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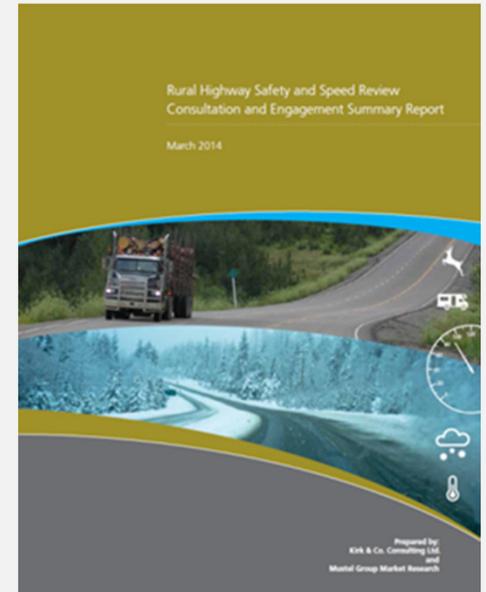
# Rural Highway Safety & Speed Review

3 Year Post  
Implementation Analysis

November 6, 2018

# Background

- **Previous independent review of speed limits was done in 2003.**
- **In 2013, the ministry initiated a review of over 9,100 kilometres of highway across the province, which included four components:**
  - Speed limits
  - Winter tires
  - Slower-moving vehicles
  - Wildlife hazards
- **The ministry conducted public consultation, with over 2,300 participants.**



# 2014 Rural Highway Safety and Speed Review

- **In 2014, as a result of the review, the following actions were taken:**
  - Speed limits were increased on 33 segments covering 1,300 kilometres.
  - Legislative changes and regulation modernization of the winter tire definition and new winter tire signs.
  - Installation of Variable Speed Limit Signs on; Coquihalla, Trans-Canada, and Sea to Sky Highway.
  - “Keep Right Except to Pass” legislation updated; improved signage and pavement marking.
  - Wildlife collision mitigation actions; LED wildlife signs and two wildlife detection pilot systems.

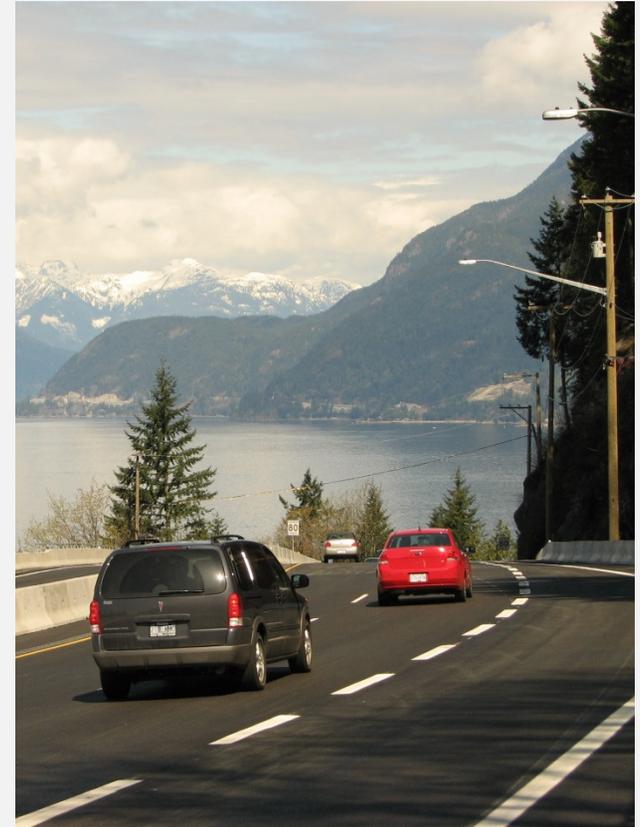


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# 2016 Rural Highway Safety and Speed Update

- In 2016, after collecting one years' worth of data, ministry engineers reviewed all 33 highway segments that received speed limit increases.
- The results of the preliminary analysis indicated:
  - 19 segments had a decrease or no change in the collision rate
  - 14 segments had an increase in the collision rate
  - A statistical analysis showed an overall increase on changed segments of 11.1%



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# 2016 Rural Highway Safety and Speed Update

- **As a result of this preliminary analysis, the following actions were taken:**
  - Speed limits were rolled back on two corridors - Highway 1 from Hope to Boston Bar and on Highway 5A from Princeton to TN Boundary.
  - On the 14 sections where the crash rates increased, the ministry invested in added safety features like improved road markings, better signage, new rumble strips, variable speed signs and wildlife safety measures.



