

Slow the Blazes Down! A Major Behavioural Change

ATAC - November 16, 2023

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Purpose of Presentation

- Start the conversation towards a change of speed limits in HRM development;
- Position an urban speed limit change nationally and internationally;
- Provide a starting point for a more complete, multi-dimensional feasibility study;
- Cite information from other jurisdictions that have investigated or implemented urban speed limit restrictions.

Pitch

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

Benefits:

- Increase in safety with corresponding reduction in health/emergency services;
- Increase in perceived safety potentially leading to changes in behavior leading to 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 - Radical? Revolutionary? Not Really...

Vancouver	Various BC locations have been lobbying for lower urban speed limits since 2016. Reported Jun 2022, an online survey of people around the province shows 66% of British Columbians acknowledge that they would “definitely” or “probably” like to see the speed limit reduced to 30 km/h on all residential streets in their municipality
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	while keeping the speed limit on arterial and collector roads at 50 km/h.
Calgary	May 31, 2021 speed limits from 50km/h to 40km/h on most residential roads
Edmonton*	August 6, 2023 speed limits from 50km/h to 40km/h on most residential roads
Toronto*	May 2015, the Toronto and East York Community Council voted to lower the default speed limit from 40km/hr to 30km/hr on all local roads and some collector roads.
Ottawa	50km/h but many residents are asking for reductions
Montreal	Montreal has a patchwork of speed limit changes. I.e. Dorval has changed to 30km/h July 1, 2021. Côte-des-Neiges–NDG Projet Montréal administration announced speed limit reductions on local and arterial streets five years ago. Back then, it was announced that residential streets would go down to 30 km/h and most arterial streets to 40 km/h, as part of a citywide push to slow down vehicular traffic in Montreal.
Amsterdam*	December 8, 2023, speed limit on most Amsterdam roads will be lowered to 30 km/h
Wales*	September 17, 2023 speed limits 32km/h on most residential roads

* Information is included in the appendix.

International Findings: Effect of Lower Speeds on Collisions and Injuries

There is overwhelming evidence that lower speeds result in fewer collisions and in reduced severity of collisions and injuries. This evidence has built up over more than two decades.

The road safety benefits of reducing speeds in urban areas were recognised in February 2020 at the Third 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 represented at the conference 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, except where strong evidence exists that higher speeds are safe, 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.”

It can be clearly understood that 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 (31mph) compared to the same type of collisions at 30 km/h (18.6mph). In 2018 the OECD reported that research consistently shows that lower speeds reduce deaths and injuries, not least because there is more time to react.

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. This latter point is often overlooked, especially in the absence of three years or more of post-implementation casualty data. It is therefore wrong to think that average speed reductions of even 1 to 2mph are trivial and have little or no value.

It is also important to note that road traffic injury is also strongly associated with poverty. Child pedestrian deaths in deprived neighbourhoods are over four times those in affluent neighbourhoods. Reducing speeds through the application of area-wide 20mph speed limits would therefore help reduce health inequalities.

An important and nuanced understanding of the effect of 20mph limits on reducing speeds and casualties was gained through the evaluation of their extensive application across Bristol, which noted that (even at only three years post-implementation):

“casualty reduction is being achieved even when speed driven don’t drop to 20mph itself: ‘success is not defined by all average speeds being under the set speed limit of 20mph – it is about bringing vehicle speeds down closer to 20mph, and assessing any positive impacts of that speed reduction compared to the situation before the introduction of the lower limits.”

Wales Summary

Wales will be one of the first countries in the world, and the first nation in the UK, to introduce legislation to have a default 20mph speed limit on roads where cars mix with pedestrians and cyclists.

Enabling 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. As such, it’s important to note that the initiative reports significant actions around: Legislation and Policy, Enforcement, Engineering, Communication and Marketing Strategy, Monitoring and Evaluation, and Implementation.

[First published: 8 July 2021, Last updated: 17 September 2023]

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 and in fact 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.

These more serious collisions resulted in 1137 people being killed or seriously injured in Wales in 2018, of which 80 were children.

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 the avoidance of being injured. It must also address the perception of risk of harm and freedom from harm and its manifestation at the individual, community and societal levels.

For example, according to the British Crime Survey, speeding traffic was rated as the most serious problem of 16 social problems. Males and females both rated speeding traffic as the greatest problem in local communities – a perceived lack of safety. This rating also held true whether respondents were young, middle aged, or old.

