

Creating liveable cities – the role of active and sustainable travel

Thursday 26th May 2016

St Andrews in the Square, Glasgow

Seminar Report



An impression of the Sighthill development, North Glasgow (supplied by Glasgow City Council)

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Introductory remarks

Lorna Kelly, Associate Director of the Glasgow Centre for Population Health, chaired this event. Lorna welcomed people to the seminar and went on to explain that this event was the latest in a series that GCPH has held related to active travel. Previous seminars have explored the links between active travel and health and the impact of cycling infrastructure in the city. One of their main aims has been to encourage debate about how we move from policy to practice and what more needs to be done.

Lorna went on to explain that the focus of this event was on the role of active travel in liveable cities and, while there are lots of different views on what is meant by a liveable city, for her a liveable city is a city which supports the things which are important to us in our daily lives – *‘our work and education, housing, health, social networks, being safe and a city where those things are enabled for everyone and we're not leaving people out’*.

Lorna then went on to outline the format of the day and to introduce each speaker.

Walking is the good news story for physical activity and health

Professor Nanette Mutrie, University of Edinburgh

[\(Click here to access the full presentation\)](#)

Professor Mutrie explained that, while she was a cyclist and because cycling has a strong political lobby voice, she was speaking up in favour of walking because walking does not always get such strong advocacy and in her view, *‘walking is a good news story for physical activity, for health and for liveable cities’*.

Nanette explained that physical activity for health has been a life-long career agenda, but up until 2010 there had not been global guidance. The [Toronto Charter for Physical Activity](#) gave us that guiding voice, it was a call to action for all countries to consider the importance of physical activity for health. Soon after that we had a slew of very important evidence relating to physical activity and the impact of physical inactivity published in the medical journal [the Lancet](#) in July 2012. The editors of that journal series commented that the prevalence, global reach and health effect of inactivity made it appropriate to describe physical inactivity as a **pandemic** with far reaching health, economic, environmental and social consequences.

The Lancet articles underscored the importance of physical activity for health. There is extremely strong evidence now that regular physical activity will help prevent and reduce the risk of mortality from coronary heart disease, high blood pressure, stroke, falling, metabolic syndrome, Type 2 diabetes, two cancers: breast cancer and colon cancer and one mental health issue, depression. There are other benefits that come with regular activity, like fitness, healthy body composition, good bone health, improved functional health, particularly for older adults, and evidence that regular activity improves cognitive function, both for children at school and for older adults.

Professor Mutrie also pointed to another study in the Lancet ([by I-Min Lee](#)) that highlighted the risk of inactivity for health was equal or greater to smoking. She also

noted that in our world, in which technology has pretty well taken over, we have to engineer our way back into physical active lives.

Nanette went on to highlight the [guidelines for physical activity](#) (150 minutes a week of moderate or 75 minutes of vigorous activity for adults, coupled with strength exercises on two or more days) and also noted the importance of limiting sedentary activity. She pointed to the strength of policy in Scotland around physical activity in Scotland including the [Active Scotland Outcomes Framework](#) and the walking strategy [Let's Get Scotland Walking](#). The Step Change for Scotland infographic (shown below) illustrates things that are intrinsic - travel, education, air quality, the built environment, walking for health, the green infrastructure, economy, the workplace, health and social care, the paths network - and that walking is for everyone.



Quoting figures compiled by GCPH from the Census, Professor Mutrie noted that in Glasgow, 25% of commuters walk, while only 2% cycle, and therefore there is a lot of work to do to promote more cycling. In her view, perhaps it will be easier to get more people to walk than it will be, at least in the short term, to get a vastly different percentage of the population cycling. Infrastructure is limited and interrupted, and, while it is improving every year, it takes a long while for the infrastructure for cycling to actually encourage people to take more cycling trips.

In Scotland there are great resources for improving walking from Paths for All. There are health walks that aim to encourage people to do mostly recreational walking and

to help them find routes for active transport walking. They have community pedometer packs, they are very well put together to help individuals or groups increase their walking. She also mentioned dog walking as a way of helping people to become more active. Dog walkers are a lot more active than non-dog walkers and so we should be focusing promotional effort there as well.

In conclusion, she reiterated that walking provides the best bet for encouraging people to be active for health and happiness and represents perhaps an easier approach than trying to increase that very small percentage of people we have cycling. There will also be a bigger population reach if we can increase more walking. Active travel to school needs attention, as trends are static and further promotional efforts are needed including environmental, educational and behavioural change approaches for school children.

Our Unequal Streets: everyday experiences as barriers to cycling

Dr Rachel Aldred, University of Westminster

[\(Click here to access the full presentation\)](#)

Making links to the previous talk, Rachel reflected on the discussion about increasing cycling and commented that she came from a borough where within ten years levels of commuter cycling have trebled from 5% to 16%. So she felt that this was hopeful in that you can get that transformational change, although obviously this is not happening in most places.

She also mentioned that during her PhD on a completely different topic, she had spent a lot of time walking around an area of East London which was completely divided by transport infrastructure through the ages - canals, rail links, motorway links and so on. This environment emphasised that what mattered was the car and that pedestrians and cyclists do not matter – *‘often, unfortunately, if we’re cycling or walking that message is you do not matter, you are less important than people who are traveling by motor vehicle’*.

Returning to the focus of her talk, near misses involving cyclists, she explained that she started studying this topic for several reasons. Firstly, she was interested in using ***near misses as a potential predictor of injury collisions*** and as a way of taking action to avoid collisions in a proactive rather than reactive way. Secondly, she was interested in a concept she terms ***experienced risk***. Objectively cycling may not be that dangerous, but people feel it's terrifying, so there's this perception of risk. She felt that people are expressing how cycling feels and how it looks. This is not just a perception, but it's everyday experience and it's important to listen to and it may have an impact on cycling uptake. Thirdly, she was interested in ***power relations and inequalities on our streets***. These everyday experiences – the near misses – ‘that as people walking or as people cycling we often kind of normalise and we get used to them’. However, for somebody who is doing that activity for the first time, it can be terrifying. She felt it is really important to bring these experiences to light and learn from them.

Describing the research in more detail Rachel explained that the Near Miss Project first ran in October-November 2014 involving around 1500 people across the UK who recorded their cycling over one day and any near miss incidents they

experienced. Rachel highlighted some headline accident statistics from the study that tell us about our streets and what the cyclist's experience is of the road environment and the way cyclists are treated by other people.

Comparing injury and non-injury incident rates

Type of Incident	Rate per year, regular UK commuting cyclist
Death	.000125 (once every 8,000 yrs)
Reported serious injury	.0025 (once every 400 yrs)
Reported slight injury	.015 (once every 67 yrs)
Any injury (reported or not)	.05 (once every 20 yrs)
Harassed/abused	20
'Very scary' incident	60
Any non-injury incident	450

Final three figures derived from Near Miss Project data. First four derived from published academic sources – see journal article for full details.

The table (above) is from the first published paper from the project and gives a sense of the magnitude near miss incidents for people cycling in this country. Firstly, in terms of deaths, as a regular UK commuting cyclist you'll be killed on the roads once every eight thousand years, reported serious injuries occur around once every four hundred years of regular cycle commuting, reported slight injuries may be once every sixty seven years (although slight injuries are under-reported, especially in the STATS19 police collision statistics). Turning to self-report injuries, people might get injured once every twenty years cycling as a regular commuting cyclist.

However when you look at the rates of incidents based on the 'near misses' data they are very different. In the Near Miss Project cyclists reported:

- rates that would equate to being harassed or abused twenty times a year e.g. a deliberate kind of incident might be someone throwing a can out of a vehicle at a cyclist;
- an incident that people rated as being very scary, might happen sixty times a year or approximately once a week.

So people cycling in the UK are experiencing very scary incidents on around a weekly basis and any kind of incident around four hundred and fifty times a year. These figures suggested that injury statistics are like the tip of the iceberg and that many other incidents are missed. But these near misses can lead to things that can be very frightening or that do represent violence on the streets, people being racially or sexually harassed, people having stuff thrown at them or being driven at.

