$\label{lem:minutes} \textbf{Minutes} - \textbf{Standing Policy Committee on Infrastructure Renewal and Public Works} - \\ \textbf{March 3, 2020}$ 

#### **REPORTS**

Item No. 15 Traffic Study – Laxdal Road from Grant Avenue to Ridgewood Avenue (Charleswood-Tuxedo-Westwood 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 – March 3, 2020

#### **DECISION MAKING HISTORY:**

Moved by Councillor Santos,

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

Carried

#### STANDING COMMITTEE RECOMMENDATION:

On November 19, 2019, the Standing Policy Committee on Infrastructure Renewal and Public Works granted a further extension of time to its March 3, 2020 meeting for the Winnipeg Public Service to report back on the matter.

On September 12, 2019, the Standing Policy Committee on Infrastructure Renewal and Public Works granted an extension of time to its November 19, 2019 meeting for the Winnipeg Public Service to report back on the matter.

On February 5, 2019, the Standing Policy Committee on Infrastructure Renewal and Public Works concurred in the recommendation of the Assiniboia Community Committee and directed the Winnipeg Public Service to report back to the Standing Policy Committee on Infrastructure Renewal and Public Works within 180 days.

#### COMMUNITY COMMITTEE RECOMMENDATION:

On January 8, 2019, the Assiniboia Community Committee passed the following motion:

BE IT RESOLVED that the Standing Policy Committee on Infrastructure Renewal and Public Works be requested to direct the Winnipeg Public Service to conduct a traffic study to determine if traffic calming measures on Laxdal Road from Grant Avenue to Ridgewood Avenue are warranted.

#### ADMINISTRATIVE REPORT

Title: Traffic Study – Laxdal Road from Grant Avenue to Ridgewood Avenue

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

#### **AUTHORIZATION**

Author	Department Head	CFO	CAO
D. Patman, P.Eng.	J. Berezowsky	N/A	M. Ruta, Interim CAO

#### **EXECUTIVE SUMMARY**

Speed tables are currently in place as a traffic calming feature on Laxdal Road between Grant Avenue and Eldridge Avenue. This report summarizes the performance of the speed tables between Grant Avenue and Eldridge Avenue and reviews the need to consider traffic calming on Laxdal Road between Eldridge Avenue and Ridgewood Avenue where there are currently no traffic calming treatments in place. The report findings indicate that the speed tables on Laxdal Road had a noticeable impact on traffic speed and a marginal impact on traffic volume in the segment where they were placed between Grant Avenue and Eldridge Avenue. On Laxdal Road between Eldridge Avenue and Ridgewood Avenue, the report found that a warrant for traffic calming is not currently met and that the street is substandard relative to characteristics that a typical collector street with transit operation in the City of Winnipeg would have.

Although a warrant for traffic calming treatment was not met for Laxdal Road south of Eldridge Avenue, the report explored what Transportation Association of Canada (TAC) measures would be feasible and effective in addressing the user conflicts and livability issues on Laxdal Road that prompted the traffic study. This exploration found that speed tables, though not currently warranted, appear to be the only viable traffic calming treatment available and that the feasibility of other traffic calming options are primarily restricted by the need to maintain two-way transit operation on this segment of Laxdal Road. As a result, the report identified that any future change to the status of transit operation on Laxdal Road from the Transit Master Plan or other operational reviews may generate opportunities to consider traffic calming options for the street beyond speed tables.

#### **RECOMMENDATIONS**

1. That this report be received as information.

#### **REASON FOR THE REPORT**

On February 5, 2019, the Standing Policy Committee on Infrastructure Renewal and Public Works (SPC IRPW) concurred in the recommendation of the Assiniboia Community Committee and directed the Winnipeg Public Service to conduct a traffic study to determine if traffic calming measures on Laxdal Road from Grant Avenue to Ridgewood Avenue are warranted and report back within 180 days. Extensions of time were subsequently provided by the SPC IRPW.

