

DOWNEY ROAD

TRANSPORTATION IMPROVEMENT STUDY

Participant Handbook

Workshop 1
May 18 and 19, 2016

Workshop 2
June 23 and 28, 2016

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City of Guelph
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Background

Project Timeline

- June 2013: the City engaged the residents of Downey Road in selecting a design for the Council-approved inclusion of bike lanes on [Downey Road between Niska Road and Teal Drive](#). Residents asked staff to defer one year.
- June 2014: The City held a [community walk-about](#) to collect feedback on proposed road designs and to hear concerns about road traffic.
- July 2014, [Guelph City Council directed staff](#) to report back with a design for Downey Road that includes bicycle lanes and traffic calming elements, as well as a recommendation on the classification of Downey Road.
- 2016: Downey Road Transportation Improvement Study is initiated.

Summary of Concerns

The following concerns are summarized from the community's input at public open houses, council delegations, neighbourhood walkabouts, and correspondence to City staff.

- High traffic volumes make it difficult to access local properties, cross the street.
- Traffic speeds are above posted limit, creating unsafe environment.
- Trucks are seen using Downey Road rather than designated truck routes.
- On-street parking is highly valued by some of the local residents.
- Access to Mollison Park and the community mail boxes is challenging due to traffic, speeds, lack of safe crossing points.
- Some of the residents support on-street bicycle facilities. Others are concerned they are not safe given traffic concerns; or that they would be under-used.

Study Objective

- To engage area residents and other community stakeholders in a review of safety and traffic concerns along Downey Road
- To plan and build safe, accessible, and efficient transportation improvements to Downey Road that can be enjoyed by all users (pedestrians, cyclists, drivers), while supporting Council-approved policies and master plans.

Study Area

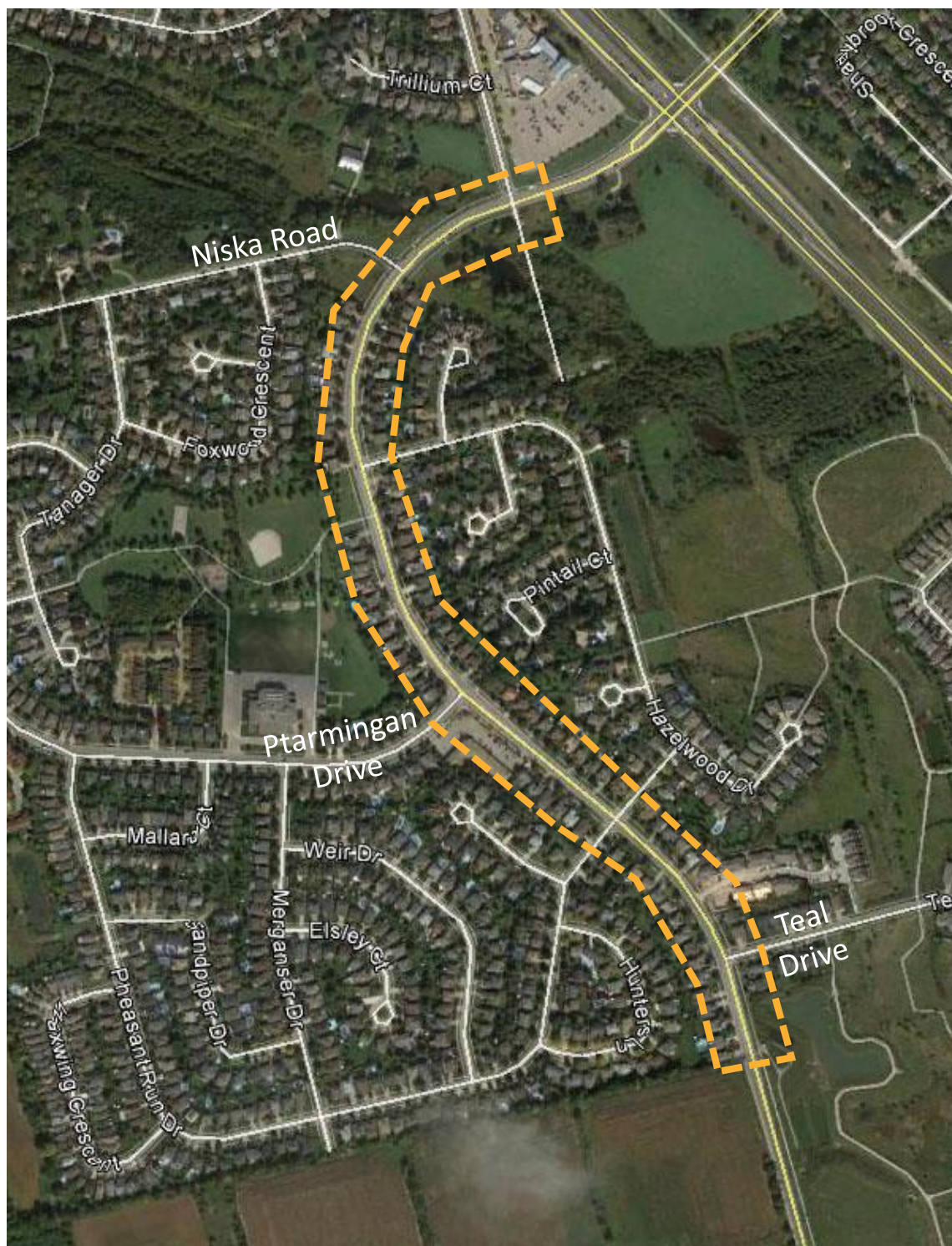


Figure 1 - Study area

Technical Analyses

Downey Road Traffic Profile

- Posted speed 50 km/h; Speeds are highest at YMCA and at Teal Drive (Figure 2)
- Currently a 2-lane plus centre turn lane street from Niska Road to south of Teal Drive
- Traffic volumes: Generally heavier in the PM peak hour. (Figures 3 & 4)
- Access Control: Signalized intersections at Hanlon Expressway and at Ptarmigan Drive; all other side streets are controlled by a stop sign.

