

Warning Signs Litigation & Issues

A presentation to the
Society of Public Insurance Administrators of Ontario
by
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Common Allegations

- ✘ Failing to post signage to warn of a hazard
- ✘ Posted sign misleading or inadequate
- ✘ Missing or ineffective due to lack of inspection & maintenance (misleading, defaced, faded, obscured, downed)

Risk Management is not an option!

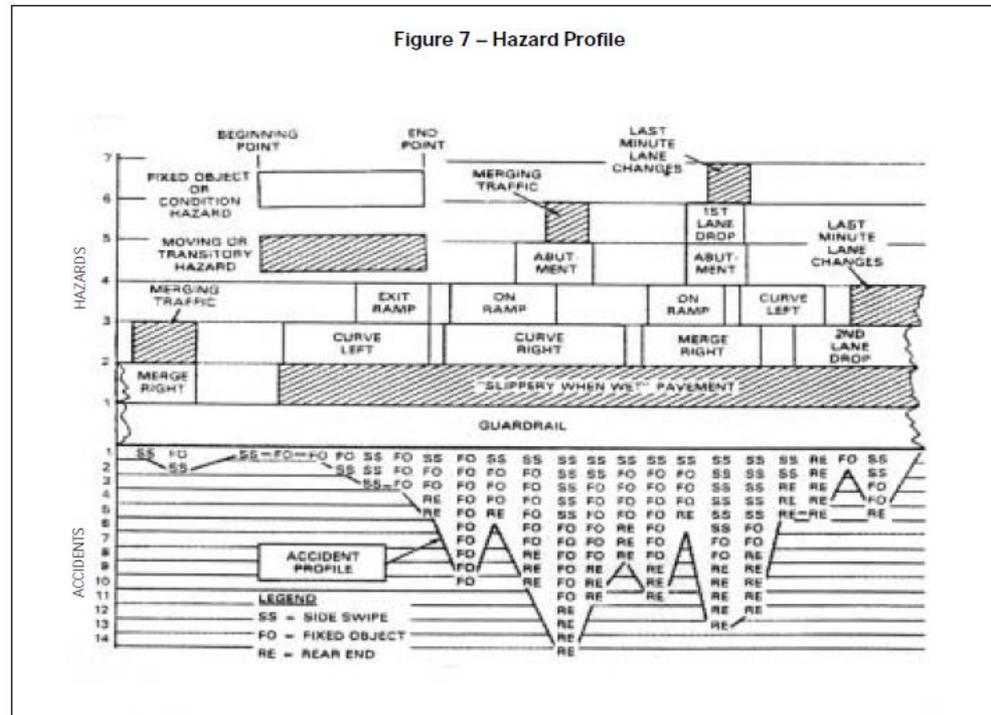
There are many hazards on a road

- Fixed Objects
- Moving Objects
- Highway Conditions
- Situation Hazards
- Inefficient Operations

The duty to repair arises wherever unreasonable risks of harm exists on the roadway for which obvious cues on or near the road are not present and no warnings are provided. . . Justice Howden (Deering v Scugog)

Hazard Clusters

- Often several hazards occur in such close proximity they may be considered one hazard



Avoiding Hazards

- Detecting the Hazard
 - How visible a hazard is depends on many factors including the interaction between a number of competing information sources
- Recognizing the Hazard
 - Once something has been seen, the driver should decide what it is
- Deciding What to Do
 - After recognizing the hazard, drivers need to determine if speed and path modification is necessary
- Doing it
 - Vehicle control to implement the decisions is entirely in the hands of the driver

