



RESORT MUNICIPALITY OF WHISTLER

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STAFF REPORT TO COUNCIL

PRESENTED: December 7, 2021 **REPORT:** 21-133
FROM: Transportation Infrastructure **FILE:** 180.5
SUBJECT: COMMUNITY SPEED REDUCTION PROGRAMS UPDATE

RECOMMENDATION FROM THE CHIEF ADMINISTRATIVE OFFICER

That the recommendation of the General Manager of Infrastructure Services be endorsed.

RECOMMENDATION(S)

That Council receive this Information Report 21-133 and continue to endorse community speed reduction programs.

PURPOSE OF REPORT

The purpose of this report is to provide a speed reduction program update to Council, further to adopting amendments to the Parking and Traffic Bylaw No. 2177, 2018 on August 17, 2021 in Parking and Traffic Amendment Bylaw (Speed Limit Schedule) No. 2326, 2021.

Information Report Administrative Report (Decision or Direction)

DISCUSSION

Background

The primary goal of reducing vehicle travel speeds is to reduce the risk of death of vulnerable users (pedestrians or cyclists) where physical separation is not enough between a motor vehicle and vulnerable users on a shared roadway. The severity of the injury in the event of a collision between these two groups is lower at a slower speed because the impact force is exponentially reduced. It has been found that the mortality rate for vulnerable user's colliding with vehicles at 30 km/h is only 10%, and the majority of injuries at this speed would be classified as 'slight'.

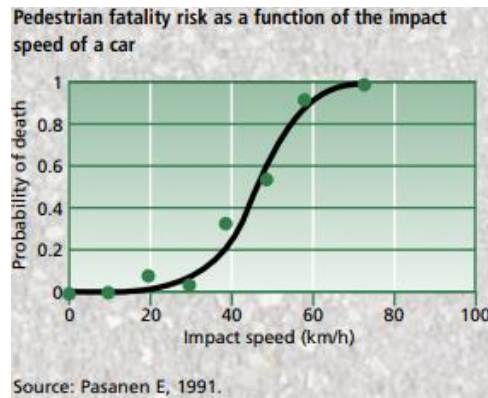


Figure 1. Reducing speeds reduces fatalities

Pursuant to Section 146(7) of the *Motor Vehicle Act* (MVA) of British Columbia, a municipality may, by bylaw, direct the maximum rate of speed at which a vehicle may operate on a roadway within the municipality.

On September 7, 2021 the Parking and Traffic Bylaw No. 2177, 2018 was amended by the adoption of Parking and Traffic Amendment Bylaw (Speed Limit Schedule) No. 2326, 2021 (Traffic Calming Bylaw) which reduced the maximum speed limit on most municipal roads to 30km/h. This amendment replaced Schedule B of the Parking and Traffic Bylaw 2177, 2018 that defines municipal roadway speed limits where different from the provincial default limit.

Currently, British Columbia's MVA sets the default speed limit within a municipality at 50 km/h and prior to the September 7, 2021 adoption most of the speed limits in Whistler matched this provincial default speed limit, regardless of roadway design. Prior to this fall, 30km/h speed limits had existed in Whistler in the Rainbow subdivision, Creekside and Cheakamus Crossing neighbourhoods, through school zones and around community park areas. The speed limit in Function Junction was reduced to 40km/h in 2018 as a trial, to test and see if the average vehicle speed along Alpha Lake Road would be reduced over time. Since the adoption of the bylaw amendment, the only municipal road that continues to be signed at 50km/h is the north end of Alta Lake Road.

The change in the speed limit happened immediately with the passing of the bylaw amendment, but changing driver behaviour to actually drive at the safer reduced speed through our community takes more time.

Traffic Calming - Beyond Speed Reduction

Evidence shows that speed is the most common high risk driving behaviour and the number one contributing factor in motor vehicle collisions. When there is a lack of physical separation between vehicles and vulnerable users, slowing vehicles reduces "near misses" making vulnerable road users feel safer when walking or cycling along the roads, making it more likely that they will leave their car at home in favour of using more active means of getting around the community.

