

# Overview and Preliminary Analysis of Canadian Truck Naturalistic Driving Study



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August 28, 2018



# Canada Data At a Glance

- ❑ Total hours driven – 27.5 k hours
- ❑ Total miles driven – 815 k miles
- ❑ Number of drivers – 25
- ❑ Number of vehicles – 25

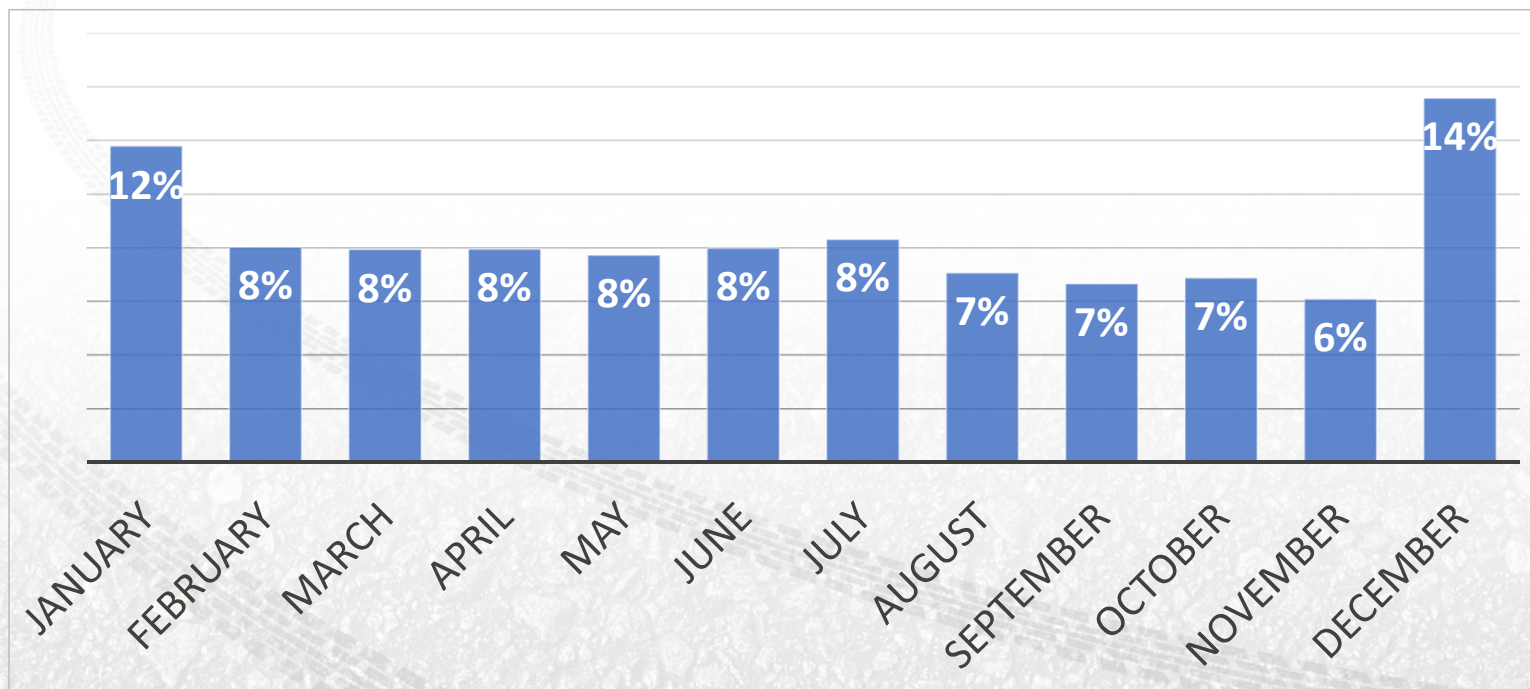


Image source : Wikipedia.org





