

Edge Drop Off At Veterans Memorial Parkway Continues to Exist Despite Several Years of Complaints and Maintenance

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Chronic roadway safety problems can exist over many years without proper treatment. It is rare that the general public becomes aware of this fact. While repairs and maintenance sometimes appear to be completed for the benefit of the news media, after the video cameras and reporters move on the problem re-appears and the public goes back to sleep. There are many examples of this and the problem of edge pavement edge drop off is particularly obvious.

An expressway was built in the early 1980's on the eastern outskirts of London, Ontario, Canada. It changed names from Highway 100 to Airport Road and in the most recent patriotic fevour of the post 9-11 era it was re-named to Veterans Memorial Parkway. For an unexplainable reason the southbound lanes of this expressway were paved with insufficient width such that the edge of the marked passing lane was right next to the edge of the pavement. This was unexplainable because certainly by the 1980s there was sufficient research from many years of examining the consequences of real-life collisions to inform any traffic engineer that the transition between the paved surface where vehicles travel and the actual edge of the pavement is an important safety concern. While some back woods roads still contained narrow lanes and close proximity of travel lanes to the pavement edge this was not acceptable for major expressways that could see high traffic volumes. Yet here, for some peculiar reason, as if London was hoping to save some small amount of pavement costs, the edge of the pavement abutted right next to the yellow painted line that marks the edge of the lane. And this scenario has now lasted for over 30 years.

In particular, a portion of this passing lane of Veterans Memorial Parkway has continually seen the development of an edge drop-off. Such a safety problem develops when the tires of passing vehicles continually fall off the travelled lane, across the edge of the pavement and onto the gravel shoulder. Over many instances the gravel becomes pushed away from that edge of the pavement and a depression develops along with a vertical drop between the lane surface and the gravel abutting the pavement edge. When this depression reaches about two inches in depth maintenance guidelines have historically indicated that this edge drop off should be removed. Unfortunately, on Veterans Memorial Parkway this edge drop off continued to exist without much notice or concern.

Interestingly, I had brought this to the attention of a local news reporter several years ago and we attended to the location of this problem where I demonstrated to the reporter how the edge drop off was in excess of 4 inches. Upon seeing this news clip London's roadway maintenance department was out there within a day or two with their

road graders and the gravel was re-positioned. I was impressed that they had also compressed the gravel and this is an important point. On many occasions the roadway grader simply churns up the gravel and then throws it back against the pavement edge where a very soft and dangerous depth of gravel awaits the unsuspecting motorist. So I congratulated the City of London on this occasion for performing a proper job. If only this could continue. Yet within months the problem deteriorated back to its original condition. No road graders have visited the area ever since.

I returned to the location of the problem a couple of days ago and took several photographs like I had done on previous occasions in the past. Although the findings are not particularly different from what I have reported in earlier articles, my conclusions about how this problem should be handled and why it continues to exist have changed. And so I present those additional comments in this additional article. First, let us re-examine the problem.

Below is a view looking south along the southbound lanes of Veterans Memorial Parkway from a location just south of the south branch of the Thames River Bridge and just north of the intersection of Hamilton Road which is in the distance background.



Although you can clearly see that the yellow painted line is right next to the edge of the pavement this point is not so impressive since the road appears to be very straight and

level and there does not appear to be any reason for vehicles to wander off the pavement. And this is exactly what typical motorists see, a very straight and level road. But in the next photo stood at the same location but this time I zoomed in with my camera's lens so as to compress the length of roadway in order to expose the fact that the roadway is not straight at all.



You can see that by shrinking the long length of roadway in this manner the curve to the left becomes evident. Now look in the area where that apparent curve commences. If you look closely enough you will see that the edge of the pavement has been broken off

and pieces of that pavement have been scattered onto the gravel in the median. Below is another look of that problem but from a closer position.



Again, by zooming in with the camera lens I am able to expose the curvature of the road and you can appreciate how the pieces of pavement have been broken off as vehicles travel of that pavement edge. In fact this is a common scenario that happens not only on this roadway but on roadways throughout North America where pavements and gravel shoulders exist. Persons unfamiliar with roadway problems look at a road and

see that it is straight without considering how a vehicle might experience that road when travelling at 100 km/h. In fact, the vehicle experiences the road very much like you experience it when you take a photo of it with a zoom lens. What appears to be straight is in fact quite curved and this is why vehicles travel off an asphalt edge on an apparently straight road. Now let's get in a little closer to the problem and show it to you without the zoomed view, as shown below.



It is often not easy to show the depth of a depression with photos but never-the-less you should be able to see the outlines of tire marks in the gravel next to the pavement edge where vehicles have continually fallen off and then come back onto the lane surface in

the background. Along with these tire marks you can see how the painted yellow line has been painted onto the edge of the pavement as shown in the photo below.



In fact, if you look more closely at some of the previous photos you should see that the persons who re-painted the yellow line noted the broken edge and attempted to paint it further inside the lane so that you can actually see two painted lines, one slightly off-set from the other. When you stop to think about it, how could this possibly make a difference? A vehicle covering a distance of some 25 to 30 metres every second and you expect that drivers will somehow divert the travel direction of their vehicle because you have moved the line by a couple of inches? This will not solve anything.