# Safety Data Overview

- **3 years of collision data was gathered through ICBC for police-attended collisions.**
  - Only serious collisions (fatal and injury) were included due to data reliability and accuracy
- **The evaluation for each segment included:**
  - Statistical analysis (Empirical Bayes)
  - Review of collision rates
  - Collision frequency
  - Contributing factors

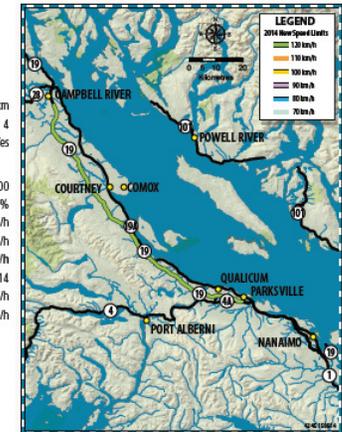
## RURAL HIGHWAY SAFETY AND SPEED REVIEW Highway 19 POST IMPLEMENTATION 2018 Nanaimo to Campbell River

### Parkville to Campbell River

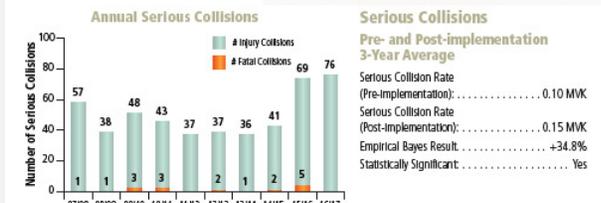
**Physical Characteristics**  
 Start Point: 1 km north of exit to Parksville/Weigh Scale  
 End Point: South of Willis Rd  
 Length: 114 km  
 Number of Lanes: 4  
 Divided: Yes

### Operational Characteristics

Average Daily Traffic: 10,000  
 % Trucks: .8%  
 Previous Speed Limit: 90/110 km/h  
 Pre-implementation 85th Percentile Speed: 121 km/h  
 New Speed Limit: 120 km/h  
 Implementation Date: July 15, 2014  
 Current 85th Percentile Speed: 129 km/h  
 Change in 85th Percentile Speed: +8 km/h

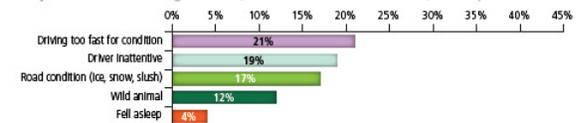


### Safety Trends



**Serious Collisions Pre- and Post-implementation 3-Year Average**  
 Serious Collision Rate (Pre-implementation): 0.10 MVK  
 Serious Collision Rate (Post-implementation): 0.15 MVK  
 Empirical Bayes Result: +34.8%  
 Statistically Significant: Yes

### Top 5 - 1st Contributing Factors (Nov. 1, 2014 to Oct. 31, 2017) Post implementation



\* These values may not add up to 100% as there are other contributing factors.



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# 3 Year Safety Evaluation Findings

- **Statistical analysis:**
  - 16 segments had no reduction in safety (14% decrease in collisions)
  - 17 segments had a decrease in safety (34% increase in collisions)
  - 11.2% over-all increase in serious collision for speed limit change segments
- **Collision rates:**
  - Serious collision rate decreased on 16 segments
  - Serious collision rate increased on 17 segments
  - 12.2 % increase in collision rate for speed limit change segments

