Agenda – Council – July 18, 2024

Report – Standing Policy Committee on Public Works – July 3, 2024

Item No. 4 Speed Limit Increase on Reenders Drive (Transcona Ward)

STANDING COMMITTEE RECOMMENDATION:

On July 9, 2024, the Executive Policy Committee concurred in the recommendation of the Standing Policy Committee on Public Works and submitted the following to Council:

1. That the speed limit on Reenders Drive between approximately 170 metres east of the eastern boundary of Lagimodiere Boulevard to Peguis Street be increased from 50 km/h to 60 km/h.

2. That the Speed Limit By-Law No. 63/2019 be amended in accordance with Recommendation 1 of this report, as per the attached draft amending By-law (Appendix A).

3. That the Proper Officers of the City be authorized to do all things necessary to implement the intent of the foregoing.

Report – Standing Policy Committee on Public Works – July 3, 2024

DECISION MAKING HISTORY:

EXECUTIVE POLICY COMMITTEE RECOMMENDATION:

On July 9, 2024, the Executive Policy Committee concurred in the recommendation of the Standing Policy Committee on Public Works and submitted the matter to Council.

STANDING COMMITTEE RECOMMENDATION:

On July 3, 2024, the Standing Policy Committee on Public Works concurred in the recommendation of the Winnipeg Public Service and submitted the matter to the Executive Policy Committee and Council.

COUNCIL DECISION:

On April 25, 2024, Council concurred in the recommendation of the Standing Policy Committee on Public Works and adopted the following:

1. That the following recommendations be referred back to the Winnipeg Public Service to consider the speed limit change from 50 km/h to 60 km/h from Lagimodiere Boulevard to Peguis Street, and report back to the Standing Policy Committee on Public Works in 90 days:

    A. That the speed limit on Reenders Drive between approximately 170 metres east of the eastern boundary of Lagimodiere Boulevard to Peguis Street be increased from 50 km/h to 60 km/h.

    B. That the Speed Limit By-Law No. 63/2019 be amended in accordance with Recommendation 1 of this report, as per the attached draft amending By-law (Appendix A).

2. That the existing ground-mounted crosswalk on Transcona Boulevard approximately 620 metres east of Chelston Gate/Veterans Way be upgraded to a Rectangular Rapid Flashing Beacon (RRFB) crossing.

3. That the Public Service report back to the Standing Policy Committee on Public Works with a recommendation regarding the speed limit on Transcona Boulevard after Recommendation 2 of this report has been completed.

Report – Standing Policy Committee on Public Works – July 3, 2024

DECISION MAKING HISTORY (continued):

COUNCIL DECISION (continued):

4. That the Proper Officers of the City be authorized to do all things necessary to implement the intent of the foregoing.

ADMINISTRATIVE REPORT

Title: Speed Limit Increase on Reenders Drive (Transcona Ward)

Critical Path: Standing Policy Committee on Public Works – Executive Policy Committee – Council

AUTHORIZATION

Author	Department Head	CFO	CAO
D. Patman, P. Eng.	J. Berezowsky	T. Graham	M. Geer, Acting CAO

EXECUTIVE SUMMARY

The Public Service recently reviewed speed limits on Reenders Drive between Lagimodiere Drive and Peguis Street. This aligns with the Public Works Department Transportation Division's Technical Guideline A-2b Speed Limit Reviews.

The speed limit review process considers:

- Current operating speeds;
- Various aspects of the street's geometry, operations, and land use; and,
- Collision history.

As a result, changes are recommended to portions of Reenders Drive.

Consideration was given to changing the recommendation to move the end of the westbound speed limit on Reenders Drive all the way to Lagimodiere Boulevard, but when all things are considered, the location recommended in the report is the best location.

This report outlines all recommended changes.

RECOMMENDATIONS

1. That the speed limit on Reenders Drive between approximately 170 metres east of the eastern boundary of Lagimodiere Boulevard to Peguis Street be increased from 50 km/h to 60 km/h.

2. That the Speed Limit By-Law No. 63/2019 be amended in accordance with Recommendation 1 of this report, as per the attached draft amending By-law (Appendix A).

3. That the Proper Officers of the City be authorized to do all things necessary to implement the intent of the foregoing.