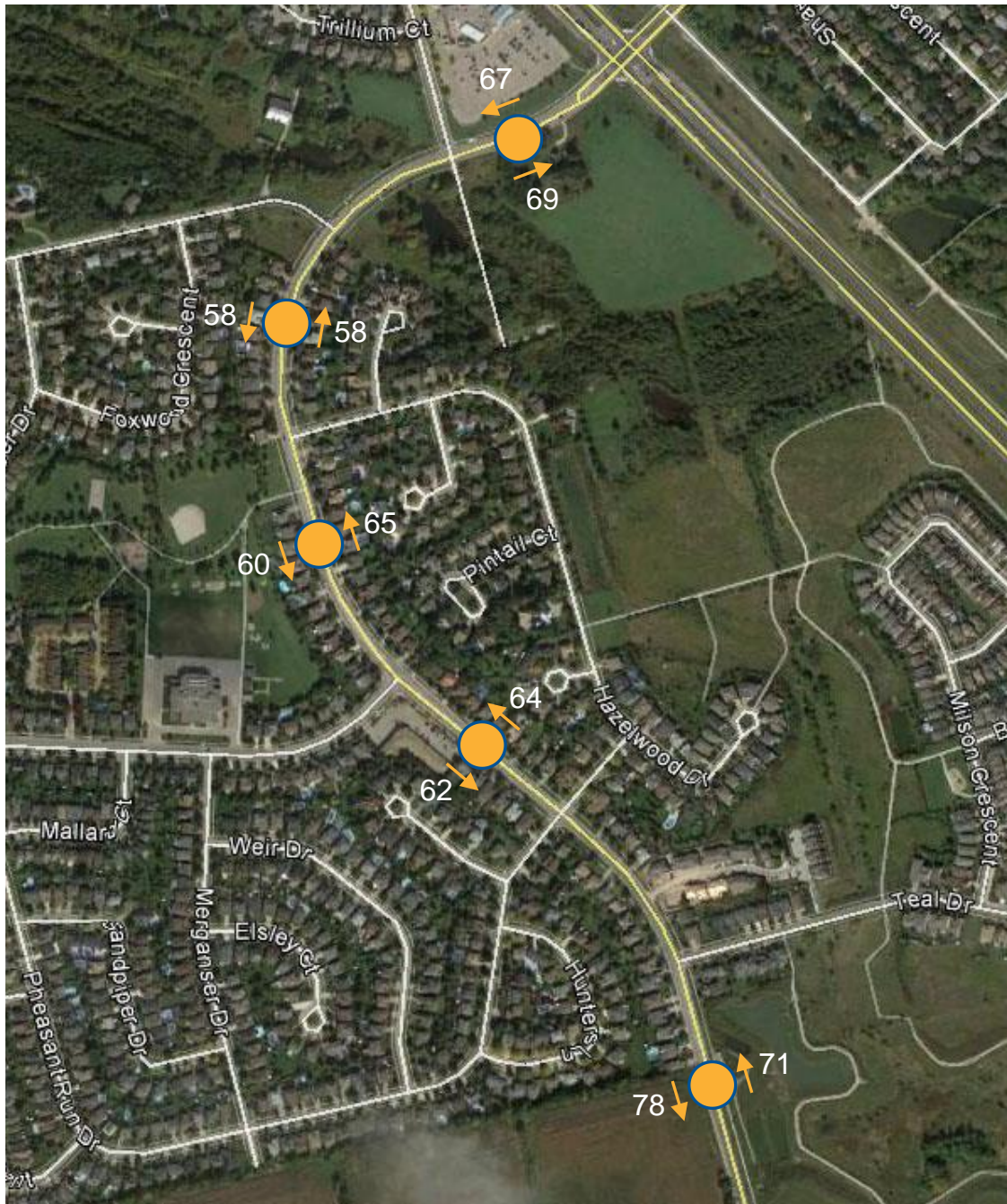


Figure 2 - Results of 85th percentile speed study conducted in April 2016.

Volumes, class and speed data were recorded in 5 locations along Downey between April 26 to May 2 (one full week) with Automated Traffic Recorders (ATRs) that recorded for 24 hours a day. We also collected turning movement counts which were done on a single day for the peak periods during a week day.

