

ROAD SAFETY TASK FORCE

FINAL REPORT FEBRUARY 2022



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A CALL TO ACTION FROM TASK FORCE MEMBERS

In the fall of 2021, the Township of Melancthon established the Road Safety Task Force in response to growing public concern about speeding and unsafe driving. The Task Force's mandate is to work with the public to identify suitable traffic calming options that can be deployed across the Township.

This report consolidates feedback from members of the public who shared personal experiences with dangerous driving in Melancthon. The Task Force used these public input – as well as data, a community survey, and research – to identify practical solutions to unsafe practices on the roads. This report recommends that Council take a strategic approach that balances awareness activities, enforcement and traffic calming options. These measures should be phased in and assessed over a three-year period. The Task Force encourages Council to act on the recommendations as soon as possible.

Of course, it is important to acknowledge that elected officials cannot address safety issues alone.

All residents must do their part: from respecting the rules of the road and encouraging neighbours to slow down, to continuing to share personal experiences with Council and police. Melancthon may never fully eliminate unsafe driving. However, taking a community-driven approach – one where all residents are invested in changing the culture around driving – will make it possible to make Melancthon's roads safer than they are today.

The Task Force wishes to thank all residents who participated in the public engagement sessions and survey. Your insights helped clarify the issues and to identify potential solutions. The Task Force would also like to thank former-Councillor Wayne Hannon for his contribution to this initiative.

Sincerely,

James McLean
Councillor

Margaret Mercer Councillor



ABOUT THE TASK FORCE

The Road Safety Task Force was created through a motion of Melancthon Council in October 2021. The purpose of the Task Force has been to investigate and recommend strategies for road safety throughout the Township.

VISION FOR MELANCTHON ROADS

A vibrant community where citizens feel safe and secure on Township roads.

PRINCIPLES TO GUIDE DECISION-MAKING

- 1. The community's concerns are real and pressing Council must find ways to address them;
- 2. There is no "Silver Bullet Approach" to addressing road safety issues. Multiple options will need to be implemented together and over time as part of a broader strategy;
- 3. Melancthon needs to maintain flexibility and use options where they make sense. One option may work for one area of the Township (e.g., hamlets) but not in another (e.g., rural roads), and;
- 4. Council must select traffic calming options that are evidence-based, practical, and reflect community feedback.

SCOPE OF THE TASK FORCE'S WORK:

This report consolidates information gathered through results of meetings, public consultations, and an online community survey. The reporting period is October 2021 to February 2022.

LIMITATIONS:

Some limitations of the Task Force's work include compressed timelines and challenges reaching residents during the pandemic. All engagement and communication took place online.



RESEARCH METHODOLOGY:

- Four Task Force meetings were convened between October 2021 and January 2022. Those who
 participated in these discussions included councillors, community members, and representatives
 from the Police Services Board.
- Two public engagement consultations were held to gather qualitative data. The information collected was experiential from the perspective of residents.
- The Task Force launched a survey that collected responses from 109 members of the community in January and February 2022. While the Task Force was pleased with the community feedback, 109 responses represent only a small percentage of the overall population. As such, the survey serves as one resource among others to help inform the Task Force's recommendations. The survey results are included as an appendix in this report.

ROAD SAFETY TASK FORCE TIMELINE:



THE ISSUE: UNSAFE DRIVING IN MELANCTHON



We can't be afraid to spend money to address this problem. After all, what is the cost of a life?* CTV News Barrie

BARRIE New

Serious collision in Melancthon sends woman to trauma centre in critical condition



CTV News Barrie

Two people injured in crash near Melancthon

If we reduce speed limits, we need to ensure that it is being enforced. Otherwise, nothing will change.



"

We need to educate the public and out-of-towners on the threats their behaviour is posing to residents.



OPP investigating fatal head-on car crash in Melancthon, Ont.





BARRIE News

Child killed in collision on Hwy. 89 in Melancthon Friday



If we don't do something, more people are going to get hurt and killed.



Between 2016 and 2021, Dufferin County's population grew by 7.3%. This region's expanding population – as well as growth in surrounding municipalities – has brought increased traffic and safety issues, including: speeding, tailgating, and aggressive driving.

In fall of 2021, the Dufferin County O.P.P. reported that traffic tickets issued by September 2021 were up 163% compared to all of 2020.²

Furthermore, during the Task Force's public engagement sessions residents shared personal stories about the dangerous activities they've seen on Melancthon roads. Residents talked about:

- Motorists driving at "incredible speeds" up Main Street and on River Road;
- Vehicles nearly colliding with horse and buggies that were carrying children;
- Pedestrians fearing for their safety;
- Vehicles creating significant noise pollution;
- Increased dust and stones being projected on gravel roads due to speeders;
- Large trucks using roads that are not meant for heavy loads, and;
- School buses being passed by speeding cars while young kids are still boarding.

Given these stories, it is perhaps unsurprising that 82% of survey respondents indicated that they were concerned about road safety in Melancthon.

The message from the community was clear: the status quo is no longer acceptable.

Before this report examines available traffic calming options, it's important to acknowledge that it will not be possible to stop every speeder or prevent every collision.

But that doesn't mean the Township can or should do nothing.

A coordinated approach – supported by data, monitoring, and community engagement – has proven effective in reducing instances of dangerous driving in other municipalities.

It can work in Melancthon as well.