# Canada Data At a Glance

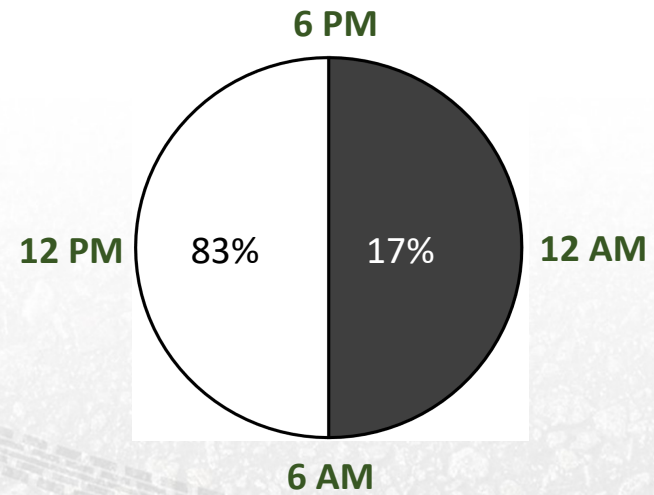
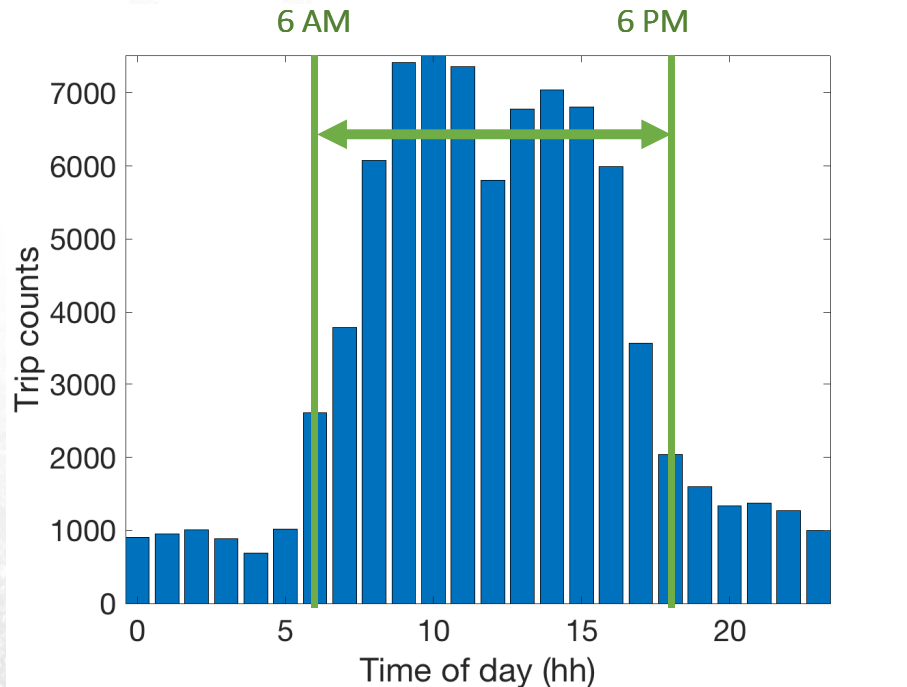


# Vehicle statistics

Years of Make	<2000	2000 - 2010	>2010
Operating	3	8	14
Total Hours Driven	2008	9062	17695



# Day/Night

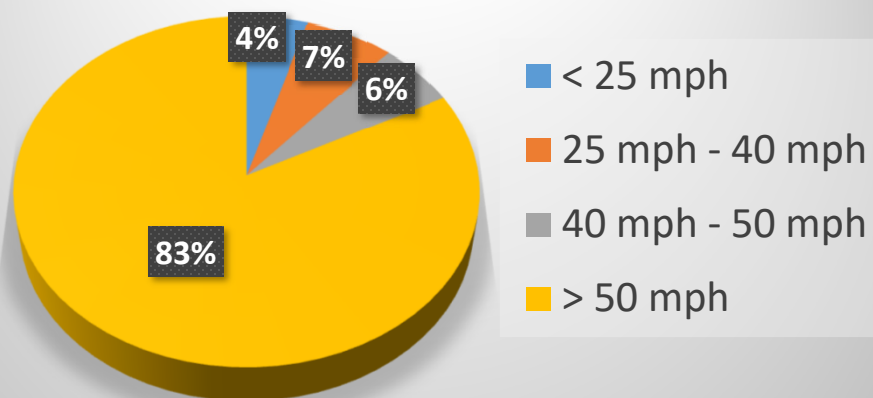


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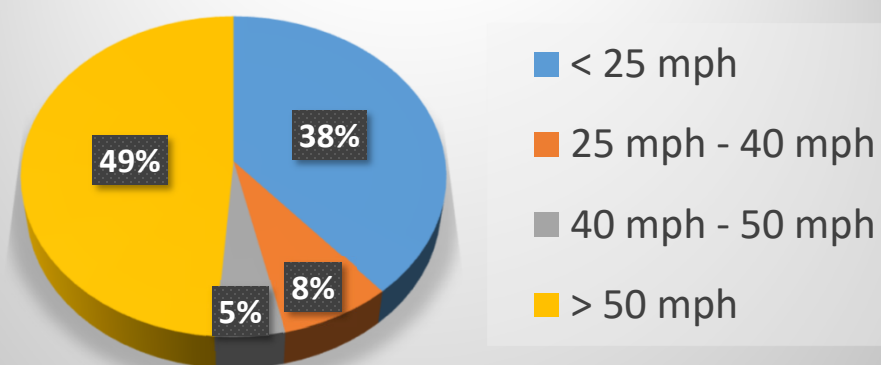


