

THE GREAT TRAFFIC DISRUPTOR

BUILDING BACK BETTER

Delivering on the three 'E's:
Equity, the Environment and the Economy

A report for the UK Noise Association

Written by John Stewart



THE PANDEMIC: THE GREAT DISRUPTOR



Nowhere more so than in transport:

- Changes have taken place to the layout of our streets at a speed never before seen.
- Public transport has lost more passengers more quickly than at any other time in its history.
- The 'rush hour' is changing as white-collar work patterns have changed.
- Cars are now seen by many as a refuge from the virus.
- Aviation has never been at such a low ebb.

In this report, focusing on surface transport, I argue we can build back better; we can create a transport system which is more equitable, improves the environment and is better for the economy.



We can deliver on the three 'E's: equity, environment and the economy

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NO GOING BACK TO THE 'OLD NORMAL'

A number of factors have come together which I think makes change inevitable:

- A big majority of residents in low traffic neighbourhoods like them and will want to keep them. They will not accept the traffic coming back having experienced life without it. Indeed, it can be expected that other communities will be calling for them.
- But communities on main roads, having found their voice, will no longer meekly accept their fate as the depository of other people's cars. These newly-emboldened residents will not allow their views to be ignored.
- These factors will create pressure on local and national government to reduce overall traffic: even though some traffic evaporates when road space is taken away, the authorities can't provide *more* low traffic neighbourhoods *and* a better deal for main roads without overall traffic reduction
- New technologies from the electric car to freight delivery bicycles will alter the traffic mix

The fact that people living on both side roads and main roads want fewer cars piles on the pressure for overall traffic reduction

What the 'new normal' could look like:

- Low traffic neighbourhoods rolled out nationwide
- Less traffic on main roads
- Active travel the norm
- Affordable, accessible, regular and frequent public transport serving every community
- The gradual roll-out of road user charging to deter car travel and help pay for the public transport
- A transport tax on large commercial concerns to help finance the cheap public transport
- Electric cars the norm
- An expansion of innovative technologies such as e-scooters and freight delivery bicycles
- More car and bicycle sharing
- Lower speeds controlled by speed limiters
- Less noise, air pollution, climate emissions and congestion

This short report suggests ways in which the new normal can come about.

MAIN ROADS ARE COMMUNITIES TOO



I have no doubt where I stand on this. The creation of low traffic neighbourhoods should not be at the expense of people living on main roads.

It need not be the case, as hope to show, but I despair at tweets like this:

'Isn't that part of the decision making process of choosing to live on a main road? when did RESIDENTIAL road residents vote to let so much through traffic onto their streets? the rat running traffic is displaced from main roads to avoid queues, LTNs put it back where it belongs.'

I may have picked a particularly insensitive tweet but there is no awareness in it that many main road residents have not *chosen* to live on them instead of on the leafy side-streets; and that these are their 'residential' roads. It is estimated just over 8% of Londoners live on main roads – that figure is about the same for white and non-white people. See the next page for a more detailed background

It is true that between 2009 and 2019 motoring on minor roads doubled between (1). For decades there had been little growth in traffic on these roads but the coming of satnav combined more home deliveries and the overall increase in the number of vehicles in the country changed that.

Many people have not chosen to live on main instead of leafy side streets

I can understand why low traffic neighbourhoods will have come as a blessed relief to people on minor roads who experienced this traffic growth but the response is not simply to heave a sigh of relief that it can now go back on to the main roads. The equitable answer is to find ways to cut traffic levels on *all* roads without hurting those whose livelihood depends on using their car or van. *And* to provide good public transport which is cheap and accessible enough for everybody to use.