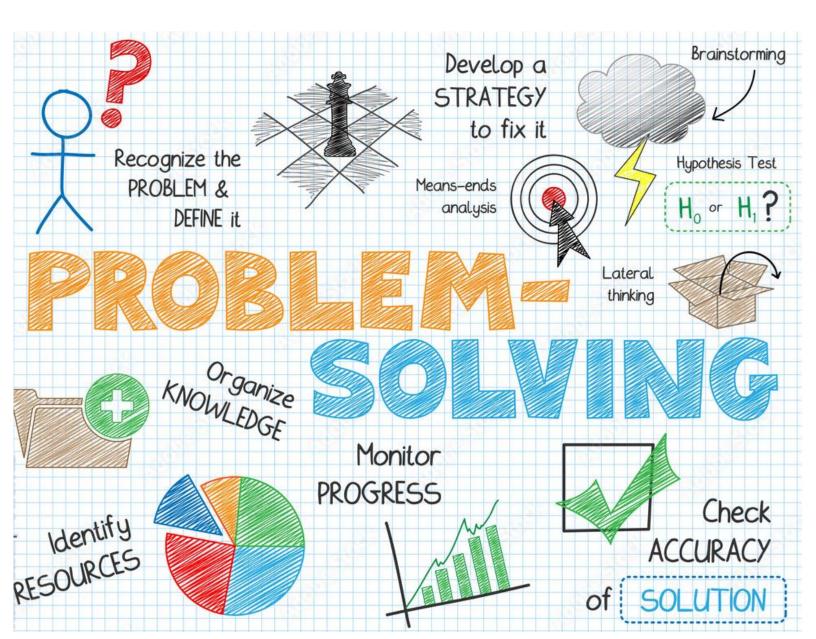


TRAFFIC CALMING OPTIONS

TABLE 1: AN OVERVIEW OF TRAFFIC CALMING OPTIONS THAT WERE CONSIDERED

MEASURE		Location Suitability		
		Rural Roads	Hamlets	
Vertical Deflection	Speed Humps			
Roadway Narrowing	Pedestrian Zone Signs		\checkmark	
Pavement Marking	Rumble Strips			
Education and Enforcement	Road Safety Awareness & Monitoring	\checkmark		
	Radar Speed Signs		\square	
	Black Cat Radar/Digital Speed Signs/Road counters	\checkmark		
	Community Safety Zone Designation	\checkmark	*Hamlets are already designated as Community Safety Zones	
	Automated Speed Enforcement cameras	\checkmark	\square	
Other	Stop Lights	\square		

ROAD SAFETY AWARENESS & MONITORING





Information is a powerful tool for action. Council and staff will depend upon data and public feedback to understand the issues, identify problem areas, track progress, evaluate interventions, and inform decisions. But the Township can also use information to inform and adjust behaviour. Raising the profile of dangerous driving – through awareness and education campaigns – can help encourage the community to take responsibility for their own actions on the road.



Internally-focused awareness

• Tracking road safety issues and evaluating interventions: The Township currently collects data on traffic volume and is provided statistics through the Police Services Board. However, a coordinated approach is needed to pull together all information – traffic volume, speeding data, police data, public complaints – to identify the areas where speeding and dangerous driving are most common. This coordinated approach will help to establish baseline data that can be compared year-over-year to assess the effectiveness of solutions the Township implements. By keeping track of this information, Council and staff will be better positioned to monitor conditions on the road and to assess whether interventions are having an impact.

Externally-focused awareness

 Public Awareness Campaign: The Township could use various methods – including its social media accounts, newsletters, Mail Chimp, radio interviews, its digital sign, "SLOW DOWN" lawn signs, etc. – to appeal to drivers to reduce their speed and drive safely. MADD Canada has achieved incredible success with changing



COST PER MEASURE

~\$40 – \$70 per lawn sign (Signs could be made free to the public or a small fee [e.g., \$10] could be charged to help with the expense)

- perceptions about intoxicated driving. Similarly, adjusting attitudes towards speeding and stunt driving will be essential for addressing road safety issues. One option Melancthon may wish to consider is partnering with other Dufferin municipalities and private sector partners on road safety public awareness campaigns. Taking a collaborative approach could magnify the message and reach more people.
- **Community Watch program:** Community Watch is a free resident-led program that encourages residents to be aware of and report unlawful behaviour in their neighbourhoods to the police. This

initiative empowers citizens to be alert and aware of suspicious or dangerous behaviour on behalf of others: Neighbours looking out for one another.

Police Services Board: Nearly 48% of the Task Force survey's respondents indicated that they didn't
understand the role of the Police Services Board (PSB). More than one-third (36%) didn't realize that
Melancthon had a PSB. Since the public feel strongly about the role of police in the community, the
PSB may wish to raise awareness of its role, responsibilities, and how the public can participate in
meetings.



- The Task Force recommends that the Roads Sub-Committee establish a data-driven process to
 monitor traffic issues and evaluate the traffic calming measures that are implemented. The findings
 should be presented to Council regularly in order to help guide decisions and track progress over
 time.
- The Task Force recommends that Melancthon launch the "SLOW DOWN" lawn sign campaign where residents can pick up signs from the Township Office.
- The Task Force recommends that Melancthon partner with other municipalities and organizations to launch a public awareness campaign focused on unsafe driving. The campaign could use various methods (e.g., news letter, emails, social media, radio, digital sign, a lawn sign campaign, posting signs in prominent locations, etc.) to reach as many people as possible.
- The Task Force recommends that the Township work with the Dufferin O.P.P. to share information with the public on how to initiate a Community Watch program.
- The Task Force recommends that the PSB try to raise awareness of its roles, responsibilities and public participation opportunities.

Community Safety Zones





A Community Safety Zone designation allows municipalities to lower speed limits and increase fines on a stretch of road where unsafe driving has created a public safety concern. Community Safety Zones must have signs to inform motorists that fines are double for speeding and dangerous driving. All other "rules of the road" remain the same.

Ontario municipalities typically locate Community Safety Zones in areas with a larger residential presence (i.e., a grouping of homes) and/or where there has been a history of speeding or reckless driving. In Melancthon, for example, sections of the 3rd Line have been designated as a Community Safety Zone and the speed limit has been reduced from 80 km/h to 60 km/h. Melancthon's three hamlets – Riverview, Corbetton and Horning's Mills – are also designated as Community Safety Zones with a speed limit of 40 km/h.



"The council of a municipality may by by-law designate a part of a highway under its jurisdiction as a community safety zone if, in the council's opinion, public safety is of special concern on that part of the highway."

 Highway Traffic Act, section 214.1 (1), https://www.ontario.ca/laws/statute/90h08#BK366





CONSIDERATIONS

- This option will require "buy-in" from those living in areas identified as potential Community Safety
 Zones. The Township will need to engage residents on which roads should be designated prior to
 moving forward.
- Studies have indicated that reduced speed limits on lower-volume roads "produces statistically significant speed decreases."

- Slower speed limits, if enforced by the O.P.P., could reduce traffic volumes on roads owned by the Township. This could lead to a series of benefits, including: fewer drivers and speeders, reduced dust on gravel roads, reduced wear-and-tear on Melancthon roads, etc.
- Reducing the speed limit from 80 km/h to 70 km/h may not make a significant difference on driving behaviour. A reduction to 60 km/h may see better results.