The types of incidents being described are varied:

The most common type of incident was a cyclist having their way blocked. Many of these incidents were frightening because someone had to swerve out of the way of a pothole or an obstruction, or a parked car, into a flow of motor traffic. So often the surrounding road environment makes something that could be trivial into something that is much more worrying, that is much more scary.

The second most common type of incident was a “problematic pass”, basically referring to someone being passed too close by (almost always) a motor vehicle – these represented nearly a third of all incidents.

Other common incidents included vehicles pulling in or out across the path of a cyclist, near left or right hooks, tail-gating and near-dooring when a motorist opens a door into the path of a cyclist. Some of these incidents are quite strongly associated with the type of conditions that lead to injury collisions - e.g. left and right hooks at major junctions. This type of near miss data could potentially be used to predict and to stop things happening before they do happen.

Other incidents are different, for example, being driven at which can be split into two types of incident: on a narrow rural road a driver comes at a cyclist and expects them to get out of the way or on an urban road that's often parked up and so very narrow again. The driver expects the cyclist to get out of the way to maybe pull into the verge, get onto the pavement and so on. These incidents express a kind of unspoken priority on our roads. We may have these hierarchies of provision, we may say pedestrians, cyclists, public transport users and so on, but unfortunately a lot of this data suggests that motorists are still de facto at the top or think they are.

Rachel also pointed out differences in incident rates by gender with women reporting higher incident rates than men - in fact around 50% more incidents per mile than men.

The speed of a cyclist was strongly associated with the near miss rates per mile and this relationship holds for very scary incidents as well as for all incidents. Those cyclists traveling at under 8 mph were reporting around three times as many incidents per mile as those who got to their destination at 12 mph or quicker. There could be a range of explanations for this, but it's concerning that our streets seem to be particularly problematic for people who are cycling more slowly.

In terms of the qualitative experience of these incidents, near misses involving motor vehicles tended to be more scary, three times more likely to be very scary compared to those not involving motor vehicles, and the involvement of HGVs and buses made an incident particularly likely to be scary. Also incidents involving near-dooring, close passes or near left or right hooks were also particularly scary. So it seems that the cyclists were able to judge risk in terms of the situations that were likely to result in an injury collision.

Close passes were the second most common type of incident that people reported and the most common scary type of incident. These are very common everyday experiences for people who cycle in the UK and, while they are common in urban

areas, they are particularly typical in rural areas. In rural areas nearly half of all reported incidents were close passes and these incidents can lead to injury collisions; these are cyclist's deaths and serious injuries on rural A roads and are particularly dangerous for cyclists, and incidents often related to being overtaken too closely.

Rachel gave a few examples of how close passes made people feel, noting these are incidences that happen weekly, these are normal experiences: *'This is a 20 mph road, a car came past very close, a punishment pass at well in excess of the speed limit. Then slowed down to avoid triggering the speed camera, only to accelerate hard again afterwards. I felt upset at the seeming disregard for my safety; to be honest it's normal on this stretch of road. I just got my head down and carried on.'* This type of incident is viewed as a punishment by a motorist but also seen as normal, something that happens regularly.

And in another example:- *'The car behind which had been driving up close and then backing off over took me. The passenger shouted abuse as they passed and then cut sharply in front of me. I felt resigned and angry but it is rare that I cycle up this hill in this road position without abuse, being overtaken closely, having a car drive up close on my back wheel or repeated use of their horn. Sometimes all of these from the same vehicle.'* So this is clearly a repeated experience of somebody cycling up this hill and includes deliberate harassment.

How frequently do these things happen? Rachel quoted Ian Walker's work on close passes whereby how close vehicles came to cyclists was measured. This research concluded that one to two percentage of all over-takes came within 50 cm of the rider no matter how they dressed – so close passes are really fairly common.

Rachel concluded by mentioning a study applying this research on one specific road in the London Borough of Hackney and to see the impact of a proposal to restrict the road to residential traffic, reducing traffic from 4000 vehicles per day to 400 per day. Under this scenario the number of close passes experienced by a regular commuting cyclist might reduce from once a week to around one every two months. This kind of change could make quite a difference to people's experience of cycling. The impact on a new cyclist, of these types of incidents may be particularly off-putting.

She concluded that although cycling is amazing, can give you really positive experiences and be really health giving, at the moment, unfortunately, it is often an unpleasant experience. And this is related to the road environment and specifically to the behaviour of other people on the road. Main roads and residential roads are often hostile for cycling and people experience near misses on a regular basis.

The fact that people are experiencing these incidents regularly is a big reason as to why people feel it is unsafe to cycle and why people don't want to cycle. The data suggests that we need both infrastructural and cultural change and they are linked. *'You improve the environment, the infrastructure, you send a message that people cycling are welcome and are respected road users and hopefully you then start to change the culture'*. At the moment too often infrastructure sends the message that cyclists do not belong, that they are not really worth providing for properly and that

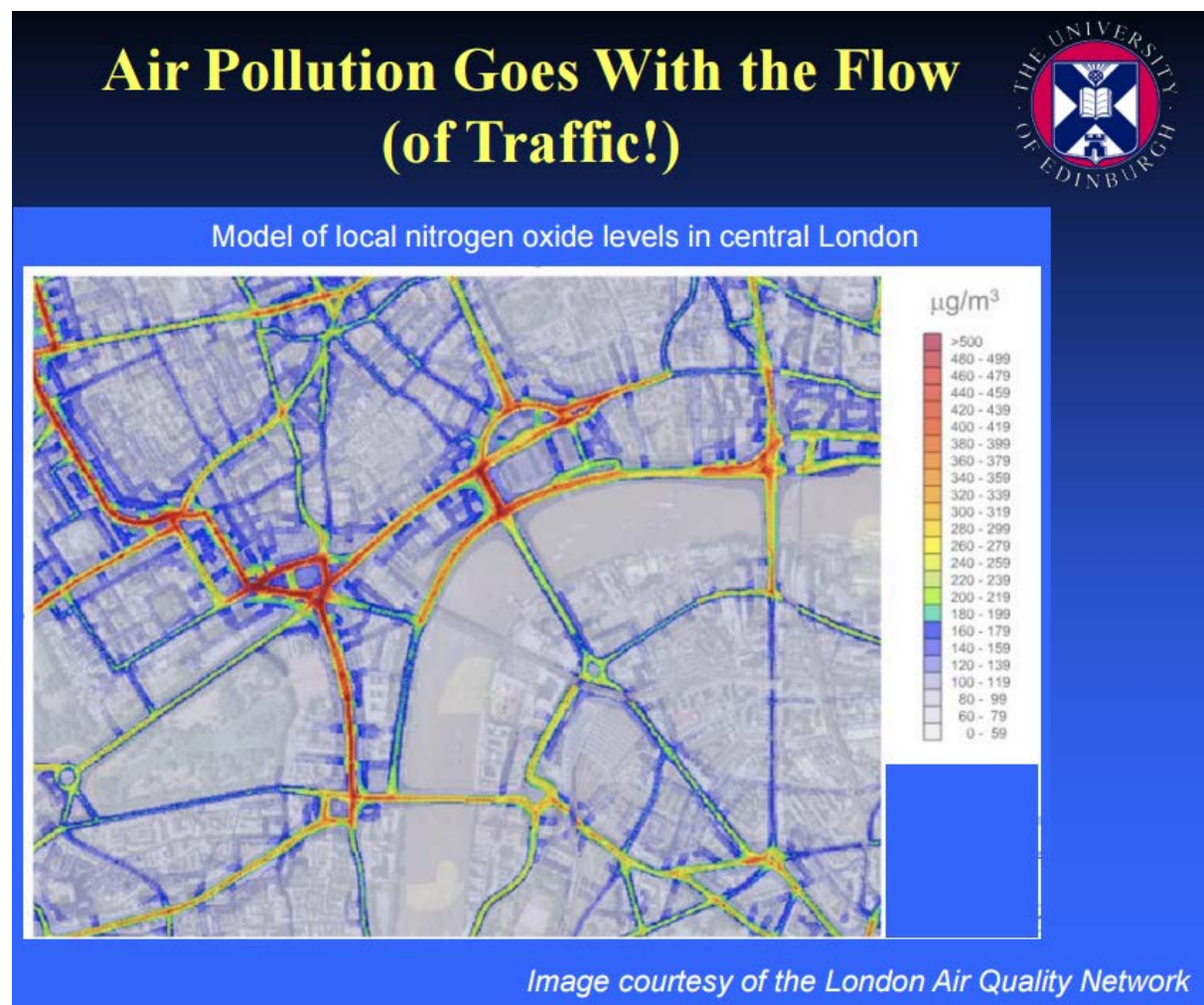
feeds into the way in which too often people in cars and motor vehicles treat people on bikes.

