buses



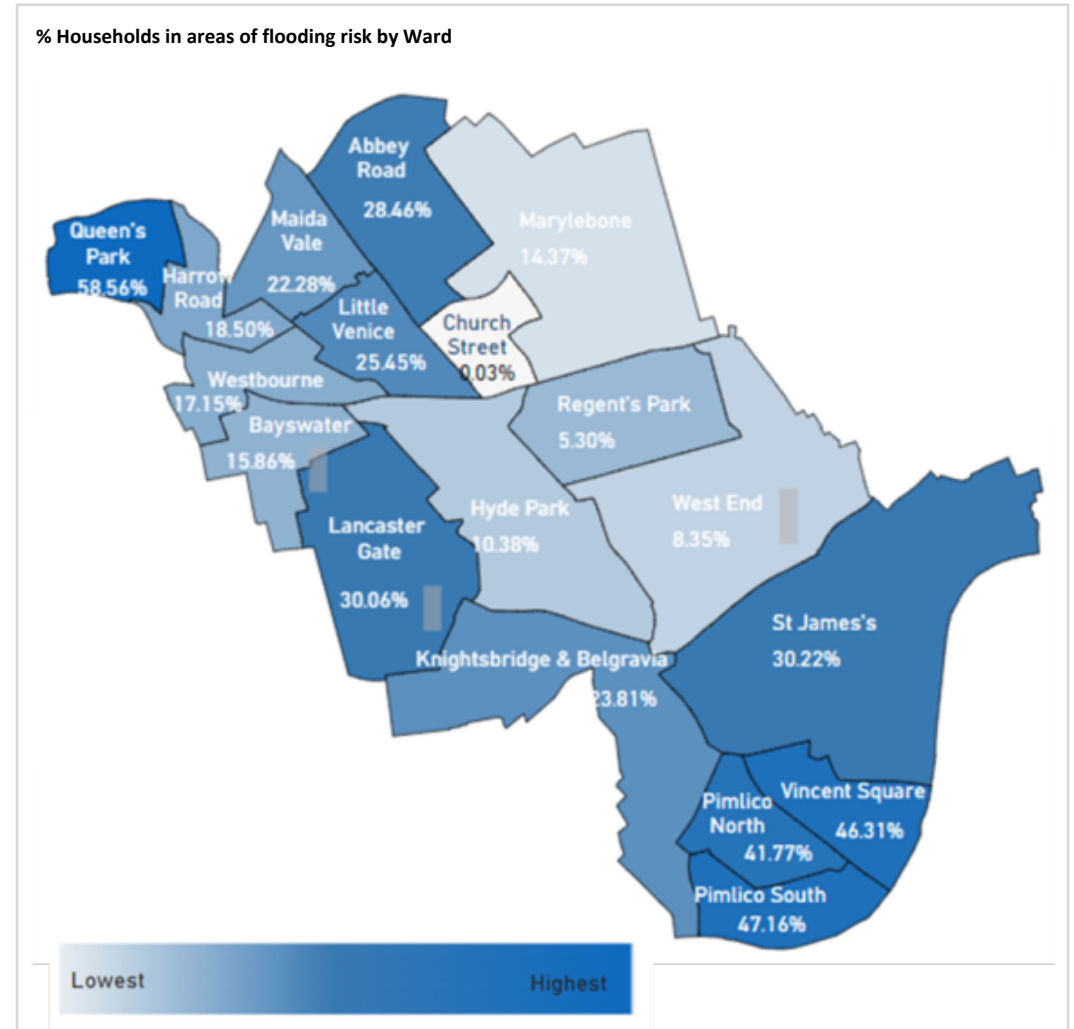
Climate change

- ❖ Flooding affects both traffic flow and road safety.
- ❖ Many of the most severely affected flood risk properties are basement flats, which were badly affected in 2016 and 2021
- ❖ In 2021 – two major flood events occurred in Westminster (12th and 25th July) – around **1,000** properties were flooded.
 - ❖ **60** roads around Essendine (Maida Vale) and Shirland Road (Queen's Park) were flooded, including 1 primary school, 3 libraries and 3 community centres – in Flood Zone cat 1 lowest risk. (1 every 1000 years).
 - ❖ Victoria / St James – Flood zone 3, (1 every 200 years).
- ❖ Heatwave impacts on IT and communications services causing freight and travel delays, accidents and impacts on emergency services.
- ❖ Lightning strikes on railways damaging electronic equipment, line-side trees and buildings

High temperatures

- ❖ Heatwaves and high temperatures: Buckling of rail lines, line sag and rail speed restrictions, damage to bridges and pavements, deterioration of airport runways, road surfaces and disruption of communications and IT services leading to transport delays.

