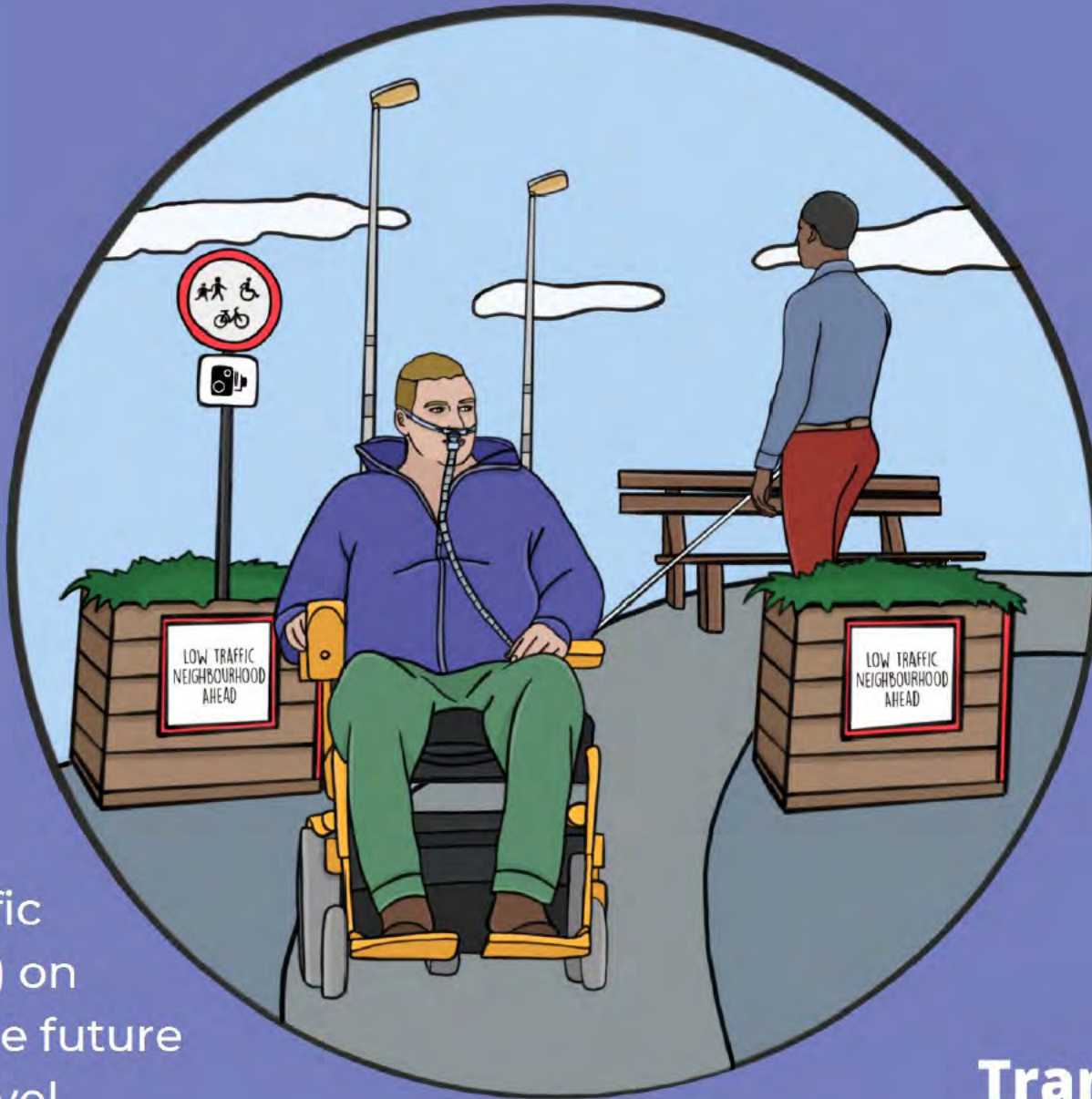


# Pave The Way

The impact of Low Traffic Neighbourhoods (LTNs) on disabled people, and the future of accessible Active Travel.