#### **IMPLICATIONS OF THE RECOMMENDATIONS**

There are no implications to receiving this report as information.

#### HISTORY/DISCUSSION

#### **BACKGROUND INFORMATION**

On January 8, 2019, the Assiniboia Community Committee requested that the Standing Policy Committee on Infrastructure Renewal and Public Works be requested to direct the Winnipeg Public Service to conduct a traffic study to determine if traffic calming measures on Laxdal Road from Grant Avenue to Ridgewood Avenue are warranted. Subsequent discussion with the area Councillor confirmed that the area of focus for the traffic calming measures is the segment of Laxdal Road between Eldridge Avenue and Ridgewood Avenue as the segment of Laxdal Road to the north of Eldridge Avenue already features speed tables. Reasons stated by the area Councillor for the request included:

- Speed of vehicles on this segment of Laxdal Road.
- Volume of vehicles on this segment of Laxdal Road.
- The lack of pedestrian facilities on this segment of Laxdal Road and the potential for conflict between vehicles and pedestrians.

#### **CURRENT TRAFFIC CONDITIONS**

Laxdal Road between Grant Avenue and Ridgewood Avenue is a two-lane, undivided, collector street and Snow Route in the Elmhurst neighbourhood with a speed limit of 50 km/h. There is a very short (25 metre) segment of Laxdal Road on the south side of Grant Avenue that has a 30 km/h school zone speed limit in effect between the hours of 07:00 and 17:30 from Monday to Friday during the period between September and June. Parking is permitted on the west side of Laxdal Road and the utilization of on-street parking appears to be low. Winnipeg Transit (Route 98 – Grace Hospital Westdale Unicity) operates in both directions on the segment of Laxdal Road between Eldridge Avenue and Ridgewood Avenue. The roadway characteristic varies along Laxdal Road as follows from north to south:

- Between Grant Avenue and Epsom Place, Laxdal Road has an urban cross-section with curbs and a standard sidewalk on the west side. There is an east-side sidewalk on Laxdal Road from a point approximately 80 metres south of Grant Avenue to Grant Avenue.
- Between Epson Place and Eldridge Avenue, Laxdal Road has a rural cross-section (i.e. no curbs and ditch drainage) and a narrow west side sidewalk.
- Between Eldridge Avenue and Ridgewood Avenue, Laxdal Road has a rural crosssection and no sidewalks.
- There is all-way stop control at the intersection of Laxdal Road with Ridgewood Avenue,
   Beiko Avenue, and Eldridge Avenue.

In the fall of 2013, four speed tables were installed on Laxdal Road from Grant Avenue to Eldridge Avenue. These speed tables feature an advisory speed of 30 km/h. The average weekday traffic volume on Laxdal Road in the study area in 2015 was approximately 2,200 vehicles per day.

Excepting the first 150 metres south of Grant Avenue, which is commercial and medium density residential in nature, land use on Laxdal Road within the study area is single-family residential. Properties on the west side of Laxdal Road are primarily flanking north of Eldridge Avenue and

fronting with driveways south of Eldridge Avenue. On the east side of Laxdal Road, properties are predominantly fronting with driveways. Figure 1 illustrates the Laxdal Road study area.



Figure 1: Study Area

There are no north-south Regional streets connecting Grant Avenue and Wilkes Avenue between Shaftesbury Boulevard and the Perimeter Highway (PTH 100), a distance of over six kilometres. As a result, north-south through traffic utilizes non-Regional streets such as Elmhurst Road and Harstone Road to connect between Grant Avenue and Wilkes Avenue (and vice-versa). Laxdal Road is a minor collector street that also accommodates some of these north-south movements. Similar to Haney Street and Oakdale Drive, Laxdal Street provides a connection between Grant Avenue and Ridgewood Drive that can form part of a connection to Wilkes Avenue for through traffic via Ridgewood Avenue and Elmhurst Road or Fairmont Road.

