



Partnership case study

High Street North Monitoring Study



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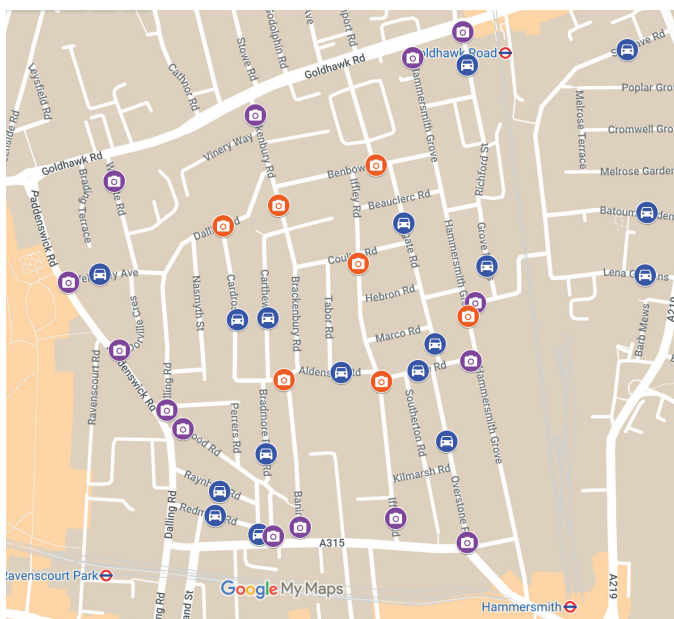
29 - 33 Old Steet, London, EC1V 9HL

Introduction

The London Borough of Newham have implemented a pedestrianised zone which is currently closed to motorised traffic from 10am to 6pm except buses, taxis and permit holders.

Smart Transport Hub are providing a bespoke monitoring solution to understand how this zone is currently being used and to highlight any potential issue in light of a redevelopment of the public realm.

Monitoring motorised vehicles, cycling and pedestrians is important for this scheme to understand the variations in behaviour within this zone and how it can be improved and regenerated using a Healthy Streets Approach.



Sites - Location overview

Smart Transport Hub's VECC sensors were installed across 8 sites along High Street North which is in the eastern part of the London Borough of Newham.

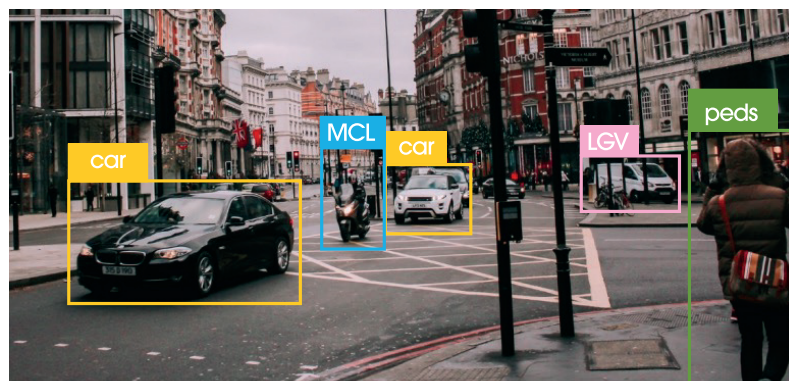
This environment is composed of financial institutions, retail, independent and convenience shops.

The area has seating and cycle stands for both pedestrian and cyclists to stop and rest.

Recorded Classifications

Monitoring real time impact of 9 different classes

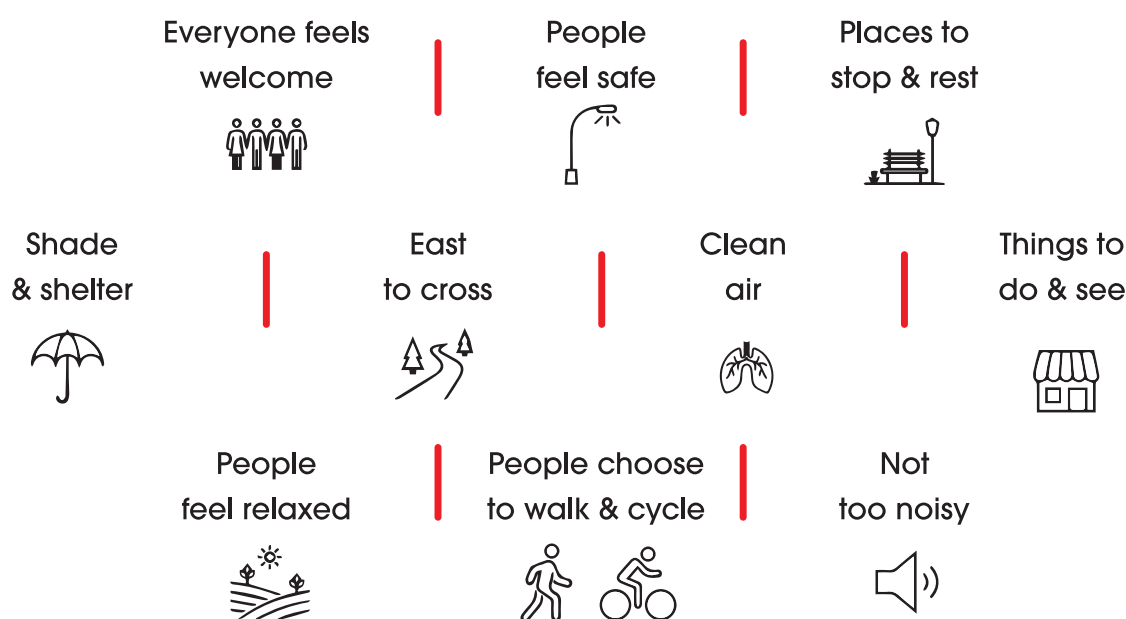
- Cars
- Large Good Vehicles (LGV)
- Motorcycles (MCL)
- Cyclists (PCL)
- Public Service Vehicle (PSV)
- Pedestrians (Peds)
- Other Goods Vehicle (OGV1)
- Other Goods Vehicle (OGV2)
- London Taxi
- E Scooters