Health effects of air pollution: getting to the heart of the matter

Professor David Newby, University of Edinburgh

[\(Click here to access the full presentation\)](#)

Professor Newby explained his talk was about air quality and how it might affect urban living. The main problem as he saw it was air pollution from traffic and, in particular, the particles that are generated, predominantly, by diesel engines but also come from petrol driven cars. These are nanoparticles and they are incredibly small. These particles are most concentrated in our cities and where traffic is heaviest, such as on trunk roads, and it is here that air pollution is highest.



The predominate problem that we have with health and breathing-in is related to combustion and derived air pollution from traffic. David noted that there is a linear relationship between how likely you are to have or develop heart disease during your life and how polluted the environment is that you work in. Air pollution is associated not only with long term risk of developing heart disease and strokes and the like, but is also an acute precipitant. For example, for those people who have had a heart attack there is a threefold higher chance of having been in traffic in the hours before they have their heart attack.

He then described research he conducted with other respiratory physicians on the effects of air pollution conducted at a unique exposure facility in the north of Sweden. They looked at blood clots and at both how quickly the body dissolves blood clots and also how quickly it forms a blood clot. In experiments, where young people were exposed to diesel exhaust fumes this reduced the amount of clot dissolving. They also looked at the formation of clots during exposure to diesel exhaust. When you are exposed to dilute diesel exhaust, your blood is thicker, it is more likely to clot and the amount of clot you generate goes up. This is what underlies having a heart attack.

They also looked at patients who had heart disease. They used special monitors to monitor their heart during the exposures and by monitoring the electrical activity of the heart they were able to assess stress levels in the heart. They were able to show that cycling in an environment of dilute diesel exhaust was putting the heart under a lot more strain. And again, when looking at patients exposed to diesel exhaust, their clot releasing proteins were reduced, in turn reducing their ability to fight off blood clots as easily.

David described wearing mobile air quality monitoring equipment as an experiment while walking around London and experiencing spikes in air pollution readings due to buses coming past, due to dust particles in the Underground and particularly walking down streets. He commented on the extremely high level of air pollution in Beijing, where reported background levels of air pollution are five times higher than Edinburgh. He also described evidence from experiments carried out there that a proper face mask **reduced** blood pressure and reduced stress levels compared to not wearing the mask.

In coming to a close, Professor Newby referred to a study led by Dr Jill Pell into the impact of the smoking ban in Scotland. This showed that outdoor tobacco control legislation reduced the amount of myocardial heart attacks across Scotland by about 17% and particularly in people who did not smoke. The rate fell in non-smokers and smokers, but actually fell by 20% in those who never smoked because of reduced exposure to secondary smoke phenomenon. Similar reductions might be achieved if urban air pollution could be improved.

In summary, he reiterated that the environmental air pollution being faced today is mainly traffic derived. Air pollution does cause heart attacks and strokes and can precipitate them. It seems to have effects on the circulation and blood vessels do not react as well. He concluded by saying we should be striving to get people on their bikes, get them walking and get them out of their cars. Actually most journeys do not need a car and could easily be done on foot or a bike.

Addendum - questions

In the questions following this talk, Fiona Crawford asked for clarification about exposure to air pollution *'if you are on a bike in heavy traffic and if you are sitting in a car in heavy traffic or if you are pedestrian maybe with a child in a pushchair in heavy traffic where air quality is not good, who is most exposed?'*

Professor Newby's response was to say that although people often think they are protected - in a little cocoon - inside a car, particle levels inside a car are often three to four times higher than outside the car. So in polluted traffic the best thing to do is wind down your window if you haven't got a good recirculating filter built into your car. Because the air inlet in a car is at the front next to the exhaust pipe of the car in front, you can get quite high exposures and that is true on buses also.

Cyclists, of course, get pushed into taxi and bus lanes, where there are diesel engine exhaust fumes but the concentration they are breathing in is a third to a fourth less than the car. On the other hand, a cyclist may be breathing three to four times as hard, so actually the exposure is probably about the same.

In relation to pedestrians being close to traffic, there is an exponential decay of exposure, so the further you are from the kerbside the better. Children of course will be lower down they may have a slightly higher ventilatory rate than an adult because they're smaller, they breathe faster and so their exposure might also be high. But if they're sat in a car it (exposure to pollution) might be even higher. So actually being out in the open air is probably better, particularly in rain as when it rains it precipitates out a lot of the particles. So, in summary, is it better putting your baby in the back of the car or walking? It is better walking.

Another question was raised relating to uncontrolled (and controlled) kerbside parking and whether there should be stricter controls on parking. Rachel Aldred agreed that this is a really important issue and one that people are often scared to tackle. In some of her work on cycling experiences looking at children in particular, people have expressed concern, not only on residential streets but in relation to rat runs. With car parking in the way, a child may not be visible and it makes it hard to cross the road as a pedestrian, for children and for people with more mobility problems. She felt that the negative impacts of car parking, although an important issue, have not got into the debate yet, but this should be brought up for debate because it does make a big difference to the quality of the walking and cycling environment.

What have we learned? A synthesis of GCPH's work on active travel

Jill Muirie, Glasgow Centre for Population Health

[\(Click here to access the full presentation\)](#)

Jill began by explaining that in her talk she would bring together learning about active travel that the Glasgow Centre has gathered since it was established in 2006. She also aimed to apply this learning and to apply it to thinking about liveability in Glasgow and acknowledged and thanked her colleagues in the Glasgow Centre whose work she was drawing on.

So she started by considering how liveability might be defined. A liveable city might be one that is walkable, on a human scale, with ecological sustainable urban fabric that respects nature and encourages communities to flourish. She emphasised that she was really thinking about what active travel can contribute to making Glasgow a good place to live, for all the people and population groups that live here.

Jill defined active travel as any type of activity that is for the purpose of functional travel rather than leisure travel - so not walking or cycling for pleasure - but walking to get to work or to study or shopping or other specific trips.

