

5
TRAFFIC REVIEW
YONGE STREET - DAVIS DRIVE TO GREEN LANE
TOWN OF NEWMARKET

(Regional Council at its meeting on September 18, 2003, amended the foregoing Clause to include the following recommendation:

- 4. The Town of East Gwillimbury be included in the discussions and collaborations on the project and a copy of this report be forwarded to the Clerk of the Town of East Gwillimbury.)***

The Transportation and Works Committee recommends the adoption of the recommendations contained in the following report, August 25, 2003, from the Commissioner of Transportation and Works:

1. RECOMMENDATIONS

It is recommended that:

1. The following recommendations as outlined in the attached Traffic Review report be implemented:
 - a. Repaint crosswalk lines at all signalized intersections on Yonge Street from Davis Drive to Green Lane.
 - b. Paint lane directional arrows for all lanes on all approaches at signalized intersections on Yonge Street from Davis Drive to Green Lane.
 - c. Install right turn lane markings in the northbound right turn lane from the Davis Drive intersection to the Upper Canada Mall access.
 - d. Conduct an additional weekend traffic review to be completed in September 2003 to assess the revised signal timings in relation to normal traffic flows.
 - e. An origin/destination study in the area east of Yonge Street and north of Davis Drive be undertaken by Town of Newmarket staff to quantify the amount of traffic infiltrating through this area, identify problem locations and possible courses of action to reduce the infiltration.
 - f. Investigate changing the protected left turn phasing to protected/permissive phasing (left turning traffic would be able to turn with the solid green ball when gaps are available) at the intersection of Yonge Street and Davis Drive after Bathurst Street from Highway 9 to Green Lane is completed.
2. Regional staff be directed to investigate and report back to the Transportation and Works Committee on the following recommendation as outlined in the attached Traffic Review report:

Investigate various alternatives to increase capacity and improve safety to all users of Yonge Street. These alternatives to consider but not be limited to the following:

- Installation of centre raised medians (restricting access except at controlled locations).
- Widening of Yonge Street from Davis Drive to Green Lane from five lanes to seven lanes.
- Establishing an access management plan (i.e. consolidating accesses).
- Establishing a collector road system on the west side of Yonge Street.

- Intersection improvements.
3. The Regional Clerk forward a copy of this report to the Clerk of the Town of Newmarket.

2. PURPOSE

The purpose of this report is to summarize the results of a traffic review of the section of Yonge Street from Davis Drive to Green Lane undertaken by Regional staff in consultation with staff of the Town of Newmarket. The review also addresses the Town's concerns with regards to "infiltration" through the residential neighbourhoods on the east side of Yonge Street.

3. BACKGROUND

The public and the Town of Newmarket requested that the issue of "gridlock" on the section of Yonge Street from Davis Drive to Green Lane, especially during weekends, be reviewed with action taken to resolve the issue. In addition, there has been an on-going concern from residents of the residential area to the east, that there is a substantially high "infiltration" of traffic through their subdivision created by the "gridlock" on Yonge Street.

Regional staff and Town of Newmarket staff met to discuss and exchange information. A Traffic Review report appended as *Attachment 1*, dealing with this issue was prepared by Regional staff in collaboration with Town staff. Prior to the finalisation of this report, Town staff and Region staff met to discuss and reach consensus on the recommendations for this report.

4. ANALYSIS AND OPTIONS

As a result of requests received regarding the traffic congestion on Yonge Street, Regional staff conducted studies to assess the situation. The results were evaluated and recommendations were made for some immediate improvements. A report detailing staff's assessment of this section of Yonge Street has been completed, which indicates that a reduction in vehicular delay for both northbound and southbound traffic on Yonge Street was achieved due to revised signal timing plans implemented during the last week of June and the first week of July. Furthermore, a number of other activities were recommended for either action or consideration.

A summary of the traffic analysis detailed in the report is as follows:

Traffic Volumes

- The Annual Average Daily Traffic (AADT) has grown from approximately 27 000 vehicles in 1996 to over 40 000 vehicles in 2002, an increase of 52%. The highest volumes occur on a Friday and Saturday.
- This section of Yonge Street has the capacity to service approximately 1250 veh/h for two lanes. Currently, Yonge Street is servicing approximately 1700 veh/h for two lanes during the peak periods. This results in congestion, high delays and extensive queuing.

Signal Analysis

- Turning movement counts were completed during the weekend period. This information was analyzed using specialized software which provides strategies to optimize signal timings/phasing in an effort to maximize capacities and minimize delays. Before and

after travel time studies were completed on June 21st and June 28th respectively. Revised signal timing plans were implemented during the week of June 23rd

- Generally, travel times decreased north of Davis Drive during the Saturday AM and PM peak periods, with a slight increase in the PM Peak southbound direction. With the completion of the adjustments a further decrease in the travel time is expected.

Collisions

- A total of 389 collisions occurred on this section of Yonge Street from 1999 to 2002.
- Over 300 collisions were property damage only while 2 were classified as fatal collisions.
- Approximately 33% of all collisions occur on weekends (Saturday/Sunday).