Reducing speeds is just another traffic calming tool available to the municipality to improve the road safety in the community. Each year staff also make other changes to calm traffic along neighbourhood streets:

- Forwarding bad driving behavior reports from community members to the RCMP with a request to provide enforcement at those reported locations.

- Enhance pedestrian crossing areas at intersections and at midblock locations, to improve the visibility of pedestrian to drivers.
- Installing speed reader boards to display real time travel speeds back to drivers as they pass by.
- Installing speed bumps and speed cushions on roadways to physically slow vehicles down.
- Enhanced roadway paint markings to ensure drivers stay within their travel lanes and clear of pedestrian areas (this is most effective during the summer when there is no snow on the ground).
- Narrowing of roadways to deter faster vehicle speeds.
- Grade separated sidewalks and valley trails – to provide a physical separation between vehicles and vulnerable users limiting conflict.

Analysis

A municipality may, by bylaw, direct the rate of speed at which a person may drive or operate a motor vehicle on a local road within the municipality.

In 2018 the posted maximum speed limit on Alpha Lake Road was reduced from 50km/h to 40km/h to determine whether vehicle average speed would be lower. The results showed that drivers did respond to the new speed limit, and average speeds on that section of road were reduced.

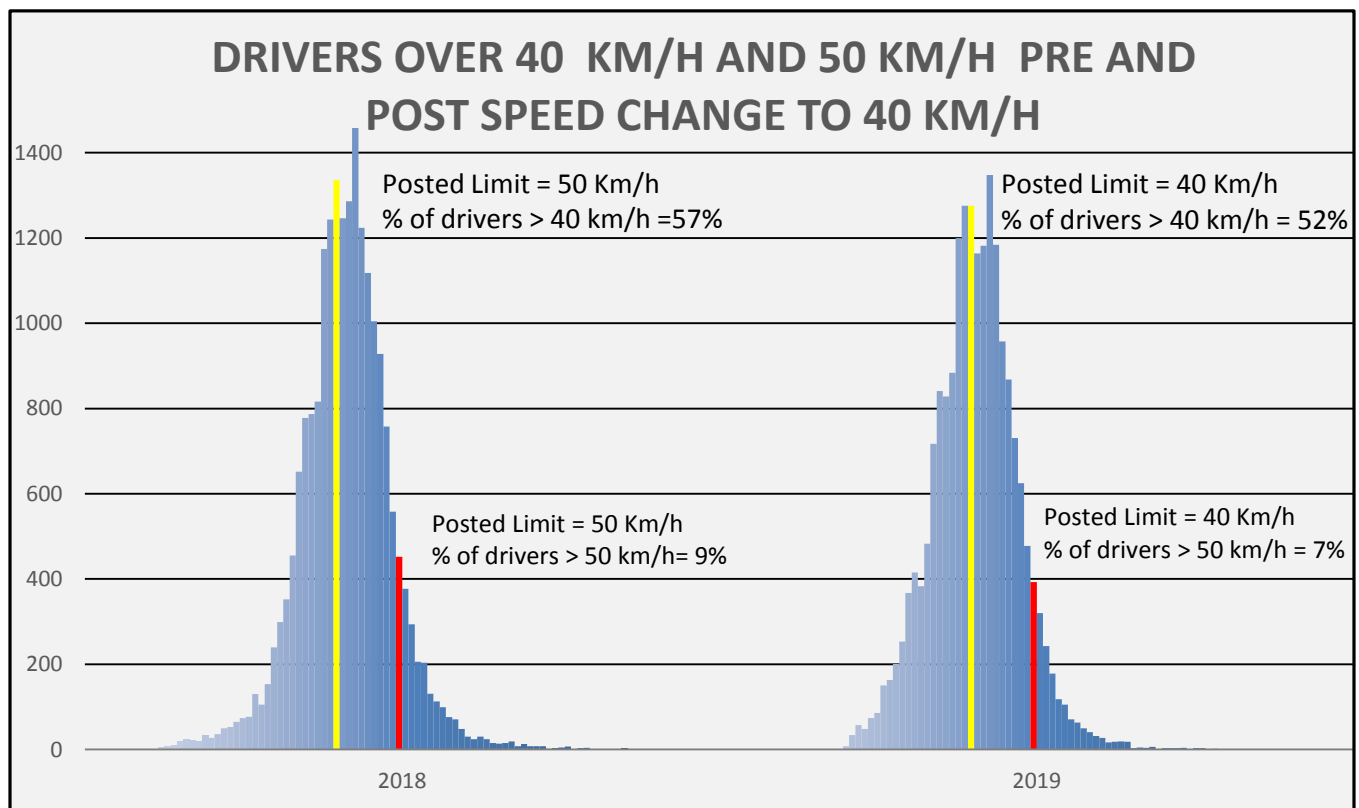


Figure 2. Alpha Lake Road Speed Reduction Trial

During a Committee of the Whole meeting on April 6, 2021 staff presented to Council the benefits of reducing the speed limit, and that reducing the speed to 30km/h had a greater survivability rate compared to 40km/h or the default speed limit of 50km/h.

Staff frequently receive requests from the community asking for traffic calming to slow vehicles down. Many express concern that vehicles are travelling too fast along local roads and particularly along sections where the road is shared with pedestrians (no sidewalk infrastructure available to separate these two groups). Other traffic calming measures have been used to slow vehicles such as electronic speed signs that flash the drivers speed, speed bumps and speed cushions. Speed bumps and cushions are installed to physically slow vehicles down to the appropriate speed limit. These systems have worked with some success.

Staff have used a number of factors to determine that 30km/h is the appropriate speed for vehicles to travel through the community because many of Whistlers streets are not designed for vehicles to travel faster than that speed. These factors include:

- Lack of grade separated sidewalks in older neighbourhoods
- Meandering roadways with sizable storm water collection ditches on either side