Report  
January 2021

**Transport** for **All**

**TfA**



“  
I feel we are being really co-opted in these debates. Whether it's cycle lanes, LTNs, or banning taxis, it's like the idea of us is utilised by either side without actually involving us.  
”  
Participant, Ealing

# Timeline



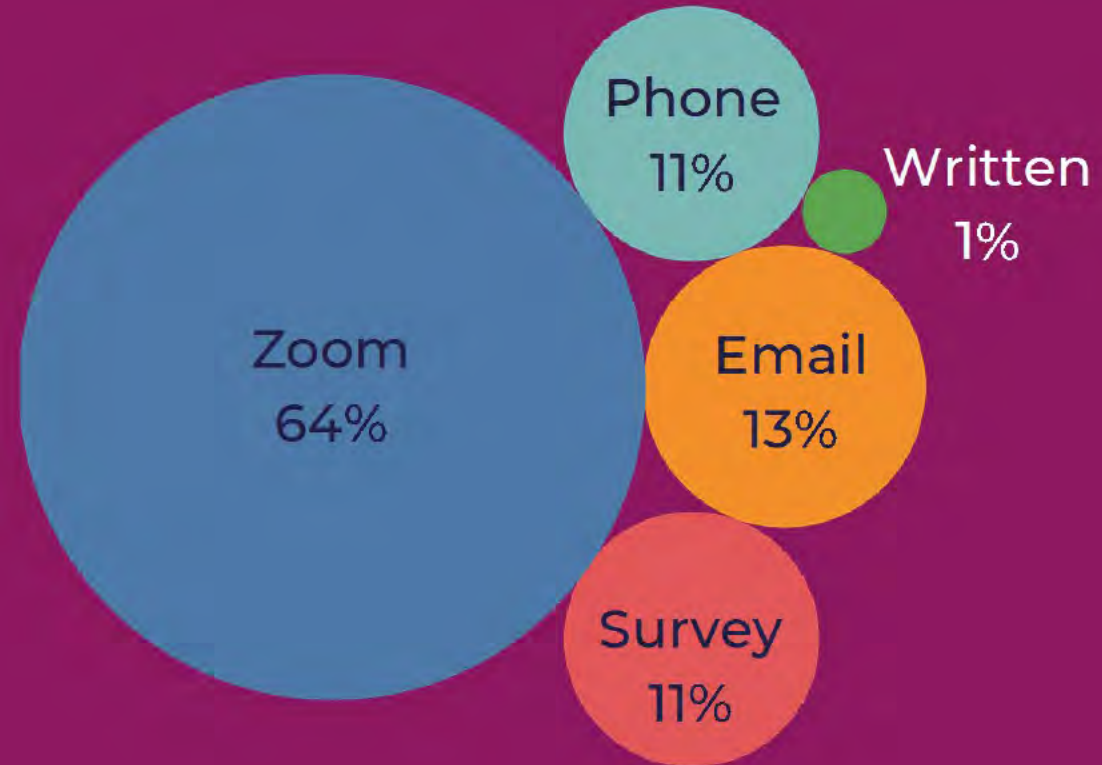
# Method

Transport for All **TfA**

We spoke to

84

participants



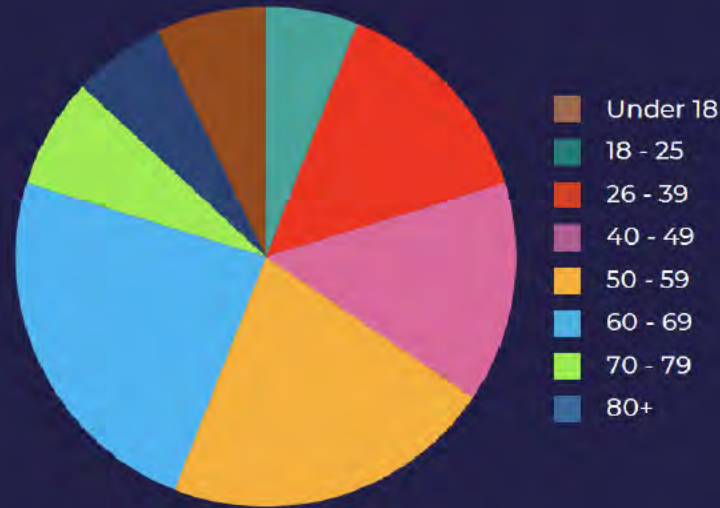
# Demographics

Transport for All

TfA



across a range of  
impairment groups



aged 8 to 89



in 19 out of the 21 boroughs  
with new LTNs (plus 5  
locations outside London)