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 repeatedly 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. Yet, for traditional road safety led by a casualty reduction focus, more children in cars may lead to lower casualty numbers. Road safety has not been improved. Rather, road safety, as measured by casualties, has been achieved through fear.

Wales Findings: Walking and Cycling

Increasing walking and cycling is an important policy goal of the Welsh Government. Active Travel is good for people's mental and physical health and when it replaces a car trip will help to reduce carbon emissions and improve air quality. More walking and cycling produce more cohesive and safe communities for people to live, work and socialise in.

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.

There has been little research as yet which has focused on monitoring any changes in active travel as the result of introduction of 20mph speed limits in the UK, but evidence from initial pilot schemes in Bristol and Edinburgh both reported positive results.

In continental Europe research has reported that objectively assessed traffic speed levels of 30km/h or less are associated with a higher likelihood of cycling.

Wales Findings: Social Cohesion

There is clear evidence that more social connectivity including friendships and acquaintances protects against death from all causes. This protection is as much as 50% higher for those with greater social connections. Possible increases in social interaction such as with neighbours due to more walking and cycling and consequent incidental social connectivity could therefore lead to health improvements. Any change is, however, likely to be measurable only over an extended period of five years plus and identifying any causal effect is challenging.

Wales Findings: Noise and Air Quality

Evidence for other changes in health impacts include likely reductions in noise with lower motor traffic speeds. Research finds that higher motor vehicle speeds always lead to greater annoyance but more significantly lower speeds and hence reduced noise could result in positive changes in physical and mental health outcomes including lowering hypertension.

Despite growing interest in the issue of emissions there is relatively little evidence for the effect of 20mph speed limits on air quality. A 2017 study which modeled the impacts of a 20mph default speed limit for restricted roads across Wales concluded there would be an overall improvement in air quality. The researchers also calculated gains of 54 lives saved and a decrease of 647 years of life lost due to reduced fine particulate matter and nitrogen dioxide emissions. Where there has been any investigation into air quality impacts, these are reported as either negligible or a slight improvement.

Wales Findings: Journey Times

The concern is often expressed that 20mph speed limits will significantly increase journey times, both generally and for particular types of traffic such as buses. In fact previous studies have indicated that the reduction in the speed limit has not significantly increased journey times. While this finding may be surprising, it can be explained by the fact that 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 it is rarely the case in towns and cities that vehicles can reach 30mph for more than a minute or two before they are slowed by queuing vehicles or red signals.

Transport for Wales (TfW) undertook journey time modelling for a series of routes using a Geographic Information Systems (GIS) analysis. This exercise calculated the change in travel time compared to current off-peak all-traffic speeds, assuming that future speeds in the new 20mph limits would reduce to 20mph. In summary, TfW found that the impact on long distance journey times across Wales would be minimal. A greater impact was found on longer routes through urban areas, but even on the 38km long bus route, the forecast increase in off-peak journey time was only 5 minutes. As buses travel more slowly than general traffic the increase on off-peak bus journey time along this route is expected to be less than this.

Wales Findings: Public Support

In surveys over the past decade across the UK there has been a consistent positive finding of public support for 20mph limits both pre- and post-implementation.

In a trial of 20mph limits across Scotland in 2001 overall results from the attitudinal survey demonstrated strong local support for the schemes and almost three quarters of respondents considered that the experiment had been either 'very' or 'partly' successful.

More recent studies have reported that public support for 20mph is consistently high (62%-89%) for residential streets where reported (for Portsmouth, 2010; Bristol, 2012; Edinburgh 2013; Atkins interim evidence 2016; Bristol, 2018; Calderdale , 2018), and 72% on busy streets (Bristol, 2018).

Repeat survey work with a national polling agency using representative sampling from across Great Britain has reported that support for 20mph speed limits increases from around 70% to 80% post implementation. However, the same research has also found that while people surveyed supported 20mph speed limits by a significant majority they wrongly believed that they were in a minority. This will need be addressed through the Communication and Promotion Strategy.

Outstanding Issues

1. Speed limits need to be addressed via the Provincial Government
2. Where would the boundaries for a new HRM speed limit be placed
3. As a compliment to slowing down private vehicles, there also needs to be an initiative for higher speed, high quality public transportation in HRM.