#### **TRAFFIC STUDY**

Speed data and traffic volumes were collected using pneumatic tubes on Laxdal Road, Haney Street, and Elmhurst Road before the installation of speed tables on Laxdal Road in 2013 and again in 2015 well after the installation of speed tables on Laxdal Road. The speed study results for Laxdal Road are shown in Table 1 and Table 2 below.

Table 1: Speed Study Results for Laxdal Road – Grant to Eldridge (south of Epsom Place)

Metric	Year	
Metric	2013	2015
Speed Limit	50 km/h	50 km/h
85 <sup>th</sup> Percentile Speed	56 km/h	44 km/h
Average Speed	48 km/h	37 km/h
Percent of Vehicles traveling 55 km/h or higher	26.0%	2.8%
Percent of Vehicles traveling 60 km/h or higher	9.0%	1.5%
24 Hour Volume	4,097	3,797

Table 2: Speed Study Results for Laxdal Road – Eldridge to Ridgewood (south of Eldridge Avenue)

Madeia	Year	
Metric	2013	2015
Speed Limit	50 km/h	50 km/h
85 <sup>th</sup> Percentile Speed	52 km/h	52 km/h
Average Speed	43 km/h	43 km/h
Percent of Vehicles traveling 55 km/h or higher	20.2%	13.4%
Percent of Vehicles traveling 60 km/h or higher	4.5%	3.7%
24 Hour Volume	2,474	2,244

The Table 1 results indicate that the speed tables introduced on Laxdal Road had a noticeable impact on traffic speed in the segment where they were placed between Grant Avenue and Eldridge Avenue (see values highlighted in **bold italic**). The impact on volume in that segment was more marginal (approximately a 7% decrease). Table 2 indicates that the installation of speed tables on Laxdal Road north of Eldridge Avenue had little effect south of Eldridge Avenue from either a speed or volume perspective.

Results from the speed studies indicate that 2015 speed values for Laxdal Road between Grant Avenue and Ridgewood Avenue are below typical speed criteria currently used by the City in warrant considerations for speed humps. Speed criteria for speed hump treatment consideration are: an average speed exceeding 50 km/h, 15% of vehicles exceeding 55 km/h and 10% of vehicles exceeding 60 km/h. As such, based on the current speed limit of 50 km/h, existing vehicle speeds on Laxdal Road do not appear to require further moderation through traffic calming. It does appear from the percentage of vehicles travelling 55 km/h or higher, that the speed tables on the north segment of Laxdal Road may have had a positive benefit on this percentage as it decreased from 20.2% to 13.4% (Table 1).

Should the speed limit change in the future, these results would need to be reconsidered in that context.

Average weekday volumes on Laxdal Road south of Eldridge Avenue are in the order of 2,200 vehicles per day. This volume is below the intended volume limit for the collector roadway classification in the City of Winnipeg (typically 5,000 vehicles per day for a minor collector such as Laxdal Road). However, it is noted that, despite being a transit route, this segment of Laxdal Road does not have all of the features of a typical City of Winnipeg collector street as the road is two metres narrower than a typical collector, has a rural cross-section as opposed to a curbed urban cross-section, has private approaches from single-family homes, and does not have sidewalks.

#### TRAFFIC CALMING CONSIDERATIONS

As noted previously, traffic calming is already in place on Laxdal Road between Grant Avenue and Eldridge Avenue in the form of four speed tables. South of Eldridge Avenue, available traffic data indicates that traffic volumes and traffic speeds on Laxdal Road are below typical traffic calming consideration levels. It was also noted that this segment of Laxdal Road is substandard relative to its collector street designation.

Despite not currently meeting a warrant for traffic calming, available traffic calming options were explored to identify what types of treatments might be feasible and effective on Laxdal Road. The Transportation Association of Canada (TAC) Canadian Guide to Traffic Calming Second Edition summarizes benefits of traffic calming into four categories:

- Speed reduction
- Volume reduction
- Conflict reduction between street users
- Environment and neighbourhood liveability

Considering that speed and volume criteria are not met on Laxdal Road between Eldridge Avenue and Ridgewood Avenue, and that Laxdal Road is a substandard collector from a design perspective, the focus for traffic calming was on treatments with benefit to reducing conflict (particularly between vehicles and pedestrians) and improving liveability.

