Minutes – Standing Policy Committee on Infrastructure Renewal and Public Works – February 5, 2019

REPORTS

Item No. 16 Traffic Study – Chancellor Drive (Waverley West Ward)

STANDING COMMITTEE DECISION:

The Standing Policy Committee on Infrastructure Renewal and Public Works concurred in the recommendation of the Winnipeg Public Service and received the report as information.

Minutes – Standing Policy Committee on Infrastructure Renewal and Public Works – February 5, 2019

DECISION MAKING HISTORY:

Moved by Councillor Browaty,

That the recommendation of the Winnipeg Pubic Service be concurred in.

Carried

STANDING COMMITTEE RECOMMENDATION:

On January 8, 2019, the Standing Policy Committee on Infrastructure Renewal and Public Works granted an extension of time to its February 5, 2019 meeting for the Winnipeg Public Service to report back on the matter.

On May 29, 2018, the Standing Policy Committee on Infrastructure Renewal and Public Works concurred in the recommendation of the Riel Community Committee and directed the Winnipeg Public Service to conduct a traffic study when students are in school to determine if Chancellor Drive (north and south) meet speed table criteria, and install appropriate traffic calming devices, and report back to the Standing Committee within 120 days.

COMMUNITY COMMITTEE RECOMMENDATION:

On May 7, 2018, the Riel Community Committee passed the following motion:

WHEREAS two elementary schools, Bonnycastle School and Arthur A. Leach School, as well as Waverley Heights Community Centre are located on Chancellor Drive (north and south) between Chancellor Drive (east and west) and Markham Road;

AND WHEREAS Chancellor Drive (north and south) is a primary connecting route for Waverley Heights to major destinations;

AND WHEREAS there are significant volumes of traffic using this route and the residential community, school communities and community centers believe there is excessive speeding occurring on Chancellor Drive (north and south);

THEREFORE BE IT RESOLVED that the Standing Policy Committee on Infrastructure Renewal and Public Works direct the Winnipeg Public Service to conduct a traffic study when students are in school to determine if Chancellor Drive (north and south) meet speed table criteria, and install appropriate traffic calming devices.

ADMINISTRATIVE REPORT

Traffic Study – Chancellor Drive (South Winnipeg – St. Norbert Ward)

Critical Path: Standing Policy Committee on Infrastructure Renewal and Public Works

AUTHORIZATION

| Author | Department Head | CFO | CAO | | |
|-------------------|-----------------|---------|-----------|--|--|
| D. Patman, P.Eng. | J. Berezowsky | M. Ruta | D. McNeil | | |

EXECUTIVE SUMMARY

A traffic study was conducted on Chancellor Drive between Markham Road and Chancellor Drive in the fall of 2018 to evaluate speeding concerns near R.H.G Bonnycastle School, Waverley Heights Community Centre, and Arthur A. Leach Junior High. Speed data was collected and evaluated outside of and during the Reduced-Speed School Zone hours. The results of the speed study indicate that there is good compliance with the 50 km/h and 30 km/h speed limits. During the Reduced-Speed School Zone hours when the 30 km/h speed limit applies, the 85th percentile speed in the school zones is 34 km/h. Outside of the Reduced-Speed School Zone hours when the 50 km/h speed limit applies, the 85th percentile speed is 45 km/h. Based on the results of this traffic study, no new traffic calming measures are required on Chancellor Drive between Markham Road and Chancellor Drive at this time.

During the traffic study, two signage deficiencies were observed. Using current program funds, the existing Playground signs will be relocated for improved driver expectancy, and new "No Stopping Anytime" signs will be installed at the Arthur A. Leach Junior High crosswalk for better driver visibility.

RECOMMENDATIONS

1. That this report be received as information.

REASON FOR THE REPORT

On May 29, 2018, the Standing Policy Committee on Infrastructure Renewal and Public Works concurred in the recommendation of the Riel Community Committee and directed the Winnipeg Public Service to conduct a traffic study when students are in school to determine if Chancellor Drive (north and south) meets speed table criteria, install appropriate traffic calming devices, and report back to the Standing Policy Committee at the November 20, 2018 meeting. At the November 20, 2018 meeting, the Standing Policy Committee provided an extension on the report to the February 5, 2019 meeting.

IMPLICATIONS OF THE RECOMMENDATIONS

There are no budgetary impacts, as the signage changes fall under existing Public Works Department programs.