# Barriers

Transport for All **TfA**



Medical



Physical (infrastructure)



Financial



Attitudinal



Societal





# Physical (infrastructure)

Transport for All

TfA



raised  
issues with  
streetspace

“

If the LTN is meant to be about walking, why are the pavements all broken up?

”



# Financial

- Non-standard cycles significantly more expensive.
- According to Wheels For Wellbeing, cycles range from £500 for the most basic adult pedal trike, to £3500 for handcycles with e-assist. Cargo bikes can be up to £8000.
- Lack of cycle-hire schemes.
- Cost of maintenance, repair, and insurance.
- Cost of high quality wheelchairs and other mobility aids.
- Disabled people are twice as likely to be unemployed, and face extra costs of £583 a month.
- Financial barrier is therefore not only prohibitive, but discriminatory





# Attitudinal

**Transport** for **All**

**TfA**

“

Handcycling... it's not for wobbly people like me.

”

- Lack of visibility and representation of disabled cyclists.
- Many disabled people do not know that cycling is an option.





# Societal

Transport for All **TfA**

— “ —

I'm not there yet mentally. It's a type of mourning, losing your health.

— ” —

— “ —

I don't want to use a wheelchair. I can still get about with my car.

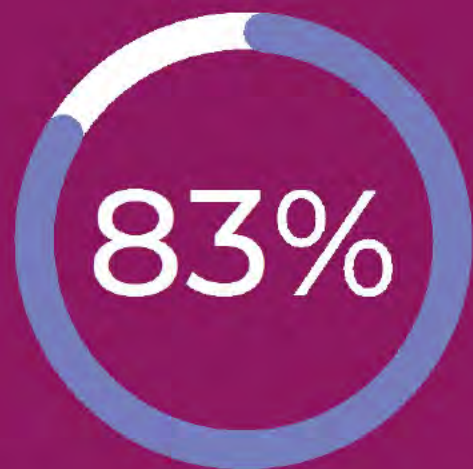
— ” —

# Findings

## General observations

Transport for All

TfA



felt strongly impacted by the Low Traffic Neighbourhoods



discussed how divisive the LTN issue is

“  
It's not like disabled people haven't tried to be a part of this movement, but if you raise concerns, you are seen as someone who is against bikes and demonised as someone who doesn't care about the environment.  
”



# Positive

Transport for All

TfA



14%

reported easier or more  
pleasant journeys.



18%

reported a decrease  
in traffic danger



17%

reported a  
decrease in  
noise.

# Positive

**Transport** for **All**

**TfA**

— “ —

Since the LTN I feel much more secure going on the road. I know that that particular road is much quieter, and I feel that I have more of a right to be on the road.

— ” —

Manual wheelchair user,  
Lambeth

— “ —

There are many things that can be quite overwhelming about being autistic. The LTN means there are less cars, which is less overwhelming, so I'm feeling less stressed, which means I'm burnt out less. It's just one of a combination of things that can help and it's nice to not have.

— ” —

Autistic participant,  
Lambeth



# Negative

Transport for All

TfA

77%

reported an  
increase in  
journey time



raised concerns over  
an increase in money  
spent on petrol or  
taxis.

1 in 3



reported an increase  
in traffic danger

# Negative

Transport for All

TfA

“

Everything has taken me considerably longer to do, and obviously is leaving me more tired at the end of it. Even my journey to and from work takes longer and leaves me more zonked by the end of the week. It accumulates at the end of the week, and I just sort of collapse on the tenth week.

”

Chronically ill participant,  
Islington

“

It made it really difficult for me to get places, because I was using taxis to get around. And obviously, because it took [the driver] so much longer, sometimes it ended up that [the driver] wouldn't want to wait in traffic to get to me.