Because the depth of the depression at the pavement edge is difficult to show with these photos I brought along a 4-foot carpenter's level and measurement tape to help you visualize the problem. The photos on the following page will hopefully help you to see that, when the carpenter's level is placed horizontally and the one edge is placed on the pavement edge, the other end of the level is nested comfortably on the gravel. The problem is that, between these two points there is very deep depression which is highlighted by the tape measure -a drop of 4.5 inches.



A drop of this height is similar to the height of a railway tie. How would you like to drive over top of a railway tie at 100 km/h ! Would that be a good idea? Yet this continues to exist for months on end.

Now, if this is such a problem, shouldn't there be numerous collisions and injuries being reported? Well this is another interesting issue that I would like to high-light.

In Ontario, residents feel that they pay high insurance premiums. But when they are involved in two at-fault collisions their premiums truly rise through the roof. I have been approached by numerous persons who would like to defend themselves from being found at-fault for a minor collision because they know that this will cost them thousands of dollars over many years if the insurer deems that they are at fault for a second incident. Would it seem reasonable that the average insured driver might not want to report a collision in this circumstance?

In fact a single vehicle collision is precisely the golden opportunity where the non-reporting of an accident will occur. And where/how do these collisions occur? Very often they occur at sites such as what I have shown here on Veterans Memorial Parkway. A vehicle travels off an asphalt edge like this, it rotates out of control and slides into the ditch, or worse, but the driver is not seriously injured. If the vehicle can be driven it is driven. If a friend is called to lend a helping hand then why not? A tow truck is called but the towing personnel do not report the event and a little more cash is delivered into the helping hand. Is this the way it is?

In fact, I have been monitoring other sites where frequent loss-of-control collisions occur and I can confirm that this is what happens. I am able to identify what takes place from the physical evidence at the site. The tire marks of the loss of control vehicle the tire marks of a tow truck. Yes, it is more difficult to determine if the incident is ever reported to police but in some instances residents living along the road report to me that this or that incident occurred last night and no police were involved.

Let us also consider the changes that have occurred in the Province of Ontario since the "Common Sense Revolution" of the Mike Harris government. Police no longer need to attend the sites of most collisions but drivers are required to attend a "police reporting centre" where miraculously the manner in which the event occurred will be determined from the written statements of the drivers. If in fact there are multiple drivers. But if it is a single vehicle event who is there to compel that driver to come in so that his or her insurance premiums with skyrocket? Are police that anxious to follow up with these drivers? If there is a domestic dispute or a robbery will the Sergeant be pleased that the C.O.P. is hunting down some possible minor fender damage on a car where no other damage exists to another vehicle or city property?

Are Municipal staff that anxious to have collisions reported due to possible defects on their roadways? The naive response is "Yes", they are genuinely interested in the safety of its citizens. The true response "No". A far more chilling prospect is that plaintiff lawyers lurk in the dark caverns of the courts waiting to get wind of a roadway problem so they can pounce on those deep pockets and make themselves and their clients

some good money. As much as there are legitimate claims, when there is the possibility of a pot of gold at the end of the rainbow this is sufficient incentive for many of us to take the gold whether we are entitled to it or not. And municipal staff are very aware of this fact. Municipalities in Ontario have organized precisely for this reason into a well-oiled defensive machine, under the umbrella of seemingly neutral organizations such as the Ontario Goods Roads Association and various other municipal organizations that meet to plan strategies with their legal staff. Roadway defects and municipalities have always been and will continue to be large targets simply because so many of us use public roads and eventually something happens that could lead to a potential claim. So certainly there is an incentive for municipal staff to be pleased when word of road accidents remain as quiet and out of the public's eye as possible. If collisions are not reported then this can be helpful to their defense.

What becomes a problem is that such accident information is held in secret and the causes are not revealed. Action to repair and maintain becomes more focused on the appearance of action rather than genuine and permanent solutions that remove a safety problem.

And so this comes back to some new conclusions about edge drop offs that I have not expressed in previous articles. The reality is that the road graders and maintenance actions that Municipalities are conducting are band-aids that fall off shortly from the wound after the news media have moved onto the next crisis. What I have reported on Veterans Memorial Parkway is just one example of many similar matters. An edge drop off is never "fixed" by simply bringing a road grader over it. Such drop offs re-occur but are not maintained unless someone complains and then the same band-aid is re-applied. The proper solution with edge drop-offs is to widen a width of pavement but that is a cost that municipalities will not engage in. In many instances Municipal staff do what they can with what money is available. And if money is not available the natural tendency is to deny that a problem exists or to hide it.

So edge drop-offs such as what exist on Veterans Memorial Parkway remain so long as no one is aware or complains. Drivers, insurers, police and the municipalities all have a vested interest in ignoring the fact that they exist. Only independent researchers and reconstructionists such as myself have no reason to deny their existence and influence. Whether I receive a new reconstruction assignment from a plaintiff or defense lawyer makes no difference. In fact it is with considerable jeopardy to my business that I continue to make these issues known. Many powerful persons and organizations would wish that the discussion move on to issues such as alcohol impairment, speed, seat-belt use, driver distraction and all those other matters that place the blame and fault on the driver. While those are important factors in injury causation and death they are not the only factors. A balanced and independent assessment must document all those influences including roadway defects such as edge drop-offs.