HISTORY/DISCUSSION

STUDY SITE AND SUMMARY OF RESIDENT CONCERNS:

Chancellor Drive is a two-lane, undivided, residential collector street in Waverley Heights. The study segment is the north/south segment of Chancellor Drive that is bounded by Markham Road to the south, and the east/west segment of Chancellor Drive to the north. The intersections of Chancellor Drive with Chancellor Drive and with Markham Road are both controlled by all-way stop signs. Figure 1 (below, page 3) highlights points of interest along the study segment including the schools, community centre, crosswalks, speed limits, and locations where vehicle counts and speeds were recorded as part of this traffic study.

There are two schools and a community centre located within the study segment. R.H.G. Bonnycastle School is an elementary school located at the northern end of the study segment on the west side of Chancellor Drive; Waverley Community Centre is located at the midpoint of the study segment on the east side of Chancellor Drive; and Arthur A. Leach Junior High is located at the southern end of the study segment on the east side of Chancellor Drive.

The speed limit on Chancellor Drive is 50 km/h. There are two Reduced-Speed School Zones on the study segment: (1) for Arthur A. Leach School from 52 metres south of the south property line of Markham Road to 52 metres south of the south property line of Lake Pointe Road; and (2) for R.H.G. Bonnycastle School from 147 metres south of the south property line of R.H.G. Bonnycastle School to 8 metres north of the north property line of Bonnycastle School. The speed limit is 30 km/h between 07:00 and 17:30, Monday to Friday, September to June, in the Reduced-Speed School Zones. The section of Chancellor Drive in front of the Waverley Community Centre is not within a Reduced-Speed School Zone however, Playground Signs are present in front of the Community Centre to alert drivers of the possible presence of children.

There are sidewalks on both sides of Chancellor Drive. Parking is permitted on the west side of Chancellor Drive, except near R.H.G. Bonnycastle School where loading zones are provided for school busses and student pick-up/drop-off. Marked school crosswalks are located on Chancellor Drive adjacent to R.H.G. Bonnycastle School and Arthur A. Leach Junior High School. At R.H.G. Bonnycastle School, adult crossing guards patrol the school crosswalk on Chancellor Drive and the intersection of Chancellor Drive and Chancellor Drive. Adults are also present during school bus drop-off and pick-up to assist with safely loading and unloading children.

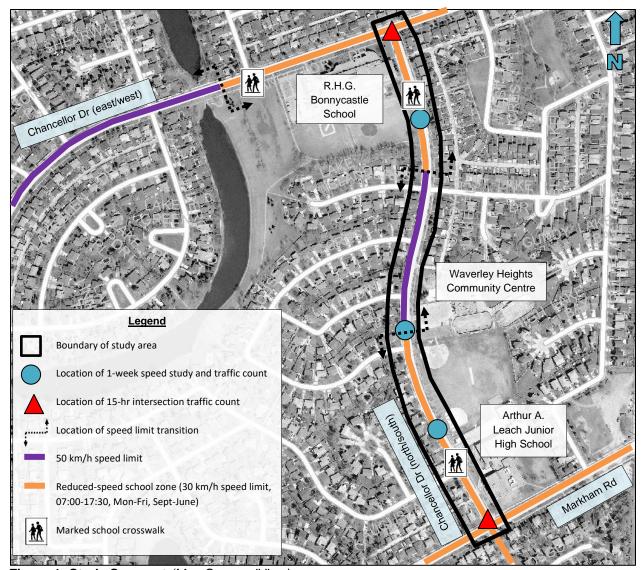


Figure 1: Study Segment (Map Source: iView)

The Riel Community Committee summarized the community's traffic concerns on May 7, 2018:

- Two elementary schools as well as the Waverley Heights Community Centre are located on Chancellor Drive (north/south) between Markham Road and Chancellor Drive (east/west).
- Chancellor Drive (north/south) is a primary connecting route for Waverley Heights to major destinations.
- There are significant volumes of traffic using this route and the residential community, school communities, and community centre believes there is excessive speeding occurring on Chancellor Drive (north/south).

TRAFFIC STUDY:

Traffic data was collected in September 2018 at five locations along the study segment:

- 15-hour intersection turning movement counts were conducted at Chancellor Drive and Chancellor Drive on Tuesday, September 25, 2018, and at Markham Road and Chancellor Drive on Thursday, September 27, 2018. Intersection turning movement counts use video data to capture motor vehicle, pedestrian, and cyclist volumes.
- 1-week speed and volume studies were conducted via pneumatic tubes at three midblock locations during the week of September 25, 2018: (1) near Arthur A. Leach Junior High School in front of 1848 Chancellor Drive; (2) near the Waverley Heights Community Centre in front of 1885 Chancellor Drive; and (3) near R.H.G. Bonnycastle School in front of 1957 Chancellor Drive.