# Highway/ local road

## Mileage Exposure



## Time Exposure



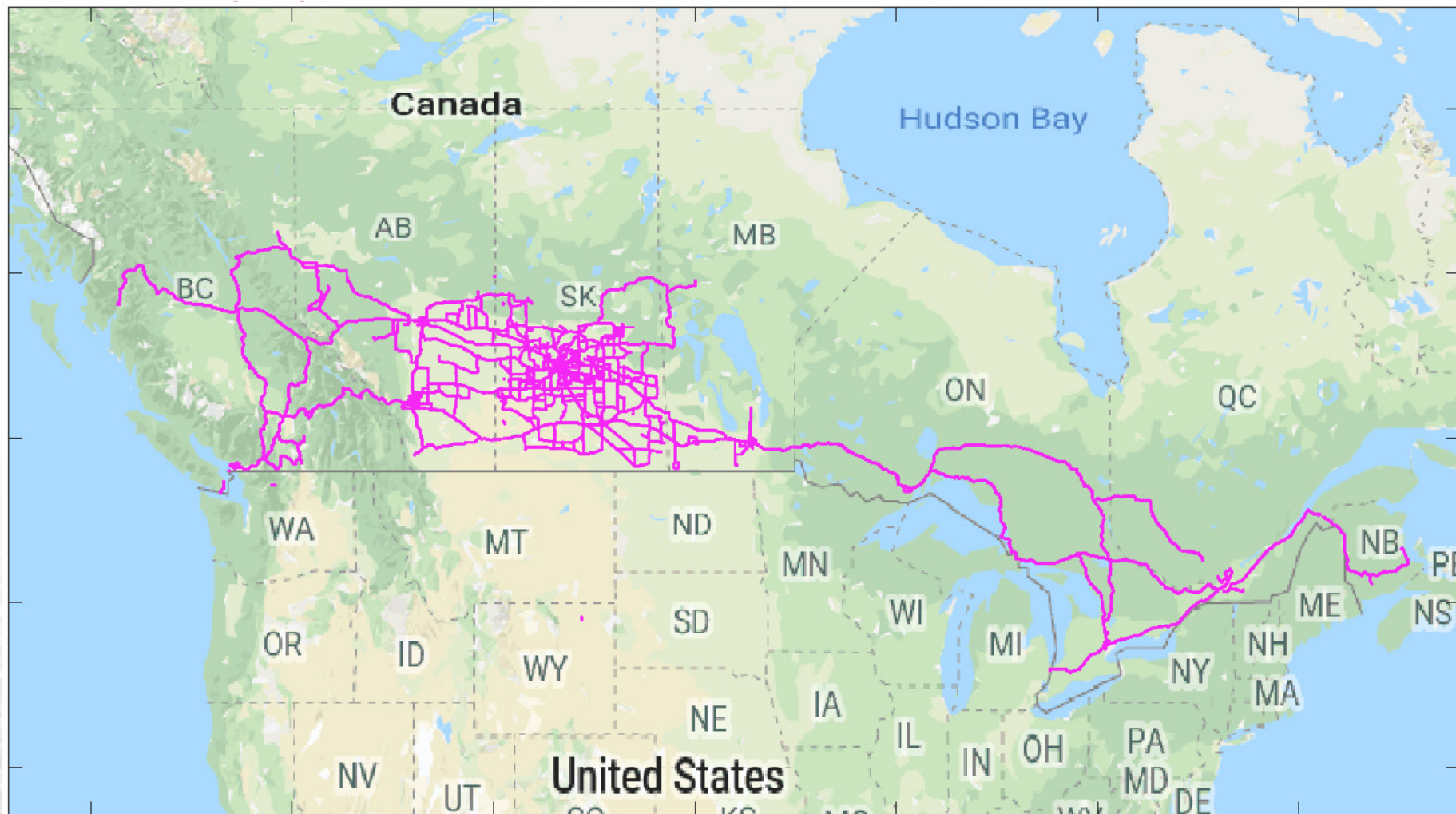
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# Geographical coverage