Main roads will by their nature always be busier. They will carry more through-traffic; they have the hustle and bustle of shops, cafes, churches, mosques, take-aways and pubs – they will have more deliveries; and they are, with very good reason, the principal bus routes. This means that the amount of traffic on main roads doesn't just impact its residents. Most of us spend a lot of time on main roads: at work; at school; shopping and socialising; waiting for buses; meeting friends; simply walking along them since main roads are often the most direct route for pedestrians. Ways need to be found to cut traffic levels on main roads I believe it can be done.

'Build Back Better' must include a better quality of life on main roads.

WHO LIVES ON THE MAIN ROADS?

		Inner London	Outer London
		% main road or high street	% main road or high street
Age	Under 16	7.0%	8.4%
	16 to 64	8.8%	8.9%
	65 plus	8.2%	7.3%
Ethnicity	White	8.1%	7.3%
	Black	8.4%	8.7%
	Asian	8.7%	11.1%
	Mixed, Other & Arab	10.5%	11.2%
Disability that limits travel	Yes	6.7%	8.3%
	No	8.7%	8.6%
Household income	<£20k	8.3%	9.4%
	£20k -£49k	9.4%	8.6%
	£50k+	7.7%	8.2%
Household car access	No car	10.3%	12.7%
	One car	6.6%	7.8%
	Two or more cars	6.0%	6.3%
All		8.4%	8.6%

Across London (2), most people live on residential streets.

Only **8.5%** live on a main road or a high street (5.5% main road versus 3.0% high street).

In Inner London, White, Black and Asian people have similar rates of living on main vs. 'residential' streets (8.1-8.7%); by contrast 10.5% of people from the mixed/other/Arab ethnic groups live on a main road or high street. Of course, patterns may vary by local area, but overall there are few disparities by demographic group. Inner Londoners living on a main road or high street are relatively unlikely to have access to one or more cars. That may in part be down to income but the lower availability of car storage and better access to public transport are also key factors.

In Outer London, there are more differences by ethnicity and household income in the likelihood of living on a main road. While Asian Outer Londoners are more likely than White Outer Londoners to live on main roads or high streets, the overwhelmingly majority (89%; albeit less than the 93% for whites) live on residential streets. Almost as many middle- and high-income Outer Londoners live on a main as poorer Londoners. As in Inner London, people without cars are more likely than average to live on a main road or high street, as are working age Londoners. There is however no difference by disability.

Note to self: Add some comments and references

LOW TRAFFIC NEIGHBOURHOODS ARE HERE TO STAY

A recent survey (3) of 2,000 people living in London showed 52% of people supported low traffic neighbourhoods; only 19% opposed them.

It is not surprising. They create places where children can play more safely; where older and disabled people are less fearful of going out; where residents can linger on the streets; and where house prices are likely to increase. More areas want them. **Any traffic measure which goes with the flow of local opinion is unlikely to be reversed.** Of course, the introduction of low traffic neighbourhoods has not been problem-free. Some residents don't like their one. And, in truth, some have not been designed well; others may not be needed. But on the whole they are liked.



No longer just in upmarket areas

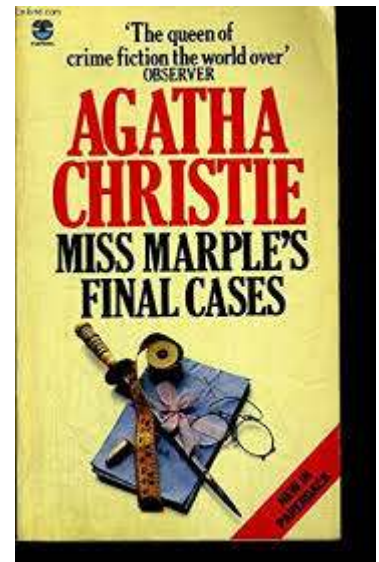
This is a seismic change from previous decades when low traffic neighbourhoods tended to be confined to leafy side streets.

The photo above is of **Railton Road in Brixton**, the scene of widespread rioting in 1981. On the right, a council estate in the **London Borough of Hackney**.



