

DECISION REPORT

Residential Speed Limit Review – Speed Limit and Eligible Streets**ISSUE**

As per the revising speed limits on residential streets project roadmap that was provided in March 2021, and building on the background information and feedback summary that was provided in June 2021, this report provides recommendations to the posted speed limit on residential streets and which streets should be eligible.

BACKGROUND**History**

Since 2013, the Administration has been working closely with local residents, community associations, and area Councillors to complete 75 Neighbourhood Traffic Reviews (NTRs), with another 10 currently underway. The most common concern raised by residents is speed of vehicles on neighbourhood streets.

At its Regular Business Meeting held on October 22, 2018, City Council considered the Posted Speed Limit Review report, and resolved:

- “1. That the Administration develop a detailed framework for revising posted speed limits on neighbourhood streets;
2. That the Administration develop a detailed framework for revising posted speed limits in school and playground zones; and
3. That the Administration report on options for addressing speeding and safety in areas of high concentration of seniors.”

At its meeting held on March 1, 2021, the Standing Policy Committee on Transportation received an information report for the Residential Speed Limit Review – Project Roadmap. At its meeting held on June 7, 2021, the Standing Policy Committee on Transportation received an information report for the Residential Speed Limit Review – Background Information and Feedback Summary. Additional Council and Committee referrals related to this issue are included in Appendix 1.

Current Status

Posted speed limits are governed by Bylaw No. 7200, The Traffic Bylaw, which states that the posted speed limit is 50 km/h, with exceptions being specifically listed within Schedule 4. The speed limit is 50 km/h for most residential areas except for Montgomery Place.

City of Saskatoon’s Current Approach



The recommended maximum allowable speeds for new and modified roadways are based on road classification, adjacent land use, driver behaviour and familiarity, and safety concerns. The goal is to establish a reasonable and safe speed limit that is appropriate for a particular roadway based on its design and classification.










OPTIONS

Speed Limit Options

A detailed assessment of three options assessed for speed limits in residential areas is provided below:

Legend: Relative Impact Between Options

| | | | | | | | |
|---|------|---|--------|---|------|---|------|
|  | None |  | Little |  | Some |  | Most |
|---|------|---|--------|---|------|---|------|

| Criteria | | Speed Limit Options | | |
|----------------|--|---|--|--|
| | | Option 1 50 km/h | Option 2 40 km/h | Option 3 30 km/h |
| Traffic Safety | Driver and Vehicle Response ¹ | No change. | Improves safety by reducing the distance travelled before a driver can react, increasing the field of vision, and reducing stopping sight distance; however, there may be a larger speed differential. | Significantly improves safety by reducing the distance travelled before a driver can react, increasing the field of vision, and reducing stopping sight distance; however, there may be a larger speed differential. |
| | |  |  |  |
| | Anticipated Collisions ^{2 3} | No change. | Less collisions anticipated to occur on streets with reduced speed limit. | Significantly less collisions anticipated to occur on streets with reduced speed limit. |
| | |  |  |  |
| | Risk of Severe Injury or Fatality ⁴ | No change. At 50 km/h the risk of severe injury or death is 85% for pedestrians, 80% for head-on collisions, 40% for opposing turning collisions, and 8% for rear-end collisions. | At 40 km/h the risk of severe injury or death is lowered to approximately 55% for pedestrians, 45% for head-on collisions, 20% for opposing turning collisions, and <5% for rear-end collisions. | At 30 km/h the risk of severe injury or death is lowered to approximately 25% for pedestrians, 15% for head-on collisions, 9% for opposing turning collisions, and 2% for rear-end collisions. |
| | |  |  |  |













¹ [Residential Speed Limit Review – Background Information and Feedback Summary \[File No. CK 6320-1\]](#), Standing Policy Committee Meeting, June 7, 2021, Section 5.1 of Appendix 1

² SWOV Fact Sheet, The relationship between speed and crashes, Leidschendam, the Netherlands April 2012, https://safety.fhwa.dot.gov/speedmgt/ref_mats/fhwasa1304/Resources3/08%20-%20The%20Relation%20Between%20Speed%20and%20Crashes.pdf

³ World Health Organization Fact Sheet, 2004, https://www.who.int/violence_injury_prevention/publications/road_traffic/world_report/speed_en.pdf