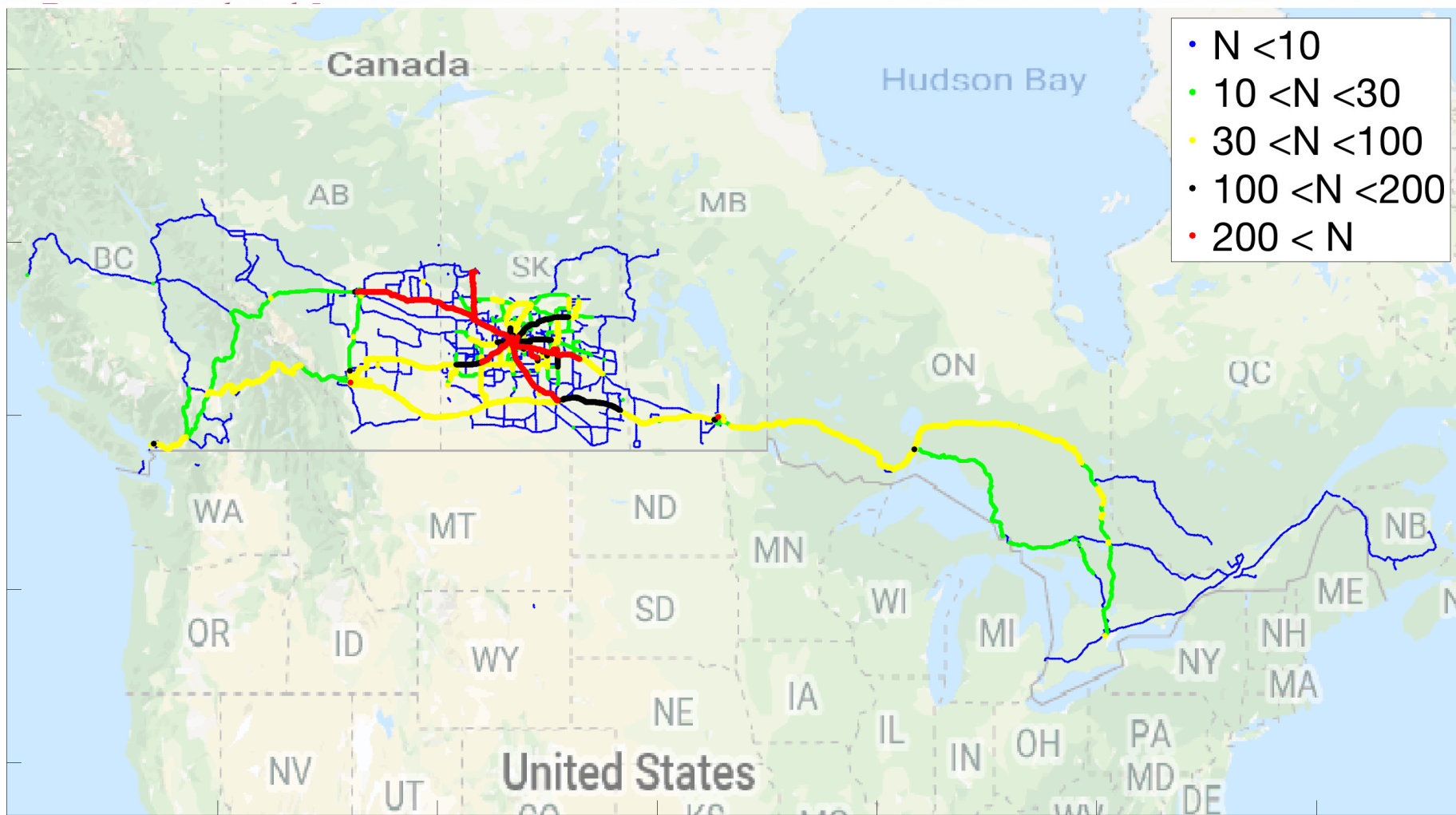




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