Next Steps

1. Examine the resources provided here, from Wales, Edmonton, Toronto and Amsterdam
2. Consult with province about a potential HRM-wide speed limit change
3. Adjust presentation and provide at the <> committee
4. Consult with other Canadian jurisdictions (Calgary, Edmonton, Toronto)

Appendix A. Extensive Wales Information

Wales has a very complete set of information supporting the change, its background, preliminary tests and public opinion research (<https://www.gov.wales/20mph-speed-limits>). Most directly relevant to HRM planning is its “20mph Task Force Group report”:

<https://www.gov.wales/sites/default/files/publications/2020-07/20mph-task-force-group-report.pdf>

It contains the following sections:

1. Executive Summary
 2. Introduction
 3. The Case for Change
 4. Legislation and Policy
 5. Enforcement
 6. Engineering
 7. Communication and Marketing Strategy
 8. Monitoring and Evaluation
 9. Implementation
 10. Main Findings and Recommendations
- Glossary of Terms
Appendices

Editor’s Note: This is an excellent reference document. Everyone should read the 2-page “Executive Summary”. The ATAC committee should also read at least the 5-page “The Case for Change”. The HRM Planners should study the whole report in detail.

Guidance and services

- [Introducing 20mph speed limits: frequently asked questions](#) - Guidance on why we are introducing a 20mph speed limit from 17 September 2023.
- [Setting local speed limits](#) - Helps local authorities decide when to change speed limits to better suit local conditions.
- [20mph campaign: promotional material](#) - Promotional material used to support the 20mph speed limits that will start from 17 September 2023.
- [Find a proposed exception to a 20mph speed limit](#) - View a map of proposed exceptions to a 20mph speed limit and comment on a proposed exception.
- [Setting exceptions to the 20mph default speed limit for restricted roads](#) - How highway authorities can set exceptions to 20mph speed limits that will come into force on 17 September 2023 on restricted roads in Wales.
- [Roads affected by changes to the speed limit on restricted roads: user guide](#) - This guidance will help you use the 20mph speed limit exceptions to the default road speed data map.
- [Traffic Signs Regulations and General Directions: guidance on the introduction of the default 20mph speed limit](#) - The changes to traffic sign laws needed to introduce default 20mph speed limit for residential roads from 17 September 2023.
- [20mph campaign: promotional leaflet](#) - Accessible and alternative language versions of the leaflet used to support the 20mph campaign.

Policy and background

- [Introducing default 20mph speed limits](#) - We have introduced a default 20mph speed limit on restricted roads across Wales.
- [20mph public attitudes research](#) - We commissioned Beaufort Research to research public attitudes and awareness.
- [20mph Task Force Group report](#) - Review on reducing the default speed limit on restricted roads to 20mph in Wales and the changes that need to take place.
- [The state of the evidence on 20mph speed limits with regards to road safety, active travel and air pollution impacts: August 2018](#) - Outlines research into the effects of 20mph speed limits on road safety, active travel and air pollution.

How did Wales Proceed?

Wales worked with highway authorities, Trunk Road Agents (TRAs), who operate the strategic road network, and local authorities, who are responsible for county roads. Not all roads with a 30mph limit are suitable to change to 20mph. These roads are known as exceptions. Local Authorities considered which roads should remain at 30mph. There will be 30mph signs in place to tell this. A map on [DataMapWales](#) that shows which roads would stay at 30mph.

20mph Public Attitudes Research

Wales commissioned Beaufort Research to research public attitudes and awareness:

1. Traffic Orders 20mph public attitudes survey,
2. 20mph public attitudes survey: further research

20mph Task Force Group report: <https://www.gov.wales/sites/default/files/publications/2020-07/20mph-task-force-group-report.pdf>

20mph Promotional material: [20mph campaign: promotional material](#)

Appendix B. Edmonton (and Calgary), Alberta

https://www.edmonton.ca/transportation/traffic_safety/residential-speed-limits

August 6, 2023, Edmonton made a modest decrease in speed limits from 50km/h to 40km/h on most urban roads, in line with Calgary (who made the change May 31, 2021) and what other Canadian cities are doing.

[As well Montreal has a patchwork of speed limit changes. I.e. Dorval has changed to 30km/h July 1, 2021. Côte-des-Neiges–NDG Projet Montréal administration announced speed limit reductions on local and arterial streets five years ago. Back then, it was announced that residential streets would go down to 30 km/h and most arterial streets to 40 km/h, as part of a citywide push to slow down vehicular traffic in Montreal.