Rating Hazard Visibility

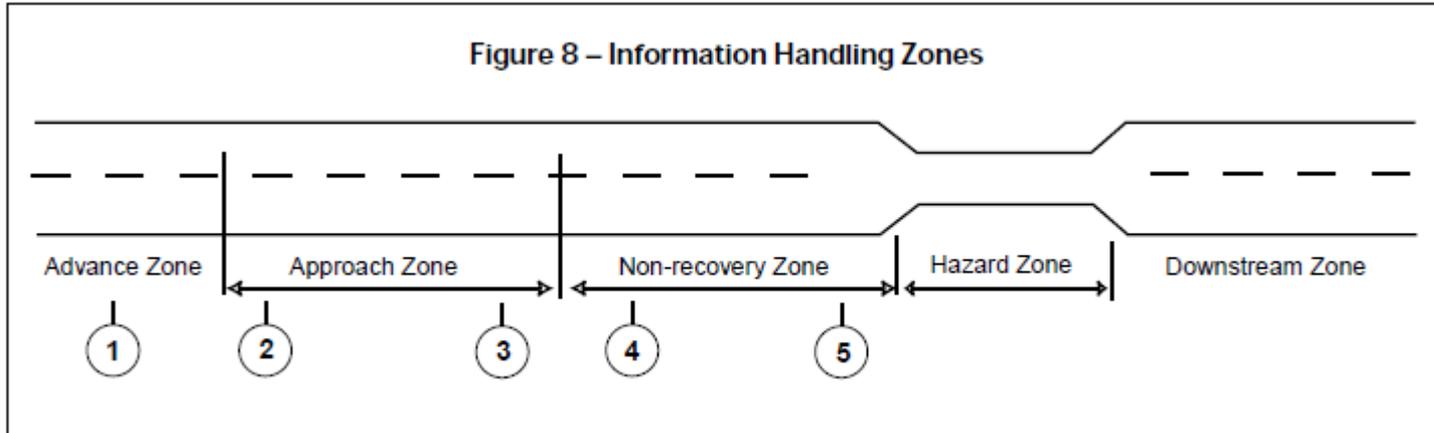
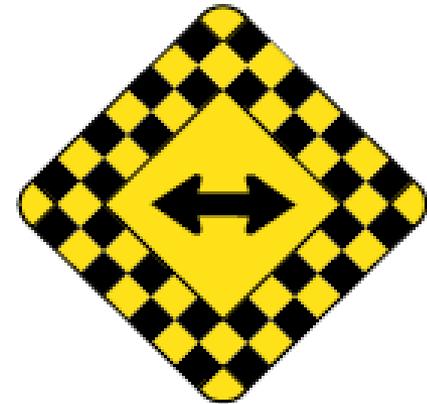
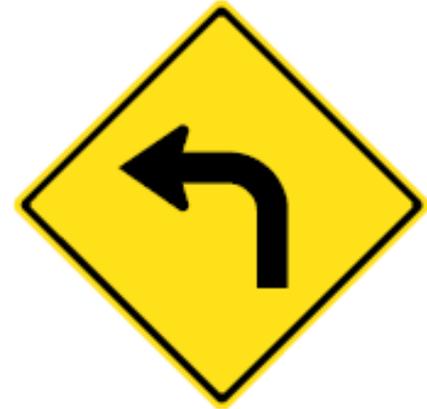


Table 9 – Standard Information Needs by Zones

Advance Zone	Approach Zone	Non-recovery Zone	Hazard Zone	Downstream Zone
Expectancy Needs	Advance Hazard Warning Needs	Speed and Path Implementation Needs	Hazard Detection Enhancement Needs	Low Primacy Needs
Low Primacy Needs	Speed and Path Selection Needs		Speed and Path Implementation Needs	

Recent Litigation

- Ferguson v. Brant County (2013) – 55%
- Fordham v. Dutton Dunwich (2014) – 0%



Ferguson v County of Brant, 2013 ONSC 435 & 2013 ONSC 4365

- Accident Date: April 2, 2005
- At approximately 10:30 PM Jesse Ferguson was driving his father's SUV westbound on Scenic Drive and approached a sharp curve to the right. He failed to negotiate the turn and crashed into a tree
- Jesse Ferguson sustained serious personal injuries
- This driver had 4 passengers in the vehicle but their injuries were not serious

Allegations against Brant County

- Failed to install signs that adequately warned motorists of the risk of negotiating this curve
- They allowed a condition of non-repair to exist due to a slippery, slushy and snow covered road



Facts determined at Trial



- Scenic Drive was a paved road with a posted speed limit of 60 km/hr
- At the time of the accident the westbound driver approaching the curve would have observed a “Winding Road” sign placed 166 metres away from the curve
- A “Y” intersection sign was placed 81 metres from the beginning of the curve
- Both signs were present for at least 6 years
- Neither signs were appropriate as per the Manual of Uniform Traffic Control Devices (MUTCD) (1999-2001) and the OTM (2001-2005)