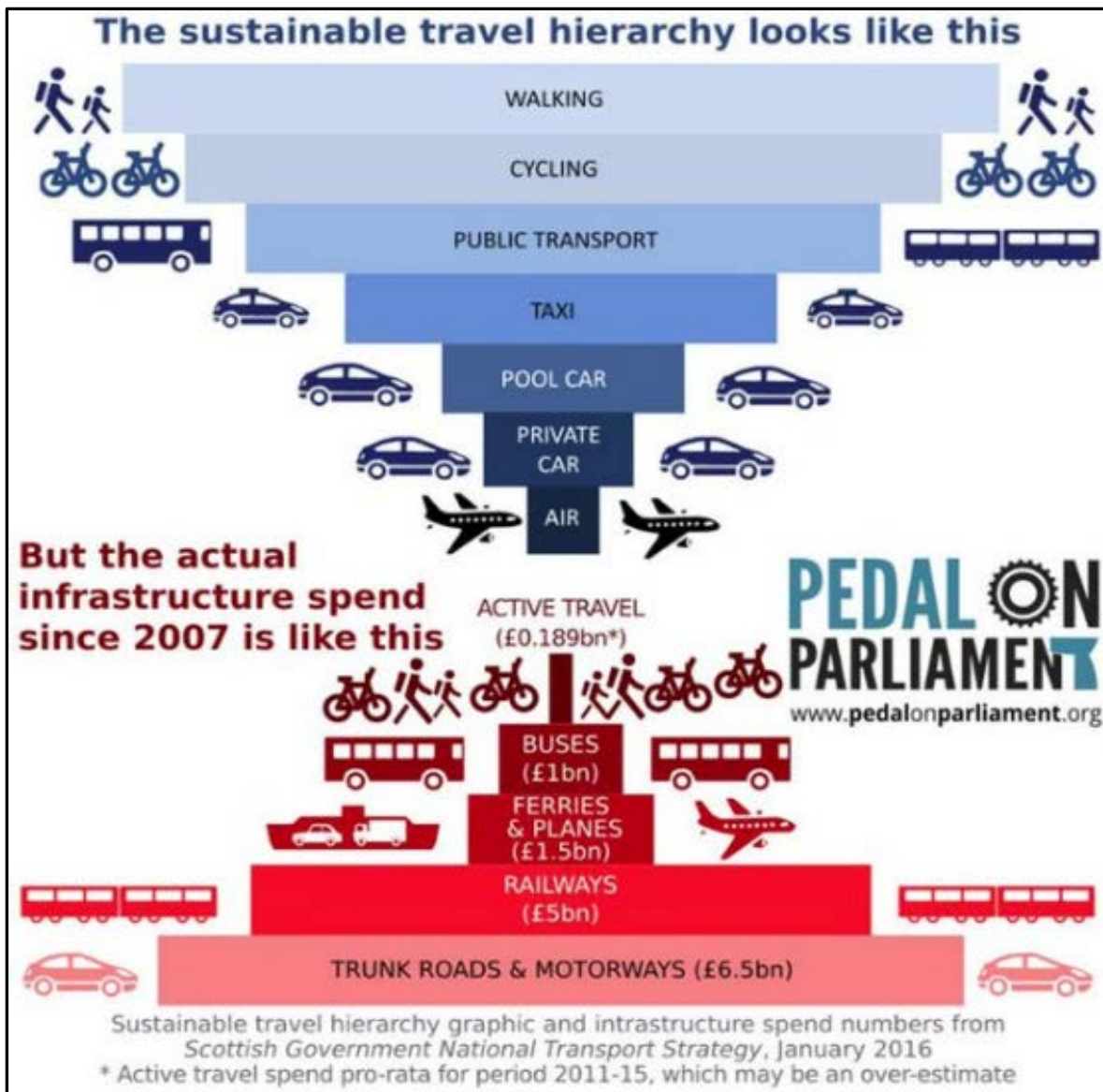
When the GCPH was first established in 2006, one of the early publications brought together the existing evidence of the relationship between transport and public health. This highlighted the many benefits for population health of increasing the proportion of journeys that are made actively and reducing the number of motorised journeys.

Additionally, public transport often involves a bit of physical activity, so increasing public transport can also increase people's physical activity. She also noted that there is a transport impact on inequalities. There is plenty of evidence to show that the impact of motorised transport affects disproportionately certain population groups, particularly the disabled, people with long term conditions, the very young and very old and people living in deprived populations.

Over the lifetime of GCPH the policy context has become increasingly favourable for active travel. There are now many strategies and policies, both at Scotland level and Glasgow level – on physical activity, active travel, air quality and climate change - that highlight the potential related benefits of increasing physical activity and active travel, improving air quality and reducing carbon emissions. It is clear there is growing political will to increase the focus on active travel.

However, levels of funding have not reflected the political support in terms of policy, although spending on active travel has been increasing over time nationally: the total spend on active travel as the proportion of the budget on transport spend increased from 0.9% into 2012/13 to 1.9% in 2015/16 (see table below). Notably, Edinburgh City Council, has made longer term commitment to increasing the proportion of their transport budget that they commit to cycling specifically, from 5% in 2012/13 to 8% in 2015/16. In Glasgow, there have been considerable investments recently in segregated cycle and pedestrian paths and in the city's bike hire scheme. More recently, in the new cycling strategy, there is a commitment to £2 million per year for cycling infrastructure each year over the next three years. Despite these developments, investment still falls short of the 10% of transport budget that experts recommended back in 2010 that we should be investing in walking and cycling.

Scottish Government Spend in Real Terms	12/13	13/14	14/15	15/16
Total transport investment (£m)	1,893	2,019	2,019	2,108
Investment for cycling/walking (£m)	17.9	20.4	39.1	39.5
% of total transport £ spent on walking/cycling (Scotland)	0.9%	1.0%	1.9%	1.9%
% of total transport £ spent on cycling (Edinburgh)	5%	6%	7%	8%



The infographic above, published by Pedal on Parliament, illustrates the relative investments in different modes of travel; showing at the top, the sustainable travel hierarchy that you'll be familiar with and at the bottom the relative investments in various forms of transport.

Adding to this, despite the support policy context, active travel related trends have been going the wrong way. Walking for commuting has reduced and public transport use is going down and this is having impacts on physical activity. Road traffic injuries have reduced but inequality is persistent in relation to pedestrian casualties - pedestrian casualties in deprived areas and the most deprived areas are still about two and a half times greater than those in more affluent areas. While, in terms of cycling, although there has been a very slight increase in cycling prevalence (from a low base line) this has been accompanied by an increase in adult cyclist casualties despite a fall in road traffic injuries more generally.

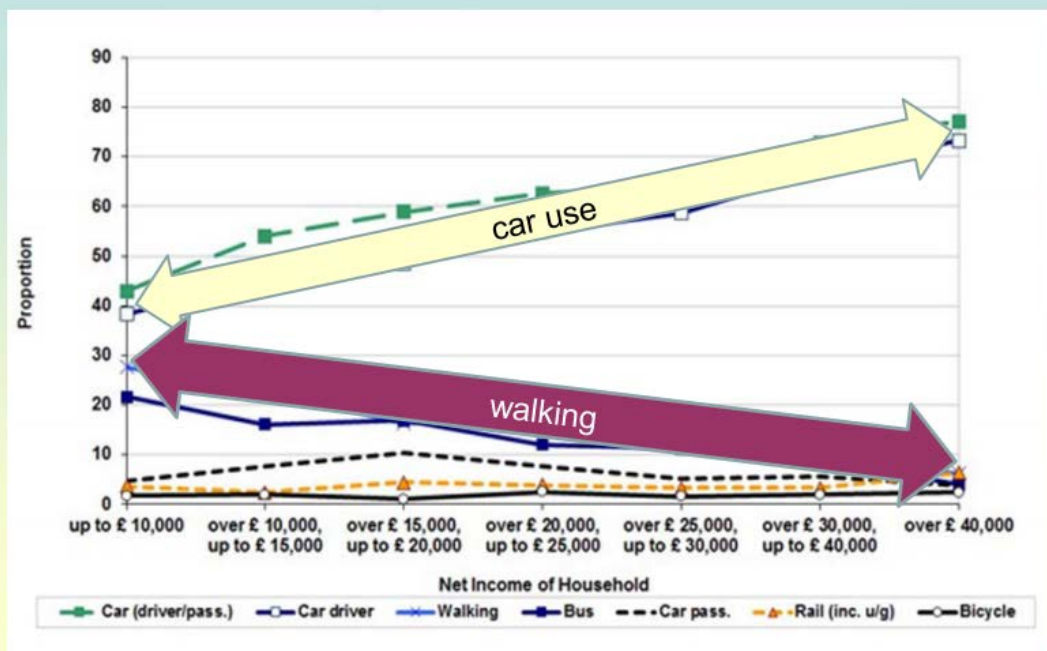
Car ownership has risen and is now at its highest ever on record, but people living in the most deprived areas are least likely to own a car. We also know that car

ownership and car use impact on air pollution, carbon emissions, the volume of traffic on the road, congestion and the likelihood that people would want to walk around their local area, and their physical activity. Reductions in physical activity have impacts on our levels of obesity, although as Nanette pointed out more people are walking for pleasure which is a good thing. Also in Glasgow, the counts of people coming in and out of Glasgow by bike or walking have risen steadily since 2009.

Jill also pointed out that in the lowest income households, those earning under £10,000, under 40% use a car to get to work, while in the highest income households (those with earning over £40,000 a year) over 70% of them use a car to get to work. Conversely, nearly 30% of people in the lowest income households will walk to work compared to less than 10% for the richest households (see below).

Travel to work (excl. those who work at/from home) shown by annual net income of household, 2012.

Source: Scottish Household Survey



These are significant inequalities and very relevant when we think about the infrastructure.

