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**TO:** CHAIR AND MEMBERS  
TRAFFIC SAFETY COMMITTEE

**DATE:** 2019 May 27

**FROM:** DIRECTOR ENGINEERING

**FILE:** 38000-20  
*Ref: Traffic Safety*

**SUBJECT:** TRAFFIC CONCERNS ALONG VICTORY STREET

**PURPOSE:** To respond to request for traffic calming along Victory Street.

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**RECOMMENDATIONS:**

1. **THAT** Committee recommend to Council the installation of traffic circles at the intersection of Victory and Frederick, and at Victory and Waverley as detailed in this report to improve traffic safety along Victory Street.
2. **THAT** a copy of this report be sent to Ms. Alkins-Jang, Ms. Willows and other residents who have expressed concerns about traffic along Victory Street.

**REPORT****POLICY SECTION**

Traffic Safety is aligned with the City of Burnaby's Corporate Strategic Plan by supporting the following goal and sub-goal of the Plan.

**Goal**

- A Safe Community
  - Transportation safety –  
Make City streets, pathways, trails and sidewalks safer

**BACKGROUND**

In 2018 staff received correspondence from residents along Victory Street regarding the increasing volume and speed of traffic along their street. On 2018 September 18, the Public Safety Committee received correspondence from Ms. Katy Alkins-Jang expressing concerns about increasing volume and speed of traffic along Victory Street between Royal Oak and Nelson Ave. On 2018 November 06, the Public Safety Committee received correspondence from Ms. Susan Willows about safe cycling routes in Burnaby and requesting speed bumps along Victory Street and restricted access to Victory Street from north-south streets. Both concerns were referred to staff for review.

At that time, temporary construction activity along Rumble Street and along Royal Oak may have impacted normal traffic patterns and staff committed to collect and analyze traffic data once construction activity was completed to assess traffic conditions.

Victory Street between Patterson and Royal Oak is classified as a Local Collector with the intention of routing traffic from local streets to busier major collector or arterial streets. These busier streets include Patterson, Nelson, and Royal Oak. Victory Street also intersects with Sussex Ave which is also classified as a Local Collector. All intersections are controlled by stop signs except at McKay Ave where a traffic circle has been installed. See Figures 1, 2 and 3. Some sections of Victory have been finished to a final standard with a pavement width of 8.5m with curb and gutter on either side. Other sections have an interim asphalt pavement width of about 6.0m and gravel shoulders.

In 2005, Council approved the implementation of the Victory Bikeway to increase the cycling network in Burnaby. Approved changes included: a traffic circle at Victory and McKay, pavement markings along the route to remind motorists to share the road, median refuges at Sussex, Nelson and Royal Oak to facilitate cyclists crossing at those streets, and guide signs to mark the route. Traffic circles were also recommended at Frederick and at Waverley but were not approved because of uncertainties regarding their safety, and 4-way stop signs were installed at those intersections instead.

## **TRAFFIC VOLUMES**

Traffic data was collected at several locations along Victory earlier this year to assess the current traffic conditions. Traffic counts completed at Sussex, Frederick, Waverley, Nelson, and Royal Oak found that in the peak hour, two-way traffic volumes range from about 100 to 200 vehicles per hour with volumes generally increasing from the west to east along the street. This is not unexpected because Victory connects to more significant north-south streets (Nelson and Royal Oak) and leads to Burnaby South Secondary School at its eastern end. Traffic volumes at the Victory and Royal Oak intersection peak at 8:00 am and 3:00 pm showing the influence of the proximity to Burnaby South Secondary School. The counts also indicated significant pedestrian volumes at the intersection and additional counts will be completed later this year to determine if the existing marked pedestrian crosswalk should be upgraded to enhance safety.

For a street classified as a Local Collector, traffic volumes in the range of 100 to 500 vehicles in the peak hour can be expected; therefore, Victory has traffic volumes in the lower range for its classification. Part of this is due to the fact that two nearby east-west streets (Imperial to the north and Rumble to the south) provide greater connectivity for travellers moving across Burnaby. Victory, on the other hand, terminates at Patterson and at Antrim making it less desirable for shortcutting commuter traffic. Additionally, there are no traffic signals at major cross streets to facilitate east-west traffic flow.

