Slow the Blazes Down - A Major Behavioural Change

Halifax Regional Municipality

Active Transportation Advisory Committee

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Purpose of Presentation

- Start the conversation towards a change of urban speed limits in HRM development;
- Position an urban speed limit change nationally and internationally;
- Cite information from other jurisdictions that have investigated or implemented urban speed limit restrictions;
- Summarize the report which contains fuller information and links.

Pitch

Study the feasibility and details of reducing the speed limits in urban HRM areas to 30km/h.

Benefits:

- Reduction in death and injury with corresponding reduction in health/emergency services;
- Increase in *perceived safety* potentially leading to changes in behavior towards increased active transportation, increased social cohesion, reduced climate impact;
- Help to improve health and well-being with reduced noise, stress and pollution;
- Safeguard the environment for future generations.

Reduced Urban Speed Limits Revolutionary? Not Really…

Calgary	May 31, 2021 speed limits to 40km/h on most residential roads
Edmonton*	August 6, 2023 speed limits to 40km/h on most residential roads
Toronto*	May 2015, Toronto and East York lowered default speed limits to 30km/h on all local roads and some collector roads.
Montreal	Montreal has a patchwork of speed limits. I.e. Côte-des-Neiges–NDG Projet Montréal announced a 30 km/h speed limit on local and arterial streets five years ago. Dorval followed July 1, 2021.
Amsterdam*	Dec 8, 2023, most Amsterdam roads will be lowered to 30 km/h
Wales*	Sep 17, 2023 speed limits 32km/h on most residential roads

** Information is included in the supporting document.*

International Findings (page 1 of 2)
Effect of Lower Speeds on Collisions and Injuries

- In 2018 the **Organization for Economic Cooperation and Development** reported that research consistently shows that lower speeds reduce deaths and injuries, not least because there is more time to react.
- Safety benefits of reducing speeds in urban areas were recognised in 2020 at the Global Ministerial Conference on Road Safety which was hosted by the Swedish Government, in collaboration with the **World Health Organisation**. The resulting 'Stockholm Declaration' was adopted by government ministers and other stakeholders and includes the resolution to:

  "Focus on speed management, including the strengthening of law enforcement to prevent speeding and **mandate a maximum road travel speed of 30 km/h** in areas where vulnerable road users and vehicles mix in a frequent and planned manner noting that efforts to reduce speed in general will have a beneficial impact on air quality and climate change as well as being vital to reduce road traffic deaths and injuries."

International Findings (page 2 of 2)
Effect of Lower Speeds on Collisions and Injuries

- The higher the speed the longer it takes to stop the vehicle and the greater the harm on impact. At the point a 20mph car would have stopped, a 30mph car would still be doing 24mph. The risk of being killed is almost **5 times higher** in collisions between a car and a pedestrian at 50km/h compared to the same type of collisions at 30 km/h.
- Research by the Transport Research Laboratory has shown that for urban roads *with low average speeds* there is an average **6% reduction in collisions with each 1mph reduction** in average speed.
- Road traffic injury is also strongly associated with poverty. Child pedestrian deaths in deprived neighbourhoods are **over 4 times** those in affluent neighbourhoods. Reducing speeds through the application of area-wide 20mph speed limits would help reduce health inequalities.

Wales Summary

- Wales will be one of the first countries in the world to have a default 20mph speed limit on roads where cars mix with pedestrians and cyclists.
- A much wider take up of 20mph limits is expected to achieve significant road safety benefits, particularly in deprived neighbourhoods. In the longer term, reductions in the perception of road danger is expected to lead to more walking and cycling which will improve public health and replace some short car journeys, and so achieving further reductions in collisions and casualties. More walking and cycling is also likely to lead to greater social cohesion which brings further societal, environmental and health benefits. Lower speeds will lead to reductions in traffic noise, while impacts on air quality will be neutral at worst and journey time increases will be slight. Evidence shows that most people support 20mph limits although they may wrongly perceive themselves to be in a minority.
- Lowering traffic speeds in urban areas should be seen as a major behaviour change project. This will require a sophisticated communications and marketing strategy based on building social unacceptability for speeding in residential areas, and backed up with strong enforcement in the early stages.