Facts determined at Trial continued

- County employee testified at trial that he was unaware that these signs did not conform with the OTM
- He also was unaware that the OTM required chevron signs in addition to any required speed advisory speed tab-type of sign
- Judge agreed with the Plaintiff Engineering Expert who recommended a 40 km/hr advisory speed tab-type sign for this accident curve
- Driver was not speeding
- Winter maintenance by the County was not a factor, they met the MMS requirements

Trial Decision

- Judge determined “The failure of the County to exercise a standard of care that maintained Scenic Drive in a state of repair by placing proper signage was a cause of Jesse’s accident.”
- However the Judge also stated: “If Jesse had been a more experienced winter road driver, it is more probable than not that he would have been driving more slowly for the road conditions and alignment. He must, therefore, share in the responsibility for the cause of the accident”
- Judge assessed the County’s liability at 55% and the Plaintiff’s at 45%
- Damages awarded over \$3.5 million including costs

Fordham v Dutton Dunwich

- This action arises as a result of a single vehicle collision which occurred at the intersection of Willey Road and Erin Line in Dutton-Dunwich, Ontario at approximately 8:50 p.m. on January 20th, 2007.

Allegations against Dutton Dunwich

- The plaintiffs concede that Andrew Fordham failed to stop at the stop sign at the intersection, however, he submits that the defendant failed to warn him of the change in the road alignment through the intersection, or the concrete abutment on the other side of the intersection thereby causing a risk of harm.

Facts Agreed to at Trial

- The parties agree that this intersection is a rural hard-pack dirt and gravel road with no lane markings and an unposted speed limit of 80 km per hour. There are no shoulders. There is no artificial light in the vicinity of the intersection.

Fact Agreed to at Trial continued

The parties have agreed to the following facts:

1. Andrew was the holder of a G2 license at the time of the collision;
2. Willey Road and Erin Line are gravel roads;
3. The accident occurred in a rural area;
4. The intersection was marked with stop signs for southbound and northbound traffic along Willey Road at the time of the accident;
5. The plaintiff had a blood alcohol level between 29.6 and 53.6 milligrams per deciliter at the time of the collision. He had consumed between 1.7 to 2.3 bottles of beer at some point pre-collision. It was further agreed that the closer the alcohol was consumed to the time of the collision, the closer it would be to the lower end of the ranges;
6. Police charged the plaintiff with **careless driving** but instead he **pled guilty to failing to stop at a stop sign.**

Fact Agreed to at Trial continued

- At issue is the configuration or characterization of the intersection. In other words, what is the most accurate manner in which to describe the geometric design of this intersection? The plaintiff's experts and the police investigators describe the intersection as "offset". The defendant expert describes the intersection as "skewed." The geometric design determines the appropriate signage.

Trial Decision

- The fact that he was not going to reduce his speed for the stop sign does not, in my view, suggest that he would not have done so for another type of warning sign. It can reasonably be inferred that likely Andrew looked at the lack of oncoming traffic from both sides of Erin Line simply provided him with sufficient information that he could continue to drive through expecting the road to continue in a straight line in front of him.
- Accordingly, I find that the cause of the crash was two-fold:
 - (1) Andrew did not stop at the intersection of Willey and Erin Line;
 - (2) the defendant did not warn Andrew of the change in road alignment through the intersection, or the concrete abutments on the other side of the intersection.
- “But for” Andrew’s failure to stop, and the defendant’s failure to warn motorists of the hazard ahead (***due to the lack of placement of checkerboard signs***), this accident would not have occurred.

So what is my responsibility?

- A road authority must provide “Positive Guidance” to drivers which means:
 - Giving drivers the information they need to avoid hazards, when and where they need it, in a form they can best use it
- Positive Guidance is provided when that information is presented unequivocally, unambiguously and conspicuously enough to meet decision sight distance criteria and enhances the probability of drivers making appropriate speed and path decisions

How is Positive Guidance provided?

Optimum Highway Design

- Drivers know what to expect from the highway
- Their attention is attracted to the most important sources of information
- Adequate time to respond to conditions and situations as they arise

1- Near Gordon Street



From NCHRP 600

How is Positive Guidance provided

continued

- Warning signs are intended to provide advance notice to road users about unexpected and potentially dangerous conditions on or near the road

NOTE:

- Insufficient warning signs may leave drivers unprepared for hazards
- Over-signing or exaggerated signing may result in complacency

How is Positive Guidance provided

continued

- Pavement markings and delineation devices fulfill an important guidance function for drivers, especially at night. They provide drivers with information about their lane position and which lanes are available for use.
- They provide drivers with a preview of upcoming changes in the roadway, including curves, lane drops, lane narrowings, intersections, crosswalks, and the beginning and end of passing zones.
- Good delineation generally results in better driver performance and greater driver comfort.