COST PER MEASURE

- \$145 for each new speed limit sign/Community
 Safety Zone sign and hardware.
- Total cost would depend on the length of road to be designated as a Community Safety Zone
- The travel time for local residents would increase due to the slower rate of speed on affected roads.
- The Township would incur some costs to change the signage on rural roads. However, costs could be spread out over time by rolling out more Community Safety Zones gradually over a three- or fiveyear period.
- Approximately one third of those who responded to the Road Safety Taskforce Survey indicated that
 they would support lower speed limits. This suggests that there is support for this idea in the
 community that can be explored through further engagement.
- 2019 data indicates that the 2nd Line SW, 4th Line (between Hwy 10 and County Road 17) and 5th Side Road (between County Road 124 and 3rd Line) all have higher-than-average traffic volume. ⁴
 Stretches of these roads could be candidates for lower speed limits.
- Slower speed limits may discourage some drivers from using Township roads as shortcuts if they are
 able to travel faster on county and provincial roads. This outcome would align with the Township's
 Road Management Plan's goal of shifting "external drivers" to use upper-tier roads.⁵



APPROPRIATE LOCATIONS

- Should be located on stretches of road where there are road safety concerns from residents and/or a history of collisions and speeding.
- Only applicable on rural roads (Hamlets are already designated).



• The Task Force Recommends that the Township establish a process to determine where Community Safety Zones could reduce dangerous driving and higher-than-average traffic volume. Such a process could include three components: Assessing AADT and speeding data; reviewing complaints received from the Township and O.P.P., and engaging the public on where to locate Community Safety Zones.

- The Task Force recommends that the Township gradually expand the use of Community Safety Zones in Melancthon, based on data, complaints and public engagement.
- It is recommended that the Township clarify for residents how they can share their road safety concerns. This could include continuing to promote the O.P.P.'s non-emergency phone number on Township news letters and communications, and to encourage residents to share their concerns directly with Council/staff.

Rumble Strips





Transverse rumble strips (also called in-lane rumble strips) are used to warn drivers in rural areas that they are approaching a stop sign. The strips typically consist of grooves cut into the road surface that provide a tactile and audible warning to drivers as they drive over them.

This option is considered a low cost and low maintenance tactic to mitigate instances where people drive through stop signs. Rumble strips are situated at various locations throughout Dufferin County, including at the corner of County Road 17 and County Road 19 ("Prince of Wales Road") and on Mono-Amaranth Townline (south of County Road 10).



APPROPRIATE LOCATIONS

 Rumble strips can only be located on pavement so this option is not applicable to gravel roads.



CONSIDERATIONS

Rumble strips have been shown to:

- Capture drivers' attention;
- Reduce speed leading up to a stop sign
- Lower the likelihood that people will drive through stop signs
- Have low cost installation/low maintenance

It is important to note that rumble strips may also be noisy for some residents living in close proximity to them.

Based on traffic count volume data from 2019, it appears that there are *at least* five locations that the Township might consider for rumble strips:

- o 5th Side Road and County Road 124 (west side of intersection)
- o 3rd Line and County Road 17 (north and south of intersection)
- o 2nd Line and Highway 89 (north west of intersection)
- o 2nd Line and 260 Sideroad
- o 4th Line NE/County Road 2 and County Road 9 (south of intersection)

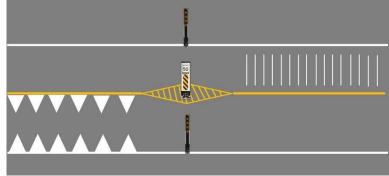


The Township should use traffic count volume data and collision data from the O.P.P. to determine where best to place rumble strips.

Pedestrian Zone Signs











Pedestrian Zone Signs are flexible, plastic signs that are installed on pavement to narrow the street and force vehicles to slow down. Typically, two pedestrian zone signs are installed at the edges of the road and one sign is installed in the centre of the road. The ideal distance between the middle sign and the signs on the side of the road is 3 meters, but it varies by need. Road paint is often used in conjunction with signs to warn drivers to slow down (see previous page).

When struck by a vehicle, the pedestrian zone signs fold up on impact and then return to their initial position. According to Quebec-based manufacturer, Develotech, these signs can withstand "impact at 80 km/h from different types of vehicles (buses, firetrucks, trucks, cars, etc.)." The signs can be anchored to the ground each spring and removed before winter.

Other municipalities appear to be using Ped-Zone signs with great success. For example, the Region of Peel installed signs in a few locations in 2021. According to a manager of the Peel Roads Department, local farmers were initially concerned that signage located on the road would limit their use of the street. However, tractors are able to drive over the signs without damaging them and Peel has not received any complaints from farmers after signs were installed.



APPROPRIATE LOCATIONS

- Residential areas with paved roads
- Level roads where drivers can clearly see them upon approach



COST PER MEASURE

\$400 per set + \$145 per warning sign notifying motorists of P.E.D. signs



CONSIDERATIONS

Pedestrian Zone Signs:

- Reduce car and truck speed;
- Are relatively cost-effective (~\$400 for one set of three signs) and are relatively low maintenance;
- Do not impede farm/emergency vehicle traffic;
- Work best when installed in a series (e.g., 3 sets of Pedestrian Zone signs spread out over 100 metres);
- Work best when combined with road painting;
- Can be installed in the spring and removed in the fall;
- May not reduce the speed of motorcycles;
- Can include custom information printed on the signs (e.g., pedestrian crossing, speed limits, etc.), and:
- Should be located where the road is level.



- The Task Force recommends that the Township purchase and install Pedestrian Zone Signs in Horning's Mills on one-year pilot basis.
- It is recommended that Melancthon purchase nine sets of signs (estimated cost: ~\$3,600) and locate them in three locations:
 - Main Street (just south of the Horning's Mills Park;
 - o Just north of the Main-Mill Street intersection; and
 - On Mill Street/River Road at the entrance into Horning's Mills.*
- Using existing data collection tools, the Township should record speeds on Main Street and Mill Street/River Road before and after installation of the Pedestrian Zones Signs to assess whether they are having an impact on speeding. Data collected by Digital Speed Signs on Main Street in 2020-21 can also be used as baseline data.
- Should the pilot be successful in reducing speed, it is recommended that the Township install signs in Corbetton and Riverview in 2023.

^{*}If this option is pursued, manufacturers will travel to Melancthon to assist the Roads Department with identifying the most ideal location and with installation.