”

Visually impaired participant,  
Redbridge



# No other options?

Transport for All

TfA

- 42% of participants raised issues with streetspace. (eg: lack of dropped curbs, uneven pavements, poor cycle lanes, pot holes, street clutter, e-bikes)
- 53% of participants raised issues with public transport (eg: buses, trains, Tube)
- 45% of participants discussed barriers disabled people face to Active Travel/ cycling (for example: high cost of adapted bikes, education, cultural attitudes, impairment-based).

"it's a complicated maze of measures" - Islington resident

# EQIAs + engagement

Transport for All

TfA

3 in 4



criticised how changes  
in their local area were  
communicated to them

— “ —

It was just the shock of suddenly, 'Oh, there's loads of roads closed? Is there work being done or something? I don't know what's going on'. so I think that's the context. That's a really important point for me: is that everybody is complaining that there's not been enough information - but for me, it was like I had none.

” —

Participant, Lewisham



# Solutions

**Transport** for **All**



## To mitigate negative impact

- Meaningful engagement with disabled people in the community
- Accessible communication
- Accessible implementation
- Softer approach
- Dispensation for disabled people

## To remove barriers to Active Travel (and public transport)

### Infrastructure

- Accessibility upgrades to areas where streetspace schemes are implemented
- Wider accessibility upgrades to public realm

### Policy

- Nationwide pavement parking ban
- Accessibility standard for cycle lanes
- A commitment that concessionary travel for disabled people will never be rescinded.

### Investment

- Cycle hire schemes for non-standard cycles
- Subsidised adapted cycles and high quality wheelchairs

Michael Barratt  
Development Impact  
Assessment Manager



It is about  
considering  
everyone



**Survey:**  
75% of disabled  
cyclists use their  
cycle as a  
mobility aid



## Designing for cyclists

maintain cycling

thinking about all  
types of cycles

raise ramp to help  
3 wheel bikes  
turn





## Widths and obstructions a lack of consideration!



## Obstructions to reach the push button







**Keep areas clear**

**Use cowls to avoid barriers**

**Or put barriers behind the push button unit**



# Footway closures

Is the diverted route accessible for everyone?





**If footways are not accessible you may be forcing someone into the road!**



**Is there turning space at the pedestrian ramp?**

**Avoid black asphalt ramp on black asphalt**

**surface**





**Ensure the  
crossing is aligned**

**Good gradient**

**Good contrast**





## Hidden disabilities

- Dyspraxia
- Dyslexia
- Visual impairment
- Autism
- Multiple messaging!!!





# Learning differences

Isabelle follows signs  
as they tell her



## Keeping footways open



**Removes the need for  
signage**







## The impacts of closing a bus stop

A temporary stop must be as close as possible to the closed stop, the next stop maybe 400m away.