⁴ [Residential Speed Limit Review – Background Information and Feedback Summary \[File No. CK 6320-1\]](#), Standing Policy Committee Meeting, June 7, 2021, Section 5.3 of Appendix 1

Residential Speed Limit Review – Speed Limit and Eligible Streets

| Criteria | | Speed Limit Options | | |
|--------------------|--|---|---|--|
| | | Option 1 50 km/h | Option 2 40 km/h | Option 3 30 km/h |
| | Driver Expectation | Meets driver expectation. Continues current practice. | Initially will be against driver expectation but with time and education drivers will adjust as has happened in other jurisdictions. | Initially will be against driver expectation but with time and education drivers will adjust as has happened in other jurisdictions. |
| | |  |  |  |
| Traffic Operations | Travel Time | No change. | Slightly increased travel time for trips along streets with reduced speed limit. | Increased travel time for trips along streets with reduced speed limit. |
| | |  |  |  |
| | Equity for Multiple Modes ⁵ ₆ | No change. | Reducing speeds in neighbourhoods makes the road system safer. Increased safety is also perceived, removing a major barrier to people walking or cycling, and can encourage increased physical activity levels. | Reducing speeds in neighbourhoods makes the road system safer. Increased safety is also perceived, removing a major barrier to people walking or cycling, and can encourage increased physical activity levels. Streets with operating speeds of 30 km/h could be considered bikeways. |
| | |  |  |  |
| Quality of Life | Vehicle Noise ⁷ ₈ | No change. | Improved quality of life because lower operating speeds would result in lower levels of vehicle noise. | Significantly improved quality of life because lower operating speeds would result in significantly lower levels of vehicle noise. |
| | |  |  |  |










⁵ Safe speed: promoting safe walking and cycling by reducing traffic speed, Dr. Jan Garrard, November 2008
https://www.healthyactivebydesign.com.au/images/uploads/Partners/Resources/Publications/Safe_Speed_Report_Dec_202008.pdf

⁶ Measuring Transport Equity, Karen Lucas and Karel Martens, 2019 https://books.google.ca/books?id=l-GaDwAAQBAJ&pg=PA162&lpg=PA162&dq=speed+limit+and+community+cohesion&source=bl&ots=d1XnFuuVUD&sig=ACfU3U2k3geqKnOVjy_Blm3Cz3_k70Cjdg&hl=en&sa=X&ved=2ahUKEwidsNaZz7XxAhXX7Z4KHVvLBS8Q6AEwEHOECBQQAw#v=onepage&q=speed%20limit%20and%20community%20cohesion&f=false

⁷ Noisy Speeding: Impact of Speed on Noise Level, Camea Technology,
<https://www.cameatechnology.com/articles/noisy-speeding-impact-of-speed-on-noise-level/>

⁸ Speed distribution Influence in Road Traffic Noise Prediction, Gerardo Iannone, Claudio Guarnaccia, Joseph Quartieri, Environmental Engineering and Management Journal, March 2013,
https://www.researchgate.net/publication/256646360_Speed_distribution_influence_in_road_traffic_noise_prediction

Residential Speed Limit Review – Speed Limit and Eligible Streets

| Criteria | | Speed Limit Options | | |
|-------------------|------------------------------------|--|--|---|
| | | Option 1 50 km/h | Option 2 40 km/h | Option 3 30 km/h |
| | Perception of Safety | No change. | Improved quality of life because perception of safety would likely increase. | Improved quality of life because perception of safety would likely increase more. |
| | |  |  |  |
| Community Support | Survey Feedback ⁹ | No change in speed limit was the most preferred option for respondents from the public open house survey regardless of street type. No change in speed limit was the most preferred option for respondents from the statistically representative survey for collector and arterial streets. | There were more respondents who supported a reduction in speed limit to 40 km/h out of those who supported a reduction in speed limit. | There was some support for a speed limit reduction to 30 km/h, the highest of these respondents supported the change for local streets. |
| | |  |  |  |
| | Neighbourhood Traffic Review Input | Will not address ongoing safety concerns for streets where speeding has not been verified by traffic data. | May address some of the safety concerns for streets where speeding has not been verified by traffic data. | May address some of the safety concerns for streets where speeding has not been verified by traffic data. |
| | |  |  |  |

Options for Street Eligibility

Option A: Street Classification - Eligibility would be established according to the approved street classification for the street as shown in the Saskatoon Transportation Master Plan. Street classifications that could be eligible for the speed limit reduction are local and collector streets.