Speed Humps



Speed humps, sometimes called road humps, are often used on residential streets or connector roads where traffic flows smoothly but excessive speed threatens pedestrians.

Playground and school zones often use speed humps as part of their traffic management plans. Whereas speed "bumps" are more common in parking lots and reduce car speed to 3-15 km/h to avoid vehicle damage, speed humps raise the car in a more gradual fashion and force motorists to reduce their speed to a more moderate rate (16-25 km/h).



APPROPRIATE LOCATIONS

- Speed humps can only be installed on level, and paved roadways;
- Best suited for hamlets or areas with higher residential density



COST PER MEASURE

\$1,000 – \$5,000 (Physical speed hump, signage, pavement markings, polling)



CONSIDERATIONS

Speed humps:

- Are effective in reducing speed for cars, trucks and motorcycles;
- Must be accompanied by signage wherever they are installed;
- Can be installed in the spring and removed in the fall if rubber humps are purchased. This option would mean that snowplows would not be impeded during the winter months;
- May lead some motorists to slow down for the speed humps but accelerate quickly between them;
 and
- Are not favoured by emergency vehicles (one speed hump can add up to 10 seconds to a response time).⁷



- It is recommended that the Township use Pedestrian Zone Signs, rather than speed humps, due to the latter's impact on emergency vehicles.
- Should Melancthon wish to purchase speed humps, consultation with the Township's engineer and insurance provider would help identify the most appropriate locations.





Melancthon is a rural community with a vast network of roads. In 2019, A.J. Burnside & Associates completed its *Road Management Plan* (RMP) to inform Council's decision-making on how to maintain and improve the Township's gravel and paved roads. To inform the Plan, Burnside conducted a series of analyses to support its conclusions, including:

- Assessing all existing hardtop roads and a select-list of gravel roads;
- Analyzing current road conditions;
- Reviewing potential surface type upgrades or downgrades for select roads;
- Completing ten-year road capital and maintenance improvement plan; and
- Conducting an analysis of the long-term (20-year) capital and maintenance budget requirements.⁸

In completing this work, Burnside also used various methods – including AADT and engineer field reviews – to support their analysis.

The RMP lays out a multi-year blueprint for the improvement, maintenance and management of Melancthon's roads. Using evidence and expert insight, the Plan specifies the roads and bridges that the Township should prioritize for maintenance and improvement.

Among its findings, the RMP indicated that none of the existing gravel roads should be upgraded to hardtop surfaces and that some paved roads with lower AADT should be reverted back to gravel. The RMP does not assess whether roads should be widened.

Despite the utility of the RMP, some in the community have voiced understandable concerns with some of its conclusions. For example, residents have shared that gravel roads create road safety concerns, including: flying stones, increased dust, and muddy driving surfaces that reduce tire traction. Many also cite the high cost of grading, controlling dust and replacing gravel as a reason to upgrade roads to hardtop, though the RMP indicates that these costs are lower compared to paved roads. 10

The width of Melancthon's roads has also become a hazard for the Township's growing Mennonite population. Increased horse and buggy traffic on narrow roads has led to a series of near-collisions that have been well documented. This has led many residents to call on the Township to pave and widen Melancthon's remaining gravel roads. Approximately 27% of respondents to the Road Safety Task Force survey indicated that they would prioritize paving and widening shoulders as an option to improve road safety.



COST PER MEASURE

Varies by project

- ~\$650,000 for the 4th Line NE;
- ~\$1.1M for the 5th Line from County Road 17 to County Road 21



APPROPRIATE LOCATIONS

- The Road Management Plan identifies roads that should be prioritized for resurfacing due to various factors, including traffic volume.
- In addition to the RMP, certain roads (e.g., 4th Line NE and 5th Line) have been identified by residents and some members of Council as deserving priority.



CONSIDERATIONS

- The RMP has identified the 5th Line as a road that should be returned to a hardtop whenever the budget allows.
- The 5th Line has currently been reverted to gravel due to the end of the hardtop's lifecycle. County Road 21, which intersects with the 5th Line, is currently under construction by the County of Dufferin Roads Department. Fully-loaded dump trucks associated with the construction are using the 5th Line, making it an unsuitable time to pave the road. The dump trucks are expected to cease their use of the 5th Line in late Summer 2022.
- If Council decides to pave 5th Line and/or 4th Line NE, it could increase traffic volumes and speeding on these roads. In that situation, Council could reduce the speed limit from 80 km/h to address the likely increase in speeding and dangerous driving.
- Paving and/or widening the Township's roads would:
 - Eliminate the primary issues associated with gravel roads (e.g., dust, flying stones, mud, etc.);
 - o Make it easier for Melancthon's Mennonite population to use the roads with greater safety; and
 - Require significant capital investments; without additional provincial grants, the Township would have to cover these expenditures through a mix of spreading the timeline of paving roads (or sections of roads) over many years, using into municipal reserves, and/or increasing taxes.



- The Task Force recommends that Council continue to prioritize paving and widening rural roads as part of its budget process in addition to considering the RMP recommendations.
- It is also recommended that the Township of Melancthon work with its municipal partners to lobby the provincial government to increase its investment in rural infrastructure. This campaign could be carried out in collaboration with Dufferin County, the Western Ontario Wardens Caucus, the Association of Municipalities of Ontario (AMO) as well as through direct outreach to local MPPs and ministers.
- If Council paves 5th Line and/or 4th Line NE, the Task Force recommends that the Township reduce the speed limit on those road(s) to 60 km/h to help mitigate increased traffic and speeding.



Township-O.P.P. Contract Enhancement



Findings from the Road Safety Task Force Survey indicate wide support for enhancing police presence in the Township. Nearly 80% of respondents indicated they strongly agree or agree that the O.P.P. should increase their visibility in and around Melancthon. When asked to select their preferred traffic calming measure, close to 60% of respondents – the highest response for this question – said the Township should prioritize "more policing."

Like all other Dufferin municipalities, Melancthon has a contract with the O.P.P. to carry out standard ("base") police services as well as calls for service in the Township. In 2021, Melancthon spent a little over \$400,000 on police services, and is expected to spend \$420,000 in 2022. As part of its "base" contract, the Township does not pay for an officer dedicated specifically to patrolling Melancthon. Instead, the O.P.P. police Melancthon as part of their regular patrols of Dufferin County and in response to emergencies.