## Insufficient kerb height will render a bus stop useless



To deploy a ramp kerb height must be minimum 125mm

In Ilford, we built a temporary stop where the kerb was too low



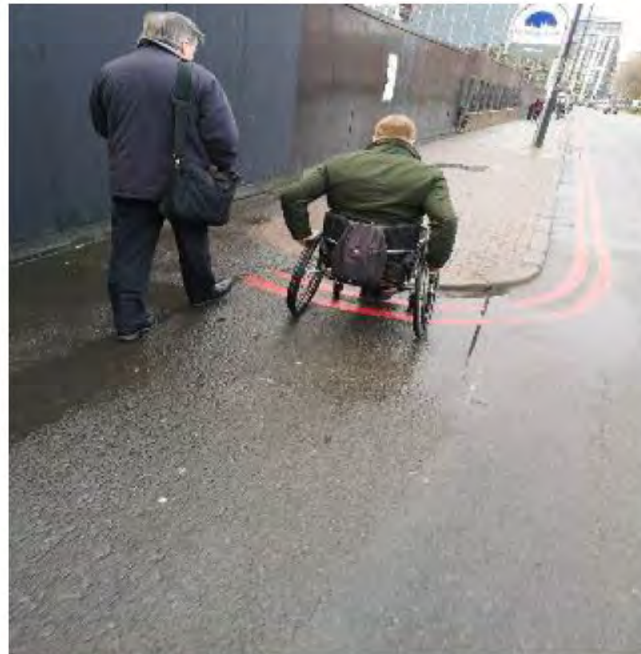


## 3 Tier Assessment

Involving the community

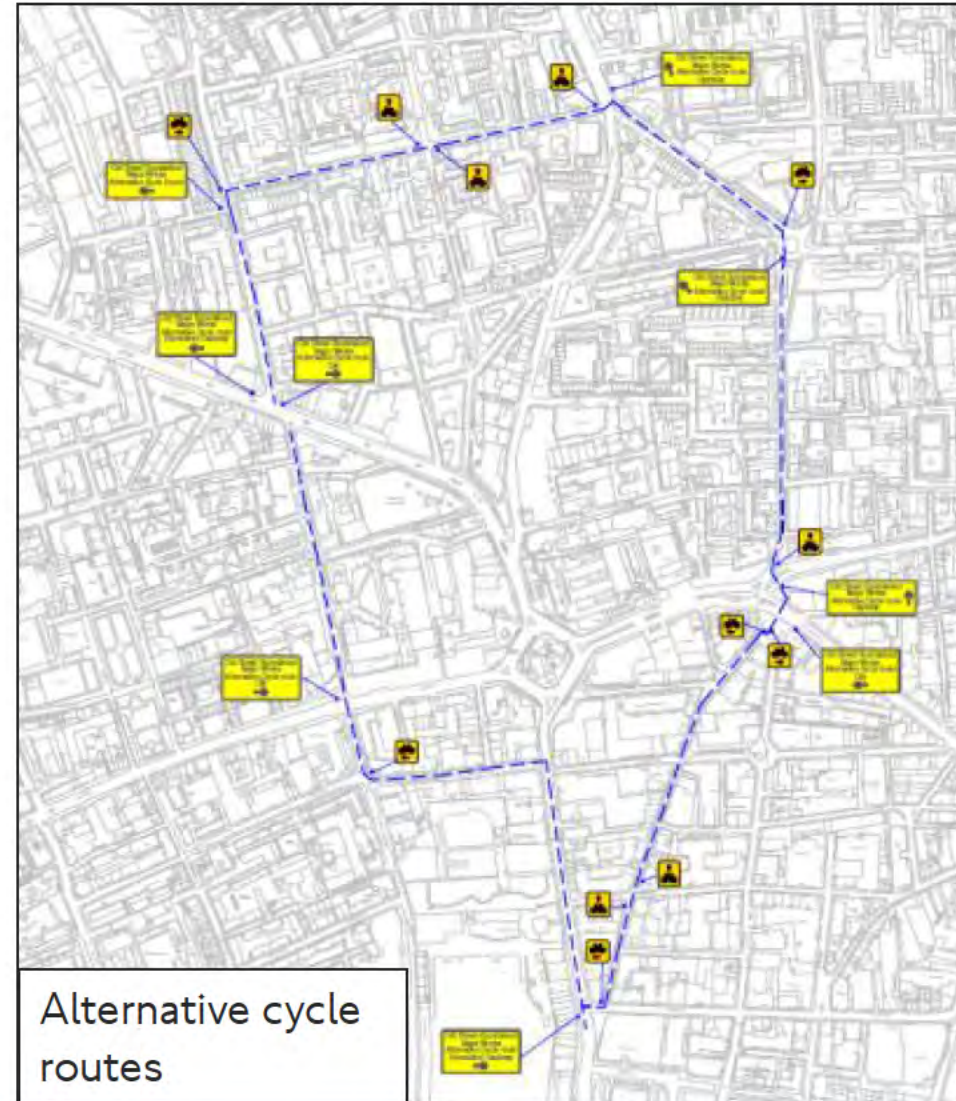
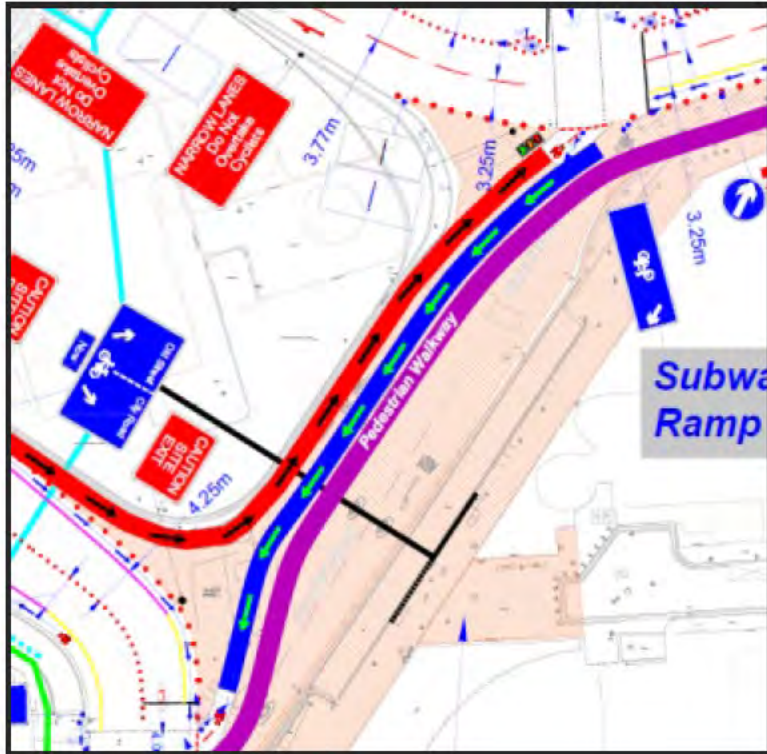