REASON FOR THE REPORT

On June 8, 2023, the Standing Policy Committee on Public Works (Committee) directed the Winnipeg Public Service to report back in 150 days on increasing the speed limit along Reenders Drive from Panet Road to Peguis Street, from 50 km/hour to 60 km/hour.

On November 21, 2023, the Committee granted a 90-day extension at the request of the Public Service, to enable an expanded scope of the study that would review the speed limit on Transcona Boulevard and Peguis Street.

On April 9, 2024, the Committee recommended to Council that recommendation #1 and #2 be referred back to the public service to reconsider where the speed limit change would end for westbound traffic on Reenders Drive. At the same meeting the Committee concurred with recommendations #3, #4 and #5.

On April 25, 2024, Council concurred with the recommendation of the Committee and referred recommendation #1 and #2 back to the public service.

Council approval is required to amend the by-law.

IMPLICATIONS OF THE RECOMMENDATIONS

Adoption of the recommendation for the speed limit change on Reenders Drive will require a corresponding amendment to the Speed Limit By-law 63/2019 as per Appendix A. Appropriate speed limit signage will need to be changed. The estimated total cost to change the speed limit signage to 60 km/h on the applicable section of Reenders Drive is $1,100 and will be charged to the 2024 operating budget.

HISTORY/DISCUSSION

BACKGROUND

In a previous report speed limit reviews were conducted on the following streets which are shown in red in Figure 1:

- Reenders Drive between Lagimodiere Boulevard and Peguis Street;
- Peguis Street between Regent Avenue West and Concordia Avenue;
- Transcona Boulevard between Peguis Street and Plessis Road.