Traffic Volumes:

The average weekday traffic volume for combined northbound and southbound travel directions on Chancellor Drive between Chancellor Drive and Markham Road is 1,509 vehicles per day. Traffic volumes on Chancellor Drive are at the lower end of typical traffic volumes experienced on residential collector streets in the City of Winnipeg, which is up to 5,000 vehicles per day. Average weekday traffic volumes along the study segment by direction of travel are shown in Table 1.

Table 1: Average Weekday Volume by Direction (Data from September 25 - October 3, 2018)

| Location | Average Weekday Traffic Volume Northbound (vehicles/day) | Average Weekday Traffic Volume Southbound (vehicles/day) | Average Weekday Traffic Volume Combined Travel Directions (vehicles/day) |
|--|--|--|--|
| R.H.G. Bonnycastle School (in front of 1957 Chancellor Drive) | 851 | 774 | 1,625 |
| Waverley Heights Community Centre (in front of 1885 Chancellor Drive) | 791 | 683 | 1,474 |
| Arthur A. Leach Junior High School (in front of 1848 Chancellor Drive) | 766 | 662 | 1,428 |
| Average for Chancellor Drive between Chancellor Drive and Markham Road | 803 | 706 | 1,509 |

Figure 2 demonstrates that traffic volumes are relatively even per direction of travel throughout the day; there is not a clear AM peak travel direction or PM peak travel direction. The AM peak hour at Chancellor Drive and Chancellor Drive and at Chancellor Drive and Markham Road is between 8:00 and 9:00, which captures school's start time of 8:45. The PM peak hour occurs

between 16:30 and 17:30 at Chancellor Drive and Chancellor Drive, which is an hour after R.H.G. Bonnycastle School's dismissal time of 15:30. The PM peak hour at Chancellor Drive and Markham Road occurs between 15:30 and 16:30, which coincides with the 15:30 dismissal time at Arthur A. Leach Junior High School.

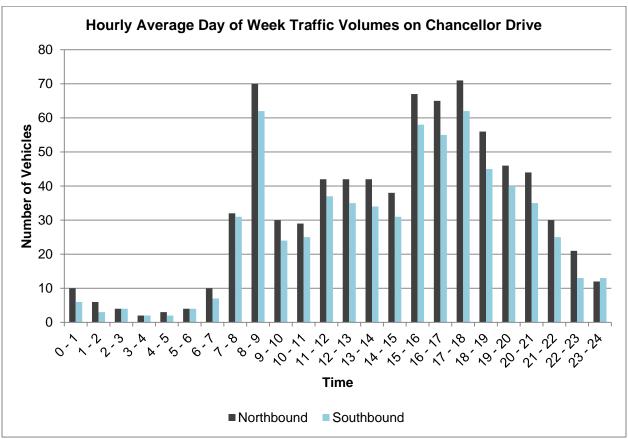


Figure 2: Hourly Average Day of Week Traffic Volumes (in front of 1885 Chancellor Drive, count conducted September 25 - October 3, 2018)

Traffic Speeds:

Traffic speeds were evaluated during 30 km/h Reduced-Speed School Zone hours, and outside of this time period as well. The results of the speed study indicate that there is reasonable compliance with the 50 km/h speed limit and with the 30 km/h speed limit in the Reduced-Speed School Zones.

Traffic speeds outside of the Reduced-Speed School Zone Hours:

A 50 km/h speed limit applies outside of the Reduced-Speed School Zone hours, which occur Monday to Friday between 17:30 and 07:00, and Saturday and Sunday during all hours. The speed study results for outside of the Reduced-Speed School Zone hours are shown in Table 2 and indicate that there is good compliance with the 50 km/h speed limit.

The 85th percentile speed reflects the speed at or below which 85 percent of motorists operate their vehicle. When the speed limit is close to or equal to the 85th percentile speed, the speed

limit is considered credible and respected by drivers. Outside of the Reduced-Speed School Zone hours, 85 percent of drivers on Chancellor Drive travel at or below 45 km/h, which indicates that there is good compliance with the 50 km/h speed limit. The average speed is 38 km/h. About two percent of drivers travel above 55 km/h and less than one percent travel above 60 km/h, which are additional indicators demonstrating good compliance with the 50 km/h speed limit.