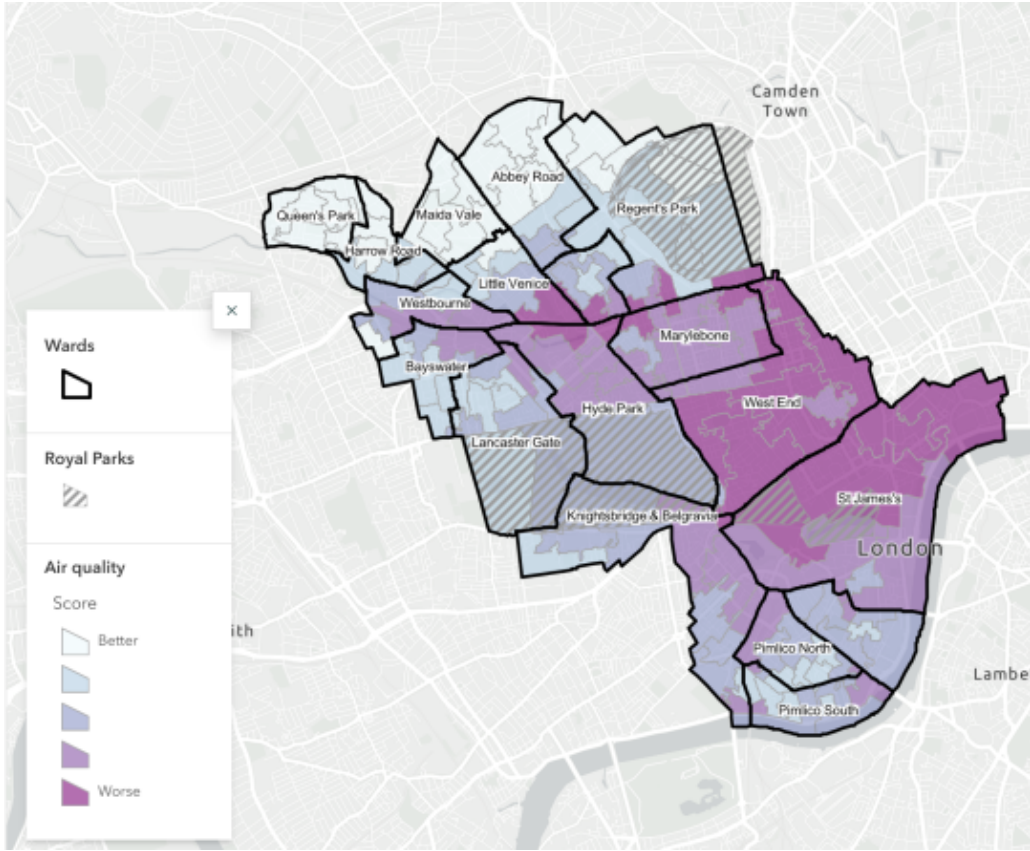
Source: UK Climate Change Risk Assessment (CCRA) Technical Report



Challenges

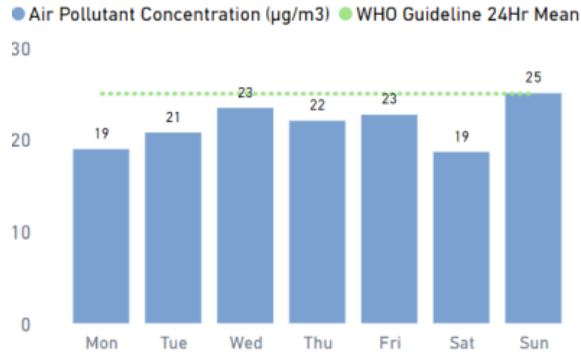
- ❖ Additional information about where more flood defences may be needed.
- ❖ SuDs (Sustainable drainage systems) Masterplan to retrofit SuDs into our highways and public realm.
- ❖ Quick response to flooding events.