Despite the absence of a dedicated officer specifically for Melancthon, the O.P.P. has taken important steps to ensure road safety in the Township. For example, as of September 2021 the number of tickets handed out in Melancthon increased by 163% compared to 2020. ¹¹

Further, in the fall of 2021, the O.P.P. established a "traffic unit" that will patrol all of Dufferin County. This unit dedicates officers who are focused exclusively on proactive road safety activities, such as speed enforcement. The traffic unit functions in addition to existing road patrols that are routinely performed by

Base Services: The Base Services cover proactive activities that include routine patrols, crime prevention, RIDE programs, as well as training, administration, etc. The cost to each municipality is determined by the number of properties in the municipality and the standard provincewide average cost per property.

Melancthon spent \$229,840 for base services in 2021.

Calls for Service: The Calls for Service relate to activities that are more reactive in nature, such as responding to an emergency or calls from the public. Melancthon spent \$150,369 for Calls for Service in 2021.

Source: Ontario Provincial Police. (2022). 2022

OPP Municipal Policing Billing General
Information. Retrieved Online at:
http://www.opp.ca/tms/entrydata.php?fnc=3
http://www.opp.ca/tms/entrydata.php
ht

other O.P.P. officers across the county. While the establishment of the traffic unit is a welcome addition, it is still too early to determine its impact on Melancthon.

Nevertheless, Melancthon's Council has inquired into the option of enhancing its contract with the O.P.P. to have a dedicated officer for the Township. Under this arrangement, the Township would be required to pay an extra \$201,000 in the first year and approximately \$180,000 in the following years. These costs cover the officer's salary as well as vehicle, equipment and administrative costs associated with putting an extra constable on the road.



COST PER MEASURE

- \$201,000 for the first year
- \$180,000 for the following years, with possible incremental increases (includes cost of dedicated constable, vehicle, equipment, administrative expenses)



CONSIDERATIONS

Enhancing the Township's police contract:

- Would establish one officer dedicated exclusively to the Township;
- Would help to enforce existing laws and complement proposed traffic calming measures (e.g., the introduction of new Community Safety Zones, etc.);
- May or may not be necessary given the recent actions by the Dufferin O.P.P. (i.e., increasing ticketing and the launch of the new traffic unit); and
- Represents the most expensive traffic calming option that the Township is considering and would likely require a tax rate increase.

It's important to note that numerous studies have shown that ticketing speeders may not have an impact on their future behaviour. A study in Spain, for example, found that nearly 40% of survey respondents indicated that receiving a ticket would not change whether they would speed again in the future. However, it is important to note that 60% in that same study said that it would have an impact on their future driving habits.



- When assessing whether to enhance the Township's policing contract, the Task Force considered a
 series of interrelated factors: First, the costs associated with enhancing the O.P.P. contract are
 significant, likely requiring a tax increase. Second, the O.P.P. Traffic Unit has not yet been
 established long enough to evaluate its true impact on dangerous driving. Finally, the Township is
 currently seeking to address other costly priorities in 2022. For these reasons, the Task Force
 recommends that Council not enhance the O.P.P. contract as a first step in its traffic calming
 strategy.
- The Task Force requests that Council adopt other recommended traffic calming measures in 2022 and 2023 and evaluate their effectiveness over time.
- It is also requested that Police Services Board (PSB) representatives work with the O.P.P. to assess the impact of the newly established Traffic Unit and report regularly to Council on its activities and effectiveness.
- Should the traffic calming measures implemented in 2022-23 not be effective in reducing speed and dangerous driving, it is recommended that Council consider enhancing its O.P.P. contract in 2024.

Traffic Lights





Traffic lights offer one effective way to slow down motorists at busy intersections. During the public engagement that was held in November 2021, residents discussed the possibility of locating traffic lights at hazardous intersections. Two intersections in particular were identified: Redickville (corner of County Road 124 and County Road 21) and the location of the old Melancthon Store (Highway 10 and County Road 17). While these intersections are located in Melancthon, the intersecting roads at both locations are the responsibility of other levels of government (County of Dufferin and Province of Ontario). This provides both pros and cons.



The con is that the Township cannot unilaterally install traffic lights at these locations should it choose to do so. Instead, Melancthon would have to work with the County and provincial governments to determine whether and when this option would be possible. A pro is that pursuing this option would mean that the costs for installing lights would not be borne by Melancthon but instead by the county and province.



DATA

1. Old Melancthon Stores intersection (Highway 10 and County Road 17):

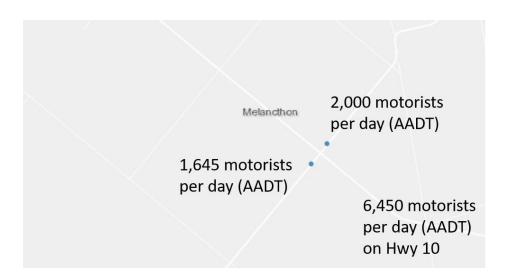
Data collected by the County of Dufferin in 2016 (the most recent available dataset) shows that approximately 2,000 motorists approach the old Melancthon Store intersection SW-bound on County Road 17 each day. ¹⁴ Approximately 1,645 vehicles approach the same intersection driving NE on County Road 17. ¹⁵ Provincial data from 2016 shows that approximately 6,450 people per day pass through the same intersection taking Highway 10 (see Map 1). ¹⁶

2. Redickville Intersection (County Road 24 and County Road 21)

Road counter strips located on County Road 124 close to the Redickville show that between 4,473 to 6,463 motorists travel through that intersection each day (see Map 2). No data was available to identify the number of vehicles that pass through this intersection using County Road 21.