Table 2: Speed Study Results Outside of Reduced-Speed School Zone Hours (Monday to Friday 17:30 to 7:00, and all hours of the day on Saturday and Sunday) (Data from September 25 - October 3, 2018)

| | Location | | | | | |
|--|--|---|---|--|--|--|
| Metric | Arthur A. Leach Junior High School (in front of 1848 Chancellor Drive) | Waverley Heights Community Centre (in front of 1885 Chancellor Drive) | R.H.G. Bonnycastle School (in front of 1957 Chancellor Drive) | | | |
| Speed Limit | 50 km/h | 50 km/h | 50 km/h | | | |
| 85 th Percentile Speed | 45 km/h | 45 km/h | 45 km/h | | | |
| Average Speed | 38 km/h | 38 km/h | 38 km/h | | | |
| Percent of Vehicles traveling above 55 km/h | 2.2% | 2.3% | 2.1% | | | |
| Percent of Vehicles traveling above 60 km/h | 0.9% | 0.7% | 0.6% | | | |
| Total Number of Vehicles Studied | 4,425 | 5,723 | 6,066 | | | |

Traffic speeds during the Reduced-Speed School Zone Hours:

A 30 km/h speed limit applies in front of both schools during the Reduced-Speed School Zone hours, which are Monday to Friday between 07:00 and 17:30. The section of Chancellor Drive in front of the Waverley Heights Community Centre is not within a Reduced-Speed School Zone, so the speed limit is 50 km/h in this section. The speed study results for during the Reduced-Speed School Zone hours are shown in Table 3 and indicate that there is good compliance with the 30 km/h speed limit.

During the Reduced-Speed School Zone hours, 85 percent of drivers on Chancellor Drive in front of both schools travel at or below 34 km/h, which indicates that there is good compliance with the 30 km/h speed limit. The average speed in front of the schools is 26 km/h. During the Reduced-Speed School Zone hours, the 85th percentile speed in front of the Waverley Heights Community Centre is 39 km/h, which suggests that the two adjacent school zones results in reduced speeds in front of the Community Centre, even though the speed limit in front of the Community Centre remains 50 km/h.

Table 3: Speed Study Results during Reduced-Speed School Zone Hours (Data from September 25 - October 3, 2018)

| | Location | | | | | | |
|--------------------------------------|--|---|---|--|--|--|--|
| Metric | Arthur A. Leach Junior High School (in front of 1848 Chancellor Drive) | Waverley Heights Community Centre (in front of 1885 Chancellor Drive) | R.H.G. Bonnycastle School (in front of 1957 Chancellor Drive) | | | | |
| Speed Limit | 30 km/h | 50 km/h | 30 km/h | | | | |
| 85 th Percentile Speed | 34 km/h | 39 km/h | 34 km/h | | | | |
| Average Speed | 26 km/h | 32 km/h | 26 km/h | | | | |
| Total Number of Vehicles Studied | 4,226 | 5,621 | 5,093 | | | | |

SIGNAGE:

All required signage for the Reduced-Speed School Zones is properly installed on Chancellor Drive. Two observations were made regarding other signage on Chancellor Drive during a site visit:

- Parking is permitted in the southbound lane approaching the school crosswalk in front of Arthur A. Leach Junior High school. City guidelines and the TAC Pedestrian Crossing Control Guide recommend 15 metre No Stopping Anytime setbacks approaching crosswalks to improve pedestrian visibility. Installing No Stopping Anytime signage on the west side of Chancellor, 15 metres in advance of the school crosswalk is recommended.
- The spacing of Playground signs for the play structure at the Waverley Heights Community Centre could be modified to improve driver expectancy. The Playground sign facing northbound traffic is over 300 metres from the play structure and the Playground sign facing southbound traffic is across the street from the play structure. Figure 3 shows the recommended relocation of the playground signs to improve driver expectancy. The northbound sign will be relocated closer to the play structure and the southbound sign will be relocated in advance of the play structure so that it provides adequate warning to drivers.