Air Quality

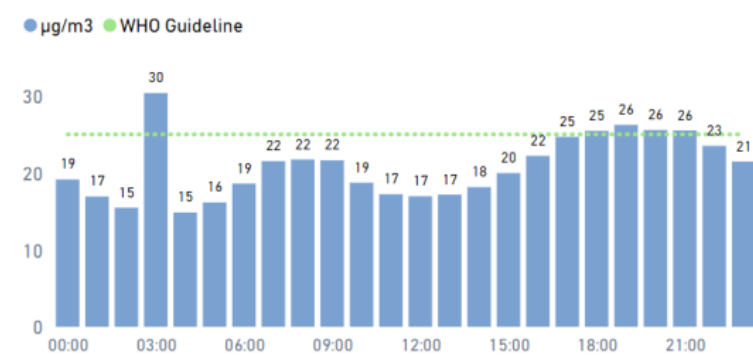


- ❖ Westminster's air quality has been improving in recent years and the Council continues to tackle pollution through school clean air zones, encouraging active travel, and expanding and sharing monitoring data to help communities take localised action.
- ❖ In 2019, Westminster's average NO₂ emissions were **37.8 µg/m**, within the Government's healthy standard. Westminster's level is higher than London and the U.K. average, where NO₂ levels were **26.7 µg/m³** and **15.8 µg/m³** in 2019.

Concentration (µg/m³) day of the week



Concentration (µg/m³) by hour



From 14/05/23 – 05/02/24

The Air Quality Action Plan 2024-2029 is a statutory requirement that must be completed by the end of the year. This plan will aim to address air quality issues within our community and implement strategies to improve overall air quality. It represents our commitment to addressing air pollution and ensuring cleaner air for our community, with a strong focus on collaboration and data-driven decision-making, particularly in tandem with efforts to improve sustainable transportation.

Collaboration with the Sustainable Transport Strategy is therefore essential as there are significant overlaps between the two. By aligning engagement and data collection efforts, we hope to ensure that our actions effectively target areas where air pollution from transportation contributes to poor air quality.

We are awaiting data for WHO baselining, which we anticipate receiving by mid to end February. This data, which will provide valuable insights for shaping both the Air Quality Action Plan and the Sustainable Transport Strategy.