THE MYSTERY OF THE DISAPPEARING TRAFFIC

It is a mystery worthy of Agatha Christie. Although the creation of low traffic neighbourhoods funnels traffic towards the main roads (as it is intended to do), some of it disappears altogether! This can happen because it becomes harder to drive around the whole area, so some people give up trying. An early study (4) revealed that some evaporation of traffic nearly always takes place. It found that 'the average reduction in traffic on treated roads was 41%, of which less than half reappears as extra traffic on alternative roads or different times of the day.' There were exceptions but the traffic increase on the main roads adjacent to the traffic-calmed side streets was not nearly as high as would have been expected. This was the case in the London Borough of Waltham Forest after the installation of its recent - and now famous - 'Mini-Holland' scheme: the largest and busiest road through the centre of the local traffic neighbourhoods has seen just 2% increase in traffic. Of course, although lower than expected, that still is an increase. However, there are ways to ensure this does not happen. The key is to reduce the space given over to cars and lorries on main roads, thus making them less attractive to drivers. Wider pavements, more regulated parking, cycle and bus lanes will ensure that yet more traffic disappears!



1990s: Edinburgh showed the way

A **template** of how to cut traffic both on side streets and the adjacent main road



1990s Leith Walk was not fashionable. It was the wide thoroughfare which linked the port of Leith to central Edinburgh. Leith was a solidly working class area. Leith Walk was lined with small shops, businesses and flats. In the 1990s Edinburgh Council took the decision to traffic-calm the 'residential' roads surrounding Leith Walk. But, under the inspirational David Begg, Edinburgh's Transport Convenor at the time, the Council decided to install Greenways on Leith Walk at the same time. Together with measures to improve things for pedestrians, one of the aims was to ensure that the people who lived and worked on Leith Walk were not overwhelmed by car and lorry traffic. Because it was such a wide road (it would have been called a boulevard if it has been in Paris), there was a lot of scope to introduce measures to cut traffic. Many main roads present more of a challenge. I look at that in more detail over the next few pages. But David Begg - now Professor David Begg and a national transport figure - showed something else is needed if change is to take place: inspirational leadership and boldness. He rode out fierce criticism of being 'anti-car' to deliver

something which has brought lasting, all-round improvements.

HOW TO TURN LOW TRAFFIC NEIGHBOURHOODS INTO LOW TRAFFIC TOWNS AND CITIES

It requires an overall reduction in traffic: less traffic on side roads and on main roads.

It will not be an easy task. The journalist Tom Welsh writing in the Daily Telegraph (11th October 2020) was of the view *Britain is a pro-car society ruled by an anti-car elite*. He added, with reference to recent measures to install cycle lanes and low traffic neighbourhoods: “Millions have stayed in their cars, and are finding that local authorities have made their lives more difficult, out of a total misunderstanding of their preferences.” Craig Mackinlay MP, the Chair of the All Party Parliamentary Group ‘Fair Fuel for UK Motorists & Hauliers’, said, The car is “*one of the most liberating inventions yet created.*”

It would be flying in the face of reality to deny the value of cars, the desire so many people have to buy one and the enjoyment they get from them. For many people, particularly those living outside our town centres and inner cities, the car is how they travel. It is an integral part of their way of life. I suspect it is why there is such unconstrained fury at the growth of cycle lanes and low traffic neighbourhoods amongst many drivers. They are literally getting in their way. Obstacles a year ago they could never have conceived would exist. And to repeat what I wrote earlier: for some people their car or their van is their livelihood. That must always be respected.

However, I think tighter restrictions on traffic are inevitable. Residents in low traffic neighbourhoods don't want to go back to the old normal. And communities on main roads, having found their voice, will no longer meekly accept their fate as the depository of other people's cars. Social media has given these communities a platform they never had before: “*the South circular is not like a motorway, there are real people who live right on top of these roads*”(Rosamund Kissi-Debrah). The raw sincerity of these voices has shone through and I believe will not go away. Something will need to give. I think it will be traffic volumes, particularly as the car is now widely recognised as a major contributor to noise, air pollution, climate emissions and road danger.

