



Distracted Driving Survey: Combined Urban/Rural Results

Brian Jonah and Valerie Todd

CCMTA · CCATM
CANADIAN COUNCIL OF MOTOR TRANSPORT ADMINISTRATORS
CONSEIL CANADIEN DES ADMINISTRATEURS EN TRANSPORT MOTORISÉ

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Background

- Driver use of electronic communications devices (ECDs) such as cell phones, smart phones, and tablets has increased by about 33% between 2007 and 2012
- Previous surveys found that 3.3% of drivers used hand-held ECDs in urban areas (2010) and 3.6% in rural areas (2009)
- Most Canadian jurisdictions have banned use of hand-held ECDs by drivers
- CCMTA was interested to know if driver ECD use had changed since these laws went into effect



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Survey Methodology

- Observational surveys were conducted at 286 urban (popn > 10,000) sites in Sept 2012 and at 252 rural (popn > 1,000 to 10,000) sites in Sept 2013
- Observed drivers stopped at intersections controlled by traffic light or stop sign
- Drivers observed between 07:30 and 18:30
- Total observations: 104,170 (70,686 urban and 33,483 rural)



Variables Observed

- Driver using hand-held ECD (Yes/No)
- Type of usage (Talking, Typing/Texting, Both)
- Vehicle type (Passenger Car, Minivan/SUV, Light Truck)
- Sex (Male, Female)
- Estimated Age (<25, 25-49, 50+)
- Presence of Passengers (None, 1, 2+)



ECD Usage by Jurisdiction

Jurisdiction	ECD Usage (Urban/Rural)	Urban ECD Usage	Rural ECD Usage
Newfoundland & Labrador	5.2%	5.5%	4.5%
Prince Edward Island	3.5%	3.8%	2.7%
Nova Scotia	3.2%	3.8%	1.8%
New Brunswick	2.1%	2.4%	1.4%
Quebec	4.7%	4.8%	3.9%
Ontario	5.0%	5.1%	3.6%
Manitoba	1.5%	1.3%	2.5%
Saskatchewan	2.3%	1.9%	4.6%
Alberta	2.6%	2.6%	2.2%
British Columbia	5.5%	5.4%	6.2%
Yukon	8.7%	7.0%	26.7%
Northwest Territories	1.4%	1.3%	2.4%
Canada	4.4%	4.6%	3.5%

ECD Usage by Type of Vehicle

Jurisdiction	Passenger cars	Minivans & SUVs	Light Trucks
Newfoundland/Labrador	6.0%	3.1%	4.7%
Prince Edward Island	2.9%	2.9%	5.5%
Nova Scotia	2.1%	2.1%	5.8%
New Brunswick	2.0%	2.5%	2.3%
Quebec	5.3%	4.7%	5.9%
Ontario	5.1%	5.7%	6.7%
Manitoba	0.7%	1.5%	1.3%
Saskatchewan	2.6%	2.3%	2.3%
Alberta	2.3%	2.8%	2.8%
British Columbia	5.2%	5.7%	6.5%
Yukon	9.5%	10.3%	6.9%
Northwest Territories	1.2%	0.4%	2.2%
Canada	4.5%	4.7%	5.7%



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ECD Usage by Sex

Jurisdiction	Male	Female
Newfoundland & Labrador	5.1%	3.3%
Prince Edward Island	3.0%	4.5%
Nova Scotia	2.5%	2.8%
New Brunswick	2.1%	2.4%
Quebec	5.2%	5.0%
Ontario	5.0%	6.2%
Manitoba	1.0%	1.2%
Saskatchewan	2.1%	2.8%
Alberta	2.6%	2.6%
British Columbia	5.5%	5.7%
Yukon	7.0%	10.9%
Northwest Territories	2.1%	0.4%
Canada	4.5%	5.0%



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ECD Usage by Estimated Age

Jurisdiction	Under 25	25 to 49	50 and over
Newfoundland & Labrador	14.6%	3.9%	0.8%
Prince Edward Island	7.6%	4.3%	1.0%
Nova Scotia	4.5%	2.8%	1.1%
New Brunswick	0.7%	2.9%	1.5%
Quebec	9.4%	5.6%	1.8%
Ontario	7.1%	6.4%	2.8%
Manitoba	1.0%	1.3%	0.7%
Saskatchewan	4.8%	2.3%	0.9%
Alberta	4.3%	2.9%	0.7%
British Columbia	8.0%	6.0%	3.4%
Yukon	20.4%	8.1%	3.3%
Northwest Territories	3.7%	2.0%	0.0%
Canada	7.1%	5.3%	2.2%