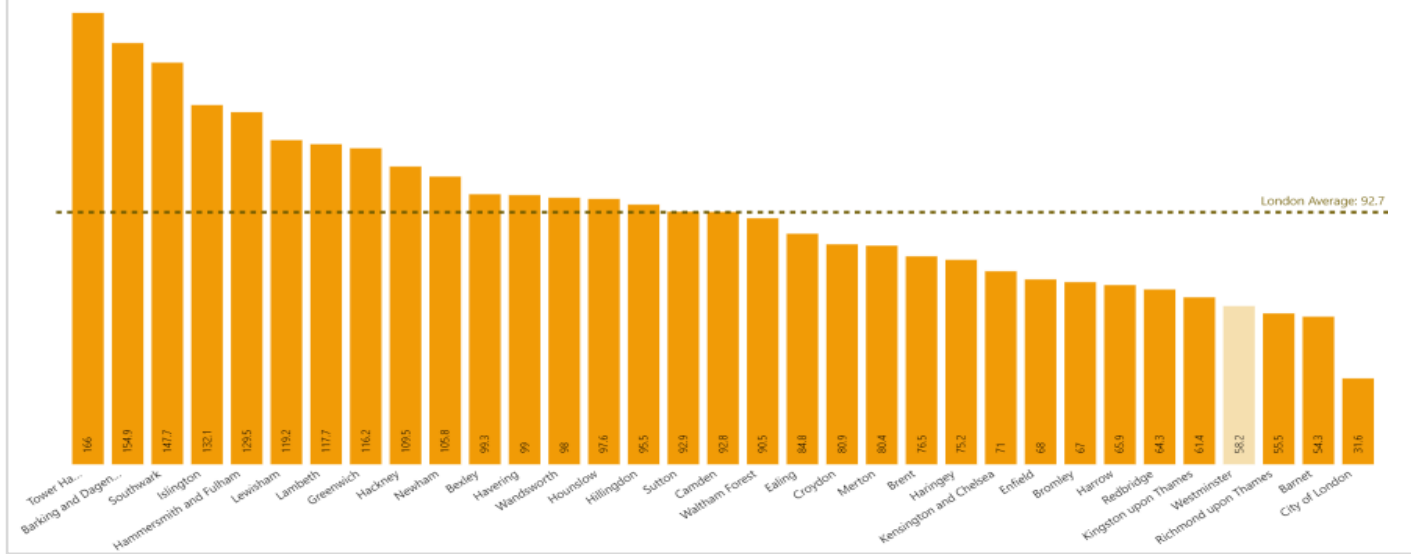
Key facts

37%

NO₂ from transport

Air Quality

Emergency hospital admissions for Chronic Pulmonary Disease (COPD) 2016 /17 – 2020 / 21)

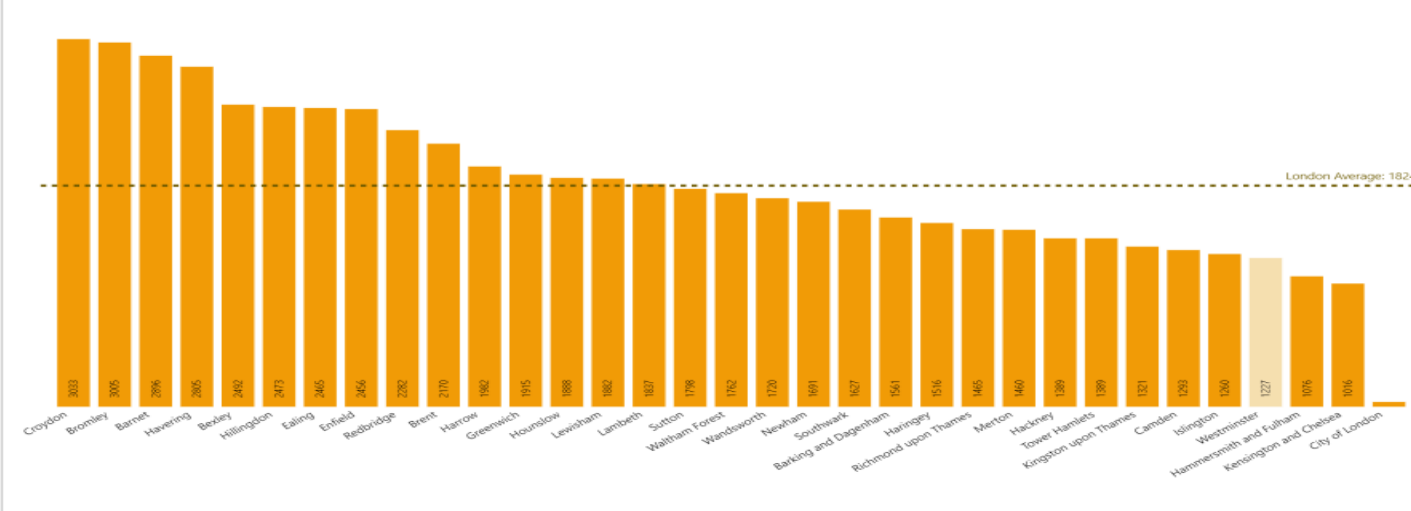


In London, pollution concentrations with a few metres of busy roads are normally 2 or 3 times those at background locations, defined as normally at least 50-100m away from busy roads. The most extreme conditions are found in narrow streets lined with tall buildings, which can trap pollution and lead to more elevated concentrations.

There is now strong evidence of a link between traffic-related pollution and a worsening of lung conditions such as asthma and chronic obstructive lung disease (COPD). In addition, research suggests a role for traffic-generated air pollutants in the development of asthma and COPD, particularly in those living close to busy roads.