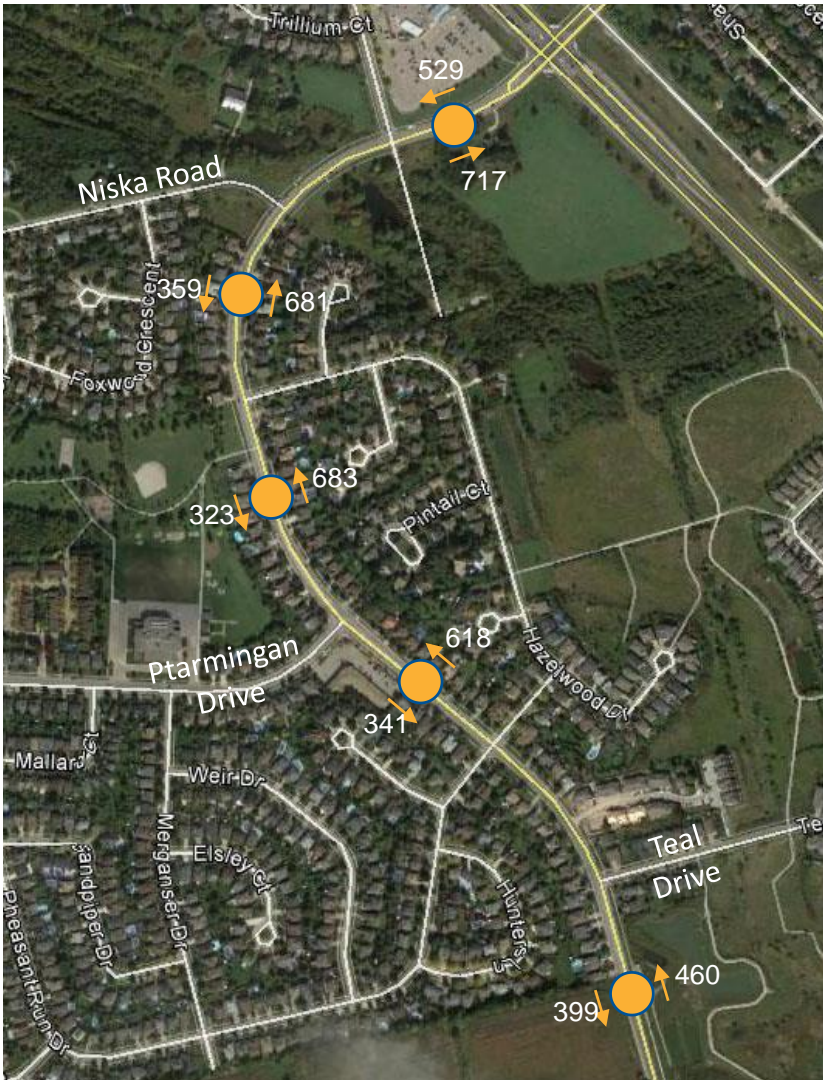


Figure 3 – AM Peak Hour Volumes

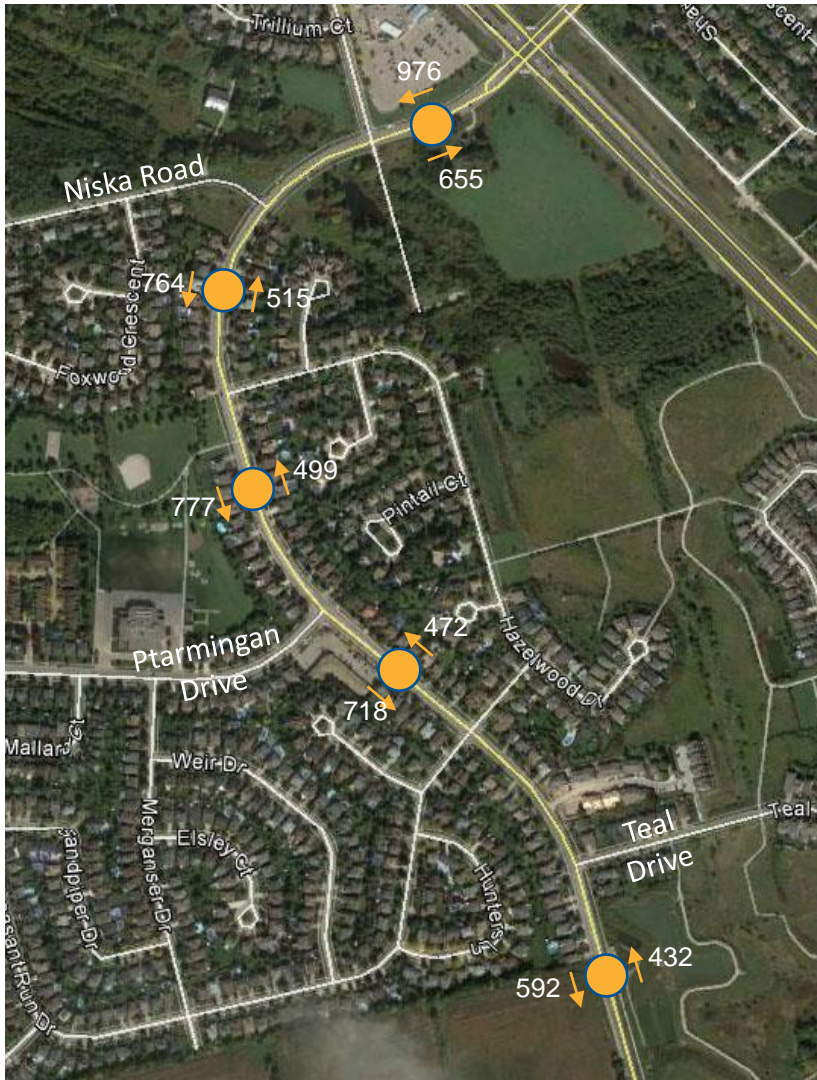


Figure 4 - PM Peak Hour Volumes

Collision History

There have been a total of 33 police-reported collisions within the study area between 2011 and 2015. Twelve (12) of these were mid-block collisions. The remaining occurred at intersections. See Figure 5 below.