Jill then went on to address questions about travel choices and highlighted five factors that seem to influence travel choices. **Real and perceived safety** risks discourage walking and cycling. Safety concerns primarily are around traffic, and are related to traffic speed and high density traffic. However, there are also issues around unsafe routes, the condition of road and path surfaces, importantly around maintenance of routes and around parked cars hindering safe cycling and walking.

From our work with schools, it is apparent that active travel to school is directly associated with the perceptions amongst the children and their families of the safety risks of traveling to school actively. Where there are low safety concerns there are higher active travel rates to schools.

Traffic speed is clearly related to people's real and perceived safety concerns. We know that slower road vehicles reduce road traffic accidents, both in terms of the quantity of road traffic accidents, but also in terms of their severity. We know from evaluations of areas where there are lower traffic speeds, for example where a 20 mph zone has been put in, that this encourages more people to walk, to cycle, to let their children go out and play and to spend more time around about their homes outside. So there are important benefits of reducing road speed.

Infrastructure in urban design is another factor that influences travel. Howard Frumkin gave a [presentation on urban design](#) and its influence on health at a GCPH seminar in 2006. What he was saying was largely that the built environment we create determines our opportunities for active travel and he described how well planners, particularly in the States, have virtually completely engineered out activity in our daily lives. So we have driven-throughs, we have shopping malls, we have limited footpath space and lots and lots of space for cars. He highlighted that there is a disproportionate disadvantage to people who do not have access to cars in an urban environment which is planned primarily for people with cars. This can be very limiting and can prevent people living in areas of deprivation - who maybe don't have access to car at all - accessing employment, education and other opportunities. He also highlighted a factor identified in many GCPH studies that well-connected attractive places with local amenities, shops and safe routes encourage people to get out, to walk more, to cycle more and to spend more time in their local community.

Jill highlighted **cost, time efficiency and convenience** as a key combination of factors. She pointed out that GCPH research has shown active travel only really became appealing when car travel became less convenient or more expensive. Conversely, if public transport and active travel infrastructure was deemed to be quite unreliable and inconvenient, more people would choose to use their car because it seemed like less hassle. Thinking about people without a car, inadequate and poor public and active travel infrastructure then becomes a barrier to employment and other connections. Lone parents and other people with multiple responsibilities in their lives may require to make complex journeys where they stop off at various places and if public or active travel infrastructure doesn't allow them to do that then they feel that they have to have a car.

If people feel that a car is an essential, that then increases the numbers of cars obviously that we have. This relates to the **culture and social norms**. Our qualitative research indicates that an individual's choice of their form of travel related to their sense of who they were, their peer group, what they considered to be normal. For most people cycling is not what they consider to be a normal for them and many people do not even consider it. Walking would be considered by more people but only if it was convenient. For everybody freedom and independence is important and they need to know that their transport option gives them that freedom and independence.

Jill then turned to consider ***how we might increase rates of active travel.***

Supportive policies are not sufficient and we need to consistently address the factors that we know influence people's travel behaviour. Our learning from trips to Gothenburg and other research shows we need ***strong political leadership, commitment and investment.*** We need to positively discriminate in favour of more active modes. In Glasgow, we have seen the Nextbike scheme, new cycle routes and the introduction of 20 mph zone in the city centre, but much more is needed. We need a stronger vision with a longer term focus and a more consistent approach across the different policies. There needs to be adequate resources in the long term to begin to change some of the car-dominated travel trends. We also need to think about inequalities and be careful to ensure that everybody can take advantage of the investment that we make in active travel and that we do not advantage some groups over others.

Cultural and behaviour change can have an important role to play in a context where the car is dominant and where the car is the mode of travel that is given priority. If we want to have a redistribution of the modes of travel that we use in Glasgow, we need to make other modes of travel more convenient, more acceptable and more normal. We need to improve the skills and knowledge of all the road users and need a bit more mutual respect. There is a place for campaigns and for soft measures thinking around changing people's perception of different modes of transport. Travel plans and schools can help, as can campaigns and social media but these will not be sufficient to make the difference on their own. They must sit alongside supported leadership, policy, investment and infrastructure developments.

In terms of infrastructure the choices we make about ***urban design*** are really important. We know from our research that where high quality local amenities, shops and places to go are included then people will walk more locally. We know that where walking, cycling and outdoor play are prioritised people will use these facilities, particularly in their local neighbourhood. And this will benefit and help with building a stronger community.

Traffic speed and safety need to be considered also. In many of these communities there will be major roads running through that bring people from outside of Glasgow into the middle of Glasgow and people will have to cross these roads in order to get their children to school or get to public transport hubs or to walk or cycle to work. And if it is too dangerous or too unpleasant to do that then if they can possibly avoid doing it they will. This relates to connectivity, both within neighbourhoods and between neighbourhoods and the rest of Glasgow. Safe travel to school would be an important place to focus. How can our children get to school safely? If parents do not believe their children can get there safely they'll drive them, but there's a real opportunity to change some behaviours around that and starting in schools could be a really good place to start.

From our research evaluating new infrastructure in Glasgow, including a new bridge and segregated cycle routes, it is clear that the good quality safe infrastructure is associated with increased commuting by foot and by bike and that at least some of these people would otherwise have driven. We know too that the bike hire scheme introduced in Glasgow at the time of the Commonwealth Games in 2014 has been

well used, particularly for commuting and seems to be attracting more women than we might otherwise expect to cycle.

Integrated infrastructure works but developments tend to concentrate in small parts of the city. The city centre is relatively well served for interconnected infrastructure - along the river there is good infrastructure. However, people need to get from their homes to these places and, if they cannot do that safely, particularly if they are novices and not particularly confident, they just won't. So we need make the whole city more accommodating for walkers and cyclists. Thinking about whether you could let your 12 year old out safely on a piece of road, either on their bike or walking, might be a useful thing to bear in mind.

Maintenance of infrastructure as well as building new infrastructure is really important. Keeping roads and cycle routes open and gritted in winter conditions is important and too often neglected and if this is the case people will get in their car to travel small distances because they cannot risk walking on these icy pavements. In summary integrated infrastructure is vitally important. If we have appropriate, convenient, connected and integrated active and public transport systems and reduced road speeds this will all help to shift our travel behaviour.

Jill noted that Glasgow has a City Deal, which is a fantastic opportunity to begin to build active and public health infrastructure in an integrated way into the city. Let us hope that we take full advantage of that opportunity.

In concluding, she summarised her own view of how active travel can contribute to Glasgow being a liveable city. First and foremost, active travel can give us a city where the air is cleaner, children can play safely outside our homes and they can walk and cycle to school. And if people are more likely to walk and cycle around the local neighbourhoods that will help us build local, strong neighbourhoods with attractive shopping streets and amenities and encourage more people to spend time in their own neighbourhood rather than going out to a mall outside of the city centre. If people have less need of a car they can spend less on transport and might even do without a car. In this city of the future, it will be easier to get to where you need to be because there will be better infrastructure and there will be fewer cars, people will be more active on a daily basis and thus healthier. There will be fewer pedestrians and cyclists injured and killed, and hopefully more people enjoying walking and cycling in the city.

To get there we need to begin to shift the priority, we need leadership and we need to come together and have a consistent perspective on where we want to get to.

Sighthill – a cycling village

Nick Cotton, Sighthill TRA, Glasgow City Council

[\(Click here to access the full presentation\)](#)

Nick started by explaining about the context of Sighthill (situated in the north of Glasgow) within the city and also how the development there fitted alongside other city development projects.

Nick outlined planned improvements along Sauchiehall Street as part of the city centre action plan. There are also significant improvements to the Buchanan Galleries and the Buchanan Street quarter, adjacent to Queen Street Station and the areas around it. Queen Street Station is currently affected by the Edinburgh to Glasgow Improvements Programme (EGIP), which involves the electrification of the train lines between Edinburgh and Glasgow. The improvements to Queen Street Station are having a direct effect on Sighthill because of the location of the railway line, which runs along one side of the site.

There have been significant improvements to the City of Glasgow Campus, Strathclyde University and the like over the last years, which are now almost complete. Immediately adjacent to Sighthill is Port Dundas, the canal quarter and also Speirs Wharf, and Nick noted that there are some exciting proposals for this area of Glasgow, revolving around new housing but also relating to the development of urban sports. North of the city centre and north of Sighthill, is Cowlares which is in line for longer term improvements.