Map 1: Old Melancthon Store intersection (County Road 17 and Highway 10)

County of Dufferin and Province of Ontario AADT data (2016)

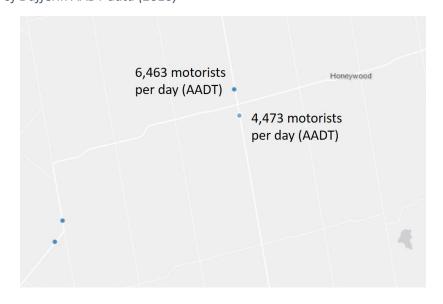


Sources: County of Dufferin. (2022). The Dufferin County Information Hub. Retrieved online at: https://data-dufferincounty-traffic-counts-2016/explore?location=44.113457%2C-80.254128%2C14.32

Ministry of Transportation (2016). *Provincial Highways Traffic Volumes*. Government of Ontario. Retrieved online at: https://www.library.mto.gov.on.ca/SydneyPLUS/TechPubs/Theme.aspx?r=702797&f=files%2FProvincial+Highways+Traffic+Volumes+2016+AADT+Only.pdf&m=resource

Map 2: Redickville Intersection (County Road 124 and County Road 21)

County of Dufferin AADT data (2016)



Source: County of Dufferin. (2022). *The Dufferin County Information Hub*. Retrieved online at: https://data-dufferincounty.opendata.arcgis.com/datasets/dufferin-county-traffic-counts-2016/explore?location=44.113457%2C-80.254128%2C14.32



- When assessing traffic volume at these intersections, it is clear that these two areas are significantly busier than other Melancthon roads. 17
- Since the province and county are responsible for the proposed intersections, the Township would be required to negotiate with both levels of government to install traffic lights at these locations. The decision would ultimately rest with them.
- Due to these negotiations and the time it will take to install the lights, this option could not be implemented right away (the process to install the new lights in Shelburne at Highway 10 and 3rd Line took years).
- It is anticipated that there would be no cost to the Township to pursue this option as the lights would be installed by the County and/or province.
- Approximately 23% of survey respondents indicated that they would support additional traffic lights on busy roads in the Township.
- Highway 10 is a major corridor connecting the GTA to Owen Sound. It's possible the province may be reluctant to install new traffic lights that could impede traffic flows.



• The Task Force recommends that the Township initiate discussions with the County of Dufferin and the Province of Ontario to determine the feasibility of locating traffic lights at the Old Melancthon Store and Redickville intersections.







Digital Signs / Road Tube Counters / Black Cat Radar / Automated Speed Enforcement



The Township of Melancthon currently has four digital radar signs in addition to portable road tube counters and a Black Cat Radar system that was purchased in 2021. Digital radar signs are installed at the side of a road and measure and display a motorist's speed as they approach. If the driver is speeding, the sign will flash in an attempt to encourage drivers to slow down. These signs are also a helpful data source. Through digital sensors, these signs collect statistics on the number of vehicles passing by as well as speed ranges. This information helps to determine areas that are more prone to high traffic volumes and speeding.

The Black Cat Radar system is a similar system that collects anonymous traffic data that can be downloaded by police and used to inform traffic enforcement decisions. The Black Cat is a small, portable system that can be moved around the Township, as required.

Road counters are long black tubes that run perpendicular across a road. Sensors record the number of vehicles that run over them to generate an Annual Average Daily Traffic number.

It is important to note that these three systems do not collect data on individual drivers such as pictures, license plate numbers, or any other identifiable information.

By contrast, Automated Speed Enforcement (ASE) cameras can be purchased and installed in designated Community Safety Zones to capture images of vehicles travelling in excess of the speed limit. These ASE cameras have been used in larger urban centres and allow for traffic enforcement without a physical police presence. For example, in February 2022 Toronto City Council approved the purchase of 25 additional speed cameras, bringing the total to 75 across the municipality. xviii According to a media release, the City says that "Preliminary evaluation data from an ongoing study on the ASE (Automated Speed Enforcement) program conducted by The Hospital for Sick Children point to increased compliance and reduced speeding, demonstrating a positive impact on driver behaviour where the speed cameras were placed."xix



COST PER MEASURE

Digital Road Sign: \$3,000 –\$5,000

Road Tube Counters: \$600 – \$2,000

Black Cat Radar: \$4,000

ASE Camera: \$50,000 (includes purchase of unit and software)



APPROPRIATE LOCATIONS

Digital Speed Signs, road tube counters, and the Black Cat Radar are portable and can be located anywhere in the Township (i.e., rural roads or in hamlets).

ASE cameras can only be located in areas designated as Community Safety Zones.

Municipalities that use ASE cameras must follow specific guidelines for their installation, including posting signage that warns that cameras are used in the area.

When the ASE cameras take a picture of a speeding vehicle, the images are downloaded and reviewed by law enforcement. The vehicle's owner – not the driver – is issued a fine. It is important to note that no demerit points are issued through the use of speed cameras.



 Some Canadians have expressed privacy concerns with ASE cameras, likening them to a form of government surveillance or intrusion.



- The Task Force recommends that the Township not purchase additional digital signs, road counters or Black Cat radar at this time.
- The Task Force recommends that the Township continue to move portable collection devices (e.g., road tube counters and the Black Cat radar) to various points in the Township each year to ensure the O.P.P.'s Traffic Unit has up-to-date data on areas that experience high traffic volume and speeding.
- The Task Force recommends that the Township purchase and install Automated Speed Enforcement cameras in 2024 **if** Council determines that the traffic calming measures implemented in 2022-23 are not effective in reducing speed and dangerous driving.

RECOMMENDATIONS & TIMELINE

2022

It is recommended that the Township:

- Establish a data-driven process to monitor safety issues and evaluate the traffic calming measures that
 are implemented. This process could be led by the Roads Committee. The findings should be presented to
 Council regularly in order to help guide decisions and track progress over time.
- Purchase nine sets of signs (estimated cost: ~\$3,600) and locate them in three locations:
 - Main Street (just south of the Horning's Mills Park;
 - o Just north of the Main-Mill Street intersection; and
 - o On Mill Street/River Road at the entrance into Horning's Mills.
- Record speeds on Main Street and Mill Street/River Road before and after installation of the Pedestrian
 Zones Signs to assess whether they are having an impact on speeding. Data collected by Digital Speed
 Signs on Main Street in 2020-21 can also be used as baseline data.
- Use traffic count volume data and collision data from the O.P.P. to determine where to place rumble strips. Some locations Council should consider include:
 - o 5th Side Road and County Road 124 (west side of intersection)
 - o 3rd Line and County Road 17 (north and south of intersection)
 - o 2nd Line and Highway 89 (north west of intersection)
 - o 2nd Line and 260 Sideroad
 - o 4th Line NE/County Road 2 and County Road 9 (South of intersection)
- Use data, complaints and public engagement to identify opportunities for new Community Safety Zones in Melancthon.
- Request that PSB representatives work with the O.P.P. to assess the newly established Traffic Unit and report regularly to Council on its activities and effectiveness.
- Partner with other municipalities and organizations to launch a public awareness campaign focused on unsafe driving. The campaign could use various methods (e.g., news letter, emails, social media, radio, digital sign, a lawn sign campaign, posting signs in prominent locations, etc.) to reach as many people as possible.
- Launch the SLOW DOWN lawn sign campaign where residents can pick up signs from the Township Office (estimated cost: \$1,000)
- The Task Force recommends that the Police Services Board and Council try to raise awareness of its roles, responsibilities and public participation opportunities.
- Work with the Dufferin O.P.P. to share information with the public on how to initiate a Community Watch program.