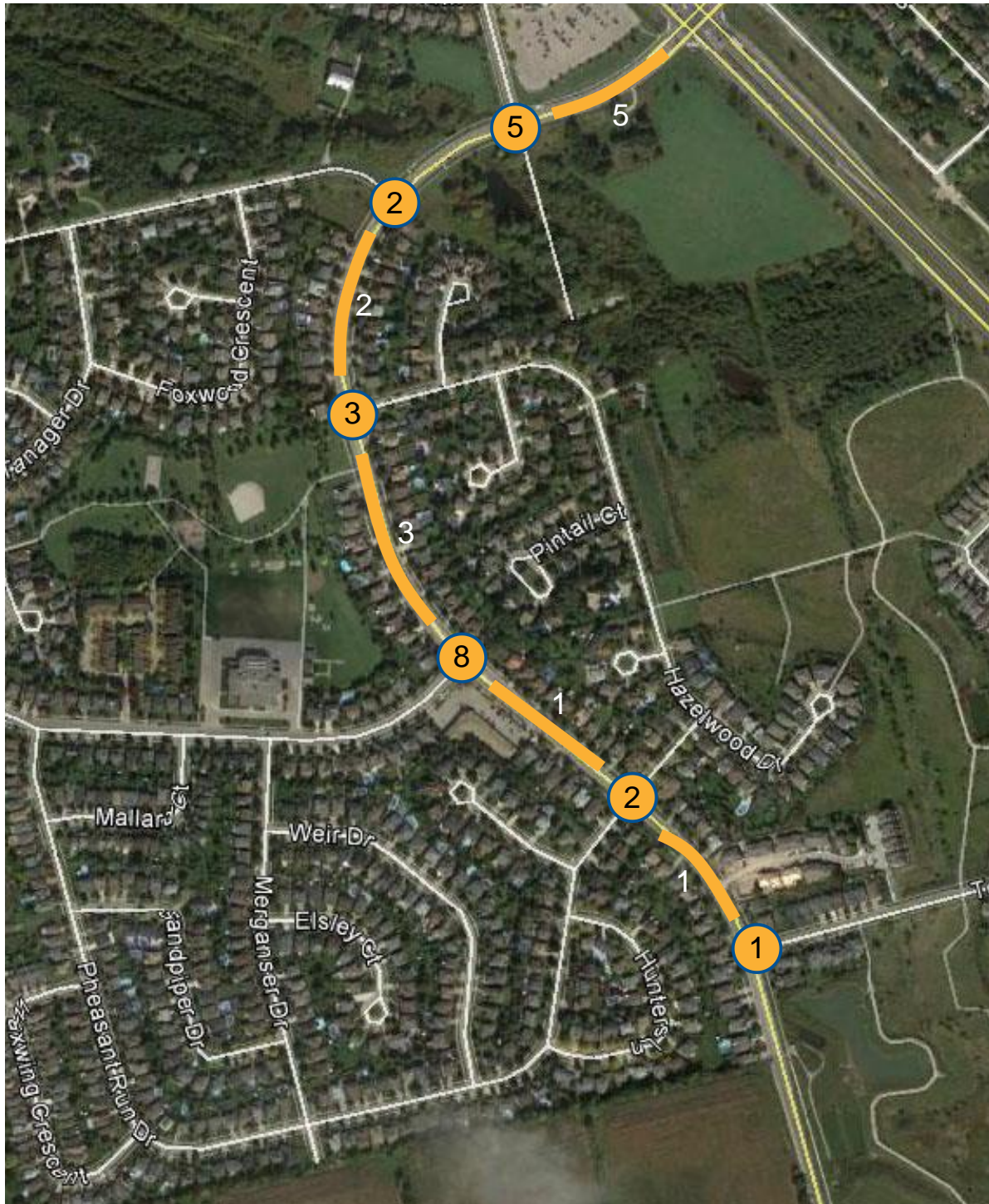


Figure 5 - Collisions along Downey Road between Woodland Glen Drive and Teal Drive from January 2011 to December 2015

What is Traffic Calming?

Traffic calming, as defined by the Institute of Transportation Engineers (ITE) Subcommittee on Traffic Calming, 1997 is:

"The combination of mainly physical measures that reduce the negative effects of motor vehicle use, alter driver behaviour and improve conditions for non-motorized street users."

According to the Canadian Guide to Neighbourhood Traffic Calming, prepared by the Institute of Transportation Engineers (ITE) and the Transportation Association of Canada (TAC), December 1998:

"The purpose of traffic calming is to restore streets to their intended function."

The primary purpose of traffic calming is to reduce high traffic speeds within residential neighbourhoods and thus improve safety for pedestrians and area residents.

Traffic calming measures are designed to be a self-enforced method for drivers and are intended to make them feel like they have to go slower. Traffic calming measures have been proven to have sustained success in changing the behaviour of drivers.

Traffic enforcement is successful on a limited basis but it needs to be sustained for a long time and the fines need to be hefty in order to have a lasting impact. Stop signs are not considered traffic calming measures. The purpose of a stop sign is to assign right-of-way. Stop signs installed at unwarranted locations (based on technical guidelines) often lead to non-compliance such as rolling stops that can result in new safety hazards for other road users. In addition, stop signs only slow traffic in the immediate vicinity, and there is a tendency for drivers to speed up after a stop sign.