Classification of Warning Signs

Wa – Physical Condition Warning Signs



Wb – Traffic Regulations Ahead



Wc – Pedestrian and Intermittent Hazard



Sign Location

As a first step in determining the distance between the sign and a hazard, warning signs are allocated into three groups:

- **Condition A: Driver Judgement Required**
- **Condition B: Potential or Actual Stop Required**
- **Condition C: Speed Reduction Required**

Sign Placement Condition B and C

Table 4 – Minimum Advance Placement of Condition B and C Warning Signs
(Requiring Stopping or Speed Reduction)*

(km/h)	Final Speed	90	80	70	60	50	40	30	20	10	0
Posted (Initial) Speed	Minimum Advance Distance (m)										
100		250	295	335	370	400	420	440	455	460	465
90			230	270	300	330	355	370	385	395	395
80				205	240	270	290	310	325	330	335
70					185	210	235	255	265	275	275
60						160	185	200	215	225	225
50							95	115	130	135	140
40								80	90	100	100
30									60	70	70

* Based on 2.5 seconds brake reaction time (source: *Ontario Geometric Design Manual*) and 5.3 km/hr/s deceleration time (source: *ITE Transportation and Traffic Engineering Handbook*).

OTM Manuals

- The courts have upheld the OTM series of manuals as best practices.



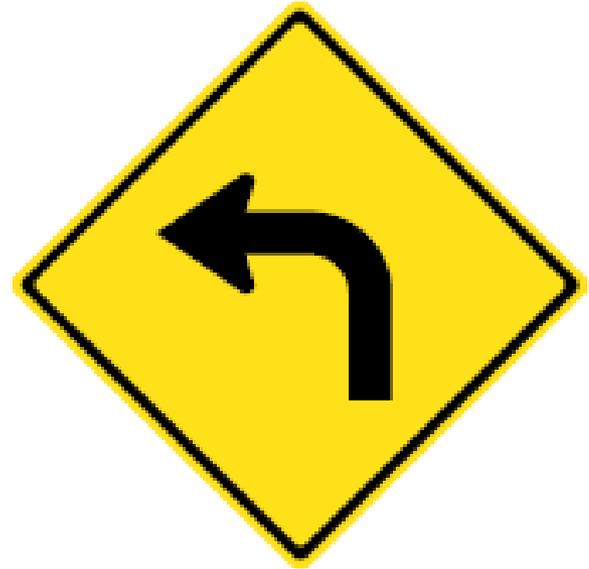
A Guideline

- OTM Manuals are guidelines, engineering judgement is required to ensure proper placement and avoid a driver misinterpreting the information



Over-exaggerated signage

- The Sharp Curve Wa-2 or Wa-102 sign is to be used at locations where the final speed around a curve is less than the posted speed (a speed advisory tab may be required) Table 5 Book 6
- If the final speed is 10km/hr less than the posted speed table 5 recommends that a Advisory Tab is not required