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ECD Usage by Passengers

Jurisdiction	No passenger	One passenger	2+ passengers
Newfoundland & Labrador	5.2%	5.2%	0.6%
Prince Edward Island	4.2%	2.0%	0.0%
Nova Scotia	2.8%	2.5%	0.5%
New Brunswick	2.7%	1.0%	0.3%
Quebec	5.6%	3.6%	4.0%
Ontario	6.8%	3.2%	2.5%
Manitoba	0.8%	0.5%	3.6%
Saskatchewan	2.3%	2.6%	2.9%
Alberta	3.0%	1.7%	1.5%
British Columbia	7.4%	2.4%	0.8%
Yukon	9.3%	7.9%	5.2%
Northwest Territories	1.7%	0.9%	2.3%
Canada	5.6%	2.9%	2.4%



Type of ECD Usage

Jurisdiction	Type of ECD Usage	
	Talking	Typing
Newfoundland & Labrador	3.3%	0.8%
Prince Edward Island	1.6%	1.3%
Nova Scotia	2.2%	0.8%
New Brunswick	1.6%	0.4%
Quebec	2.7%	1.5%
Ontario	2.3%	2.3%
Manitoba	0.9%	0.4%
Saskatchewan	0.8%	0.8%
Alberta	1.5%	0.3%
British Columbia	3.0%	2.0%
Yukon	4.8%	3.8%
Northwest Territories	1.0%	0.0%
Canada	2.3%	1.6%



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Differences in Type of ECD Use

- Talking was more frequent for drivers of light trucks than it was for passenger cars or minivans/SUVs but typing did not vary by type of vehicle.
- Talking on ECD was more common among men than women but women were more likely to be typing than men.
- Both talking and typing on ECD was more frequent for drivers under 25 than for older drivers
- Drivers were more likely to be talking or typing on ECD when there were no passengers present



Trends in Talking on ECD

Jurisdiction	2006-2007	2009-2010	2012-2013
Newfoundland & Labrador	4.2%	3.5%	3.3%
Prince Edward Island	4.2%	3.5%	1.6%
Nova Scotia	1.7%	3.6%	2.2%
New Brunswick	2.1%	1.8%	1.6%
Quebec	3.2%	3.3%	2.7%
Ontario	6.8%	3.3%	2.3%
Manitoba	4.4%	1.8%	0.9%
Saskatchewan	2.8%	1.8%	0.8%
Alberta	10.7%	4.9%	1.5%
British Columbia	4.0%	3.3%	3.0%
Yukon	3.8%	2.2%	4.8%
Northwest Territories	4.7%	2.1%	1.0%
Canada	5.5%	3.3%	2.3%



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ECD Usage Before and After Law

Jurisdiction	Effective Date of Law	ECD Usage for Talking			Confidence Interval for Difference from 2006-2007 to 2012-2013
		2006-2007	2009-2010	2012-2013	
Newfoundland and Lab	04/2003	4.2%	3.5%	3.3%	(-2.6%, 0.8%)
Prince Edward Island	01/2010	4.2%	3.5%	1.6%	(-3.3%, -1.9%)
Nova Scotia	04/2008	1.7%	3.6%	2.2%	(0.2%, 0.8%)
New Brunswick	06/2011	2.1%	1.8%	1.6%	(-1.1%, 0.03%)
Quebec	08/2008	3.2%	3.3%	2.7%	(-0.7%, -0.2%)
Ontario	10/2009	6.8%	3.3%	2.3%	(-5.3%, -3.8%)
Manitoba	07/2010	4.4%	1.8%	0.9%	(-4.7%, -2.5%)
Saskatchewan	01/2010	2.8%	1.8%	0.8%	(-2.3%, -1.7%)
Alberta	09/2011	10.7%	4.9%	1.5%	(-10.7%, -7.8%)
British Columbia	01/2010	4.0%	3.3%	3.0%	(-1.6%, -0.5%)
Yukon	04/2011	3.8%	2.2%	4.8%	(-0.1%, 2.1%)
Northwest Territories	01/2012	4.7%	2.1%	1.0%	(-6.3%, -1.0%)
Canada		5.5%	3.3%	2.3%	(-3.5%,-2.8%)



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Conclusions

- Driver hand-held ECD use was higher in urban than rural areas
- ECD use was greater among:
 - Drivers of light trucks
 - Females
 - Young drivers (<25)
 - Drivers without passengers
- ECD used more for talking than typing/texting
- Talking on ECDs has declined since 2006-2007 surveys
- Talking on ECDs decreased significantly in 8 jurisdictions suggesting laws banning hand-held ECD use were effective- more effective in urban areas?



Limitations

- Surveys only looked at hand-held use of ECDs- hands-free use may have increased
- Observations made only at intersections on roads with 50kph speed limits- ECD use may be greater on highway, particularly 4-lane divided
- Not clear if typing/texting has changed since it was not observed in earlier surveys
- No control group which did not pass law banning ECD use