The pandemic has accelerated change that might have been coming anyway.



Are people really going to give up their new found freedoms?

BOLD CHANGE FOR A CHANGED WORLD

To reduce traffic on both main roads and side roads requires a bold, creative approach

These are the key elements:

- Roll out well-designed low traffic neighbourhoods across the country
- Reallocate road space on main roads from cars to other modes of transport – by means of wider pavements, reduced parking and the installation of more bus and cycle lanes
- Facilitate walking and cycling
- Run affordable, accessible, frequent and reliable public transport services
- Phase in road user charging
- Embrace new technology, including shared modes of transport
- Reduce speed limits

I look at each in turn.

Roll out well-designed low traffic neighbourhoods across the country. We know how to do this. The phrase ‘low traffic neighbourhoods’ may be relatively recent but something similar has been taking place for years – whether it has been called ‘traffic-calming’ or ‘play streets’ or the Dutch ‘woonerfs’. We know how to design them well. Local authorities have often, though, got bogged down in ‘consultation’ so that good schemes can take years to implement. Let’s free our councils from ‘consultation’! I believe the best way is to put something in on a trial basis, let local people see how it’s working, take their views, and adapt it as necessary. It’s more inclusive and it is a lot, lot quicker.

Reallocate road space on main roads from cars to other modes of transport – by means of wider pavements, reduced parking and the installation of more bus and cycle lanes. Again, we know how to do this. (I gave the example on page 7 of how Edinburgh went about it). Over the last few decades town and cities have brought in bus lanes and cycle lanes. Pedestrian facilities at junctions have improved. Parking spaces have been reduced in many areas. I first moved into my office in Stockwell in South London in the early 1980s. It stands directly across from Stockwell Underground Station at the junction of two busy, heavily-bussed main roads. At the time there were no pedestrian phases at the busy, complex junction, no bus or cycle lanes and little control of parking. All that has now changed. I recognise that in many places, particularly outside London, the change has been less dramatic but my point is we know how to reallocate space on main roads away from car and lorry traffic.

Facilitate walking and cycling. Once again, we know how to do this. It works best when the hierarchy of road users is adopted where pedestrians are top of the pyramid. When written into policy this ensures the needs of those on foot are considered first when allocating road space. And more walking and cycling can make a real difference to traffic levels as they are viable alternatives car trips. Although overall we travel greater distances than before, most car trips remain short. Nationally, 56% of are under 5 miles long (5). In London 50% of private car journeys are less than 3km, with 35% under 2km (6).



Run affordable, accessible, frequent and reliable public transport services. There will be car journeys for which public transport alternatives are difficult. Over recent decades housing developments, retail stores, leisure facilities and business parks have grown up on the assumption they will be served by cars. In its research (7) the consultancy Transport for Quality of Life identified two key components of a viable public transport system: frequency and affordability.

Frequency: Transport for Quality of Life recommends the system used in Switzerland where frequency standards are set down in law, ensuring a comprehensive public transport network across the whole country. In the area around Zurich, for example, settlements of over 300 people are guaranteed an hourly bus service; corridors with multiple settlements get a half-hourly one; and large dense settlements receive are served at least every 15 minutes. Services run from 6am till midnight, seven days a week. Buses and trains connect, and services repeat hourly at regular intervals.

“Fare-free bus travel in Dunkerque has been a game-changer for a working class town that was culturally very attached to the car. One year on, bus trips are up 85%. Half of new bus users previously drove and one in ten new bus users have sold their second car.”

Affordability: Transport for Quality of Life advocates **fare-free local bus services**, following the examples of Dunkerque in 2018, Calais in December 2019, and Luxembourg in March 2020: “Fare-free bus travel in Dunkerque has been a game-changer for a working class town that was culturally very attached to the car. One year on, bus trips are up 85%. Half of new bus users previously drove and one in ten new bus users have sold their second car.”