4.1 Recommended Actions - Immediate

Regional staff in consultation with staff of the Town of Newmarket recommends that the following actions be undertaken:

- a. Repaint crosswalk lines at all signalized intersections on Yonge Street from Davis Drive to Green Lane.
- b. Paint lane directional arrows for all lanes on all approaches at signalized intersections on Yonge Street from Davis Drive to Green Lane.
- c. Install right turn lane markings in the northbound right turn lane from the Davis Drive intersection to the Upper Canada Mall access.
- d. Conduct an additional weekend traffic review to be completed in September 2003 to assess the revised signal timings in relation to normal traffic flows.
- e. An origin-destination study in the area east of Yonge Street and north of Davis Drive be undertaken by Town of Newmarket staff, to quantify the amount of traffic infiltrating through this area, identify problem locations and possible courses of action to reduce the infiltration.
- f. Further investigation by Regional staff into changing the protected left turn phasing to protected/permissive phasing (left turning traffic would be able to turn with the solid green ball when gaps are available) at the intersection of Yonge Street and Davis Drive after Bathurst Street from Highway 9 to Green Lane is completed.

4.2 Recommended Actions - Long Term

Both Regional staff and staff of the Town of Newmarket recognize that the actions recommended as "Immediate" will not resolve all of the gridlock issues. Therefore, the following additional recommended action should be undertaken.

Investigate various alternatives to increase capacity and improve safety to all users of Yonge Street. These alternatives to consider but not be limited to the following:

- Installation of centre raised medians (restricting access except at controlled locations).
- Widening of Yonge Street from Davis Drive to Green Lane from five lanes to seven lanes.
- Establishing an access management plan (i.e. consolidating accesses).
- Establishing a collector road system on the west side of Yonge Street.
- Intersection improvements.

4.3 Status of Improvements

The pavement markings and arterial review in recommendation 1 a, b, c and d will be completed by the end of September 2003.

Recommendation 1 e, regarding an, origin-destination study will be undertaken by the Town of Newmarket staff in 2004. Recommendation 1 f, regarding the operation of the intersection of Yonge Street and Davis Drive will be completed by December 2003.

The actions identified as long term will be clarified in a subsequent report and dealt with through the Capital Program. A Class Environmental Assessment will be initiated in 2003 to evaluate the needs and justification for improvements on Yonge Street from Mulock Drive to Green Lane. Part of this section of Yonge Street is within the Regional Centre and will follow the guidelines for Regional Centres in collaboration with the Town of Newmarket. The road works in this section are currently proposed for construction in 2007 in the draft 2004 Business Plan and Budget.

5. FINANCIAL IMPLICATIONS

The costs for those actions identified as “Immediate” are included within the approved 2003 Roads Transportation Program Budget. The costs for those actions identified as “Long Term” will be identified in a subsequent report and dealt with through the Capital Program. A Class Environmental Assessment will be initiated in 2003 to evaluate the needs and justification for improvements on Yonge Street from Mulock Drive to Green Lane. Part of this section of Yonge Street is within the Regional Centre and will follow the guidelines for Regional Centres in collaboration with the Town of Newmarket. The road works in this section are currently proposed for construction in 2007 in the draft 2004 Business Plan and Budget.

6. LOCAL MUNICIPAL IMPACT

This report recommends a number of operational improvements to Yonge Street from Davis Drive to Green Lane and that the Town of Newmarket staff undertake a comprehensive origin-destination study in the area east of Yonge Street and north of Davis Drive, to quantify the amount of traffic infiltrating through this area, identify problem locations and possible courses of action to reduce the infiltration. A copy of this report should be forwarded to the Clerk of the Town of Newmarket by the Regional Clerk.

7. CONCLUSION

At the request of the public and the Town of Newmarket, due to the issue of “gridlock” during weekends, an arterial review of the section of Yonge Street from Davis Drive to Green Lane was undertaken by Regional staff in consultation with staff of the Town of Newmarket. The arterial review also addressed the Town’s concerns with regards to ‘infiltration’ through the residential neighbourhoods on the east side of Yonge Street.

Regional staff and Town of Newmarket staff met with information between the staffs exchanged. A Traffic Review report appended as *Attachment 1*, dealing with this issue was prepared. Prior to the finalization of this report, Town staff and Region staff met to discuss and reach consensus on the recommendations for the Traffic Review report.

The Traffic Review report summarized staff’s assessment of this section of Yonge Street, indicating a reduction in vehicular delay and stops for both northbound and southbound traffic on Yonge Street due to revised signal timing plans implemented during the last week of June and the first week of July. Furthermore, a number of other activities were recommended for either action or consideration. These activities are identified in the recommendations of the report to Transportation and Works Committee.

The actions identified, as “Immediate” will be undertaken by both Regional and Town staff. The actions identified as “Long Term” will be clarified in a subsequent report and dealt with through the Capital Program. A Class Environmental Assessment will be initiated in 2003 to evaluate the needs and justification for improvements on Yonge Street from Mulock Drive to Green Lane. Part of this section of Yonge Street is within the Regional Centre and will follow the guidelines for Regional Centres in collaboration with the Town of Newmarket. The road works in this section are currently proposed for construction in 2007 in the draft 2004 Business Plan and Budget.

The Senior Management Group has reviewed this report.

(A copy of the attachment referred to in the foregoing is included with this report and is also on file in the Office of the Regional Clerk.)