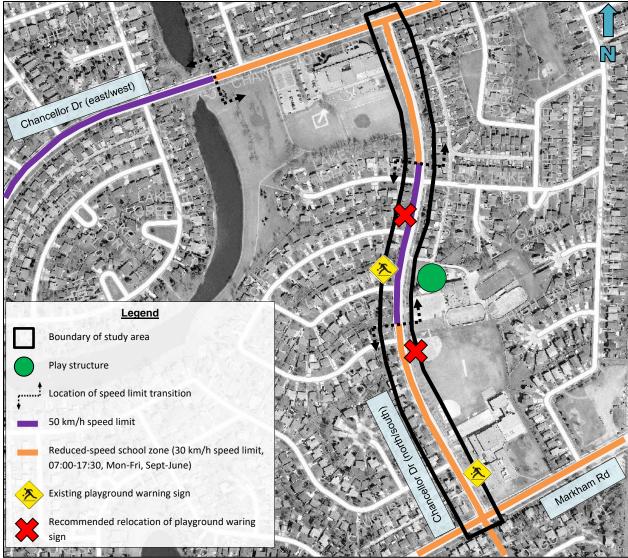


Figure 3: Recommended Relocation of Playground Warning Signs (Map Source: iView)

CONCLUSIONS AND RECOMMENDATIONS:

The traffic study of Chancellor Drive between Markham Road and Chancellor Drive finds that traffic volumes are reasonable for a residential collector street, and that traffic speeds are reasonable for the 50 km/h and 30 km/h speed limits. Based on the results of this traffic study, the following actions will be taken by the Public Service:

- 1. No physical traffic calming measures will be implemented at this time.
- 15 metre No Stopping Anytime signs will be installed on the west side of Chancellor Drive, north of Augusta Drive at the school crosswalk in front of Arthur A. Leach Junior High school.
- 3. The existing Playground signs will be relocated to give improved warning to drivers approaching the play structure at Waverley Heights Community Centre.

FINANCIAL IMPACT

Financial Impact Statement

First Year of Program

Date:

2019

December 13, 2018

Project Name:

Traffic Study – Chancellor Drive (South Winnipeg – St. Norbert Ward)

| | 2 | 019 | 2 | 2020 | 2 | 2021 | 2022 | 2023 |
|------------------------------------|----|-----|----|------|----|------|---------|---------|
| Capital | _ | | _ | | _ | | | |
| Capital Expenditures Required | \$ | - | \$ | - | \$ | - | \$ - | \$ - |
| Less: Existing Budgeted Costs | | - | | - | | - | - | - |
| Additional Capital Budget Required | \$ | - | \$ | - | \$ | - | \$ - | \$ - |
| Funding Sources: | | | | | | | | |
| Debt - Internal | \$ | _ | \$ | _ | \$ | _ | \$ _ | \$ - |
| Debt - External | | - | | - | | - | - | - |
| Grants (Enter Description Here) | | - | | - | | - | - | - |
| Reserves, Equity, Surplus | | - | | - | | - | - | - |
| Other - Enter Description Here | | - | | - | | - | - | - |
| Total Funding | \$ | - | \$ | - | \$ | - | \$ - | \$ - |
| Total Additional Capital Budget | | | | | | | | |
| Required | \$ | - | = | | | | | |
| Total Additional Debt Required | \$ | - | = | | | | | |
| Current Expenditures/Revenues | | | | | | | | |
| Direct Costs | \$ | 880 | \$ | - | \$ | - | \$ - | \$ - |
| Less: Incremental Revenue/Recovery | | - | | - | | _ | _ | - |
| Net Cost/(Benefit) | \$ | 880 | \$ | - | \$ | - | \$ _ | \$ - |
| Less: Existing Budget Amounts | | 880 | | | | | _ | |
| Net Budget Adjustment Required | \$ | - | \$ | - | \$ | - | \$ - | \$ _ |

Additional Comments: Direct costs represent the estimated cost to install new signage and relocate existing signage. There will be sufficient funds in the 2019 Operating budget for this expense.

"Original signed by J. Ruby, CPA, CA"

J. Ruby CPA, CA

Manager of Finance and Administration

CONSULTATION

This Report has been prepared in consultation with: N/A

OURWINNIPEG POLICY ALIGNMENT

The Sustainable Transportation Direction Strategy developed as part of OurWinnipeg forms the policy framework for the Transportation Master Plan (TMP). Sustainable Transportation identified a vision and five Key Strategic Goals which are critical to achieving a balanced and sustainable transportation system for Winnipeg. These goals form the basis for the TMP and the directions and strategies contained within it:

- 1. A transportation system that is dynamically integrated with land use;
- 2. A transportation system that supports active, accessible and healthy lifestyle options;
- 3. A safe, efficient and equitable transportation system for people, goods and services;
- 4. Transportation infrastructure that is well maintained; and
- 5. A transportation system that is financially sustainable

The recommendations within this report are consistent with the Key Strategic Goals.

SUBMITTED BY

Department: Public Works **Division:** Transportation

Prepared by: R. Peterniak, M.Sc., P.Eng, Community Traffic Engineer

Date: December 19, 2018