Various BC locations have been lobbying for lower urban speed limits since 2016. The online survey of people around the province shows 66% of British Columbians acknowledge that they would “definitely” or “probably” like to see the speed limit reduced to 30 km/h on all residential streets in their municipality while keeping the speed limit on arterial and collector roads at 50 km/h.]

Edmonton’s website contains:

A simple rationale for why the change:

Reducing speed limits on residential streets, downtown, and high pedestrian areas makes our streets safer, calmer, and quieter for everyone. Slowing down gives people more time to react to the unexpected to prevent crashes and reduce the severity of collisions that do happen. The Estimated Time of Arrival Tool shows how little impact there is to driving times with this change.

Reducing the default speed limit is one important action within the Safe Mobility Strategy 2021-2025, Edmonton’s approach to advancing Vision Zero. It is a key component of the City's strategic goals for the next 10 years and supports ConnectEdmonton in creating a safe, healthy, urban and climate-resilient city for all residents.



Project status / Implementation and Education

The speed limit is now 40 km/h on most residential and downtown streets.

The City of Edmonton and the Edmonton Police Service (EPS) are working together to provide education and enforce speed limits in an effort to make Edmonton’s streets safer for everyone.

Community Outreach Toolkit

https://www.edmonton.ca/transportation/traffic_safety/safe-speeds-toolkit

Including sections on signage, tools to address neighbourhood speeding concerns and Youtube messages:

https://www.youtube.com/watch?v=BH7V_QCNgw and

<https://www.youtube.com/watch?v=VUOnQKulti8>

Speed Limit Map

It indicates which roads are now 40km/h. The citywide default speed limit is now 40 km/h. This means, if you do not see a speed limit sign, the speed limit is 40 km/h.

Estimated Time of Arrival Tool

Edmonton provides a tool to see how trip times may be affected by the 40 km/hr default for residential roads and goes on to assert: You may be surprised that your overall journey stays about the same. This is because the speed limits on many major roads you use to get around the city are not changing.

Speed Limit Reduction FAQ

https://www.edmonton.ca/transportation/traffic_safety/residential-speed-limits-faq

Vision Zero

Our streets are for everyone, whether you are walking, rolling, cycling, driving or taking transit. The [Safe Mobility Strategy 2021-2025](#) is our plan to achieve Vision Zero: Zero traffic-related serious injuries and fatalities through safer, more livable streets for all by 2032.

Since Vision Zero was adopted in 2015, traffic-related fatalities have decreased by 50%, serious injuries have decreased by 32% and pedestrian fatalities and serious injuries have decreased by 27%.

<https://www.edmonton.ca/transportation/traffic-safety>

More Information

311 Contact Centre: **Online** [Contact 311 Online](#)

If you are calling from outside of Edmonton: 780-442-5311

Appendix C. Toronto, Ontario

<https://www.tcat.ca/project/saferstreetsnearschools-getting-started/speed-limit-measures/>

Toronto has a number of measures in place:

- a) Toronto (Toronto & East York, Etobicoke York, North York, and Scarborough) has moved in the lower default speed limits. *Toronto has deemed that lowering the posted speed limit over a large area can be more effective than a limit on a single street. In May of 2015, the Toronto and East York Community Council voted to lower the default speed limit from 40km/hr to 30km/hr on all local roads and some collector roads. This was done in response to demands for safer streets from local communities.*
- b) 30km/h limit (<https://www.tcat.ca/project/saferstreetsnearschools-getting-started/speed-limits-of-30kmhr/>)

You can apply for a 30km/h Speed Limit on a single street or for several streets around your school.

To have lower speed limits implemented, a number of ‘warrants’ will need to be met. Warrants are criteria that a policy must pass to be recommended for approval.