[London Air Quality Network Guide](#)

Mortality caused by respiratory disease (2013 – 2021)



Challenges

- ❖ Providing cleaner air quality routes for pedestrians and cyclists, especially during rush hour, when air pollution levels are higher near busy roads
- ❖ A better understanding of health effects of air pollution.
- ❖ Understanding why and when we are likely to go above WHO guideline levels for NO2.
- ❖ Understanding the impact buildings have on air quality

Key facts

652

deaths from respiratory diseases (count) 2016-2020

58.2

emergency hospital admissions for Chronic Pulmonary Diseases (2016 / 17 – 2020/21)

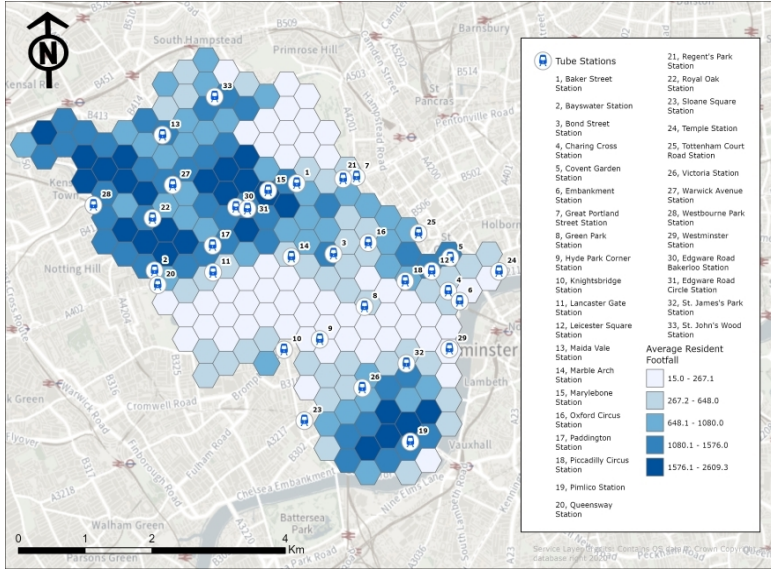
1227

mortality caused by respiratory disease in Westminster (2013 – 2021)

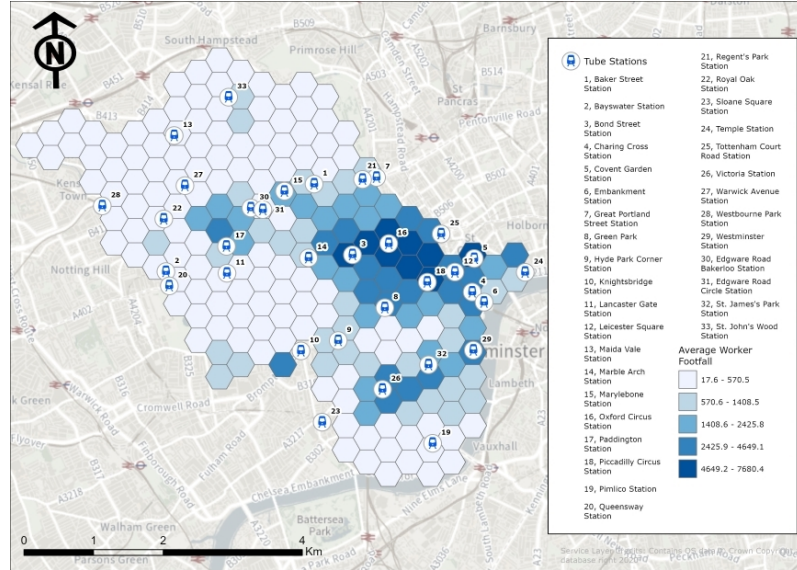
Hospital admissions calculations: Geographic area Observed / Adjusted Geographic Expected admissions multiplied by 100