Nick then turned to Sighthill itself. Firstly, he pointed out that Sighthill suffers from being land locked – it is essentially an island. To the north is Sighthill Cemetery, to the east side there is Springburn Road, to the west the Glasgow to Edinburgh railway line and the M8 is to the south. Sighthill's geography and isolation poses challenges for its development.

Nick pointed out that this isolation has been there historically and he illustrated this via a map from 1890. The map also showed a chemical works to the south side of the site which is a huge part of the problem requiring remediation work. Nick also pointed out that it was important not to lose all the historical characteristics of the site in this development. In this respect he noted that there is an existing pond, people in the area are familiar with, known as the stinky ocean; so named because it has been a chemical dump and the remains of animals have been thrown in from butchers also. The pond is the focus of some of the current remediation works.

Nick mentioned further aspects of the ongoing development on the site. Three multi-storeys were demolished about five years ago and two others are currently in the process of being demolished. The Glasgow Housing Association has recently developed and created 141 new homes.

He noted the presence of the motorway, which is a disconnect between the city centre and the community in Sighthill. He then showed a diagram explaining connectivity, activation and destination. In this he explained that they need to connect/reconnect the community to the city, to create a neighbourhood core - a place - and to create a clear pedestrian circulation spine, which gives pedestrians and cyclists' priority and where the motor car is further down the hierarchy.

To do this they are remodelling the existing Sighthill Park. Another important aspect of the development is water. The SUDS strategy (the Sustainable Urban Drainage System) is going to form part of the backbone of the park. They plan to create dipping ponds, to create an opportunity for people to connect with the water that's actually been drained from the landscape.

Nick also noted as background, that Sighthill had been a TRA, which is Transformational Regeneration Area, one of eight highlighted within the city, and as part of Glasgow's ultimately unsuccessful bid for the 2018 Youth Olympics, Sighthill was to be the athletes' village. The current Sighthill development has been fully funded through the City Deal,

Nick went on to outline how the planners are addressing the issue of connectivity. A large part of the plan is to replace an existing pedestrian bridge over the M8 motorway – which is about 3 or 4 metres wide with a wire mesh on either side of it and is very noisy – with a much improved new bridge. He highlighted examples of so-called “green bridges” - at Mile End in London, a planned new bridge across the Thames in London and the high line in New York.

Nick explained their vision is for the new bridge to be 16 to 18 metres wide, creating a tunnel for the motorway, and for those on the bridge creating the feeling that you are in Sighthill or you are in the city centre. He described the bridge as being an extension of the public realm, which will hide the motorway and but which will also capture different, interesting views of the city. An image of how the bridge will connect with the rest of the city is shown below.



He showed plans for a redesigned Sighthill Park, which becomes a useable, multi-function park and which will bring people to it. Nick identified another challenge for Sighthill was its hilly nature. There is a significant rise to access the hill from the city side. He explained that they were trying to avoid ramps and to provide sloped access suitable for the pedestrian and the cyclist.

The infrastructure needs to come first and is the spine of the development. This has been followed by development plots for house builders to come in following design codes, design briefs but to build new neighbourhoods around what will already be in

place – the roads, park and bridge. Nick also highlighted other aspects of the plan which should make the area an attractive destination. There will be allotments and play areas on the site - the play area is not one specific area, it is the entire park. There will be facilities within this park that people will come to and want to use, not just the play areas and the green space, but a pump track and it will be on the cycle network. The Sighthill Standing Stones, which were erected during the early 1980s, are being repositioned on the site also.

Nick presented a diagram showing the active travel paths and cycle routes that have been identified through work with colleagues within Development and Regeneration Services (DRS), Land and Environment Services (LES) and Sustrans but also through conversations with the community. The cycle route connects through the heart of the masterplan, while a new road will connect to Cowlares via a new road bridge. This road is intended to take pressure off the existing Pinkston Road, which is being realigned vertically as well as slightly horizontally, while maintaining existing cycling routes and enhancing connections.

A key aspect is that there will be a 20 mph speed limit throughout the entire area of the masterplan. The main carriageway or civic boulevard will have speed bumps, raised tables and pedestrian crossings. There will be a footway either side of the central area. North of the boulevard and adjacent to the footway is a 3.5 metre mandatory cycle way. Pinkston Road, which connects through the site, will have a cycleway, which is a dedicated cycleway with a raised kerb, separating it from the carriageway.

Nick finished by stating that these designs are currently just about to go out to tender, so major aspects of the Sighthill development are about to happen.

Questions and feedback

Lorna asked people to reflect on what they had heard over the course of the afternoon and to consider how active travel can contribute to making Glasgow a liveable city. She also asked people to think about what they could each do individually and also collectively to make that happen. A flavour of these discussions that came out in the plenary is given below.

The first point that was made was that more investment in active travel is needed and that this will benefit everyone. This was backed up by another group that reiterated the importance of a proportion of the transport spend being committed to active travel. Another group brought up the feeling people often have that the *'infrastructure is done to them'* rather than with them, so earlier engagement with people is needed. There was support for keeping things (programmes) going. People are going to keep walking and cycling and it was important to really encourage others to get there and to be a bit more visible so that more people see people walking and cycling.

Another point was that while the quality of the built environment is important and creating a more attractive environment for people to walk around - for example, when you increase the footway width and try and generate a café culture - the proximity to buses idling and to diesel fumes does not make the most attractive environment to increase walking. Another point was made about the ubiquity of relatively cheap parking in the city

that leads to more car use. There is *'workplace parking.....free parking all over the city centre, free parking within most of the corporate buildings and there's fairly cheap car parks all over the city centre'*. These were seen as increasing the attractiveness of private car journeys into the city centre in comparison to public transport journeys.

Panel members reflections

Towards the end of the seminar four panel members were invited to comment on what they had heard and discussed. Their reflections are summarised below.

Neil Langhorn, Transport Scotland

Reflecting on the focus of the event, Neil asked *'how can Glasgow be a liveable city without increasing active travel?'* Answering his own question, he endorsed active travel as being an essential part of creating a liveable city and noted this is increasingly backed up in studies. In his experience the cities that you can walk and cycle around easily and safely were also the most enjoyable to visit.

He turned to how you influence people's travel choices and how you make walking and cycling a more natural travel choice. Within the Scottish Government they use an ISM (Individual-Social-Material) model for work on behaviour change as a way of thinking about the different things that influence people's behaviour.

The ***individual*** reflects what is inside your head, what are your views on walking and cycling as modes of transport, what information do you have about the routes and how you get there, what is your confidence to cycle or to walk, what's your perception of safety and how you weigh those things up inside you.

The ***social*** describes the culture that exists around you, the things that influence you from what you see around you in society. What are the norms? Do people see cycling and walking as normal? Probably not in much of Britain at the moment, but in the Netherlands and in Denmark it is and seen as just part and parcel of day-to-day life. Related to this, can we influence those who are role models, do we see ourselves as cyclists or people on bikes? There's a role for changing attitudes and changing 'the normal'. Public campaigns and so on are part of that.

The ***material*** relates to the physical environment around us, the infrastructure and whether it is safe, accessible, and whether we feel that we can let our children cycle on it. We know that you can't have significant change without the infrastructure being changed, but you cannot focus on infrastructure in isolation. We need to work on all three of those levels.

In concluding, Neil reflected on people's attitudes and why they do or don't cycle and discussed some research evidence from Copenhagen. There, people do or do not cycle because they want to save the world or because it is going to get them healthy. In Copenhagen, the number one reason why people cycle is because it is convenient - the most convenient way to get to where they want to go. We have to aspire to that sort of situation where walking and cycling are seen as an easy choice, a convenient choice and a safe choice.

Councillor Martin McElroy, Glasgow City Council

Martin explained he was the cycling spokesperson on Glasgow City Council. He said he had enjoyed the event and had found it very informative and interesting, particularly getting to hear so many different opinions.

