

12

2005 TRAFFIC SAFETY IMPROVEMENT PROGRAM AND 2005 NEW TRAFFIC SIGNAL INSTALLATIONS

The Transportation and Works Committee recommends the adoption of the recommendation contained in the following report, June 1, 2005, from the Commissioner of Transportation and Works:

1. RECOMMENDATIONS

It is recommended that:

1. Staff report back to the Transportation and Works Committee in the fall of 2005, outlining the results of the Traffic Safety Improvement Program.

2. PURPOSE

This report outlines the 2005 Traffic Safety Improvement Program. The Traffic Safety Improvement Program will provide staff with a list of intersections and roadway links where statistical analysis have indicated a potential for a significant reduction in collisions through the application of various road safety improvement measures. These intersections and roadway links will be reviewed during 2005 to identify and/or to confirm suitable roadway improvement measures that will be effective in reducing collisions at these locations and improving traffic operations. This report also identifies the locations where new traffic signals are planned to be installed in 2005.

3. BACKGROUND

The Traffic Safety Section was established in the fall of 1999 within the Roads Transportation Branch of the Transportation and Works Department. The primary goal of the Traffic Safety Section is to interact with all road traffic functions undertaken by York Region's Transportation and Works Department by bringing safety explicitly and formally to existing and future programs. Strong business partnerships have been developed with York Regional Police and Public Health. These partnerships, together, have contributed to the reduction in the severity of collisions occurring on the Regional road network.

The first step in developing a Traffic Safety Improvement Program is to "screen" the network, using appropriate statistical methodologies, to identify roadway links and intersections, where collisions in total or particular collision types e.g. right-angle collisions, rear-end collisions etc., occur more than expected, and would therefore have a high potential for cost-effective safety improvements.

The second step is to conduct special investigations, operational safety reviews and economic feasibility analysis to identify and select suitable countermeasures to address identified safety concerns.

The final step is to implement the selected countermeasure by integrating the identified road safety improvements into existing Transportation and Works programs and budgets.

4. ANALYSIS AND OPTIONS

4.1 Methodology

To develop the 2005 Road Safety Improvement Program, state-of-the-art network screening methodologies were used to identify signalized intersections and roadway links where the number of collisions exceeds the average number of collisions for similar locations (taking into consideration traffic volumes) and therefore has a potential for cost effective safety improvements.

4.2 2005 Road Safety Improvement Program

4.2.1 Corridor Improvements

Table 1 lists three corridors (links and intersections combined) with a potential for safety and operational improvements based upon the results of the network screening exercise. These corridors have been selected on the basis of their safety performance and not on their levels of traffic congestion.

During 2005, operational safety reviews will be conducted along each of these corridors, to identify cost-effective measures to improve operations and safety. These improvement measures could for example include additional signs and markings, additional signal heads, signal timing changes and resurfacing. The implementation of cost effective safety improvement measures identified and selected through these reviews will be integrated into various Transportation and Works programs and budgets.

Table 1
2005 Operational Safety Reviews: Corridors

Corridor	Municipality
Jane Street between Major Mackenzie Drive and Teston Road	Vaughan
Sixteenth Avenue between Warden Avenue and Highway 48	Markham
Major Mackenzie Drive between Yonge Street and Bayview Avenue	Richmond Hill

4.2.2 Signalized Intersection Improvements

Table 2 lists ten signalized intersections that have a high potential for safety and operational improvements based upon the results of the network screening exercise. Operational safety reviews will be conducted at these intersections during 2005.

The design and implementation of the operational and safety improvement measures identified and selected through these reviews will be integrated into various Transportation and Works programs and budgets. These improvement measures could for example include additional signs and markings, additional signal heads, signal timing changes and resurfacing.

Table 2
2005 Operational Safety Reviews: Signalized Intersections

Intersection Name	Municipality
Bathurst Street at Elgin Mills Road West	Richmond Hill
Bayview Avenue at Blackmore Avenue	Richmond Hill
Highway 7 at Kennedy Road	Markham
Highway 7 at Roddick Road	Markham
King Road at Dufferin Street	King
Major Mackenzie Drive at Bathurst Street	Richmond Hill
McCowan Road at Denison Street	Markham
Rutherford Road at Dufferin Street	Vaughan
Yonge Street at Mulock Drive	Newmarket
Yonge Street at Green Lane	East Gwillimbury

4.2.3 New Traffic Signals

Table 3 lists the unsignalized intersections that are included in the 2005 program for signalization to improve safety and the quality of traffic operations.

Table 3
2005 New Traffic Signal Locations

Location	Municipality
16th Avenue at Dewbourne Avenue	Richmond Hill
Bayview Avenue at Carberry Street	Newmarket
Davis Drive at Warden Avenue	East Gwillimbury
Dufferin Street at Teston Road	Vaughan
Leslie Street at State Farm Way	Newmarket
Leslie Street at Stouffville Road East	Richmond Hill
Leslie Street at Stouffville Road West	Richmond Hill
Lloydtown/Aurora Road at Dufferin Street	King
Major Mackenzie Drive at Pine Valley Drive	Vaughan
Major Mackenzie Drive at Starling Boulevard	Vaughan
Major Mackenzie Drive at Vellore Woods	Vaughan
Mulock Drive at Harry Walker Parkway South	Newmarket
Ninth Line at Tiers Gate Court	Markham
Rutherford Road at Forest Fountain Drive	Vaughan
Warden Avenue at Clegg Road	Markham
Woodbine Avenue at Church Street	Georgina
Woodbine Avenue at Old Homestead Road	Georgina
Woodbine Avenue at Riverglen Drive	Georgina

4.3 Existing and Future Partnerships

The Traffic Safety Section is, and will continue to be a very active member of the Save-a-Life Program. The Save-a-Life Program was established in 1999, and is a combined effort by the York Region's Transportation and Works Department, York Regional Police and York Health Services to integrate resources, experience and skills, and to address growing community concerns about road safety in York Region.

The Save-a-Life Program goal is: *“To Save a Life on the roadways in York Region and to improve the quality of life of the citizens of York Region by being the benchmark of excellence in Road Safety.”*

As the custodian of Regional collision data, the Traffic Safety Section will continue to play an important role in supplying results of collision data analysis and information to York Regional Police and York Health Services to support Save-a-Life Program initiatives.

5. FINANCIAL IMPLICATIONS

Funding for implementing minor road safety improvements to be identified by the different operational safety reviews are included in the 2005 Roads Minor Capital Program budgets and the ten year program.

6. LOCAL MUNICIPAL IMPACT

The goal of the Traffic Safety Improvement Program is to address traffic safety issues throughout the Regional road network. Any operational assessment and safety related recommendations that impact the flow of traffic on the local road system are discussed directly with the appropriate municipal staff before they are implemented.

7. CONCLUSION

The Traffic Safety Section has developed a Traffic Safety Improvement Program for 2005. The implementation of this program is expected to result in a substantial reduction in collisions and personal injuries on the Regional road network and improvements in the traffic operations.

The Senior Management Group has reviewed this report.