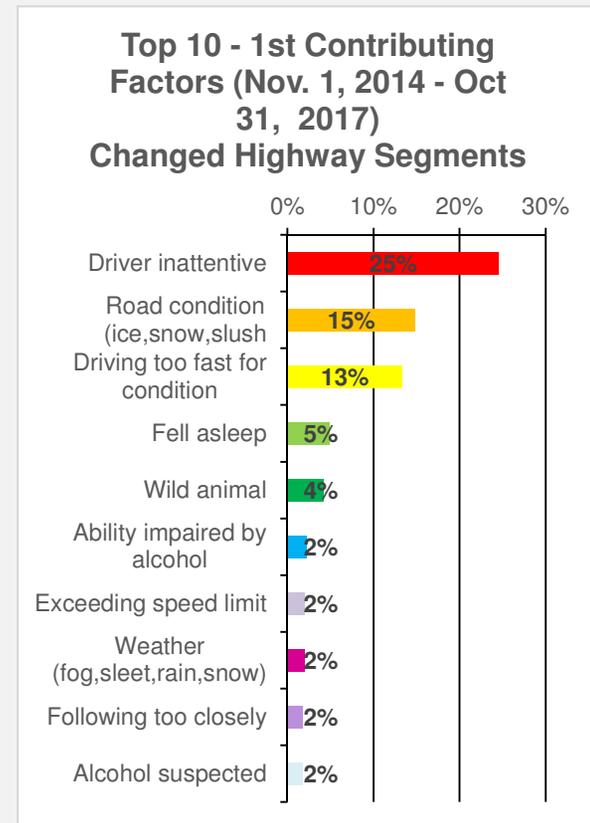


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# Contributing Factors In Serious Collisions

- **Ministry staff reviewed all contributing factors in serious highway collisions.**
- **The top three contributing factors where speed limits were changed include:**
  - Driver inattentive
  - Road condition
  - Driving too fast for conditions
- **For all provincial highways, the same factors are the top contributors to serious collisions.**



# Safety Evaluation Findings By Segment

Location	Speed above posted (km/h)	Change in speed related collisions (per year)	Statistical Result (%)
Hwy 6 - Summit Lake to Nakusp	6	-2.0	-87.1
Hwy 99 - Lillooet to Cache Creek	9	-1.8	-74.2
Hwy 6 - New Denver to Hills	1	-0.4	-64.6
Hwy 33 - Rock Creek to Westbridge	9	-0.6	-55.1
Hwy 19 - Campbell River to Bloedel	12	-0.4	-42.9
Hwy 3 - Sunshine Valley to Manning Park East Boundary	17	-3.8	-36.9
Hwy 3 - Hope to Coquihalla	9	-1.7	-36.5
Hwy 1 - Revelstoke to Golden	1	-13.6	-33
Hwy 33 - McCulloch Road to Black Mountain	2	-1.2	-19.1
Hwy 1 - Salmon Arm to Revelstoke	10	-6.4	-17.5
Hwy 97 - Swan Lake to Monte Creek	6	-0.5	-14.1
Hwy 19 - Port McNeill to Port Hardy	-1	-0.3	-13.2
Hwy 97A - Armstrong to Enderby	-1	-0.6	-12
Hwy 97 - Cache Creek to 100 Mile House	7	-0.7	-11.3
Hwy 5 - Heffley to Little Fort	7	-0.8	-6
Hwy 5 - Hope to Kamloops	7	-7.7	-5.4



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# Safety Evaluation Findings By Segment

Location	Speed above posted (km/h)	Change in speed related collisions (per year)	Statistical Result (%)
Hwy 97A - Grindrod to Sicamous	5	0.6	+3.6
Hwy 3 - Sunday Summit to Princeton	16	0.8	+8.0
Hwy 99 - Squamish to Whistler	7	2.4	+8.4
Hwy 1 - Tobiano to Savona	5	0.5	+14.9
Hwy 99 - Horseshoe Bay to Squamish	16	6.3	+18.9
Hwy 1 - Cowichan Bay to Nanaimo	8	6.1	+24.2
Hwy 1 - Hope to Boston Bar	21	3.3	+29.3
Hwy 97C - Merritt to Aspen Grove	15	1.6	+33.4
Hwy 97C - Aspen Grove to Peachland	10	12.2	+34.6
Hwy 19 - Parksville to Campbell River	9	16.9	+34.8
Hwy 1 - Whatcom Road to Hope	1	29.1	+38.2
Hwy 99 - Whistler to Pemberton	0	3.3	+51.8
Hwy 5A - Princeton to TN Boundary	13	2.4	+55.3
Hwy 7 - Agassiz to Hope	9	0.8	+56.7
Hwy 1 - Chase to Sorrento	5	7.2	+65.9
Hwy 19 - Bloedel to Sayward	4	5.3	+87.5
Hwy 1 - Boston Bar to Jackass Mountain	11	2.5	+108.2

# Actions

- **Based on the recently completed review of three years' worth of data, the speed limits have been rolled back by 10 km/h on the following 15 highway corridors that were changed in 2014 and have seen any increase in collisions.**
- **RCMP will be enforcing these corridors to ensure people are respecting posted speed limits**
- **The ministry will also be employing and using road weather information systems connected to dynamic message signs on Highway 99 from Horseshoe Bay to Whistler, to give drivers real time road information so they can better drive to conditions.**



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# Thank You



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