He reflected that sometimes politicians do things for votes, particularly around elections, and that this often led to bad decisions when it comes to investment in infrastructure and other programmes. He went on to say that *'the car is definitely still king'* despite a lot of changes in the past decade or so. He felt Glasgow was on the precipice of a real transformation though and noted that Glasgow City Council has some of the best officers in the country working on new cycling projects and cycling infrastructure. He evidenced the Sighthill transformation as an example of how attitudes and approaches have changed from even a decade ago.

He stressed that there are still challenges and that while cycling is not party political it is still very political. He noted that in urban settings there is a finite amount of space and there is a battle over who gets what use of it. He described how fellow councillors would in principle support investing in cycling infrastructure – to get more commuting cyclists, less traffic, and for the health economic benefits. However in reality making changes relies also on the support of the general public. And so, he encouraged people to complain to politicians about issues related to active travel and to agitate for further changes.

Stuart Hay, Living Streets

Stuart explained that Living Streets was a charity promoting walking and was formerly the pedestrian association.

He described Glasgow as *'a fascinating place, it's a city that's really given itself to the car, it's now having second thoughts, which is good'*. He reflected on his earlier walkabout with Michael and his dog Norton. The buildings in this part of the city and the fabric is fabulous, but the public realm is not in terms of walking around - how many times you have to stop, how long you have to stop and the inconsistent placement of tactile paving - which is essential if you have a sight impairment. So there is much to improve. He said that a measure of a 'good environment' is how well it caters for the most vulnerable users. If it is good for those users, it is good for everybody.

He reiterated the points Nanette made about how important walking is. He felt that the Scottish Government's indicators should maybe be about everyday journeys, people walking and getting on and off buses as part of their exercise.

How people perceive their environment, as Rachel had noted, is important. If the perception is that it is not safe and that it's not a pleasant environment, it doesn't encourage you to walk. Air pollution could be the big driver for change if politicians take this seriously. We have massive problems with cardiovascular disease in this country and we keep spending money on expensive health facilities, but getting more people walking and cycling could help reduce this.

His reflections on Jill's talk were that she had given a useful reminder of the arguments for active travel, which were probably well understood and endorsed by those present, but how do we get these messages to reach the people who are not present. He was encouraged that a councillor was on the panel who had talked sense and that with other councillors and officials present the seminar had the right people here.

Discussing Sighthill, which he thought was amazing but also could be quite challenging, he wondered how the money that has gone into that compares to the money going into the East End regeneration route. He felt that was another conversation that Glasgow should have with itself. In his perception, it is a lot easier to do things in Glasgow than in Edinburgh because of the cityscape. There is plenty of space, although it is challenging to win back some of that space for people and not vehicles. He noted that at the moment there has been good political commitment, but political space is needed to have these conversations about the city. Stuart stated that active travel to school is really important, particularly given there has been a big reorganisation of schools in Glasgow. From his perspective Living Streets could work with the council and other partners on this and this was something he would like to follow up on.

Gregory Chauvet, Glasgow Bike Station

Gregory explained that he ran the Glasgow Bike Station, a charity that changes lives by getting people to ride the bike to cycle. He reflected on the idea Neil had brought up of wanting cycling and walking to be normal. In his six years of living in Glasgow there has been the M74 extension, which cost over £700 million, and had added even more cars to the roads. He noted that relatively small amounts are spent on cycling and he also noted from earlier discussions that there is a walking strategy. So his question was whether there was a car driving strategy, and, if not, should there not be one? *'If you spend £100 million a year in driving in cars and there is a strategy we would know what are the targets?'* As Gregory put it, a car strategy would help to clarify what it is that we are trying to achieve and whether it is sustainable or not.

Concluding remarks

Lorna brought the event to a close with some concluding remarks. She commented that the notion should not be that active travel can contribute to Glasgow being a liveable city, but that Glasgow cannot be a liveable city unless we are serious about walking and cycling and the infrastructure to support that.

She thanked the speakers, facilitators, those involved in organising the event and supporting it on the day (including Carol Frame, Ricky Fleming, Sheena Fletcher and Bruce Whyte from GCPH) and the delegates.

Appendix 1 – Event programme

Creating liveable cities – the role of active and sustainable travel

Thursday 26th May 2016

St Andrews in the Square, Glasgow

Programme

- 1.00 – 1.30 **Registration and light lunch**
- 1.30 – 1.35 **Welcome and introduction by the Chair**
Lorna Kelly, Glasgow Centre for Population Health
- 1.35 – 2.20 **Walking is the good news story for physical activity and health**
Prof Nanette Mutrie, University of Edinburgh
- Our Unequal Streets: everyday experiences as barriers to cycling**
Dr Rachel Aldred, University of Westminster
- Health effects of air pollution: getting to the heart of the matter**
Prof David Newby, University of Edinburgh
- 2.20 – 2.45 **Questions and feedback**
- 2.45 – 3.00 Tea/Coffee
- 3.00 – 3.30 **What have we learned? A synthesis of GCPH's work on active travel**
Jill Muirie, Glasgow Centre for Population Health
- Sighthill – a cycling village**
Nick Cotton, Sighthill TRA, Glasgow City Council
- 3.30 – 3.40 **Questions and feedback**
- 3.40 – 4.10 **Round table discussion and feedback**
What role does active travel have in making Glasgow more liveable and healthier? What role can you play to make this happen?
- 4.10 – 4.30 **Panel members reflections and feedback**
Cllr Martin McElroy, Glasgow City Council; Stuart Hay, Living Streets; Gregory Chauvet, Glasgow Bike Station; Neil Langhorn, Transport Scotland
- 4.30 – 4.35 **Concluding remarks and comments**

Appendix 2 – List of attendees

Rachel	Aldred	University of Westminster
Richard	Andrews	The Bike Station
Gillian	Armour	NHS Health Scotland
Norman	Armstrong	Free Wheel North and Cycling Centre
Kenny	Auld	Loch Lomond and The Trossachs National Park
Mike	Batley	Central Scotland Green Network Trust
Gary	Bell	Paths for All
Katharine	Brough	NHS GG&C
Nancy	Burns	Sustrans
Fiona	Cameron	North Ayrshire Council
Gregory	Chauvet	The Bike Station
Barry	Clarke	Glasgow City Council
Ally	Corbett	GCV Green Network Partnership
David	Corner	Sustrans
Nick	Cotton	Glasgow City Council
Fiona	Crawford	Glasgow Centre for Population Health / NHS GG&C
Michael	Ewart	Central Scotland Green Network Trust
Jim	Ewing	Healthy n Happy Community Development Trust
Sheena	Fletcher	Glasgow Centre for Population Health
Suzanne	Forup	CTC
John	Galilee	Transport Scotland
Jonathan	Gamwell	Free Wheel North
Laura	Geoghegan	Glasgow City Council
Philip	Glennie	Sustrans
Jim	Hall	Sustrans / Glasgow Cycling Forum
Isla	Hamilton	East Dunbartonshire Council
Caroline	Hammond	The Bike Station
Ellie	Harrison	Artist
David	Hazle	Glasgow City Council
Robbie	Hawthorne	Glasgow Life / Glasgow Sport
Stuart	Hay	Living Streets
Sue	Hilder	Glasgow City Council
Dave	Holladay	Independent Specialist, Integrated Transport
Neil	Johnson-Symington	Glasgow Life / Glasgow Museums
Russell	Jones	Glasgow Centre for Population Health
Lorna	Kelly	Glasgow Centre for Population Health
Mark	Kiehlmann	Cycling Scotland
Veronika	Kruspanova	Free Wheel North
Neil	Langhorn	Transport Scotland
Alasdair	Macdonald	Sustrans
Tia	MacFarlane	Bring Back British Rail
Duncan	MacIntyre	Sustrans
Phil	Mason	University of Glasgow
Gerard	McCrear	Glasgow Group of Ramblers Scotland
Jacqui	McDove	North Lanarkshire Council
Martin	McElroy	Glasgow City Council

Vincent	McInally	Glasgow City Council
Pete	Mills	Scottish Natural Heritage
Jenny	Muir	Sustrans
Lee	Muir	Glasgow Caledonian University
Jill	Muirie	Glasgow Centre for Population Health
Andy	Mulholland	Plan for Bikes
Nanette	Mutrie	University of Edinburgh
David	Newby	University of Edinburgh
Jon	Olsen	University of Glasgow
John	Redshaw	SEPA
Louise	Rennick	NHS Health Scotland
Sarah	Smalley	Sustrans
Claire	Strain	Strathclyde Partnership for Transport (SPT)
Fariha	Thomas	Glasgow City Council
Irene	Thorburn	North Lanarkshire Council
Michael	Tornow	NHS Health Scotland
Kieran	Turner	University of Edinburgh
Twan	Van Duivenbooden	Sustrans / Glasgow City Council
Bruce	Whyte	Glasgow Centre for Population Health
Ewan	Wilson	East Dunbartonshire Council
Paul	Wright	Cycling Scotland
Gregor	Yates	Glasgow Centre for Population Health

Appendix 3 – Facilitators notes from table discussions

The format of these notes varies depending on the table and their discussions. Notes are not available for every table discussion.