Table 1 - Summary of Traffic Calming Options matrix of applicable measures for Minor Arterial / Major Collector roads

Traffic Calming Measure	Traffic Issue				
	Speeding	Accidents	Congestion	Noise	Pedestrian Safety
Roundabouts	◊	◆	◊	◊	◇
Traffic Circles	◆	◆	◊	◊	◇
Chokers	◆	◊	◇	✕	◊
Pedestrian Refuge Islands	◆	◊	◇	◇	◆
Raised Intersections	◆	◇	◇	◊	◊
Speed Cushions	◆	◊	◊	✕	◊
Lane Striping	◆	◊	◇	◇	◇
Dragon's Teeth / Speed Bars	◆	◊	◇	◇	◇

Key:

- ◆ Strongly applicable
- ◊ Moderately Applicable
- ◇ Indifferent
- ✕ Not applicable

Roundabout



Roundabouts require traffic to circulate counter-clockwise around a center island. These are often confused with traffic circles. However roundabouts have a larger area and are used on higher volume streets to allocate right-of-way between competing movements.

Relative Cost:

\$\$\$\$

Advantages:

- Improve safety by eliminating many conflict points in traditional intersections and allowing traffic to share space rather than take turns
- Can provide as much as 30% greater capacity in an intersection for motor vehicles than signal systems
- Landscaped islands can usually add aesthetic value to an intersection
- Can minimize queuing (backed up traffic) at the approaches to an intersection

Disadvantages:

- May be difficult for large vehicles such as fire trucks to navigate
- Must be designed so that the circulating lane does not encroach on the crosswalks
- Can result in the elimination of some on-street parking
- Landscaping must be maintained, either by the residents, the municipality or some other entity
- They are difficult for bicyclists and pedestrians to cross, especially for the blind and visually impaired
- They are very expensive to construct
- Loss of land use (if Right-Of-Way is taken)

Criteria for Use:

- Locations with a history of frequent collisions
- Intersections where queues need to be minimized
- Intersections with irregular approaches (i.e. not 90-degree corners)
- Locations with a high proportion of U-turns
- Abundant right-of-way available

Effectiveness:

- Highly effective in reducing serious accidents.
- Moderate/Highly effective in reducing speeds.

Neighborhood Traffic Circle



Traffic circles are raised islands placed in intersections, around which traffic circulates. They are particularly good for calming intersections in neighborhoods where speeds, volume, and safety are concerns but large vehicular traffic is not.

Relative Cost:

\$\$\$

Advantages:

- Very effective in moderating speeds and improving safety
- Traffic circles can have a positive aesthetic value if designed correctly
- Placed at an intersection, they can calm two streets instead of one

Disadvantages:

- May be difficult for large vehicles such as fire trucks and other emergency vehicles to navigate
- They may result in the elimination of some on street parking
- Landscaping in the center must be maintained by either the neighborhood residents or the municipality in which it is located
- Crosswalks may need to be relocated away from the intersection which can add considerable extra cost
- Drivers sometimes intentionally turn to the left against the one-way circulation

Criteria for Use:

- Traffic circles are used for calming intersections, especially within neighborhoods where large vehicle traffic is not a major concern but speeds, volumes, and safety are major issues
- Sufficient right-of-way is required

Effectiveness:

- Highly effective in reducing speeds

Mid-Block or Intersection Choker



Chokers are curb extensions at mid-block locations or at intersections that narrow a street by widening the sidewalks or boulevard areas. They can sometimes be marked as crosswalks and offer pedestrians a shorter crossing distance.

Relative Cost:

\$\$\$

Advantages:

- Chokers tend to reduce speed
- If designed properly, they can add aesthetic value to a street
- Easy for larger vehicles to negotiate
- Improve safety for pedestrians by reducing crossing distance
- Create protection for on-street parking

Disadvantages:

- May require the elimination of some on-street parking
- Bicyclists may be required to temporarily merge with vehicular travel
- They may make it more difficult for large vehicles to make right hand turns

Criteria for Use:

- Areas with substantial speed problems and no on-street parking shortages
- Mid-block locations must have adequate width to support the installation of a Choker
- Intersection locations with substantial pedestrian activity
- Areas where vertical traffic calming measures such as speed humps and speed tables would be unacceptable

Effectiveness:

- Moderately effective in reducing speeds.

Pedestrian Refuge Island



A pedestrian refuge island is a raised median located along the center line of a street. It is used to narrow the travel lanes in that location. The islands are usually placed in mid-block locations and allow for pedestrians to cross the street in two stages. They also can be used as gateways if placed at the entrance of a neighborhood.

Relative Cost:

\$\$

Advantages:

- Provides pedestrian refuge, allowing shorter crossing distances
- If designed well they can add aesthetic value
- Center islands are traffic calming measures that can also serve as a gateway to a neighborhood
- Speed reduction is achieved by the narrowing of the street

Disadvantages:

- May require the elimination of some on-street parking and reduce left turn lane lengths
- May restrict driveway access

Criteria for Use:

- Pedestrian refuges are good for entrances to residential neighborhoods and for wide streets where pedestrians need to cross

Effectiveness:

- Moderately effective in reducing speeds
- Highly effective in facilitating pedestrian crossings

Speed Cushion



Speed cushions are similar to speed humps, but with tracks that allow fire trucks and transit busses to “straddle” the hump. The tracks are too wide for regular passenger vehicles to straddle, thus making them nearly as effective as speed humps. They are generally 3-5 m long in the direction of travel making them distinctively longer than their counterpart, the speed bump. The speed hump portion of the cushions are generally 8-10 cm high and tapered as they reach the curb to allow for uninterrupted drainage along the street.