- Continually clarify for residents how they can file road safety complaints with O.P.P. and Township.
- Initiate discussions with the County of Dufferin and the Province of Ontario to determine the feasibility of locating traffic lights at the Old Melancthon Store and Redickville intersections.
- Continue to prioritize paving and widening rural roads as part of the budget process.
 - o If Council paves 5th Line and/or 4th Line NE, reduce the speed limit on those road(s) to 60 km/h to help mitigate increased traffic and speeding.
- Work with municipal partners to lobby the provincial government to increase its investment in rural
 infrastructure. This campaign could be carried out in collaboration with Dufferin County, the Western
 Ontario Wardens Caucus, the Association of Municipalities of Ontario (AMO) as well as through direct
 outreach to local MPPs and ministers.

2023

It is recommended that the Township:

- Expand the use of Pedestrian Zone Signs to Corbetton and Riverview if pilot was successful in Horning's Mills
- Gradually expand the number of Community Safety Zones in Melancthon, based on data and in consultation with local residents.
- Use traffic count volume data and collision data from the O.P.P. to determine where to place rumble strips.
- Continue to prioritize paving and widening rural roads as part of the budget process.
- Continue the public awareness campaign focused on unsafe driving in the Township, using various
 mediums (e.g., news letter, emails, social media, radio, digital sign, posting signs in prominent locations,
 etc.).

2024

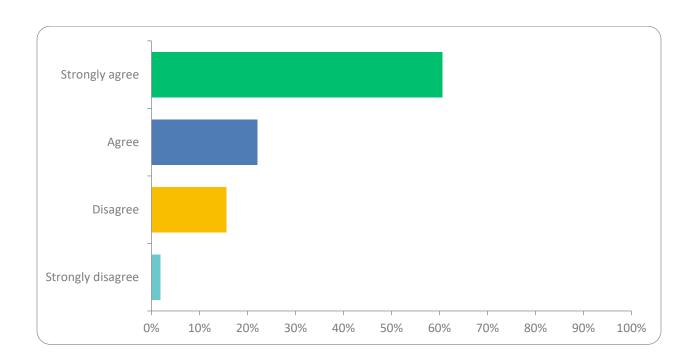
It is recommended that the Township:

- Enhance its O.P.P. contract in 2024 **if** Council determines that the traffic calming measures implemented in 2022-23 have not been sufficient in reducing speed and dangerous driving **AND/OR**
- Purchase and install Automated Speed Enforcement cameras in 2024 if Council determines that the traffic
 calming measures implemented in 2022-23 have not been sufficient in reducing speed and dangerous
 driving.

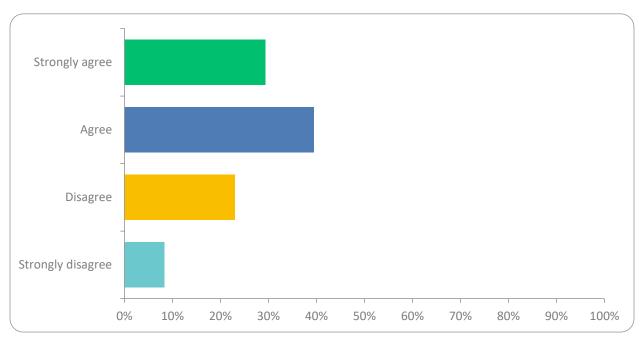
- Use traffic count volume data and collision data from the O.P.P. to determine where to place rumble strips.
- Continue to prioritize paving and widening rural roads as part of the budget process.
- Continue the public awareness campaign focused on unsafe driving in the Township, using various mediums (e.g., news letter, emails, social media, radio, digital sign, posting signs in prominent locations, etc.).

APPENDIX – RESULTS OF THE ROAD SAFETY TASK FORCE SURVEY

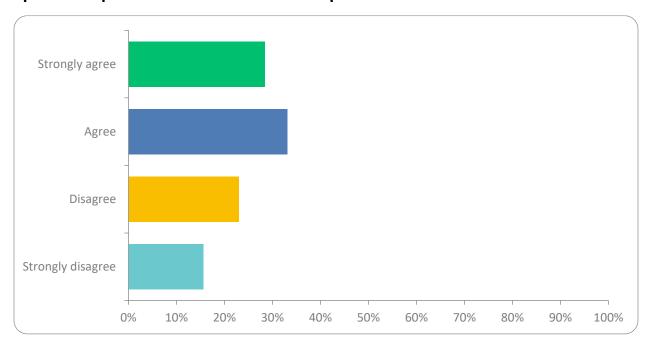
I am concerned about road safety (speeding, dangerous driving) in Melancthon Township.



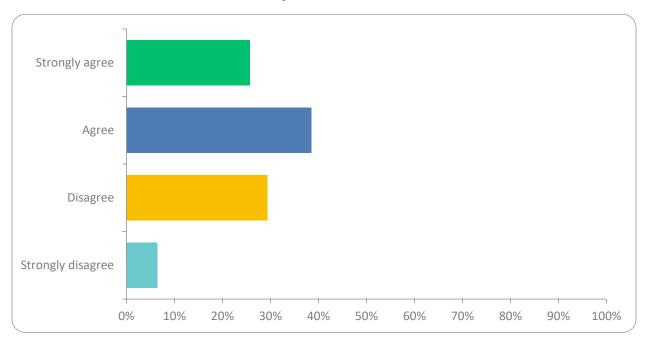
Traffic calming measures such as community safety zones, and flashing speed reduction signs are preferred.



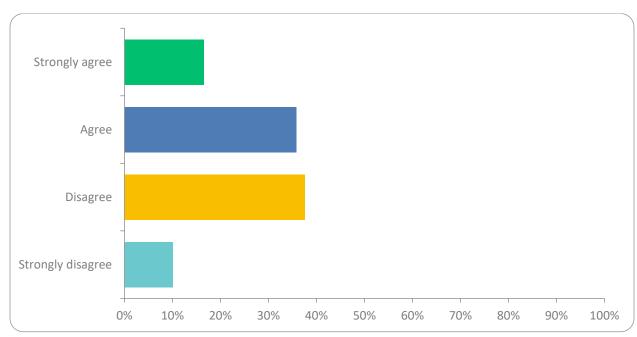
Speed humps should be used to reduce speed in the hamlets.