Option B: Street Function - Eligibility would be established according to the adjacent land use and function for the street. Streets with residential land use, on-street parking, driveways, and frontage would be eligible for the speed limit reduction.

⁹ [Residential Speed Limit Review – Background Information and Feedback Summary \[File No. CK 6320-1\]](#), Standing Policy Committee Meeting, June 7, 2021, page 10 of Appendix 2

Residential Speed Limit Review – Speed Limit and Eligible Streets

| Criteria | | Street Eligibility Options | |
|-------------------|------------------------------------|--|--|
| | | Option A Street Classification | Option B Street Function |
| Safety | Conflict points | Local and collector streets in residential areas have a high number of intersections and driveways. √ | Streets with residential land use have a high number of intersections and driveways. √ |
| | Anticipated Compliance | Compliance may vary depending on the street design; however, applying speed limits to local and collector streets only will be more straightforward and easier to understand so better compliance is anticipated. Many local streets are already operating below the 50 km/h speed limit. ¹⁰ √ | Compliance may vary depending on the street design; however, applying speed limits to streets with residential land use will be highly dependent on signage and adjacent street context so compliance may be lower. |
| | Driver Expectation | Meets driver expectation because the lower speed limit would align with typical street design. Local and collector streets also aligns with community amenities in most neighbourhoods (i.e. schools, parks, libraries, etc.). √ | May not meet driver expectation if the street design is not indicative of a lower speed limit (i.e. multi-lane arterial streets or short segments of residential land use). |
| Quality of Life | Liveable Streets | Local and collector streets in residential neighbourhoods √ | All streets with residential properties with frontage, on-street parking, and driveways. √ |
| | | | |
| Community Support | Survey Feedback | No change in speed limit was the most preferred option for respondents from the public open house survey regardless of street type. No change in speed limit was the most preferred option for respondents from the statistically representative survey for arterial and collector streets. Approximately half of respondents from the statistically representative survey and a third of public open house survey supported a lower speed limit for local streets. √ | No change in speed limit was the most preferred option for respondents from the public open house survey regardless of street type. No change in speed limit was the most preferred option for respondents from the statistically representative survey for arterial and collector streets. |
| | Neighbourhood Traffic Review Input | Will not address ongoing safety concerns for arterial streets with adjacent residential land use. | May address some of the safety concerns for arterial streets with adjacent residential land use. √ |

The street classification map for the City of Saskatoon can be found [here](#).

¹⁰ [Residential Speed Limit Review – Background Information and Feedback Summary \[File No. CK 6320-1\]](#), Standing Policy Committee Meeting, June 7, 2021, Section 3, Table 1 of Appendix 1.

RECOMMENDATION

That the Standing Policy Committee on Transportation recommend to City Council:

1. That Option 2 – 40 km/h Speed Limit for residential neighbourhoods be approved in principle;
2. That Option A – Street Classification be approved in principle to determine street eligibility for the speed limit reduction in residential neighbourhoods; and
3. That the 40 km/h speed limit in residential neighbourhoods be approved in principle for local streets and collector streets.

RATIONALE

The recommendation is based on a balanced approach between quantitative and community values criteria. An example of a quantitative criteria is traffic safety impacts, while examples of community values include quality of life and perception of safety. The recommendation is also consistent with very recent decisions by the cities of Calgary and Edmonton to lower their residential speed limit to 40 km/h.

Specifically, a 40 km/h speed limit is recommended because:

- It will improve traffic safety resulting in less severe injuries and fatalities.
- It will improve quality of life by lowering vehicle noise and increasing the perception of safety within neighbourhoods.
- Driver compliance for 40 km/h is anticipated to be attainable since it aligns well with the existing operating speeds on local streets and results in very little change to travel time.
- Provides equity for people walking and cycling and can encourage physical activity.

Collector streets were included as:

- They have similar characteristics as local streets in terms of pedestrian activity, driveways, parking, and single-family homes. They do have higher traffic volumes and are quite often transit routes.
- The anticipated impact to driving times on collector streets is minimal and is outweighed by the safety benefits.
- Including collector streets will be easier to implement.

The option of using street classification was recommended because:

- Easier for drivers to understand.
- Will meet driver expectations.
- Aligns well with typical street design so is anticipated to have better compliance than the street eligibility option.
- Easier to implement because it would not result in varying speed limits along a corridor.