Current traffic counts on Victory west of Royal Oak were compared to counts completed in 2014. The counts show that daily traffic volumes have decreased by about 10% and have not worsened over the last 5 years. Minimizing potential future increases will be dependent on maintaining the efficiency of the surrounding network of arterial and major collector streets such as Imperial, Rumble, Royal Oak, and Nelson.

## **TRAFFIC SPEEDS**

Some residents had suggested the installation of speed humps along the street to help slow down traffic. As speed humps are only allowed on local streets, this will not be an appropriate traffic calming measure. Traffic speeds along Victory were monitored at two locations: Victory west of Gray, and Victory between Marlborough and Royal Oak. At both locations the 85<sup>th</sup> percentile speed of traffic did not exceed 51 km/h. This indicates that 85% of all vehicles travelled at or below 51 km/h and is considered normal. This finding has been corroborated with Speed Watch data that residents shared with staff. Data collected in December 2018 showed that only 6% of all tracked vehicles between Nelson and Royal Oak between the hours of 8:00 am and 9:00 am exceeded 50 km/h. Therefore speed mitigation measures along Victory appear to be unnecessary at this time.

## **TRAFFIC SAFETY**

Available crash data from ICBC for the last five years (2013-2017) was reviewed and no unusual crash pattern was found. There were 65 intersection crashes along Victory between Patterson and Antrim within the last five years, with none involving pedestrians and one involving cyclists. The majority of the intersection crashes occurred at the two busiest intersections at Nelson (average of 5 crashes per year) and at Royal Oak (average of 4 crashes per year). The remaining 13 intersections had an average of less than one crash per year. The crash rate relative to other similar intersections throughout the City was found to be comparable.

Field observations were also made at several intersections to assess traffic operations in general. It was found that some motorists and most cyclists were not coming to a complete stop at stop signs. This occurred at the 4-way stop controlled intersection at Victory/Frederick and at Victory/Waverley. This observation has been shared with the RCMP and they have been requested to monitor and enforce as appropriate. To help mitigate this problem, it is recommended that traffic circles be installed at both intersections to keep vehicle and bicycle speeds down, while allowing them to proceed without stopping.

Traffic circles have been found to be a safe alternative to 4-way stop controls especially along bike routes. The existing one at Victory and McKay has operated successfully for the past 13 years. There have been no reported crashes at Victory and McKay within the last 5 years.

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From: Director Engineering  
Re: Traffic Concerns along Victory Street  
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Other observations include some landscaping encroachments on City boulevards at intersections. These encroachments may impair the visibility for road users and homeowners will be requested to remove or trim their landscaping to enhance safety.

## CONCLUSIONS

In response to concerns about increasing traffic volumes and speeds along Victory Street, traffic data was collected and an assessment was completed. The findings showed that the volume of traffic along Victory Street was consistent with its classification as a Local Collector. Traffic speeds were also found to be within expectations with the majority of vehicles travelling at or below 51 km/h. Field observations indicated some problems with the observance of the 4-way stop controls at the intersection of Victory/Frederick and at Victory/Waverley. Traffic circles at both intersections are recommended to replace the existing 4-way stop sign to enhance safety and improve the route for cyclists. These changes will be included in the 2020 Engineering Capital Plan for design and implementation at an estimated cost of about \$55,000 per traffic circle. In the meantime, the RCMP will be requested to monitor and enforce the stop regulations as appropriate. Measures will also be taken to remove landscaping encroachments on City boulevards that impact traffic safety.