As an aside, though not specifically a traffic calming feature, the addition of sidewalks to this segment of Laxdal Road would provide benefits in terms of reducing potential conflicts with pedestrians and improving transit accessibility and safety. The challenges with sidewalk implementation include the rural cross-section on Laxdal Road coupled with limited right-of-way, drainage implications, and anticipated resistance from some fronting property owners.

According to the *Canadian Guide to Traffic Calming Second Edition* the most effective measures for conflict reduction and liveability potentially applicable to a rural cross-section include:

- Speed tables Similar to the segment to the north, two or three speed tables could be
  installed on this south segment of Laxdal Road (approximately one every 200 metres).
  Anticipated challenges would include placing speed tables without affecting private
  approaches and the thin pavement structure on this segment of Laxdal Road.
- One-lane chicanes A chicane is a series of curb extensions on alternating sides of a roadway, which require drivers to steer from one side of the roadway to the other to travel through the chicane. In the case of a one-lane chicane, the road is narrowed through the curb extension to the extent that when vehicles travelling in opposite directions meet at the chicane, one vehicle must yield. The presence of numerous approaches, two-way transit operation, on-street parking, and the rural cross-section mean that chicanes are likely not an applicable treatment for this segment of Laxdal Road.

- Traffic circles/Mini roundabouts All significant intersections on this segment of Laxdal Road are already all-way stop controlled. Geometric challenges and transit challenges would be significant and as a result, this is not seen as an applicable treatment.
- Directional closure A directional closure is not compatible with transit operation and may shift traffic from Laxdal Road to local streets.
- Installing an intersection diverter requiring all vehicle traffic to turn at an intersection –
  This treatment could aggravate conditions by diverting traffic onto Laxdal Road from
  Ridgewood Avenue and Eldridge Avenue due to the need to be compatible with transit
  operations.
- Full closure of a street at an intersection or mid-block Full closure would have significant potential implications to residents and is not compatible with continued transit operation.
- Right-in/right-out islands at intersections This would not be compatible with continued transit operation.
- Introducing raised medians through intersections to prevent certain turns This would not be compatible with continued transit operation.

Based on the above, the application of speed tables appears to be the most viable traffic calming treatment available for Laxdal Road south of Eldridge Avenue; however, as noted previously, speed tables are not currently warranted on this segment as per City of Winnipeg guidelines. Other traffic calming options are not currently feasible, largely due to the need to maintain a two-way transit operation on Laxdal Road. Any future change to the status of transit operation on Laxdal Road from the Transit Master Plan or other operational transit reviews may generate opportunities to consider traffic calming options for the street beyond speed tables.

#### **FINANCIAL IMPACT**

Financial Impact Statement Date: January 27, 2020

### **Project Name:**

# Traffic Study – Laxdal Road from Grant Avenue to Ridgewood Avenue

#### **COMMENTS:**

There is no financial impact associated with the recommendation of this report.

"Original signed by J. Peters, CPA, CGA"

J. Peters CPA, CGA

Acting Manager of Finance & Administration

#### **CONSULTATION**

This Report has been prepared in consultation with:

Ward Councillor

#### **OURWINNIPEG POLICY ALIGNMENT**

The recommendation of this report is aligned with the key strategic goal of a safe, efficient and equitable transportation system for people, goods and services in the Sustainable Transportation Direction Strategy that supports OurWinnipeg.

#### WINNIPEG CLIMATE ACTION PLAN ALIGNMENT

N/A

#### **SUBMITTED BY**

**Department:** Public Works Transportation

Prepared by: C. Flather, P.Eng., M.Sc., Traffic Management Engineer

**Date:** January 27, 2020

File No.: A-08