A triple-bottom line assessment was completed and is included in Appendix 2.

Impacts to Transit will be provided as part of the implementation strategy, after direction is received regarding the posted residential speed limit, potential changes to the school zones, and potential inclusion of playground zones, senior zones, and/or bikeways. Saskatoon Transit comments are included in Appendix 3.

Emergency services can exceed the posted speed limit when responding to emergencies. However, if the posted speed limit is reduced on arterial streets, which are the primary response routes, there may be a greater impact. If the decision of City Council is to lower the posted speed limits on arterial streets, then through the implementation strategy greater commentary on the impacts to emergency services would be provided.

FINANCIAL IMPLICATIONS

Detailed financial implications of implementing speed limit revisions, playground zones, changes to school zones, and consideration of senior zones will be refined as decisions are made and more certainty is known. At this point order of magnitude cost estimates are provided below, with some considerations yet to be decided.

| | 50 km/h | 40 km/h | 30 km/h |
|-----------------------------|---------|--|---|
| Local and Collector Streets | None | <p>\$400,000 - Signs required on arterial streets, and on local and collector streets in non-residential areas</p> <p>Or, \$500,000 - Signs required at all neighbourhood entrances in residential areas</p> | <p>\$400,000 - Signs required on arterial streets and local and collector streets in non-residential areas.</p> <p>Or, \$500,000 - Signs required at all neighbourhood entrances in residential areas</p> |
| Local Streets Only | None | <p>\$600,000 - Signs required on arterial and collector streets, and on local streets in non-residential areas</p> <p>Or, also \$600,000 - Signs required on all local streets in residential areas</p> | <p>\$600,000 - Signs required on arterial and collector streets and local streets in non-residential areas</p> <p>Or, also \$600,000 - Signs required on all local streets in residential areas</p> |

These cost estimates do not reflect potential future changes regarding school zones, playground zones, senior zones, and bikeways.

Cost estimates for education and awareness campaigns, and operational impacts will follow as part of the implementation strategy.

Funding considerations will be provided as part of the implementation strategy, after direction is received regarding the posted residential speed limit, potential changes to the school zones, and potential inclusion of playground zones, senior zones, and/or

bikeways.

LEGAL IMPLICATIONS

Option B – Street Function may require a partial re-write of the Traffic Bylaw. There could also be legal implications due to the difficulty of enforcing and prosecuting tickets issued under this option.

ADDITIONAL IMPLICATIONS/CONSIDERATIONS

There are no privacy, social, or environmental implications identified with this report.

COMMUNICATION ACTIVITIES

The following stakeholder meetings have occurred since June:

1. External on July 6, 2021 - Representatives from Medavie Health Services West, Saskatchewan Health Authority, Saskatoon Council on Aging, Greater Saskatoon Catholic Schools, and Saskatoon Public Schools. Regrets received from Saskatoon Safety Council representative, and Saskatchewan Government Insurance.
2. Internal on July 13, 2021 - Representatives from Sustainability, Roadways, Fleet and Support, Planning and Development, Community Standards, Saskatoon Transit, Saskatoon Fire Department, Parks, Saskatoon Police Service and Transportation.

NEXT STEPS

1. Prepare 'approval in principle' reports, if and as required, to address speed limits for schools, playgrounds, areas with a high concentration of seniors, and streets designated as neighbourhood bikeways.
2. Prepare a final report for final approval. This final report will present for final approval all components of the residential speed limit review, including but not limited to:
 - posted speed limits;
 - which streets the posted speed limit will be applicable to;
 - school zones;
 - playground zones;
 - senior zones;
 - impacts to transit;
 - financial considerations;
 - a schedule and process for implementation; and,
 - required bylaw revisions.

Following this approach of several staged 'approvals in principle' reports, closing with a 'final report' for final approval that brings all the information together at the end of the project, provides flexibility if project components have to be revisited, if further information is required, and provides information for consideration and 'approvals in principle' in manageable components.

The planned project schedule is included as Appendix 4.