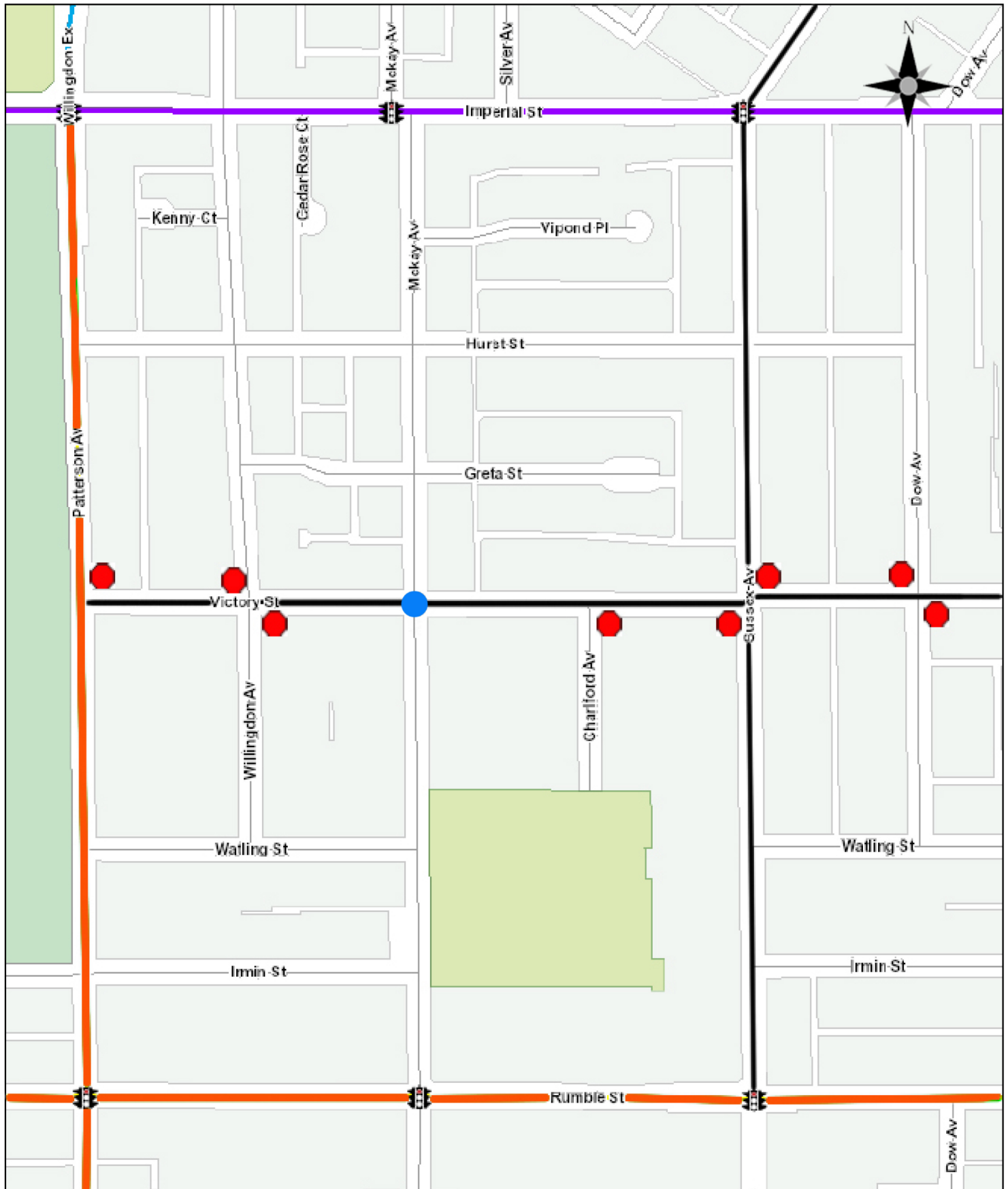
Leon A. Gous, P. Eng., MBA  
DIRECTOR ENGINEERING

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








Attachments

Copied to: City Manager  
Director Planning and Building  
Director Public Safety & Community Services  
RCMP - OIC Burnaby Detachment Chief Supt. Deanne Burleigh

# Figure 1 - Victory Street (Patterson - Dow)



## Street Classification

- |  |   |   |
|--|---|---|
|  Major Collector Primary  |  Local Residential |  Existing Stop Sign      |
|  Arterial Primary          |  Bus Loop          |  Existing Traffic Circle |
|  Arterial Secondary        |  Private           |   |
|  Major Collector Greenway |   |   |
|  Local Collector          |  Traffic Signals   |   |