I would add Accessibility.



I sat on the Board of TransportforAll for a numbers of years. It “champions the rights of disabled and older people to travel with freedom and independence in London”. And a lot of that involves road space: not just priority for fully accessible, frequent bus services but also congestion-free roads so that door-to-door vehicles like Dial-A-Ride are not bogged down in traffic. It means reducing danger on the roads and pavements so that older people, wheelchair users, deaf and partially deaf people, blind and partially blind people can move around with confidence and in safety. It also means recognizing that freedom to travel for many disabled people is enhanced by their ability to drive and cycle. Measures to make all this happen are being introduced – often too slowly – but here is no doubt it can be done.

PHASE IN A ROAD USER CHARGE; NOT A CONGESTION CHARGE

“It will never work,” I was told when I sat on an advisory body working on the congestion charge scheme which Mayor Ken Livingstone introduced into Central London in 2003. But it did work and there were no riots on the streets. It has worked too in Singapore, Stockholm, Gothenburg and Milan which have shown it can cut traffic volumes by around a fifth, sometimes more. However, if some form of road user tax is to be introduced more widely in the UK, it could face more opposition than the London congestion charge unless brought in very carefully. Most Londoners benefited from the congestion charge because only a minority drove into Central London but many used the bus services which were greatly improved using congestion charging money.

‘A road user charging scheme in much more of London - a sensible one, related to distance travelled and vehicle type - can be good for TfL finances, public transport, equity, sustainability, ease of travel by all modes, council & private services, carbon reductions, & the economy’. Professor Phil Goodwin

Why a ‘road user charge’?

It is different from a congestion charge which is designed to cut congestion on particular roads at specific times in order to allow the traffic to flow more freely. The aim of a road user charge would be to cut traffic on all roads in order to give people a better quality of life and reduce climate emissions. It should, therefore, be distance-based and, in due course, applicable to all roads. Transport for Quality of Life in its research (7) called it an ‘Eco-Levy’; I’ve called it a road user charge but the principle is the same. As an important by-product, it would reduce congestion and thus costs to business.

The revenue raised would go in part to pay for cheaper, better public transport

The revenue raised from the road-user charge would help pay for a frequent, accessible, cheap (or free) public transport system. (The Treasury would also want to claim some of it as a substitute for fuel duty which will begin to dry up as electric vehicles and even freight delivery bicycles become commonplace). There are additional ways of paying for these low fares and an improved frequency of service. I certainly don’t think most of it should continue to come out of the public purse. Transport for Quality of Life again: “Local authorities should be able to supplement income from the Eco Levy with other locally-raised income. For example, an Eco Levy should be complemented by new powers for local authorities to apply a public transport payroll levy, paid by larger employers. This is one of the main funding sources for public transport in France. Employers would benefit from a payroll levy because excellent public transport would increase the catchment from which they could attract employees. The levy would enable better transport to city centres, which would make them more productive, and it would improve access to jobs for people in less prosperous towns and rural areas”.

Isn’t it just a ‘tax on motorists’?

In the round, most people would be spending less on transport than they do today

Janice Turner wrote in her Times column (22/10/20): “Drivers will refuse to pay to collect tiles from B & Q or take their old mum to Tescos...businesses will revolt.” It would be neither equitable nor good for business if low-income drivers, small businesses and delivery vans were punished by the charge. But imagine this scenario. Public transport is dirt cheap or free so the only real cost of travelling around would be the road user tax. In the round, this would mean most people would be spending less on transport than they do today. Car use would fall. Congestion on the roads would be eased saving people who need cars and vans to do business saving them time and money.