Relative Cost:

\$\$

Advantages:

- Less expensive than horizontal deflection measures
- If designed properly, they are easy for bicycles to cross
- Effective at slowing traffic speeds
- Allow vehicles with large wheel bases (fire trucks and transit busses) to straddle the hump, creating little impact to those vehicles

Disadvantages:

- More expensive than regular speed humps
- They can increase noise and air pollution
- They may not always be aesthetically pleasing
- They cause a rough ride for all drivers

Criteria for Use:

- Speed cushions are good for locations where very low speeds are desired (and reasonable) and where noise & fumes are not a major concern. These are typically used for residential streets.

Effectiveness:

- Highly effective in reducing speeds

Raised Intersections



Raised intersections are an elevated section of pavement that span an entire intersection, effectively acting as a very long speed hump. The raised portion of the pavement can be extended to include the pedestrian crosswalks, eliminating some of the vertical changes from sidewalk to street. Drainage considerations must be taken into account when designing Raised Intersections.

Relative Cost:

\$\$\$

Advantages:

- Effective at slowing speeds
- Act as traffic calming for two streets at once.

Disadvantages:

- More expensive than regular speed humps
- They can increase noise and air pollution
- All vehicles, including emergency vehicles and transit, affected by raised intersections

Criteria for Use:

- Raised intersections are good for locations where very low speeds are desired (and reasonable) and where two intersecting streets would benefit from traffic calming. These are typically used for residential streets.

Effectiveness:

- Highly effective in reducing speeds

Lane Striping



Lane striping can be used to narrow travel lanes (encouraging drivers to reduce their speed), create formal bicycle lanes and designate on street parking areas.

Relative Cost:

\$

Advantages:

- Typically less expensive compared to other traffic calming measures
- Typically shorter design time
- Does not impede movement of emergency vehicles

Disadvantages:

- May increase regular maintenance.
- Has not been documented to significantly reduce travel speeds (however it does if used as part of a "road diet").
- In some instances, may increase traffic congestion.
- May need to seal road (high cost) to be able to stripe.

Criteria for Use:

- Lane striping can be used to reduce the number of travel lanes for streets with a wide right-of-way.
- They can be used to dedicate a narrow lane for bicyclists and/or pedestrians where these types of uses are very common yet there is not otherwise safe space provided for those uses.
- Lane striping can be also used to create auxiliary lanes such as left turn lanes and two-way left turn lanes where they do not currently exist.

Effectiveness:

- Low effectiveness in reducing speeds.

Dragon's Teeth / Speed Bars



Dragon's Teeth and Speed Bars are pavement markings placed at the edge of the travel lane used to give the driver a perception of the speed they are travelling at. A gradual reduction in spacing between bars can give the driver a perception that they are travelling faster than their actual speed.

Relative Cost:

\$

Advantages:

- Typically less expensive compared to other traffic calming measures
- Typically shorter design time
- Does not impede movement of emergency vehicles

Disadvantages:

- May increase regular maintenance.
- Has not been documented to significantly reduce travel speeds (however it does if used as part of a "road diet").

Criteria for Use:

- Dragon's Teeth or Speed Bars can be used to reduce the speed of vehicles particularly when transitioning from a high speed section to a lower speed section.

Effectiveness:

- Low/Moderately effective in reducing speeds.

Decision-Making Criteria

The following list of factors will be considered in reviewing the preferred traffic calming measures resulting from Workshops 1 and 2. These factors are not listed in a particular order:

- Regulatory and Legislative compliance
- Safety for road users
- Does not compromise the function of the roadway
- Compatible with cycling facilities and other pre-existing policies as applicable (can't think of others, can you?)
- Minimizes impacts to EMS, public transit
- Effectiveness at reducing speeds and facilitating pedestrian and cyclist mobility
- Implementation complexity
- Cost (could have impacts on how quickly it can be implemented, how likely it is that Council will approve it, etc)

Acknowledgments

The City of Guelph and Paradigm Transportation Solutions Limited would like to credit the City of Rochester for permission to use the 2009 Neighborhood Traffic Calming Manual in the creation of this workbook.

Question and Answer

Q. Why hasn't the City studied the traffic flow in the whole Kortright Hills neighbourhood in a more holistic way? Why has the city studied Niska Rd separately from Downey since traffic flow in the whole area is connected?

A. The Kortright Hills Neighbourhood has always been an integral part of the City of Guelph's Master Transportation Plan (2005), and both Niska Road and Downey Road are fundamental parts of the area's road network. Please be assured that whenever a site-specific study is undertaken, such as the Niska Road Bridge EA, any potential changes to that site are modelled on the surrounding neighbourhood streets, and on the city-wide road network.

Q. What are the implications for traffic volumes on Downey Road of the Province's proposed changes for the Hanlon Expressway at Kortright/Downey Road on this study?