## Tier 1 – meeting local people before you start work for a walk and chat





## Tier 2 – you have met the locals, now consider them in your traffic management design





## Tier 3 – go for a walk and cycle with local people for feedback





# Constructor Experiences:

- Walking
- Cycling

## Meeting people





**“If we all go above and beyond, above and beyond becomes business as usual!”**





# Pedestrian Behaviour and Risk Management research

John Murray  
Principal City Planner

This document reflects ongoing work and discussions within TfL on options for the future of TfL/LU. It is not intended to reflect or represent any formal TfL/LU views or policy. Its subject matter may relate to issues which would be subject to consultation. Its contents are confidential and should not be disclosed to any unauthorised persons.



## Project aim and delivery

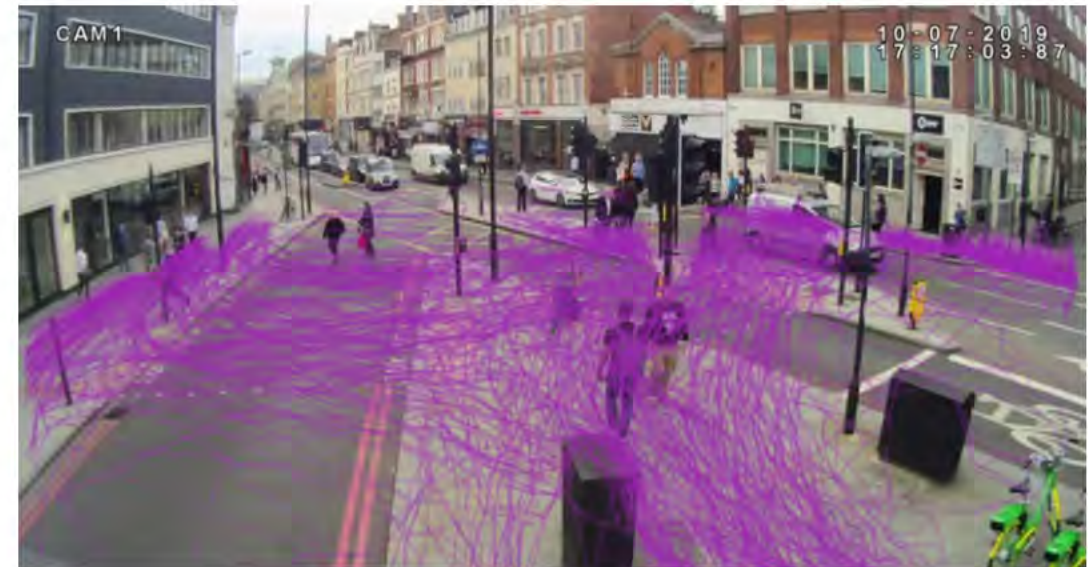
### This project set out to:

- better understand pedestrian behaviour in relation to specific types of street infrastructure, in order to ...
- identify effective light-touch engineering and technological solutions that prompt people to reduce their exposure to road danger while walking in London

### Project delivery:

Integrated Transport Projects was commissioned to deliver the work in 3 stages:

- **Stage 1:** literature review, collision data analysis
- **Stage 2:** video surveys to observe how pedestrians interact with a range of infrastructure types and other variables
- **Stage 3:** identify light-touch interventions to encourage safer crossing behaviour

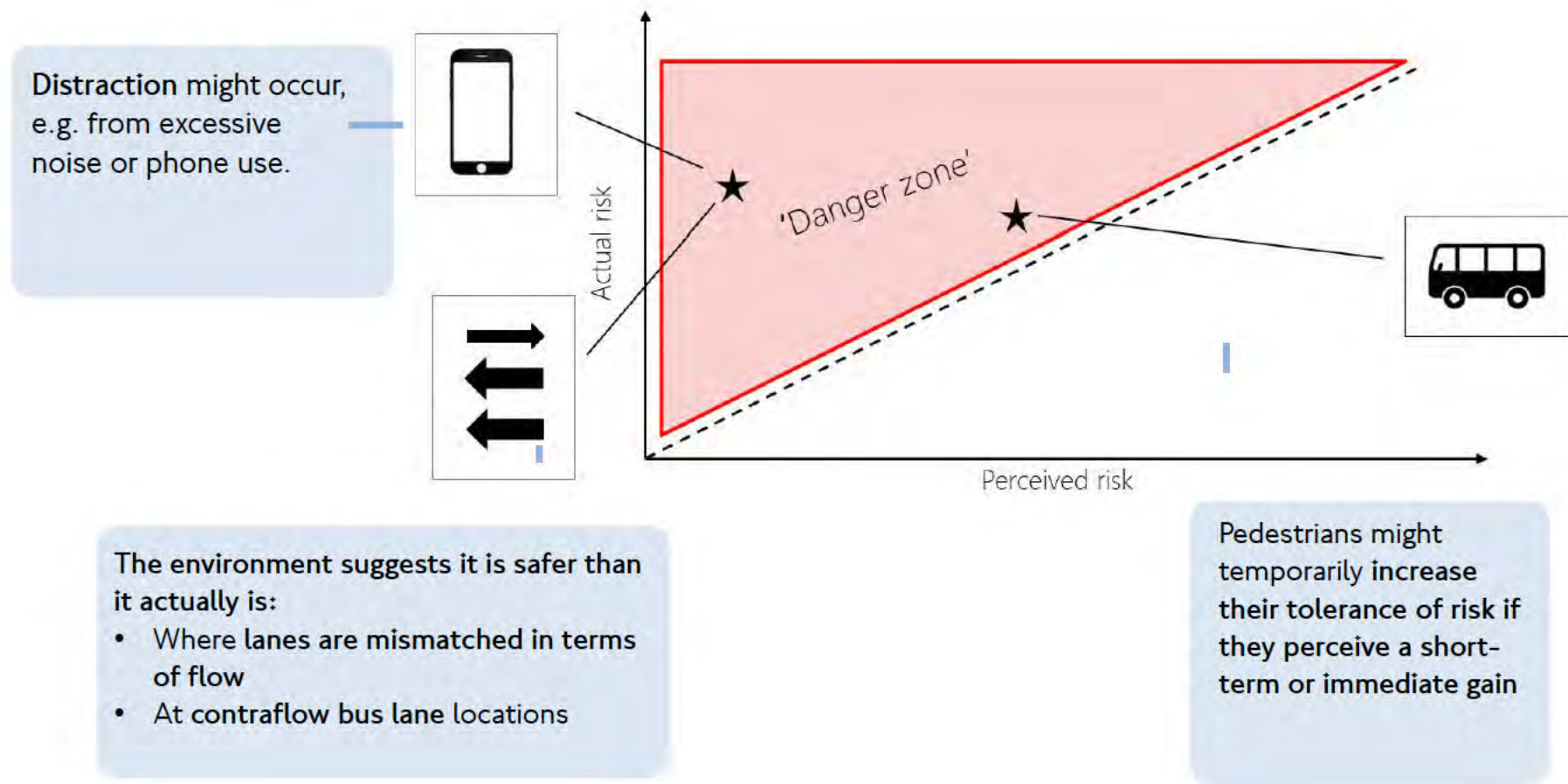




## Danger occurs in the failure to accurately judge risk

Non-conformance with crossings is high (41.5% at observed sites), but most 'risky' behaviours are not risky in all contexts.

People usually behave appropriately for the amount of risk, except in **situations where they fail to accurately judge risk:**



## These findings suggest key steps in reducing pedestrian risk

1. **Reducing traffic volumes and speeds:** non-conformant crossing occurs at all sites; low traffic volumes and speeds minimise risk in non-conformant crossing
2. **Providing or improving pedestrian crossing facilities** to reflect observed **desire lines** – providing appropriate width and minimal waiting times to reduce the prevalence of potentially risky behaviours
3. **Implementing site-appropriate interventions:**