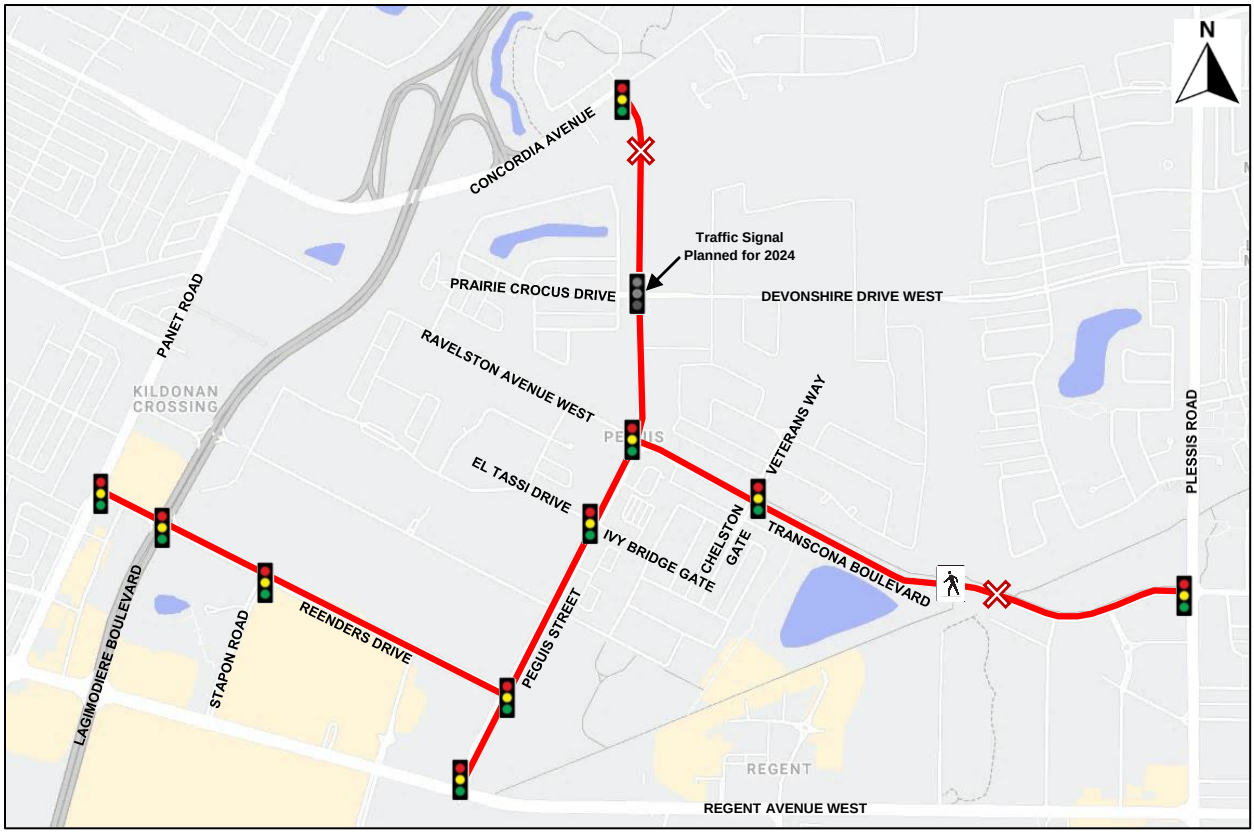


Figure 1: Study Area

. The previous report recommended that:

- Portions of Transcona Boulevard have the speed limit changed to 60 km/h only after the pedestrian crossing west of the rail line could be upgraded to a Rectangular Rapid Flashing Beacon (RRFB).
- The speed limit on Peguis Street remain at 50 km/h.
- The speed limit on Reenders Drive be increased to 60 km/h between approximately 170 metres east of the eastern boundary of Lagimodiere Boulevard and Peguis Street.

The committee concurred with the recommendation for Transcona Boulevard and Peguis Street, but requested that the beginning and end of the speed limit on the west side of Reenders Drive be reconsidered.

This report presents an assessment of the speed limit on Reenders Drive and includes additional discussion about the beginning an end of the speed limit change.

SPEED LIMIT REVIEW PROCESS

In recommending appropriate speed limits, the Public Service follows the guidance from *Technical Guideline A-2b Speed Limit Reviews* which adopts the *Manitoba Infrastructure Guide for Setting Posted Speed Limits on Manitoba Roadways* (2019)

engineering speed limit study as the framework, with minor modifications, to evaluate and recommend posted speed limits.

An engineering speed limit study can help identify, review, and propose solutions for roadways where the traffic authority has concerns with the current speeds. The engineering speed limit study provides a speed limit recommendation based on the operating speed, target speed, and collision history. A summary of the City's speed limit review process is in Appendix B.

REENDERS DRIVE BETWEEN PANET ROAD AND PEGUIS STREET

Reenders Drive spans approximately 1.3 kilometres from Panet Road to Peguis Street. It is a four-lane divided, non-Regional collector street with an urban cross section. The average weekday daily traffic volume on Reenders Drive, east of Stapon Road, is 27,900 vehicles per day. Reenders Drive is a transit route between Panet Road and Stapon Road.

There is a sidewalk on the south side of Reenders Drive and a multi-use pathway on the north side that was extended during the 2023 construction season to span the full length of Reenders Drive. Reenders Drive is signalized at the intersections with Panet Road, Lagimodiere Boulevard, Stapon Road, and Peguis Street.

Nearby land use is a mix of commercial and office space. This includes Kildonan Place Shopping Centre, Costco, Revenue Canada's Taxation Data Centre, Kildonan Crossing Shopping Mall, and Reenders Square Shopping Mall. There is undeveloped land on the north side of Reenders Drive between Stapon Road and Peguis Street that is identified as future commercial, however, the timeline for development is unknown. For now, this section is open field space.

Reenders Drive - Vehicle Operating Speed Characteristics

Speed data was collected on Reenders Drive in October, 2023 and is summarized in Table 1.

Table 1: Vehicle Operating Speed Data, Reenders Drive 300 metres east of Stapon Road – 50 km/h speed limit

Travel direction	50th percentile speed	85th percentile speed	15 km/h pace	% in pace
Eastbound	54	62	47 – 62	70%
Westbound	57	64	49 – 64	79%
Combined average	*56*	*63*	*48 – 63*	*75%*

The combined average 85th percentile speed on Reenders Drive is 63 km/h. The average 85th percentile speed is in the low to mid 60's and the maximum of the 15 km/h pace is below 65 km/h. An average of 75 percent of motorists travel at speeds that fall within the 15 km/h pace.

Reenders Drive - Target Speed

The target speed is the speed at which vehicles should operate on a facility in order to promote the safety and appropriate level of mobility for all road users. The target speed is determined using two approaches, (1) the *Transportation Association of Canada Guidelines for Establishing Posted Speed Limits*, and (2) comparison with similar classification roadways to promote city-wide consistency and driver expectation. The appropriate target speed for Reenders Drive is 60 km/h.