Warning Sign Selection

Table 5 – Selection of Turn/Curve Warning Signs

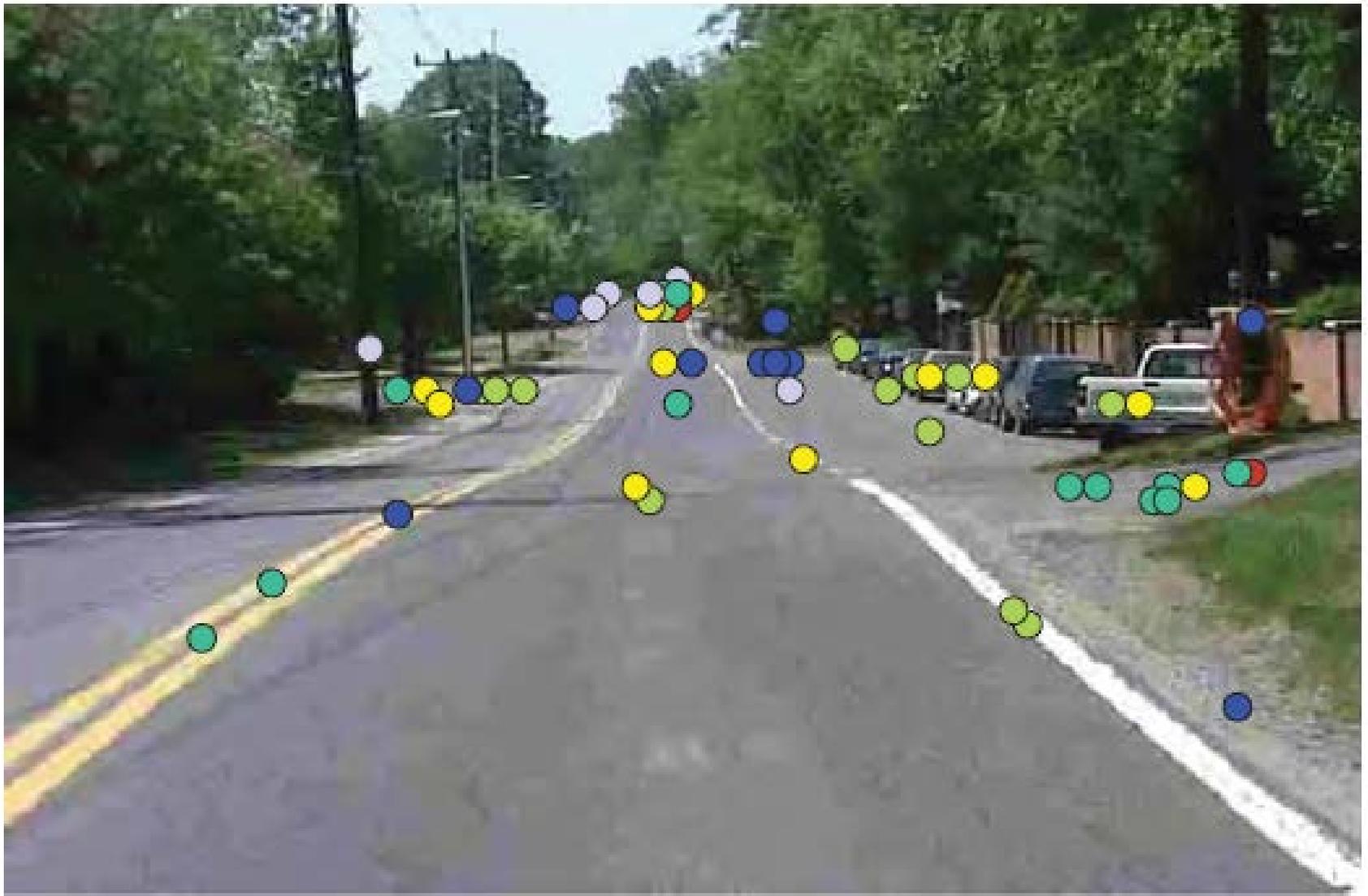
Posted Speed (Initial Speed) (km/h)	Turn/Curve Advisory Speed (Final Speed) (km/h)							
	100	90	80	70	60	50	40	30 or less
100	Wa-103 Wa-105	Wa-103 Wa-105	Wa-103 Wa-105	Wa-103 Wa-105	Wa-102 Wa-104	Wa-102 Wa-104	Wa-101	Wa-101
90		Wa-103 Wa-105	Wa-103 Wa-105	Wa-103 Wa-105	Wa-102 Wa-104	Wa-102 Wa-104	Wa-102 Wa-104	Wa-101
80			Wa-103 Wa-105	Wa-103 Wa-105	Wa-102 Wa-104	Wa-102 Wa-104	Wa-102 Wa-104	Wa-101
70				Wa-103 Wa-105	Wa-102 Wa-104	Wa-102 Wa-104	Wa-102 Wa-104	Wa-101
60					Wa-3 Wa-5	Wa-2 Wa-4	Wa-102 Wa-104	Wa-101
50						Wa-3 Wa-5	Wa-2 Wa-4	Wa-101
40							Wa-3 Wa-5	Wa-1