This scheme has an emphasis on monitoring Pedestrians, Cyclists and E Scooters

Healthy Streets

The London Borough of Newham looks at taking a Healthy Streets Approach which builds on a street's existing conditions. The 10 indicators listed below describe the aspects of a street environment and how an area's social, economic and environmental impacts can be improved:



Key monitoring outputs for behaviours

Monitoring the pedestrianised zone is important, as it assists in the process of improving many aspects of the public realm by collecting data on the following:

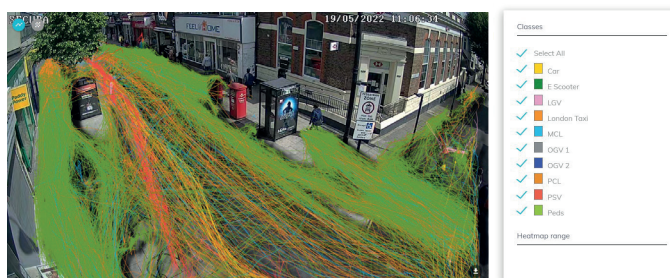
- Quantifying the volume of pedestrians, cyclists and other vehicles inside the pedestrianised zone to inform decisions on an increase in space for pedestrians and cyclists
- Understanding how pedestrians navigate this space and identify any crucial elements related at the existing layout so steps can be taken to make the environment more aesthetically pleasant and safe
- Understanding how cyclists are behaving inside the pedestrianised zone so hazards can be mitigated and safety can be improved
- Understanding how motorised traffic is behaving at the 2 junctions in the North and the South as a result of reduced access to the pedestrianised zone
- Quantify the existing usage of local shops and urban facilities within the public realm to see if there has been any variation over the course of this scheme and the subsequent impact on the local economy
- Identify any antisocial behaviour in relation with the existing street furniture provision and the changes that could be made to reduce this behaviour whilst still providing for other users
- Identify the positive impact of street furniture that provide safety, places to rest, and shelter, to everyone using the zone to judge the success of the Healthy Streets Approach and areas to improve



Smart Lenz - Introduction

By installing the VECC sensors, our Smart Lenz platform helps to provide information and reports to make data driven decisions through graphs and real time analysis. Some of this data may be anomalous due to contributing factors such as weather changes, pandemic restrictions, road closures, school holidays, national and religious holidays which can cause sporadic spikes in travel and differences in behaviour patterns.

The London Borough of Newham can visualise users as trail lines to understand space utilisation and volumes:



**Ai
Portal
view**

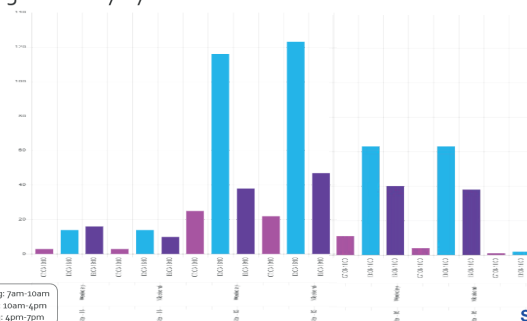
Smart Lenz - Insights

Smart Transport Hub is monitoring and analysing the following for Newham:

- Total volume counts for all sites within the area to gather an overview and to visualise the differences between the sites
- Daily traffic volumes per site to grasp a more detailed analysis of the behaviours of all classes (Pedestrians, Cyclists, E Scooters and other motorised vehicles) both hourly as well for a specific date range
- Average traffic volumes (weekday vs weekend) to see how patterns change during a working week compared to leisure times and how the routes differ from the weekday to weekend per site
Average Monthly Peak vs Off Peak (Total Pedestrians, Cyclists and E Scooters):
- To understand different segments of the population especially those who use cycles, e scooters and walk during the:

- > Morning peak to see commuters and the school run
- > Midday peak (lunch) to see workers out of office or those who don't work doing essential travels for their daily needs
- > Evening peak to see those usually commuting and other after work activities

Average Monthly Cyclist Peak vs Non Peak Volumes Per Site



- Shop usage volume counts (entering and exiting) to visualise the levels of traffic into different businesses
- Shop usage counts at peak hours throughout the day to help businesses analyse behaviour and footfall levels
- Shop usage averages between a working week in comparison to a weekend to analyse the differences in patterns
- Daily volume count of active travel cycle parking space usage
- Daily volume count of seating facilities to identify behaviour patterns
- A future concept of monitoring anti social behaviour and levels to help The London Borough of Newham adapt its public realm