  - **Physical interventions** to physically reinforce formal crossing locations or to make safer routes more attractive
  - **Increase ambiguity to increase engagement with the environment**, paying attention to sensitive design to enable ease of access for those with physical or cognitive disabilities
  - **Provide extra information to help pedestrians to accurately assess the risk level** at a site:
    - direct pedestrians' attention in the direction of an oncoming vehicle
    - reinforce the signals and improve their visibility
    - increase awareness in a situation where imbalanced traffic flows

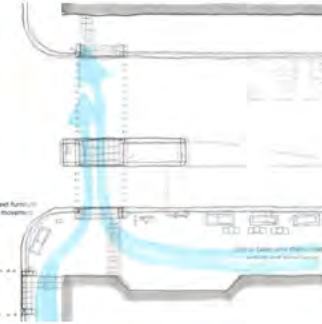
**Traffic volumes and conditions** are the biggest influence on pedestrian behaviour – they are the main aspects that define the actual and perceived risk at a site

These interventions were developed in **Stage 3**

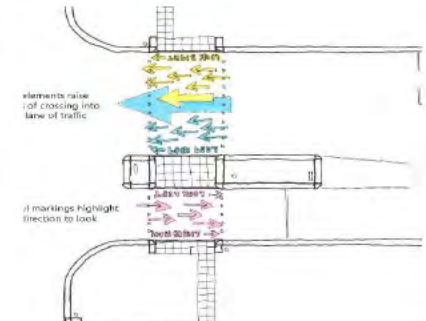


# Suggestions for light touch interventions

Lighting/street furniture to highlight destination or change desire lines increase attentiveness



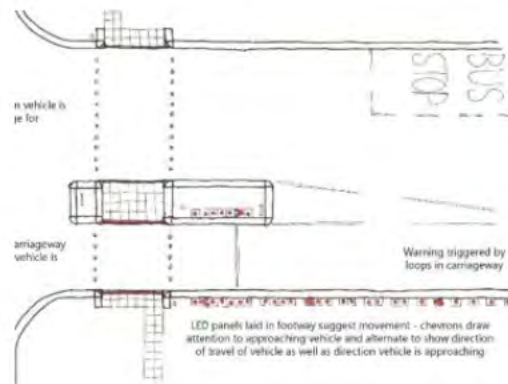
Road markings to



Lighting in footway and bollards to enforce signals



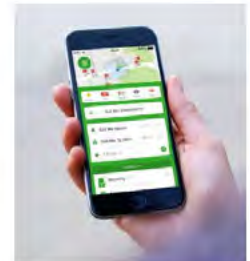
Vehicle-triggered lighting/audio to direct attention to direction of traffic



Real-time information to reduce haste



Prompts in apps to encourage calm, remove short interchanges that require peds to rush, warn about collision hotspots



# Break



EVERY JOURNEY MATTERS



# Thank you!

If you have any other ideas, feedback,  
suggestions

Email: AmyEdgar [REDACTED]