Sustainable Economy

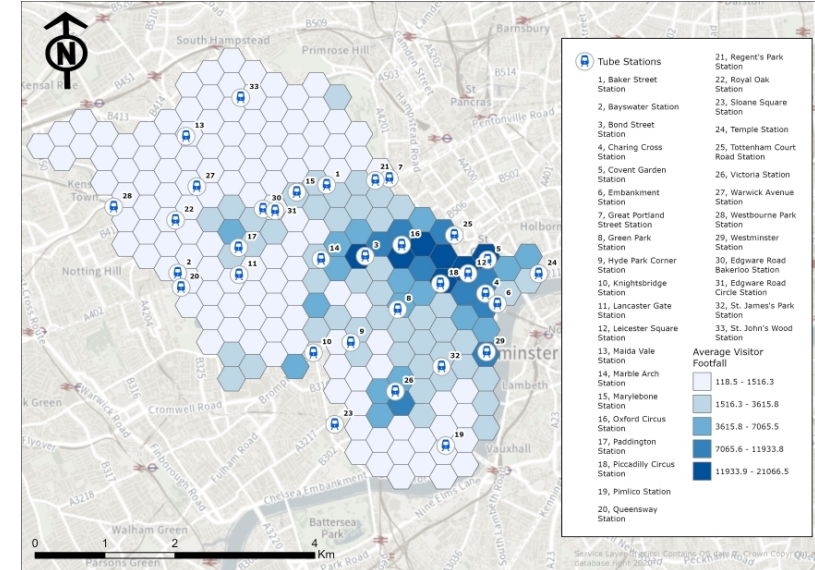
Average resident footfall



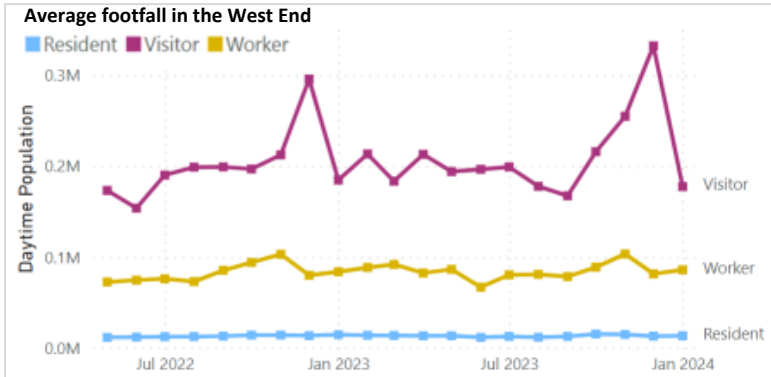
Average worker footfall



Average visitor footfall



The footfall maps above show average footfall May 22 – Dec 23



❖ Note – visitor numbers exclude international visitors

- ❖ Our High Street footfall data shows that our residents tend to stay close to home and not visit the West End
- ❖ Worker footfall and visitor footfall show that both visitors and workers are congregating at the collisions and casualties' hotspots (see Road Safety – page 5)
- ❖ Westminster jobs represent one-eighth of London's job market (Lightcast, 2022)

Challenges

- ❖ Encouraging residents to visit the West End
- ❖ Ensure the Transport Strategy is not detrimental to the economy
- ❖ Pedestrianised areas to encourage visitors and residents to spend time in the West End

Key facts

367K

Average daytime population Jan 2024

767,000

jobs hosted in Westminster (Lightcast, 2022)

Sources

Overview

- [Travel in London 2023 - The travel behaviour of London residents based on the London Travel Demand Survey \(tfl.gov.uk\)](#)
- [Road traffic statistics - Download data \(dft.gov.uk\)](#)

Road Safety

- [Road traffic statistics - Download data \(dft.gov.uk\)](#)
- Method used to travel to work [Census 2021](#)
- [TFL road safety data reports](#)
- Footfall data (internal) - BT Geolocated Mobile Network Data (GeoMND)

Health & Exercise

[Active Lives | Sport England](#)

Climate Change

- [Technical-Report-The-Third-Climate-Change-Risk-Assessment.pdf \(ukclimaterisk.org\)](#)
- [HonestJohn.co.uk Electric Car Survey | Motoring News | Honest John](#)
- [Vehicle licensing statistics data tables - GOV.UK \(www.gov.uk\)](#)

Air Quality

- [London Air Quality Network](#)
- [Environmental Justice Measure | Westminster City Council](#)
- [Air quality data | Westminster City Council](#)
- [Local Health - Office for Health Improvement and Disparities - Indicators: maps, data and charts](#)

Access & Inclusion

[Uber Green - Sustainable Rides in Electric Vehicles on Uber](#)

Sustainable Economy

[Local Authorities—UK | Lightcast](#)

Footfall data - BT Geolocated Mobile Network Data (GeoMND)