APPENDICES

1. Council History
2. Triple Bottom Line Assessment
3. Saskatoon Transit Feedback
4. Anticipated Residential Speed Limit Review Project Schedule

Report Approval

Written by: Mariniel Flores, Transportation Engineer
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Reviewed by: David LeBoutillier, Engineering Manager, Transportation
Jay Magus, Director of Transportation

Approved by: Terry Schmidt, General Manager, Transportation and Construction

Admin Report - Residential Speed Limit Review – Speed Limit and Eligible Streets.docx

Council History

At its meeting held on April 16, 2018, the Standing Policy Committee on Transportation considered the matter from Jeff Siemens – Sidewalk and Roadway Concerns (File No. CK 150-1) and resolved, in part:

1. That the Administration report on the possibility of implementing a program to address the roadway safety concerns around facilities for seniors and people with disabilities.

At its Regular Business Meeting held on May 28, 2018, City Council considered the response to the A. Iwanchuk (April 4, 2017) Neighbourhood Traffic Reviews inquiry (Files CK 6320-1 and TS 6320-1) and resolved, in part:

2. That the Administration report back on how posted limits on residential streets may be achieved, including a review of other municipalities with regards to posted speed limits, and how school zones and playground zones are being considered.

At its meeting held on September 10, 2018, the Standing Policy Committee on Transportation considered the Traffic Calming Policy (files CK 6320-0 and TS 6350) and resolved, in part:

2. That the Administration report further on options for the speed component of the technical warrant requirements to deal with the residents' perceptions and geometric design differences of residential streets.

At its meeting held on January 13, 2020, the Standing Policy Committee on Transportation considered the Traffic Enforcement – Complaint report (File No. CK 5300-1) and resolved,

That the information be received and appended to the file on Speed Limit Review on Residential Streets.

At its meeting held on March 2, 2020, the Standing Policy Committee on Transportation, considered the Briarwood Neighbourhood Traffic Review report (File No. CK 6320-1) and resolved,

That at the appropriate time, while the Administration is reviewing the posted speed limit residential review, that the Briarwood Community Center be included for consideration as a playground zone.

At its meeting held on June 1, 2020, the Standing Policy Committee on Transportation considered the Traffic Safety on Spadina Crescent report (File No. CK 375-2) and resolved,

That the information be received, and the letters appended to the appropriate ongoing files.

Triple Bottom Line Review – Residential Speed Limit Review - Speed Limits & Eligible Streets

Process and Methodology

Administration used the City of Saskatoon’s Triple Bottom Line (TBL) Decision Making Tool to comply with *Council Policy C08-001 - Triple Bottom Line*.

When conducting a TBL analysis, it is appropriate to compare and/or evaluate multiple options. As such, the following options were reviewed:

1. 50 km/h Speed Limit (Business As Usual)
2. 40 km/h Speed Limit
3. 30 km/h Speed Limit

In conducting the analysis, the Administration relied on the expertise of the Project Team and Subject Matter Experts from the Transportation, Sustainability, and Planning and Development Departments, as well as consulted the following information:

- Residential Speed Limit Review – Background Information and Feedback Summary [File No. CK 6320-1], Standing Policy Committee Meeting, June 7, 2021, Section 5.1 of Appendix 1
- SWOV Fact Sheet, The relationship between speed and crashes, Leidschendam, the Netherlands
- April 2012,
https://safety.fhwa.dot.gov/speedmgt/ref_mats/fhwasa1304/Resources3/08%20-%20The%20Relation%20Between%20Speed%20and%20Crashes.pdf
- World Health Organization Fact Sheet, 2004,
https://www.who.int/violence_injury_prevention/publications/road_traffic/world_report/speed_en.pdf
- Noisy Speeding: Impact of Speed on Noise Level, Camea Technology,
<https://www.cameatechnology.com/articles/noisy-speeding-impact-of-speed-on-noise-level/>
- Speed Distribution Influence in Road Traffic Noise Prediction, Gerardo Iannone, Claudio Guarnaccia, Joseph Quartieri, Environmental Engineering and Management Journal, March 2013,
https://www.researchgate.net/publication/256646360_Speed_distribution_influence_in_road_traffic_noise_prediction
- Safe Speed: Promoting Safe Walking and Cycling by Reducing Traffic Speed, Dr. Jan Garrard, November 2008
https://www.healthyactivebydesign.com.au/images/uploads/Partners/Resources/Publications/Safe_Speed_Report_Dec_202008.pdf
- Measuring Transport Equity, Karen Lucas and Karel Martens, 2019
https://books.google.ca/books?id=l-GaDwAAQBAJ&pg=PA162&lpg=PA162&dq=speed+limit+and+community+cohesion&source=bl&ots=d1XnFuuVUd&sig=ACfU3U2k3geqKnOVjy_BIm3Cz3_k70Cjdg&hl=en&sa=X&ved=2ahUKEwidsNaZz7XxAhXX7Z4KHVvLBS8Q6AEwEHoECBQQAw#v=onepage&q=speed%20limit%20and%20community%20cohesion&=false

- Vehicle-Based Road Dust Emissions Measurements, <https://www3.epa.gov/ttn/chief/conference/ei12/fugdust/kuhns.pdf>.