EMBRACE NEW TECHNOLOGY

‘Innovation is the child of freedom and the parent of prosperity’

The headline is a quote from the author and journalist Matt Ridley. He’s quite right. Free societies tend to be the most innovative, and innovation is a key parent of prosperity. Alongside the package of measures already discussed, new technology has an important role to play in civilising our streets. We hear most about the electric car but there are a whole range of vehicles coming on the market which will help shape the new transport normal.



The role of the electric car

The electric car will help cut noise, air pollution and emissions. Electric cars will cut NO2 significantly but there are real concerns about PM 2.5 (the most harmful air pollutant) being no different to conventional cars, because most car production of PM 2.5 is from tyres/braking (8). There may be technical solutions for some of this pollution such as regenerative braking or devices fitted near the wheels that pull in road tyre particles with an electric charge. They need to be explored. Electric cars will cut engine noise. At very low speeds the cars will be very quiet; and remain less noisy than conventional vehicles until they reach between 25 to 35mph. As a rule of thumb, tyre-road interaction is the main source of noise above 25 - 35mph for cars and above about 40 - 43mph for lorries, with engine noise predominating at lower speeds. The carbon emissions of driving 10,000 miles in an average electric vehicle is 0.96t CO₂e compared to 2.99t CO₂e in a petrol car and 2.88t CO₂e in a diesel car (9).

‘Would you believe it’ vehicles

The pandemic has coincided with an explosion of new vehicles. They are part of, and will help shape, the new normal. We need to embrace them: freight cycles; e-scooters; e-bikes; shared vehicles; pedi-cabs; hired cars and bicycles. I’m much less sure about drones, though. They are hugely valuable in delivering goods and medicines in poor countries where the terrain is





rough and the roads are poor. But delivery of our nightly pizza? I don't think so! But some of the new vehicles could be game-changers. The e-bike (left), perhaps more than the currently fashionable e-scooter, gives a diverse range of people the ability both to get exercise and travel long distances by bicycle. The new freight bikes could revolutionise deliveries allowing the delivery van to drop everything at a 'click and collect' place, with a cargo bike doing the last mile to your house. And the new technologies can enhance shared transport.



Shared transport

Shared transport has broadened out considerably from the early days of car hire and giving your colleague a lift to work. It now includes much more: from pay-by-the-hour car clubs, to a range of bike share schemes, demand-responsive mini-buses and even one-way car-sharing which enables members to pick up a car from within a pre-defined zone and drop it off anywhere else within the zone (10).

Shared transport is likely to become even easier to use with the development of **mobility hubs**. These can be as simple as an enhanced bus stop with car and bike share facilities or a



Innovative schemes like bike libraries are springing up



comprehensive hub which includes personal bike storage, delivery lockers, car hire facilities, electric charging points and cycle freight facilities. They could be at a train station or beside a key bus stop but can also include non-transport related additions such as seating, WIFI and retail outlets (11).

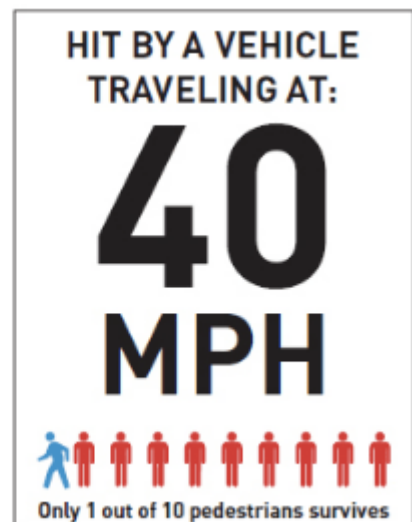
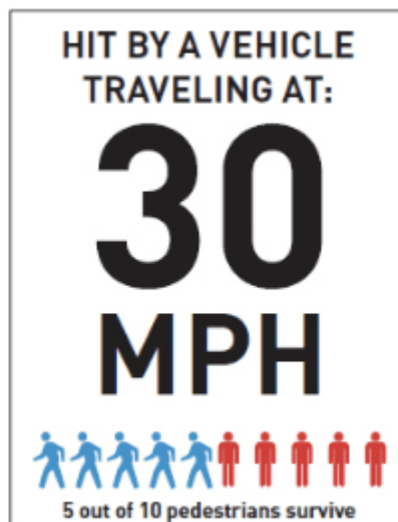
LOWER SPEEDS