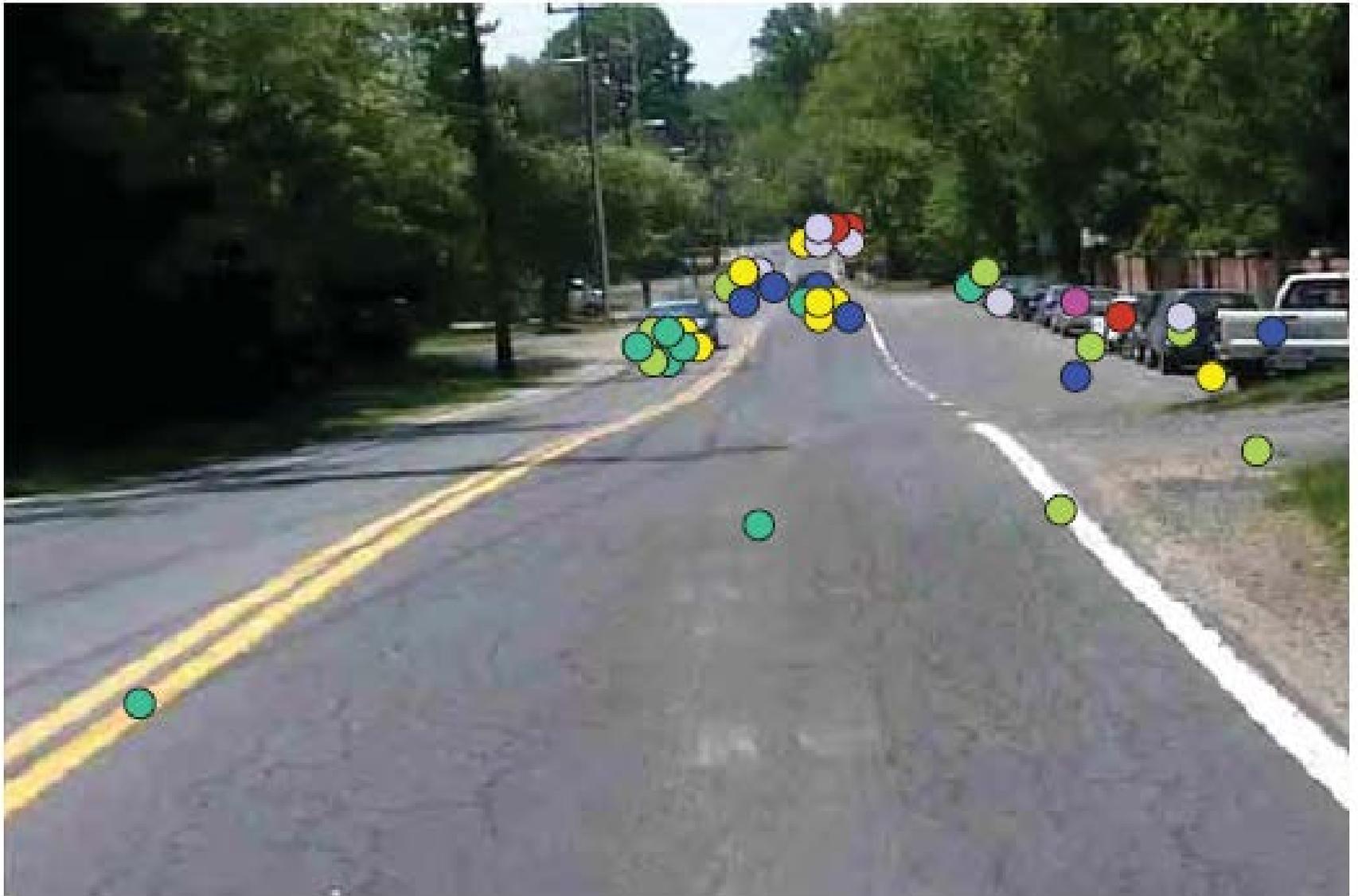
Complacency



Competition for a drivers attention

- Municipalities are being requested to provide multi-modal transportation that encourages: walking, cycling and has links to transit.
- Local restaurants, hotels and other businesses want Off Road Vehicles to be able to travel from trails to their location over municipal roads.





Are there conflicts on your roads?



Ontario Traffic Manual Training



AORS
PROMOTING KNOWLEDGE. PURSUING EXCELLENCE



**Frank Cowan
Company**



- In 2016 FCC offered training on OTM Book 6 Warning Signs
- A recent discussion with OGRA, AORS and Frank Cowan Company confirmed that a permanent OTM course will be offered in 2018.
 - Other Books of the OTM series will be offered as part of this course.

Questions



*Thank
you*



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