Reenders Drive - Collision History

Table 2 provides a summary of the most recent seven years of available intersection collision claims data from Manitoba Public Insurance.

Table 2: Reenders Drive Intersection Collisions (2015-2021)

Intersection	Collision Severity			Collisions involving pedestrians or cyclists	Injury collisions where speed on Reenders Drive may have been a factor[2]
	Property Damage Only	***Injury***	***Fatality***		
Reenders Drive and Panet Road	105	60	0	1	17
Reenders Drive and Lagimodiere Boulevard	323	170	0	1	66
Reenders Drive and Stapon Road	51	26	0	0	13
Reenders Drive and Peguis Street[1]	No data	No data	No data	No data	No data

[1] Collision claims data from Manitoba Public Insurance does not include the intersection of Reenders Drive and Peguis Street. This is likely a coding issue and is being reviewed.

[2] As per the National Cooperative Highway Research Program (NCHRP) Report 317:

- rear-end collisions – drivers not anticipating the location of the back of a queue
- run-off road collisions – drivers avoiding conflicts in the roadway proper
- angle collisions – drivers accepting gaps that are too small

At Reenders Drive and Panet Road:

- 17 rear-end injury collisions involving westbound vehicles were reported, seven of which occurred during icy or wet pavement surface condition.
- One pedestrian collision occurred, however, it was with a motorist on Panet Road and would not have been impacted by the speed limit on Reenders Drive.
- As it is a three-legged intersection, the speed limit on Reenders Drive would not have impacted the occurrence of angle collisions at Panet Road. The speed at

which motorists on Reenders Drive travel through Panet Road is controlled by the geometry. Angle collisions were not reviewed.
- No run-off road injury collisions involving eastbound or westbound vehicles were reported.

At Reenders Drive and Lagimodiere Boulevard:

- 42 rear-end injury collisions occurred with either eastbound or westbound motorists, 10 of which occurred during icy, snowy, or wet pavement surface conditions.
- 22 angle injury collisions occurred involving either eastbound or westbound motorists; 19 of these collisions involved a motorist making a left turn.
- Two run-off road injury collisions involving eastbound or westbound vehicles were reported. Both occurred during icy road surface conditions.
- One pedestrian injury collision occurred involving an eastbound vehicle on Reenders Drive. The claims data notes pedestrian error/confusion associated with the collision. The collision resulted in minor injury.
- The City of Winnipeg network screening results estimate the safety performance of intersections and identify higher-risk sites within the regional street network. Network screening results are summarized and reported using level of safety service (LOSS), which assesses the collision history of a site compared to predicted collision history from other sites with similar characteristics. Sites are categorized from LOSS I (the safest) to LOSS IV (the least safe). Data is available for the intersection of Reenders Drive and Lagimodiere Boulevard; it is categorized as LOSS III, which indicates a moderate potential for collision reduction.

At Reenders Drive and Stapon Road:

- Eight rear-end injury collisions occurred, six involving eastbound vehicles and two involving westbound vehicles. Six of the eight collisions occurred during icy, snowy, or wet pavement surface conditions.
- Five angle injury collisions occurred, four of which involved eastbound motorists.
- No run-off road injury collisions involving eastbound or westbound vehicles were reported.

Reenders Drive – Recommendation

Based on the operating speed, target speed, and collision history, increasing the speed limit to 60km/h on Reenders Drive from Lagimodiere Boulevard to Peguis Street is recommended. No changes to the existing 50 km/h speed limit between Panet Road and Lagimodiere Boulevard are recommended due to the high driver workload environment and collision history.

Consideration was given to increasing the speed limit all the way to Lagimodiere Boulevard, but when all things are considered, the preferred location to change the speed limit is 170 metres east of Lagimodiere Boulevard, as shown in Figure 2. It is best

to have the speed limit change at this location, farther away from the intersection for the following reasons:

- If the speed limit signage is placed too close to Lagimodiere Boulevard, there is an increased chance that motorists will miss it because their attention is focused on the traffic signals.
- Westbound Reenders Drive widens for the left and right turn lane near the intersection with Lagimodiere Boulevard, so any speed limit signage in this area would be farther away from the through lanes and harder to see.
- Placing the speed limit change before the bus stop on westbound Reenders Drive ensures that stopped buses will not obstruct the signage.