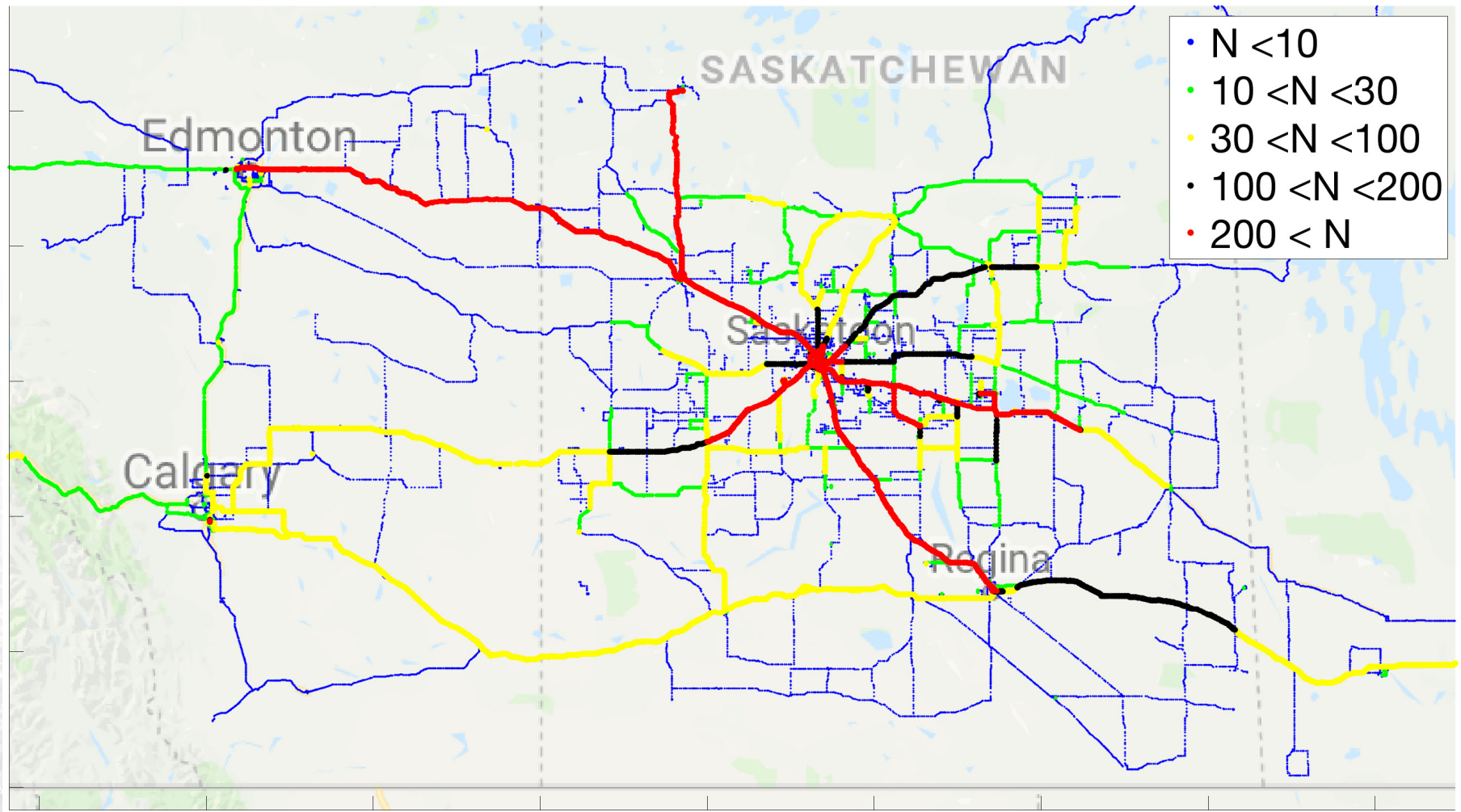