# Figure 2 - Victory Street (Dow - Nelson)

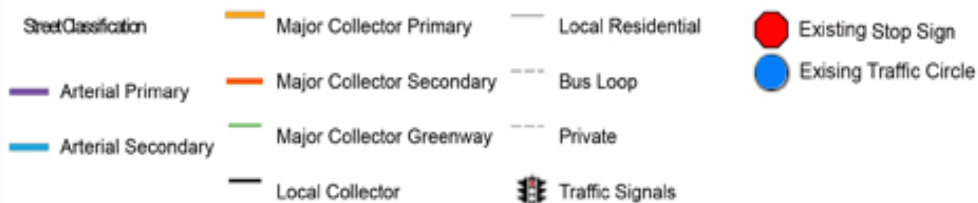
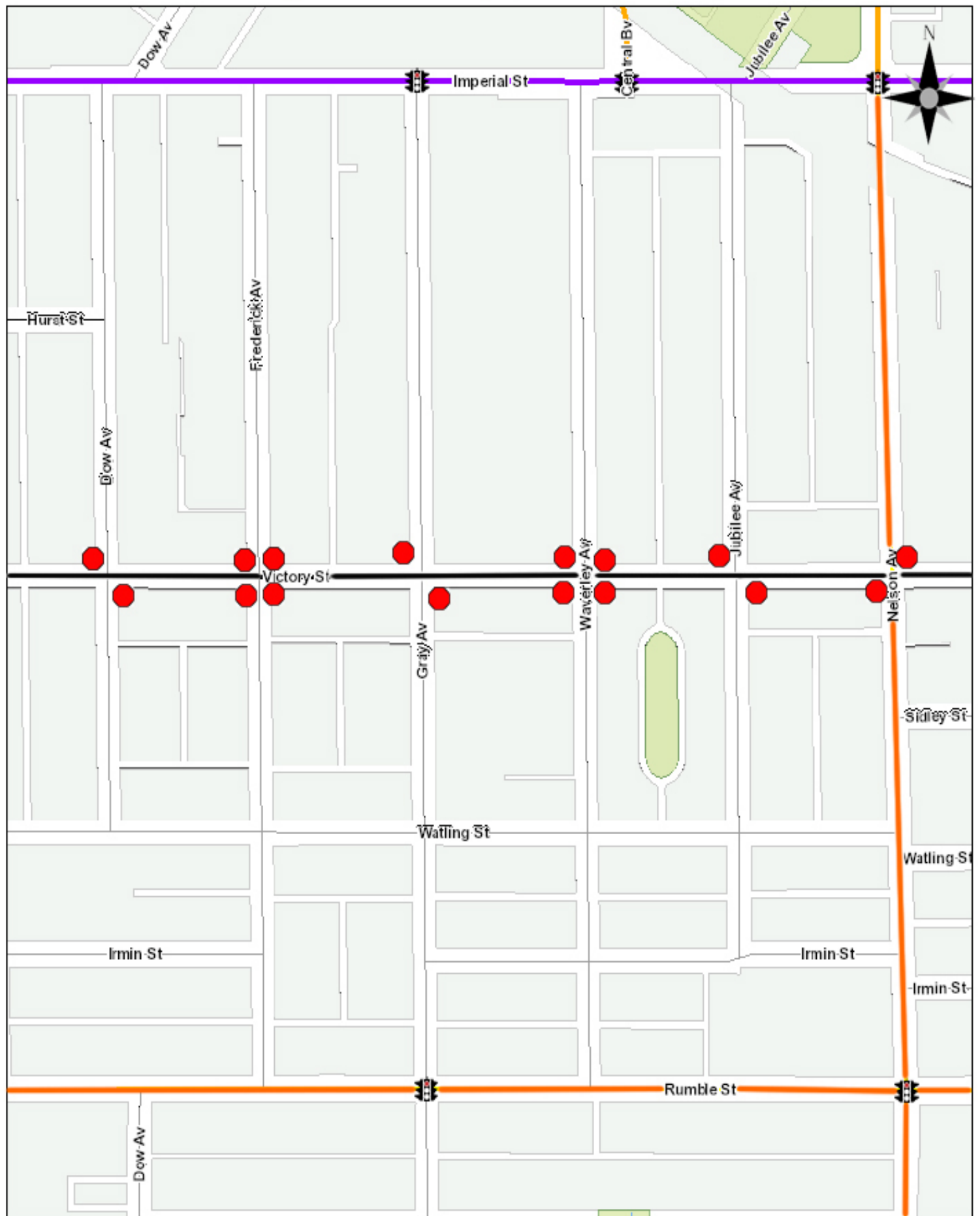


Figure 3 - Victory Street (Nelson - Antrim)



Street Classification

Arterial Primary

Arterial Secondary

Major Collector Primary

Major Collector Secondary

Major Collector Greenway

Local Collector

Local Residential

Bus Loop

Private

Traffic Signals

Existing Stop Sign

Existing Traffic Circle