- Conservative use of street lighting to reduce light pollution and preserve night skies.

Parks and school zones have historically been 30km/h. Staying inline with those zones along other streets allows drivers to maintain a consistent travel speed through community. With the amount of part-time residents and tourists visiting the community it is important to have consistent speed limits throughout the community to minimize confusion about our local road speed limits.

Gateway sign placement

“Gateway” signs were installed in each neighbourhood to inform drivers of the new speed limit as they exit the provincial highway onto the municipal road system. In 2022, additional speed limit signs will be installed along network roads that connect subdivisions to one another, and along roads that have had a history of complaints from residents about vehicles travelling at speeds faster than what would be considered acceptable in a traffic calmed neighbourhood.

Enforcement

RCMP enforcement is key to compliance with the new speed limit and advances the change in driver behaviour to reduce speeds. With the bylaw amendment, every driver of a vehicle must obey the instructions of an applicable traffic control device such as a regulatory speed sign.

Longer travel times

A slower travel speed does means longer trip times for drivers to reach their destination. Fortunately Whistler valley is long and narrow and most of the travel occurs along short municipal road sections before entering onto Highway 99. The additional time required to travel the municipal road sections at



30km/h rather than 50km/h rarely exceeds 60 seconds. Highway 99 is a provincial highway and is not impacted by the Traffic Calming Bylaw to reduce travel speeds on municipal roads.

Speed limits were reduced along boulevard roads such as Lorimer Road, Northlands Boulevard and Blackcomb Way. The horizontal deflection provided by boulevard islands naturally cause drivers to slow down in response to a visual narrowing of the road. While acknowledging that fact, it was determined that due to the number of intersections and high volume of pedestrian crossings on each of those roads, it was reasonable to reduce the speed limit to encourage slower vehicle speeds, especially during busy tourist seasons when potential conflict with the non-resident vulnerable user can be at its highest. The speed limit on those roads also remains consistent with other local roads, limiting driver confusion.

POLICY CONSIDERATIONS

Relevant Council Authority/Previous Decisions

On September 7, 2021 Parking and Traffic Bylaw No. 2177, 2018 was amended to reduce the maximum speed limit on municipal roads that are not within a park or school zone. This amendment replaced Schedule B and defined each municipal roadway that was intended to have the new speed limit of 30 km/h.