RECOMMENDATIONS

The recommendations for the speed limit increase to 60 km/h is shown in Figure 2.

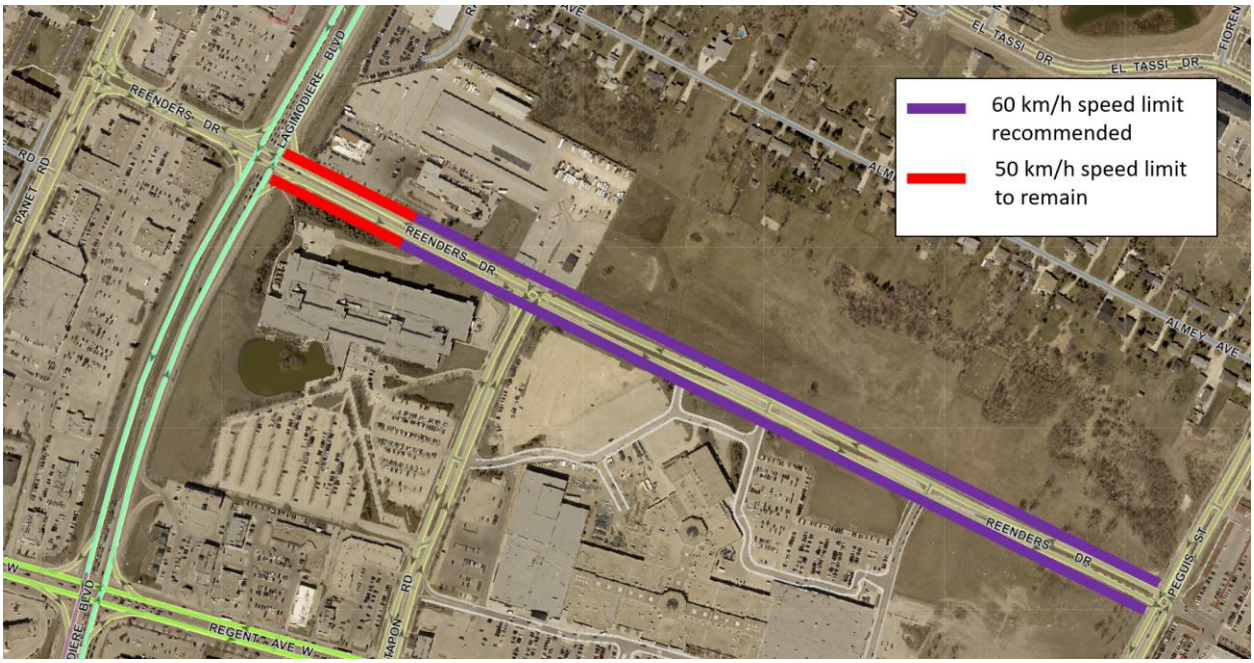


Figure 2: Reenders Drive Speed Limit Change Recommendations

FINANCIAL IMPACT

Financial Impact Statement **Date:** May 30, 2024

Project Name: **First Year of Program** **2024**

Speed Limit Increase on Reenders Drive (Transcona Ward)

	2024	2025	2026	2027	2028
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	$ 1,100	$ -	$ -	$ -	$ -
Less: Incremental Revenue/Recovery	-	-	-	-	-
Net Cost/(Benefit)	$ 1,100	$ -	$ -	$ -	$ -
Less: Existing Budget Amounts	-	-	-	-	-
Net Budget Adjustment Required	$ 1,100	$ -	$ -	$ -	$ -

Additional Comments: Direct costs represent the estimated costs to supply and install traffic speed limit signs, and will be charged to the 2024 Public Works departmental operating budget.

A. Fischer CPA,CA 2024-05-30

for: J. Ruby CPA, CA
Manager of Finance & Administration

CONSULTATION

This Report has been prepared in consultation with: Legal Services

OURWINNIPEG POLICY ALIGNMENT

The recommendations within this report are consistent with policies that fit within four goals in OurWinnipeg2045, specifically:

Leadership and Good Governance Goal

- Policy 1.5 Evidence-Informed Decisions
  Invest in data and technology in order to support objective, evidence-informed decision-making; support open government and open data principles for collection and sharing; help coordinate records and information management; and improve process efficiency, results-based service delivery and accountability.