30km/hr Speed Limit Policy Warrants

Warrant A: Petition (Mandatory - responsibility of residents)

You must provide a petition to your Councillor signed by at least 25% of the affected households (or 10% in the case of multiple family dwellings like apartment buildings)

Warrant B: Road Environment (ALL criteria must be met)

- | | | | |
|--------------------------------------|---|---|--|
| 1. Must be a local or collector road | 2. Width of road must be 8.5 metres or less | 3. Eighty-five percent of vehicles must be travelling at or below 50km/hr | 4. Vehicle volume must be less than 8,000 vehicles per day |
|--------------------------------------|---|---|--|

Warrant C: School and Cycling Environment (ONE of these criteria must be met)

- | | | |
|---|--|--|
| 1. An elementary or junior high school is beside the road | 2. The road is beside parkland that has access to a school or park | 3. There are bike lanes, sharrows, or signed bike routes |
|---|--|--|

Warrant D: Pedestrian and Traffic Environment (At least THREE criteria must be met)

- | | | | |
|---|--|---|---------------------------------|
| 1. No sidewalk on either side of the road or a major part of the road | 2. Frequent parking throughout the day with a pavement of less than 6.5m | 3. Two or more curves in short distance from each other | 4. Not enough stopping distance |
|---|--|---|---------------------------------|

- c) 40km/h limit (<https://www.tcat.ca/project/saferstreetsnearschools-getting-started/40kmhr-speed-limits/>)

Lowering the speed limit on arterial roads or other roads with current posted speed limits of 50km/h or more will involve using the 40km/hr Maximum Speed Limits Policy. While 40km/h speed limits apply primarily to minor arterial roads, exceptions have been made for major arterial roads that have schools (where the limit drops during school hours).

There is no community petition required for this policy, but there are other ‘warrants’ that must be met. To have lower speed limits implemented, a number of ‘warrants’ will need to be met. Warrants are criteria that a policy must pass to be recommended for approval.

40km/hr Speed Limit Policy Warrants

Warrant A - Wide Roads

Pavement width cannot be more than 10.5 metres

Warrant B - Pedestrian Environment (ONE criteria must be met)

- | | | | |
|--|---|---|---|
| 1.
An elementary or junior high school is beside the road | 2.
Road is beside parkland that has access to a school or park | 3.
No sidewalk (on either side or a major portion of the road) | 4. The sidewalk is not separated from motor vehicle traffic by street parking or bike lanes AND the roadway width is 5.7 metres (if a two-way street) or 4.0 metres (if a one-way street) |
|--|---|---|---|

Warrant C - Road and Traffic Environment (ONE criteria must be met)

- | | | | |
|---|--|---|---|
| 1.
Two or more locations of concern with steep hills and/or curves, with a safe speed of less than 50km/hr | 2.
Not enough distance to stop safely at two or more locations when travelling at 50km/hr | 3.
Pattern of collisions affected by vehicle speed on local roads:- 3+ over 3 years, and on other roads: 5+ over 3 years | 4. Where long term parking is permitted on one or both sides, AND the roadway width is 5.7 metres (if two-way street) or 4.0 metres (if a one-way street) |
|---|--|---|---|

- d) Traffic Calming Measures (<https://www.tcat.ca/project/saferstreetsnearschools-getting-started/traffic-calming-measures/>)
- e) Intersections and Crossings (<https://www.tcat.ca/project/saferstreetsnearschools-getting-started/intersections-and-major-crossings/>)
- f) Supporting Research (<https://www.tcat.ca/project/saferstreetsnearschools-getting-started/supporting-research/>)

Why lower speeds

Encouraging walking and biking for transportation is one important way to address the low levels of physical activity among Canada's youth. There is a strong association between active travel to school and levels of physical activity.

Improving conditions for walking and biking can have a positive impact on local economies and equity.

Traffic calming and reduced traffic speed can attract customers and new businesses to an area. These improvements to the pedestrian environment result in better retail sales and make neighbourhoods more desirable places to live.

Effectiveness of 30km/h speed limits

Studies from around the world have taken a closer look at the effectiveness of lower speed limits in residential areas and found them to be effective at lowering speeds and improving safety.

In Switzerland there was a decrease in overall accidents (15%) and accident severity (27%) in 30km/h zones.

In London (UK) a reduction of road casualties by 41.9% (48.5% among those 15 and younger) was reported for 20mph (32km/h) traffic speed zones compared to adjacent areas without lowered speed limits.

Lancashire County (UK) implemented a blanket 30 km/h speed limit in all residential areas and near all schools, and early indications are that deaths and injuries have been reduced.

Compliance with lower speed limits

One concern about lowering speed limits is that they may frustrate drivers and create a false sense of security. However, lower speed limits have proven to be particularly effective on local roads.

Studies that have found that reducing a speed limit fails to reduce actual travel speed have mostly been limited to high-volume high-speed roads. Studies done in residential areas, however, have found statistically significant speed reductions were achieved when posted speed limits were reduced.

