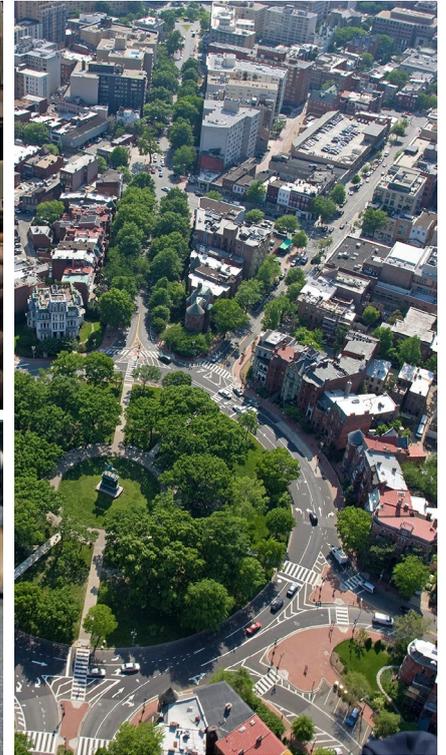


Pedestrian Safety Why a One Size Fits All Approach Benefits No-One



Introduction

During the numerous coronavirus pandemic lockdowns around the world, life became much less complicated for people, and the importance of simple freedoms was highlighted. Walks or cycle rides were the highlight of the day and the lack of vehicles on the roads in an urban environment brought many benefits, not least improved pedestrian and cyclist safety.

The restrictions meant the usual traffic movements were dramatically reduced and the balance of power tipped in favour of those on foot or two wheels. In many places, roads were adapted to cater for increased footfall and bike traffic. Initiatives such as closing or reprioritising roads were brought in to allow school communities the necessary space when arriving and at collection time.

These measures must naturally be applauded, but a critical outcome of the resulting overall lack of traffic is the opportunity to highlight the case that the car is no longer king. It's what we've all been thinking, so why have we put up with it so long?

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Protecting pedestrians - why it can't be one size fits all



Traffic authorities worldwide have for many years sought out ways to better protect pedestrians. Some countries have signed up to a Vision Zero approach, with ambitious targets to significantly reduce pedestrian casualties involving vehicles. Others, however, have explored and adopted their own objectives.

This disparate approach exists not only at a global level, but also within countries themselves, with states and regions working toward different strategies, setting different goals, and all working within different budgetary and political restrictions.

While intentions may be universally laudable, the disparity in approach naturally means some initiatives and programmes are achieving more than others.

So what's the answer?



Should the focus still solely be on reducing casualties - or do we need to recognise that as the world opens up post-pandemic, there is an opportunity to transform interactions between vehicles and pedestrians into a much more cohesive and co-operative relationship, and that the resulting efficiencies in traffic movement will bring about a natural and organically safer urban environment?

The role of technology



As authorities adjust their approach to deal with a new normal in urban traffic flow, advances in pedestrian detection technology mean that even with only small tweaks to highway infrastructure, significant improvements can be made to efficiency and pedestrian safety.

Pedestrian crossing systems now employ multiple technologies to ensure a greater free flow both of people and vehicles, but even the simplest of detection methods can benefit pedestrian safety.

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A mindset shift, and a simple tweak - London, 2020



In London in 2020 Transport for London (TfL) experimented with the ‘**default status**’ of traffic lights and swapped the priority to pedestrians instead of vehicles, trialling what is known as ‘**green man authority**’.

Traditional traffic flow models prioritise road users, with pedestrians requesting a green man to cross.

The TfL trial changed this priority, and instead of showing a green light to road traffic most of the time, even when there isn’t any, the default was red signal, with pedestrians shown a green man to cross. Detection technology meant that when vehicles approached, the lights changed to allow them through.

The key finding from the trial was that defaulting to a continual red light to road traffic when the roads were empty, changing to green only when vehicles approached, did not significantly affect road congestion.

In 2018, half of the people killed or seriously injured in road collisions in London were pedestrians. TfL research found that 80% of pedestrians will cross within 30 seconds of arriving at a pedestrian crossing, even if a green man is not shown to them.

‘Boost for walking as TfL launches Central London Footways created by London Living Streets and Urban Good’, TfL press release, 17 September 2020.

■ Around the world

Several use case examples of keeping pedestrians safe, while deploying technology to keep traffic flowing freely, highlight how the adoption of simple tweaks can bring about significant benefits for traffic authorities around the world.

AUSTRALIA

Hi-Vis Pty Ltd and its sister company Hyperion Technology Pty Ltd recently developed a new Pedestrian Safety System for medium to high traffic volume areas. This innovation followed a request from Transport for New South Wales to see if pedestrian safety could be improved, particularly around shopping centres, retirement villages and other high volume shared traffic areas.

The Hi-Vis Group successfully tested a system that was largely designed around the AGD645 Pedestrian Detector and AGD326 Pedestrian Radar. The system called upon detection of the person on approach to the pedestrian crossing and the ‘handing over’ of the person to another detector as they crossed safely to the other side.

Hi-Vis Group considered a wide variety of detectors in the design and testing phase, exploring a range of detection mechanisms such as radar, light intensity variation and 3D volume changes of mass within a detection zone.

“The AGD645 and AGD326 detectors were proven to be a clear superior detection combination. Following successful performance in field testing, the solutions now form the core of the Pedestrian Safety System. To date four such systems have been installed around New South Wales, all operating effectively with a high degree of detection accuracy.”

Brett Watson, Managing Director, Hi-Vis Group, March 2021

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IRELAND

“Elmore Group are distributors for AGD Systems in Ireland and we have supplied AGD Products to numerous City Councils, County Councils and Local Authorities throughout Ireland.

In the last 2 years we have supplied and installed more than 250 AGD641 pedestrian detectors and these are delivering the results required by our customers. We have deployed the AGD641 on Pedestrian Crossings, Isolated and Centralised Junctions and we are delighted with the feedback we have received on this product.

We look forward to many years of continued business with these products.”

Fergal Kelly, Chief Operations Officer, Elmore Group Limited, April 2021

■ Setting New Standards

The AGD Pedestrian Detection Suite represents the very latest evolution in pedestrian crossings – purpose-designed to provide the ultimate in safety for pedestrians and other vulnerable road users, and the ultimate ease for city authorities, our real-world installations across the globe are already setting a new standard for efficiency and reliability.

With wait-area and on-crossing detection platforms, pedestrians are tracked accurately in real time to ensure the safest of journeys in any urban environment – from the moment they step into the waiting zone.

Plus, flexible range setting allows zone sizes to be created right up to an impressive 24m by 10m, perfect for super crossings at busy city centre sites. And we also offer the kerb-side AGD641 platform with a 4m by 2m zone and self IR for small to medium wait areas; and the AGD645 for larger crossings where IP connectivity, pedestrian volumetrics, and large 10m x 3m coverage are required.

Highly intuitive, the detectors track all movements on and off the wait area cancelling demands when needed - keeping traffic flowing freely and ensuring the optimum in efficiency.

AGD technology allows city authorities to time crossings to perfection and ultimately keeps pedestrians safe.

Traffic & Pedestrian Control



Highways



Enforcement



Tunnel & Track