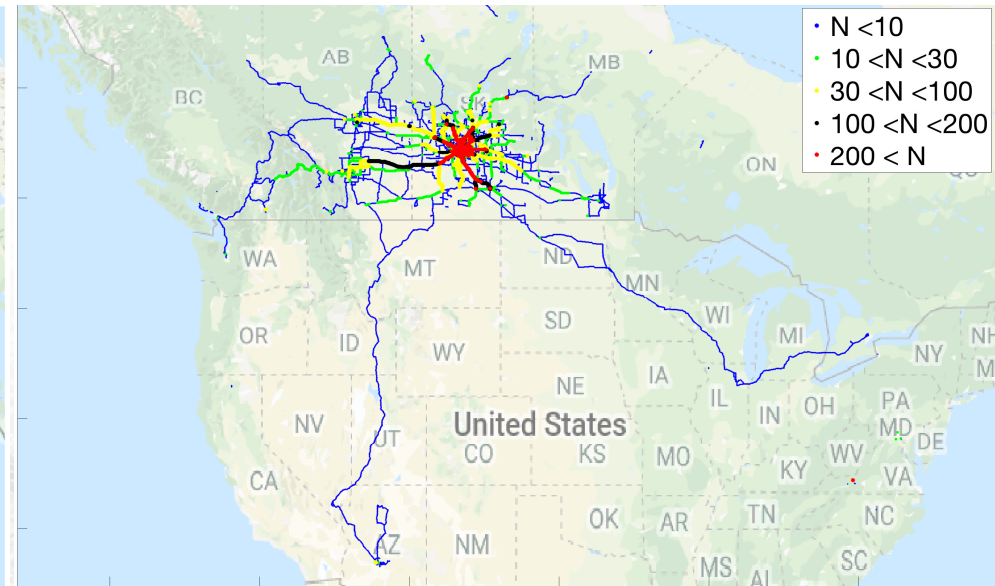
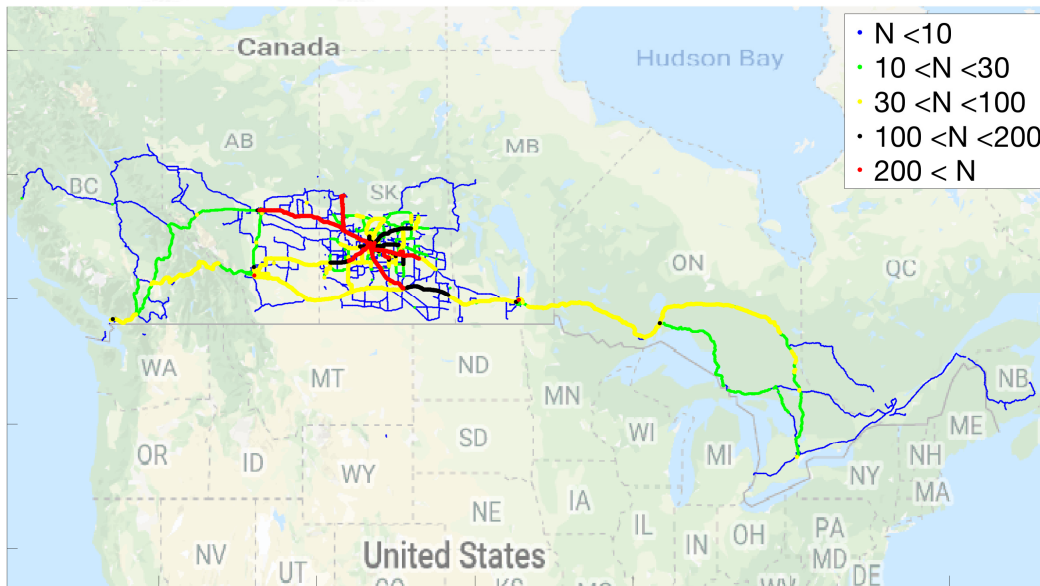
9/18/2018







# Canada Truck vs LV coverage



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# Event Statistics

Events	Event Count
Crash	34 (28)
Near Crash	60 (59)
Unintentional lane departure	884





# Conflicts for Crash/ Near Crash

Behavior/ Event	Crash	Near Crash
Conflicts with road objects	6.8%	3.4 %
Conflicts with lead vehicle	0 %	15.3 %
Conflicts with oncoming traffic	0 %	1.7 %
Conflicts with adjacent lane	0 %	27.1 %
Conflict with turning vehicle	0 %	23.7%
Vehicle Roll Over	0 %	0 %
Single vehicle conflict	92.9 %	27.1%
Rear end strike	0 %	15.3 %

All the reduced crashes were during daytime



# Secondary behavior for Crash/ Near Crash

Behavior/ Event	Crash	Near Crash
Cell phone browsing	0.0%	13.6%
Cell phone dialing	0.0%	1.7%
Texting	0.0%	0.0%
Smoking	14.3%	10.2%
Drinking	0.0%	1.7%
External Distraction	0.0%	3.4%
Talking/ Singing	10.7%	15.3%
Reaching/ moving for objects in vehicle	10.7%	10.2%
Passenger interaction	3.6%	1.7%
Radio adjust	7.1%	0.0%
No Secondary behavior	53.6%	39.0%





# Questions?

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# Thank you