[August 17, 2021: Administration Report No. 21-095](#), Community Speed Reduction – Bylaw Amendment

[September 7, 2021: Parking and Traffic Amendment Bylaw \(Speed Limit Schedule\) No. 2326, 2021](#)

Council Focus Areas

Community Balance

*Effectively **balance resort and community needs** through deliberate planning, partnerships and investment*

Climate Action

*Provide leadership to **accelerate climate action and environmental performance** across the community*

Housing

*Advance strategic and innovative initiatives to enable and **deliver additional employee housing***

Pandemic Recovery

*Leadership and support for **community and tourism recovery and sustainability** – priority focuses are where recovery needs intersect with other Council focus areas*

Not Applicable

Community Vision and Official Community Plan (OCP)

The OCP is the Resort Municipality of Whistler (RMOW)'s most important guiding document that sets the community vision and long-term community direction. This section identifies how this report applies to the OCP.

Chapter 11 Transportation – Our Shared Future

Whistler's transportation system is integral to the livability and success of Whistler as a resort community. Whistler residents and visitors walk, cycle and use public transit, supported by excellent transportation infrastructure orientated to these methods of travel. Whistler also keeps current with transportation-related technology innovations. As a result, residents and visitors of all ages and abilities increasingly choose preferred modes of transportation over single-occupancy vehicle trips.

Goals, Objectives and Policies

5.6.3.20 Policy - Support transportation strategies and investment in the Whistler Village area that reduce automobile traffic and encourage preferred modes of transportation.

10.1.1.1 Policy - Lead a community wide effort to reduce total community greenhouse gasses (GHG) emissions to a level that is 33 per cent lower than 2007 levels by 2020, 80 per cent lower than 2007 levels by 2050 and 90 per cent lower than 2007 levels by 2060.

10.2.2.3 Policy - Increase year-round connections for active transportation modes through the community, especially in areas near convenience services.

BUDGET CONSIDERATIONS

Gateway speed limit signs have been installed this year in the community to advise drivers of the new speed limit as they exit Highway 99 onto municipal roads. The estimated cost of this implementation is \$9,266.

To support the speed reduction program, additional signs are planned to be installed in 2022 to highlight the new speed limit. Future sign locations will be identified using feedback from the community reporting where excessive vehicle speed is still occurring. The estimated cost of this additional implementation is \$10,000.

LIL'WAT NATION & SQUAMISH NATION CONSIDERATIONS

The RMOW is committed to working with the Lil'wat People, known in their language as *L'il'wat7úl* and the Squamish People, known in their language as the *Skwxwú7mesh Úxwumixw* to: create an enduring relationship; establish collaborative processes for Crown land planning; achieve mutual objectives; and enable participation in Whistler's resort economy.

There are no specific considerations to include in this report.

COMMUNITY COMMUNICATION

Level of community engagement commitment for this project:

Inform Consult Involve Collaborate Empower

Media Release upon adopting the Traffic Calming Amendment Bylaw to reduce speed limits in Whistler. Communication through RMOW and RCMP channels was posted to remind drivers of the 30km/h speed limit in Whistler.

Gateway signs were installed at locations where drivers exiting Highway 99 onto local roads can see as they drive by.

REFERENCES

None.

SUMMARY

The primary goal of speed reduction is to reduce the risk of severe injury or death of vulnerable users conflicting with vehicles along shared roadways. Many local roads do have on-street parking but do not have sidewalks which leads to limited visibility and near miss occurrences. The speed limit of 30km/h was chosen as research has shown this to be a speed at which pedestrians and cyclists usually survive an impact with a vehicle.

Responding to feedback from Council and from the community requesting slower vehicle speed limits, staff requested that Council amend the Parking and Traffic Bylaw No. 2177, 2018 Schedule B and change the normal speed limit on local roads from 50km/h to 30km/h. That amendment was adopted on September 7, 2021.

A side benefit of slower speed limits is that vehicles travelling at slower speeds use less fuel and emit fewer GHG emissions when travelling down the road.

Through the use of traffic calming devices (including the new speed limit signs) and enforcement, a change in driver behaviour will result in slower vehicle speeds along local roads, making vulnerable users feel safer when sharing the road. Traffic calming may also encourage some residents and visitors to park their car and find other ways to get around the community.

SIGN-OFFS

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