The Wales Case for Change - Road Traffic Collisions and Casualties

- Although the number of Personal Injury Accidents (PIAs) recorded in Wales has fallen since 1993, a total of 4000 PIAs still occurred during 2018.
- The number of PIAs which involved people being killed or seriously injured (KSIs) has not declined as much as all accidents - there was a 6.7% rise in KSIs during 2018, with a total of 966 being recorded.
- The number of PIAs in which one or more fatalities occurred has been broadly stable over the last nine years, at around 100 per year.
- The largest proportion of these serious or fatal casualties occurred on roads **with a 30 mph speed limit**.

The Wales Case for Change - Road Safety is More than Casualty Reduction

- Road safety is more than about avoiding being injured. It must also address the **perception of risk of harm** at the individual, community and societal levels.
- According to the British Crime Survey, speeding traffic was rated as the most serious problem of 16 social problems. Both genders and all age groups rated speeding traffic as the greatest problem in local communities – i.e. a **perceived lack of safety**.
- **Loss of children's independent mobility** is a key indicator of how casualty reduction alone cannot deliver a healthier, safer society. In surveys of children's school travel mode across the UK, the top concern of parents/guardians is **fear of motor traffic**. This then leads to the vicious spiral of increased danger as more people drive their children to school – which amplifies health inequalities. This has significant environmental as well as health impacts. Minimising a child's independent transport is associated with substantial loss of physical, mental and social health benefits and can establish habitual sedentary behaviours across the life-course.

Wales Findings: Walking and Cycling

GOAL: Active Travel is good for people's mental and physical health. When it replaces a car trip will reduce carbon emissions and improve air quality. More walking and cycling produce more cohesive and safe communities.

- Streets that enable and encourage active travel are key to increasing active travel.
- Slower traffic speeds are an important way of reducing people's perception of road danger thus encouraging more people to walk and cycle.
- Evidence from initial pilot schemes in Bristol and Edinburgh reported positive results. In continental Europe research has reported that traffic speed levels of 30km/h or less are associated with a higher likelihood of cycling.

Wales Findings: Social Cohesion

GOAL: More social connectivity protects against death from all causes. This protection is as much as 50% higher for those with greater social connections.

- There are possible increases in social interaction due to more walking and cycling.

Wales Findings: Noise and Air Quality

- NOISE: Research finds that:
  - higher motor vehicle speeds lead to **greater annoyance**,
  - lower speeds and reduced noise could result in positive changes in physical and mental health outcomes including **lowering hypertension**.
- AIR QUALITY: A 2017 study concluded there would be an overall improvement in air quality leading to 54 lives saved and a reduction of 647 years of life lost due to reduced fine particulate matter and nitrogen dioxide emissions.

Wales Findings: Journey Times

- The concern is often expressed that 20mph speed limits will significantly increase journey times.
- Studies show **reducted speed limit does not significantly increase journey times**.
  - Overall point-to-point speeds in most urban areas are determined by **delays at junctions** rather than on the sections of roads between them
  - For much of the day in towns and cities, **vehicles rarely reach 30mph for more than a minute or two** before they are slowed by queuing vehicles or red signals.
- Additionally, Transport for Wales undertook a study modelling journey time and found that the impact on long distance journey times across Wales would be minimal.

Wales Findings: Public Support

There has been consistent public support for 20mph limits pre- and post-implementation.

- In a 2001 trial of 20mph limits across Scotland overall demonstrated strong local support - **almost three quarters of respondents considered that the experiment was either ‘very’ or ‘partly’ successful**.
- 2010-2018 studies reported consistently high **public support of 62%-89%**.
- Recent survey work using representative sampling across Great Britain reported that **support increases from around 70% to 80% post implementation**. It also found that supporting people wrongly believed that they were in the minority.

HRM Outstanding Issues

1. Speed limits need to be set via the Provincial Government.
2. What would be the criteria for exceptions to 30km/h? (Perhaps consult our Canadian partners.)
3. As a compliment to slowing down private vehicles, there should also be an initiative for higher speed, high quality public transportation in HRM.