Calgary found an average speed of 32 km/h in 30 km/h school zones, and an 85th percentile speed of 38.8 km/h. While 54% of vehicles drove at speeds higher than 30 km/h, only 10% drove at speeds more than 10 km/h over the speed limit.

Traffic calming

An analysis reviewing 33 previous studies found that area-wide traffic calming reduced the number of injury accidents by 15%. Residential areas saw an average reduction in the number of injuries by about 25% (9).

Effectiveness of pedestrian crossings

Marked pedestrian crossings should be combined with other safety measures, such as signage, signals, raised medians, narrowed roadways, or other features (10). Without these other measures, studies have found no significant difference in safety between unmarked and marked crossing sites (11).

Pedestrian controlled flashing or solid lights that signal drivers to stop have been shown to reduce crashes involving pedestrians by 69% (12).

Other intersection and crossing treatments

Raised medians have been found to reduce crashes involving pedestrians by 69%. Even at non-signalized intersections a raised median with a marked crosswalk can reduce collisions between vehicles and pedestrians by 46-56% (13).

Installing roundabouts in place of conventional intersections, including both traffic lights and stop signs, is a very effective speed control measure, and can reduce collisions with pedestrians by 75%.

- g) Toolkit (<https://www.tcat.ca/project/saferstreetsnearschools-getting-started/toolkit/>)

Toronto created a number of supplementary tools that you may find useful. They are in Word document format, and you are encouraged to use them as templates and modify them to meet your needs.

- [Appendix A – Worksheet – Writing a Vision – Defining the Problems & Considering Options](#)
- [Appendix B – Sample Email Template for Inviting Councillor to Meet](#)
- [Appendix C – Sample Outreach Letter](#)
- [Appendix D – Sample Traffic Calming Petition](#)
- [Appendix E – Sample Support Letter from School Admin](#)
- [Appendix F – Crossing Guards and Student Safety Patrollers](#)
- [Appendix G – Bringing Transportation Safety into the Classroom](#)
- [Appendix H- Organizations Working for Safer Streets](#)

Appendix D. Amsterdam, Netherlands

10 October 2023

<https://www.amsterdam.nl/en/news/speed-limit-30km/>

On Friday 8 December, the speed limit on most roads in Amsterdam will be lowered to a maximum of 30 kilometres per hour (km/h). We are currently preparing the city for this change, adjusting road markings and placing approximately 4,400 signs.

We started placing the first signs on the future 30km/h roads on Monday 2 October. You are still allowed to drive up to 50km/h on them until 8 December. The signs have a temporary sticker with the message '8 december hier 30km/h' ('Here 30km/h from 8 December').

Adjusting to the new speed limit

A different speed limit will take some getting used to, of course, especially for people who are behind the wheel every day. But in our city, we want to be considerate of others.

Safer and quieter

By driving a little more slowly, you are helping ensure that getting around the city is safer and more relaxed for everybody. As a driver, you will have a better overview and be able to react more quickly to unexpected situations. At 30km/h, the braking distance is 13 metres, less than half of that at 50km/h (27 metres). With a maximum speed of 30km/h, we expect 20 to 30% fewer serious accidents. The probability of a pedestrian surviving an accident in which the car was moving at 30km/h is 95%. We also think traffic noise will be cut in half. The city will be quieter and a more pleasant place to be in.

Extra markings for 50km/h roads

In the coming weeks, we are putting extra markings on the roads where the speed limit will remain 50km/h to make it clearer which limit applies where. Applying the markings will take about 15 minutes per location. The work will not cause a lot of disruption, but there may be a short wait or you may need to make a detour.

Lane dividers

To keep public transport running smoothly, in some places we are constructing separate lanes for public transport. Public transport is allowed to continue travelling at 50km/h on these lanes. The maximum speed for traffic on the adjacent lane is 30km/h. To separate the public transport lane from the 30km/h lane, we will place lane dividers at these locations. Affected neighbourhoods will be informed about the works and possible disruptions.

Where the 30km/h limit will apply

From 8 December, 80% of the roads in Amsterdam will have a speed limit of 30km/h. The maximum speed will be clearly indicated on each street with the familiar traffic signs. For more information about where the new speed limit applies, check [amsterdam.nl/30km](https://www.amsterdam.nl/30km) (page in Dutch) or look at the map.

Appendix E. HRM Map for Reference