A. The Ontario Ministry of Transportation (MTO) has jurisdiction over Hanlon interchanges, and dictates its plans and timelines to the City. MTO has proposed to build a partial interchange at Downey Road/Kortright Road and the Hanlon. The interchange will provide Downey/Kortright users with southbound access to the expressway, and northbound Hanlon users with an off-ramp to Downey/Kortright Roads. In future, there will be no northbound access from Downey/Kortright onto the Hanlon and no direct southbound access from the Hanlon to Downey/Kortright. At this time, the MTO has not yet been able to provide a timeline for when this work will be done. These proposed changes are intended to help encourage commuters and trucks to use the Laird Road interchange to access the Hanlon Creek Business Park and Puslinch Township.

Q. Why are bike lanes necessary in the final design?

A. Roads should accommodate and be safe for all types of users – drivers, cyclists, transit vehicles and users, and pedestrians of all ages and abilities.

The City of Guelph supports the traffic engineering and transportation planning concepts of "Complete Streets" and "Context Sensitive Solutions". The term complete streets is used to define a road that functions holistically for its users and surrounding community, supporting all modes of transportation, as well as adjacent land uses and activities.

Council has decided to uphold the Bicycle Policy and the Cycling Master Plan that both recommend cycling facilities on arterial roads throughout the City. Bicycle facilities are an integral part of a complete street by providing a safe space for this group of road users. Bicycle facilities will help connect Downey Road to the City's Active Transportation Network, which promotes a variety of active forms of transportation such as walking, running, cycling and inline skating, as well as improve access to key destinations such as the YMCA-YWCA of Guelph. Bicycle facilities can also sometimes serve to calm traffic speeds by narrowing the roadway.

The City of Guelph's Cycling Master Plan (2013) recommends on-street bicycle lanes for Downey Road, and this direction was upheld by City Council when it asked staff to report back with a design for Downey Road that includes bicycle lanes as well as traffic calming elements.

Q. Why is Downey Road classified as an Arterial Road?

A. Downey Road was classified as an arterial road in 1988.

One of the primary functions of arterial roads is to provide movement of people and goods through and within the City. Downey Road is identified in City of Guelph's Official Plan and Transportation

Master Plan as serving as a connection between Kortright Road and east of the Hanlon Expressway, and Puslinch County to the south.

Based on a review of recent and historical traffic studies conducted by Paradigm Transportation Solutions Ltd., Downey Road still fits the definition and characteristics of an Arterial Road as defined by the Transportation Association of Canada and the Institute of Traffic Engineers.

Characteristics of Arterial Streets include:

- Uninterrupted flow (except at signalized intersections)
- Accommodate all vehicle types
- Some degree of access control
- Volumes between 5,000 and 20,000 vehicles per day on a two-lane cross section
- Cyclists are frequently accommodated with dedicated on-road facilities
- Pedestrians are supported with sidewalks on both sides of the street and appropriate crossings

According to the guidelines for Context Sensitive Solutions (mentioned above), Downey Road falls within the "C3-Suburban" context zone, and is defined as an "Avenue":

"Walkable, low-to-medium speed (40 to 60 km/h) urban arterial or collector thoroughfare, generally shorter in length than boulevards, serving access to abutting land. Avenues serve as primary pedestrian and bicycle routes and may serve local transit routes. Avenues do not exceed 4 lanes, and access to land is a primary function. Goods movement is typically limited to local routes and deliveries. Some avenues feature a raised landscaped median. Avenues may serve commercial or mixed-use sectors and may provide curb parking."

In terms of functional classifications, Avenues can perform Principle Arterial, Minor Arterial or Collector functions.

Q. Could we close Downey Road be closed at Teal Drive to force commuters and truck drivers to stay on the Hanlon?

- A.** Attempting to view any one road in isolation (e.g. close the road to through traffic) can create problems in other parts of the city's transportation network. Guelph's transportation network also has to work with regional and provincial transportation systems – Guelph roads don't stop at the city limits. For Guelph's transportation system to work smoothly, Downey must function like other arterial roads in residential areas including Edinburgh Road, College Avenue, Kortright Road West, Stevenson Street, Victoria Road, Waterloo Avenue, etc.

Guelph's transportation network has to work with regional and provincial transportation systems – Guelph roads don't stop at the city limits. Downey Road was classified as an arterial road in 1988. One of the primary functions of arterial roads is to provide movement of through traffic. Downey Road is identified in Guelph's Official Plan and the City's Transportation Master Plan as serving as a connection between the Hanlon Expressway, and the Hanlon Creek Business Park to the south and Puslinch County beyond. Downey Road is also the continuation of the arterial road network connection to Kortright Road West. The role and function of Downey Road is consistent with its arterial designation.

Q. Why is Downey Road classified as an Arterial Road?

- A.** Based on consideration of recent and historical traffic studies, Downey Road fits the definition and characteristics of an Arterial Road as defined by the Transportation Association of Canada and the Institute of Traffic Engineers. The definition of an Arterial Street, according to the Transportation Association of Canada:
- Primarily serves through traffic

- Usually on a continuous route
- Distributes large volumes of traffic (people and goods) between other Provincial Highway, Arterial Streets and Major Collector Streets
- Provides mobility for people and goods through and within the City

Characteristics of Arterial Streets include:

- Uninterrupted flow (except at signalized intersections)
- Accommodate of all vehicle types
- Some degree of access control
- Volumes between 5,000 and 20,000 vehicles per day on a two-lane cross section
- Cyclists are frequently accommodated with dedicated on-road facilities
- Pedestrians are supported with sidewalks on both sides of the street and appropriate crossings

Context Sensitive Solutions and Complete Streets

The traffic engineering and transportation planning concepts of Complete Streets and Context Sensitive Solutions are based on the notion that roads are not explicitly built for the exclusive movement of cars, rather that they must accommodate all road users. Further, roadways and their design must reflect the environment and surrounding features through which they pass.