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A BETTER QUALITY OF LIFE FOR COMMUNITIES

Lower speeds will be particularly important if measures are successful in reducing traffic volumes. As we saw during the Covid lockdown, some drivers will take advantage of emptier streets and rev up their speeds.

I wrote in the book I co-authored, *Why Noise Matters* (12), that reducing speed 'is the most immediate and equitable way of cutting traffic noise'. It would also reduce road danger and air pollution; and cut climate emissions overall (though at very low speeds CO₂ can rise). It is one of the single most important measures for low-income communities. The statistics consistently show that children of poorer families are more likely to be killed or seriously injured on the roads, mainly because, lacking gardens, they are more often on the streets and, lacking cars, are more likely to walk to school. Slower speeds would at a stroke reduce their rates of death and serious injury. In the late 1990s I chaired both the Slower Speeds Initiative and RoadPeace, the road victim charity. It was a struggle to get lower speeds, properly enforced, on the agenda. Real progress has been made in subsequent years. 20mph zones are now commonplace. Some places are becoming 20mph towns. In 2022 all new cars will need to be fitted with automatic speed limiters. Things are moving in the right direction but more needs to be done. Lower speeds will be particularly important if measures to reduce traffic volumes succeed. As we saw during the Covid lockdown, some drivers will take advantage of emptier streets and rev up their speeds.



THE NEW NORMAL IS HERE TO STAY

It feels that we are at one of these turning points when fundamental and permanent change is on the cards. These moments rarely occur in transport. In London one of them happened in 1990 when the Government of the day abandoned a £12bn roads programme in the face of overwhelming public opposition. Londoners rose up in against the plans. One MP alone received 17,000 letters of complaint. Demonstrations and rallies took place across the capital. The campaign was coordinated by ALARM (All London against the Road Building Menace) which I chaired. ALARM brought together over 250 local protest groups from across the capital. The proposed road schemes would have had a devastating impact on London, destroying thousands of homes, damaging parks and open spaces and driving highways through established communities.



Kampala Uganda
Fundamental changes are taking place across the world

Successive Governments realized that road building could never again be put forward as the solution to the capital's transport problems. It feels like we are at similar moment now but on a national and international scale.

I simply don't see people, whether in the UK or around the world, giving up their new-found freedoms

I simply don't see communities backing down over low traffic neighbourhoods or main road voices going silent again. Social media, not around in the 1980s, has emboldened people. It gives us a chance to see what is happening in other areas (indeed across the world), broadcast our views and make links with others of the same view.



Traffic calming in Columbia

Social media has emboldened people. It allows us to broadcast our views, see what is happening elsewhere and make links with others of the same view.

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John Stewart is the current chair of the UK Noise Association and of the Campaign for Better Transport. He has just stood down as the coordinator of HACAN (which gives a voice to residents under the Heathrow flight paths). He is a trustee of the Foundation for Integrated Transport; a Director of Good Journey; and an Associate of Transport for Quality of Life. Previously, he chaired the Slower Speeds Initiative, RoadPeace, ALARM and ALARM UK (which brought together communities opposed to road building schemes). He works on transport issues in South and East London. At a European level he is vice chair of UECNA (which gives communities a voice on aviation) and is a member of the EU's Noise Expert Group. He is the author of *Poor Show* (1998), a study of the impact of traffic on low – income communities; *Location, Location, Location* (2006), assessing the impact of wind farm noise; and the lead author of *Why Noise Matters* (Earthscan, 2011).

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