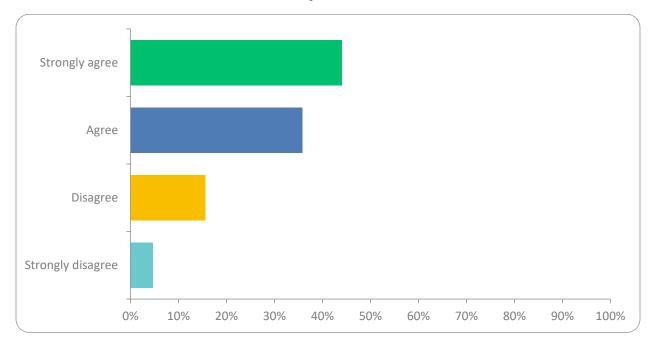
I am aware that Melancthon has a police services board.



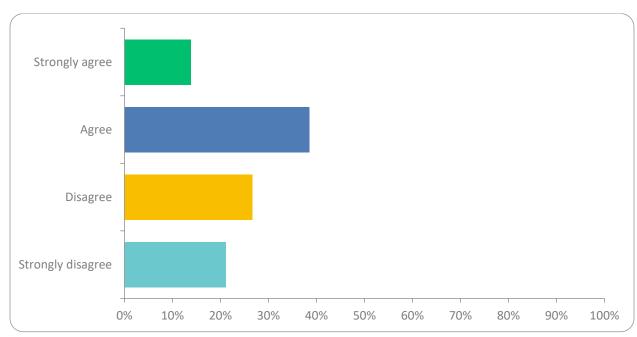
I understand the role of the police services board.



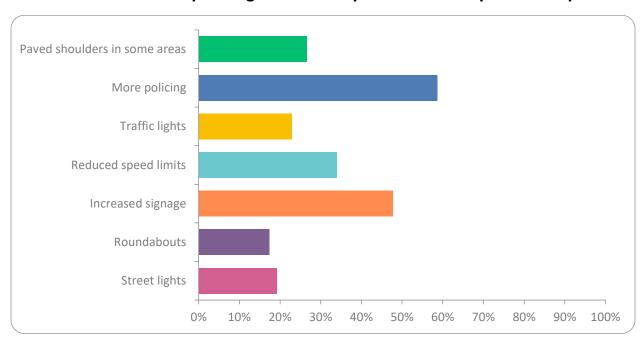
The OPP should increase their visibility in and around Melancthon.



I favour a marginal tax increase to improve road safety measures.



Please check the corresponding box next to your choices for preferred options.



humps/#:~:text=One%20speed%20hump%20can%20delay,fire%20doubles%20every%2060%20seconds.

¹ Statistics Canada (2021). Census of Population. Retrieved from: https://www12.statcan.gc.ca/census-recensement/2021/as-sa/fogs-spg/Page.cfm?Lang=E&Dguid=2021A00033522&r=1

² Terry Ward (2021). *Presentation to Melancthon Township Council*. Ontario Provincial Police. Presented verbally on October 21, 2021.

³ Ginger M. Rossy et al. (2021) *Residential Speed Limit Reduction Case Studies*. The Open Transportation Journal. https://opentransportationjournal.com/contents/volumes/V6/TOTJ-6-39/TOTJ-6-39.pdf

⁴ Township of Melancthon (2019). *Road Management Plan*. A.J. Burnside & Associates Ltd. Retrieved from: https://melancthontownship.ca/wp-content/uploads/2020/01/043927-Road-Management-Plan-191030-Secured.pdf, p. ii.

⁶ Develotech (2021). *Ped-Zone sign for pedestrian crossovers*. Retrieved online at: https://www.develotech.com/en/sign-pedestrian-crossovers/

⁷ Radarsign (2022). *First Responders Raise Alarm Over Speed Humps*. Retrieved online at: https://www.radarsign.com/first-responders-raise-alarm-speed-

⁸ Road Management Plan. https://melancthontownship.ca/wp-content/uploads/2020/01/043927-Road-Management-Plan-191030-Secured.pdf, p.1.

⁹ Ibid, p. iv.

¹⁰ Ibid, p. iii.

¹¹ Terry Ward (2021). *Presentation to Melancthon Township Council*. Ontario Provincial Police. Presented verbally on October 21, 2021.

¹² Saranath Lawpoolsri, et. al. (2007). *Do speeding tickets reduce the likelihood of receiving subsequent speeding tickets? A longitudinal study of speeding violators in Maryland*. Traffic Injury Prevention. Retrieved online at: https://pubmed.ncbi.nlm.nih.gov/17366333/

¹³ Alonso, F., Esteban, C., Calatayud, C., & Sanmartín, J. (2013). Speed and road accidents: Behaviors, motives, and assessment of the effectiveness of penalties for speeding. *American Journal of Applied Psychology, 1*(3), 58–64. doi:10.12691/ajap-1-3-5
¹⁴ County of Dufferin. (2022). *The Dufferin County Information Hub.* Retrieved online at: https://data-dufferin-county-traffic-counts-2016/explore?location=44.113457%2C-80.254128%2C14.32

¹⁵ Ibid.

¹⁶ Ministry of Transportation (2016). *Provincial Highways Traffic Volumes*. Government of Ontario. Retrieved online at: https://www.library.mto.gov.on.ca/SydneyPLUS/TechPubs/Theme.aspx?r=702797&f=files%2FProvincial+Highways+Traffic+Volumes+2016+AADT+Only.pdf&m=resource

¹⁷ Township of Melancthon (2019). *Road Management Plan*. A.J. Burnside & Associates Ltd. Retrieved from: https://melancthontownship.ca/wp-content/uploads/2020/01/043927-Road-Management-Plan-191030-Secured.pdf, p. ii. xviii Ryan Rocca. (February 3, 2022). *Toronto city council approves installation of 25 more speed cameras*. Global News. Retrieved online at: https://globalnews.ca/news/8593718/toronto-installing-25-more-speed-cameras/xix lbid.