The principles of Context Sensitive Solutions promote planning and designing transportation facilities that:

- Meet the needs of users and stakeholders;
- Are compatible with their setting and preserve scenic, aesthetic, historic and environmental resources;
- Respect design objectives for safety, efficiency, multimodal mobility, capacity and maintenance; and
- Integrate community objectives and values relating to compatibility, livability, sense of place, urban design, cost and environmental impacts.

According to the guidelines for Context Sensitive Solutions Downey Road falls within the "C3-Suburban" context zone, and would be defined as an "Avenue". CSS defines an Avenue as follows:

"Walkable, low-to-medium speed (40 to 60 km/h) urban arterial or collector thoroughfare, generally shorter in length than boulevards, serving access to abutting land. Avenues serve as primary pedestrian and bicycle routes and may serve local transit routes. Avenues do not exceed 4 lanes, and access to land is a primary function. Goods movement is typically limited to local routes and deliveries. Some avenues feature a raised landscaped median. Avenues may serve commercial or mixed-use sectors and usually provide curb parking."

In terms of functional classifications, Avenues can perform Principle Arterial, Minor Arterial or Collector function. Further, the report identifies typical volumes for Suburban (C-3) Residential Avenues reach as high as 25,000 vehicles per day on as many as four lanes.

Q. How will the Niska Bridge project affect traffic on Downey Road?

- A. The Council approved two-lane bridge and road improvements on Niska Road will not affect the traffic patterns on Downey Road. The road capacity on Niska Road remains the same as there is no additional travel lane(s) proposed and the change in travel time across the bridge is expected to be minimal. Several traffic calming measures have also been proposed for the preliminary design of Niska Road, including Dragon's Teeth and raised intersections.

Q. Why hasn't the City studied the traffic flow in the whole Kortright Hills neighbourhood in a more holistic way? Why has the city studied Niska Rd separately from Downey since traffic flow in the whole area is connected?

- A. The Kortright Hills neighbourhood has always been within the citywide transportation studies and planning. Niska Road and Downey Road are integral parts of the area's road network. Whenever a site-specific study is undertaken, such as the Niska Road Bridge EA, any potential changes to Niska Road are modelled on the city-wide road network including Downey Road.

Q Can we have more enforcement along Downey Road to control speeding?

- A. Traffic enforcement can be successful in reducing speeds, however, it is a temporary measure. It is only effective while it is physically present. Traffic calming measures on the other hand have been proven to be more cost effective and have sustained success in changing the behaviour of drivers.

Q. How will on-street parking be affected?

- A. The impacts to on-street parking will depend on the final design resulting from community input and filtered through the decision-making criteria. It is possible that on-street parking may be affected in some areas and not others, or not at all.

Q. What is being proposed at the intersection of Niska and Downey Roads?

- A. The Niska Road Bridge Environmental Assessment report recommended a signalized intersection at Niska Road and Downey Road. However, Council directed staff not to make changes to the intersection of Niska and Downey Roads. No changes are being considered or proposed at this time.

That staff be authorized to complete the Schedule 'C' Municipal Class Environmental Assessment process and issue a notice of completion to place the Environmental Study Report on the public record for the mandatory 30 day public review period and proceed with the implementation of the preferred alternatives, **except for the signalization at Niska Road and Downey Road**, as outlined in the Council Report dated December 3, 2015.

VOTING IN FAVOUR: Mayor Guthrie, Councillors Allt, Billings, Downer, Gibson, Hofland, MacKinnon, Piper and Wettstein (9)

VOTING AGAINST: Councillors Bell, Gordon, Salisbury and Van Hellemond (4)

CARRIED

Q. Can we have trail crossings like they do on Gordon Street between Clair and Clairfields?

- A. If such crossings are identified as appropriate through public consultation and application of the decision-making criteria, they may be included as part of the final recommended design for Downey Road.

Q. What are the policies that influence this project?

- A. The following is a summary of the policies that influence the Downey Road transportation improvement study:

- Downey Road is identified in the **City of Guelph Official Plan** and the **2005 Transportation Master Plan** as an arterial road. The **Official Plan** policies also encourage neighbourhood and road designs that support sustainable transportation, including cycling, walking and public transit.
- The **Cycling Master Plan** (2013) designates on-street bicycle lanes for Downey Road based on the criteria supported by the Ontario Traffic Manual Book 18. Bike lanes are typically recommended under the following conditions:
 - Traffic volumes are moderate to high (2,000-10,000 vehicles per day on a 2-lane road)
 - Operating speed of vehicles is 50 km/h or greater

- The roadway serves a collector or arterial function in the overall road network
- The road serves as a bus route
- The road serves as a connecting link to key destination(s) and/or other route connections within the community.
- The **City of Guelph Neighbourhood Traffic Calming Policy (2006)** typically does not apply to arterial roads: safety concerns on arterial roadways or four-lane collector roadways are dealt with on a case-by-case basis
- The **2005 Guelph Trails Master Plan** identifies several trail crossing locations along Downey Road between Woodland Glen Drive and Teal Drive
- **AODA**: The City of Guelph is required to make all public property accessible according to the Accessibility for Ontarians with Disabilities Act (AODA).