Environmental Resilience Goal

- Policy 2.9 Reduce Road Congestion
  Increase the efficiency, convenience and usage of the active and public transportation system, to improve air quality, provide a viable alternative to the automobile, and reduce current and future road congestion.

Economic Prosperity Goal

- 3.17 Sustainable Transportation Connectivity
  Prioritize enhancements to the integrated and sustainable transportation system that improve its viability and access to places such as educational institutions, employment opportunities, recreation and library facilities, providers of essential goods and services and health providers, especially for children, and for neighbourhoods most impacted by poverty.

Good Health and Well-Being Goal

- Policy 4.10 Transportation Safety
  Design, construct, maintain, and regulate an integrated and sustainable transportation system and related infrastructure that optimize safe, connected and reliable mobility, and minimize severe injuries and fatalities for all road users.

WINNIPEG CLIMATE ACTION PLAN ALIGNMENT

Consideration was given as to whether this report connects to the Winnipeg Climate Action Plan (CAP), and it was determined that the CAP is not applicable to this specific report.

WINNIPEG POVERTY REDUCTION STRATEGY ALIGNMENT

Consideration was given as to whether this report connects to the Winnipeg Poverty Reduction Strategy (PRS) and its Goals and Objectives, and it was determined that the PRS is not applicable to this specific report.

SUBMITTED BY

Department: Public Works
Division: Transportation
Prepared by: Greg Blatz, P.Eng. Traffic Management Engineer
Date: May 30, 2024

Attachments:
Appendix A - Draft By-law Amendment

Appendix B - Speed Limit Review Process

APPENDIX B - SPEED LIMIT REVIEW PROCESS

The Winnipeg Public Service has adopted the *Manitoba Infrastructure Guide for Setting Posted Speed Limits on Manitoba Roadways* (2019) engineering speed limit study as the framework, with minor modifications, to evaluate and recommend posted speed limits.

An engineering speed limit study can help identify, review, and propose solutions for roadways where the traffic authority has concerns with the current speeds. The engineering speed limit study provides a speed limit recommendation based on the operating speed, target speed, and collision history.

Operating Speed

The operating speed is the speed at which motorists choose to travel on a given roadway. Speed choice by drivers is based on a variety of factors, including roadway and roadside characteristics, weather, traffic characteristics, vehicle characteristics and the purpose of the trip. The operating speed for a particular road section can be estimated by measuring individual speeds through a spot speed study. The following describes operating speed characteristics:

- ***50th Percentile Speed.*** The 50th percentile speed is the speed at or below 50 percent of the measured speeds in a spot speed study.
- ***85th Percentile Speed***. The 85th percentile speed is the speed at or below 85 percent of the measured speeds in a spot speed study.
- ***15 km/h pace.*** The 15 km/h pace is the 15 km/h range of speeds that encompasses the greatest percentage of measured speeds in a spot speed study.

Target Speed

The target speed is the speed at which vehicles should operate on a facility in order to promote the safety and appropriate level of mobility for all road users. The following factors can influence target speed:

- pedestrian exposure
- cyclist exposure
- stakeholder input
- roadside environment
- roadside hazards
- average lane width
- presence of a median
- horizontal and vertical alignment
- roadway surface type
- number of intersections with public roads
- number of private access driveways
- on-street parking

The target speed is determined using two approaches, (1) the Transportation Association of Canada *Guidelines for Establishing Posted Speed Limits*, and (2) comparison with similar classification roadways to promote city-wide consistency and driver expectation.

Collision History

A collision history review can identify sections of roadway that are performing poorly from a road safety perspective. A high collision frequency or rate at a location may indicate any number of operational or geometric issues and does not necessarily indicate speed as a primary contributing factor. A closer analysis of the collision types, locations, time of day, weather conditions and other factors is useful for understanding the role of speed, if any, in the collisions. National Cooperative Highway Research Program (NCHRP) Report 613 describes the following collision patterns where inappropriate speed is more likely to be a contributing factor:

- rear-end collisions – drivers not anticipating the location of the back of a queue
- run-off road collisions – drivers avoiding conflicts in the roadway proper
- angle collisions – drivers accepting gaps that are too small

Analysis of the collision data is necessary to determine if these patterns could also be attributed to other factors, such as driver inattention or impairment, geometric conditions (alignment or sight distance) or other conditions that do not meet a driver's expectations