Table No: 1:

What role does active travel have in making Glasgow more liveable and healthier?

Steady improvements in infrastructure shows people that change towards active travel is in their hands.

- Safety issues need to be addressed
- 20 mph zones help
- City Deal funding can help
- Focusing on roads, doesn't help Glasgow where there are connections
- Emphasis on out-of-town doesn't help this
 - big role
 - shouldn't be investing in roads
 - public transport esp. trains too expensive
 - moving from public transport easier than getting people to walk/cycle
 - waiting times at lights for pedestrians too long
 - funding not supporting active travel – having a % of transport budget
 - mismatch between policy and funding
 - converted around the table – need to have people here that need converted

What role can you play to make this happen?

Political influence - Need stronger lobbying

Table No: 2

- Safe and active school travel recognised as an important issue but hard to implement rhetoric into reality. Not just leadership and resources, also culture/behaviour change needed from teachers/parents/pupils.
- We need to make daily journeys more convenient by walking, cycling or public transport – exhortations will not work
- Urban liveability is an entry point for the arguments for walking/cycling in cities.
- We need to remember that rural parts of Scotland are very different in relation to the opportunities for walking/cycling in terms of safety and distances travelled.

Table No: 3

- Does the 20 mph limit serve to make an area more liveable? A tool in the tool box. 20 mph limit may act to increase air pollution.
- Integrated urban design and construction. This is in the planning but once fitted needs to be maintained. Need to think about connectivity and networks.
- What about Gorbals / Clyde Gateway – integrated cycling and walking. Hard infrastructure but not a green network. Functional and industrial. Reflects policy of 10 years ago. Disconnect between policies and action on the ground.
- Big plan for city and look at bite size chunks
- Funding there for capital projects
- Colour code roads for cycling safety and routes

Table No: 4

- All positive about wanting an increase in active travel
 - not enough investment
 - different views about how good Glasgow is for active travel at the moment
 - improvements in last 20 years
 - poor environment for driving – on purpose?
- Re-regulation of buses would help. Integration of transport modes. Improvements are piecemeal due to funding / opportunities.
- Maintenance is a significant issue
- Separated infrastructure – improve conditions for cyclists who cause least road damage
- More money into cycling infrastructure is a good return on investment, roads are not
- Shared paths are a significant problem – need to anticipate growth in e-bikes too
- Economic benefits of cycling – need to capitalise on this
- More investment needed – choices needed to increase funding in active travel
 - investment in liveability
 - brings health benefits

Table No: 5

1. *What role can we play?*

- Funding: active travel is a public health issue
- Why aren't other public agencies funding infrastructure?

2. *Car parking / controlled zones*

- City centre car ownership is 35% and falling
- City centre parking availability is driving inward commuting – park & ride

3. *Privately owned parking*

- Only Nottingham has succeeded in charging private car parks
- Workplace parking levy
- Taxes appropriate to public cost of activities (sugar tax – congestion tax?)

Table No: 7

What role does active travel have in making Glasgow more liveable and healthier?

- Look at demand of car transportation and its effect / impact
- Take stock of transport hierarchy
- Can we increase behaviour in terms of active travel, not car?
- Infrastructure is 'done' to you rather than 'with' you
- Can there be more engagement earlier on about what people want?
- When can we get to the more difficult infrastructure areas?
- Complimentary behaviour change at the same time as the infrastructure
- Route choice and mapping

What role can you play to make this happen?

- Action for change – campaigning (not protesting) – advocacy
- Keep doing what powers cycling and walking
- Encouraging others
- 'Led rides' programme – confidence and inability

Table No: 9

- Anything active travel can do to improve health would be good because of Glasgow's health record
- Improve air pollution, make everything more pleasant
- Support Sighthill but Eastern boundary (A803) – very busy and dangerous so need to address this
- Sighthill's reputation will be problematic and will take time to overcome
- Need culture change to get more people out of cars
- Get rid of free car parking to increase active travel
- Business lobby strong for free car parking
- Role active travel has in Glasgow could be massively huge, but it has to have political will and committed funding (proportion of transport budget)
- Materials for infrastructure need to be thought about – often pavements are slippery

Appendix 4 – Individual feedback on event		
Which topics / discussions did you like best or most interested you?	Was there anything missing from the presentations / discussions?	What would you like to see happen next?
All had much to offer in relation to the topic.	We did not get sufficient time to discuss the issues overall.	I would like to see the issue of permeability addressed on a small sample area.
Presentations from Prof David Newby, Prof Nanette Mutrie and Dr Rachel Aldred.	Strategies to achieve ideals.	Investment from all key individuals and groups.
Air Quality and Near Misses.	What is Glasgow City Council doing? What is planned in the City. How will it be delivered. Most of the information was not news to the audience. Preaching to the converted.	Summary of City Action Plans and next steps. What monitoring of active travel spend is ongoing?
Favourite presentation was Nanette Mutrie. Refreshing to have an advocate for walking.	Discussion could have been longer.	Commitment from Glasgow for proportionate funding for active travel in transport budget.
All presentations were very interesting however the talks on Our Unequal Streets and What Have We Learned were especially interesting. The presentation on Sighthill also gave useful insight into how modern development incorporates the active travel agenda.	Impact on climate change and environment did not seem to be as high on the agenda as public safety and public health.	More investment in active travel and public transport infrastructure and less on roads and car travel. More political involvement is required in order to achieve this.
Interesting to hear about walking. Good mix of presentations, but perhaps best delivered in a different order.	Inequalities didn't feature enough. Seemed to cultivate unhealthy <i>us v. them</i> mentality when talking about cycling and driving.	A driving strategy for Glasgow.
Air Pollution and Near Miss presentations. Sighthill – brilliant to learn of City Deal project confirmed. Would welcome definite timeline.	Those with budget/financial authority re: active travel budgets/investment on local and national level.	Policies turned into action and matched by commitment and cash.
Presentations from Rachel Aldred, Nick Cotton and the Panel.	I felt the event was squeezed for time. An earlier start for more networking time.	
Walking presentation and Air Quality presentation.	Up to date evidence – Cambridge study comparing air quality and levels of physical activity.	More networking and taking forward some of the actions from the discussions.
Sighthill specific data. Other attendees.	Nothing.	Invites for research topics e.g. place-making impacts.
Health effects of air pollution.	More time for group discussion.	Local authorities to synergise efforts.
Our Unequal Streets. Sighthill. Walking is the Good News Story.	N/A	More investment from above.
Dr Rachel Aldred – Near Misses. Nanette Mutrie – Walking.	How to restrict car driving in cities.	Glasgow to introduce a work place parking levy.
Air pollution.	No	Car driving strategy for Glasgow.
Walking. Linking with various aspects.	N/A	Influence on road planners.
Our Unequal Streets and Sighthill TRA. GCPH work.	More consideration of obstacles to active travel. Perhaps members from local communities such as community councils could be invited.	More publicity and info given to general public about Glasgow being liveable, encouraging their support for walking and cycling because it's convenient for them. Make it so.

All topics were interesting.	Nothing.	Fewer barriers to walking around the city. Less fear of getting run over by a bus. Buses on fast lane to have a bell like the trams so folk can hear them coming. Would be keen to read the report.
Health related.	Walking away from the microphone was annoying and could have been avoided.	Present evidence to the government, local authorities and all active travel bodies.