This review is meant as a high level assessment to identify the initiative's environmental, social, economic, and governance outcomes, as well as to identify opportunities to achieve even greater sustainability benefits. The results are meant to support ongoing decision making, rather than be relied upon as a fixed sustainability evaluation.

Caveats and Limitations:

- Some TBL areas were considered out of scope, including items that were not contingent on and/or influenced by the initiative:
 - Renewable Energy
 - Conservations of Resources
 - Clear Air, Water, and Land
 - Waste Reduction and Diversion
 - Storm Water Management
 - Sustainable Food System
 - Heritage, Arts, and Culture
 - Innovation
 - Sustainable Procurement
 - Skills and Training
 - Roles, Responsibilities and Rewards

Results & Findings

Overall, the results of Administration's TBL review indicate that:

- Option 3 would achieve greater TBL benefits than the other proposed options.
- There are additional opportunities that could be explored to enhance the TBL outcomes of the initiative (see the "For Further / Future Consideration" sections later in this document).

A summary of results for each TBL principle and indicator are included in the subsequent section of this document. To provide context, a numerical description of the outcomes are shown in the following table:

| TBL Score | TBL Outcome |
|------------------|--------------------------|
| Below 0% | Not Meeting Expectations |
| 0-19% | Needs Improvement |
| 20-39% | On-Track |
| 40-59% | Meeting Expectations |
| 60-79% | Exceeding Expectations |
| Above 80% | Leading the Way |

Principle: Environmental Health and Integrity**TBL Outcome - by Principle:**

Option 1 – 50 km/h Speed Limit (Business As Usual):

Not meeting expectations

Option 2 – 40 km/h Speed Limit:

Not meeting expectations

Option 3 – 30 km/h Speed Limit:

Needs improvement

TBL Outcomes - by Indicator:

| Indicator | Option 1 – 50 km/h Speed Limit (Business As Usual) | Option 2 – 40 km/h Speed Limit | Option 3 – 30 km/h Speed Limit |
|--|---|---|---|
| Renewable Energy | | | |
| Conservation of Resources | | | |
| Climate Change Mitigation and Adaptation | | | |
| Green Buildings and Sustainable Land Use | | <ul style="list-style-type: none"> No Impact / Not Applicable: Changes would be applied across the city so it is unlikely to affect changes to infill | <ul style="list-style-type: none"> No Impact / Not Applicable: Changes would be applied across the city so it is unlikely to affect changes to infill |
| Sustainable Transportation | | <ul style="list-style-type: none"> No Impact / Not Applicable: May affect arterials or collectors where the transit routes are | <ul style="list-style-type: none"> Positive Impact: All streets become bike-friendly with a 30 km/hr speed limit No Impact / Not Applicable: May affect arterials or collectors where the transit routes are |
| Healthy Ecosystems | <ul style="list-style-type: none"> Significant Adverse Effect: Any road near greenspace has an impact No Impact / Not Applicable: There are issues with noise pollution | <ul style="list-style-type: none"> Negative Impact: This only impacts residential streets so it is unlikely to impact ecosystems. Slower speed limits reduce number and severity of wildlife collisions and noise so generally, there would be a benefit from a reduced speed limit for streets adjacent to ecosystems. Minimum Standard: A 40 km/h speed limit reduces potential for collision with wildlife | <ul style="list-style-type: none"> Negative Impact: This only impacts residential streets so it is unlikely to impact ecosystems. Slower speed limits reduce number and severity of wildlife collisions and noise so generally, there would be a benefit from a reduced speed limit for streets adjacent to ecosystems. Minimum Standard: A 30 km/h speed limit reduces potential for collision with wildlife |

| | | | |
|-------------------------------|--|---|--|
| | | <ul style="list-style-type: none"> Positive Impact: Reducing the speed limit to 40 km/h would reduce noise pollution | <ul style="list-style-type: none"> Significant Benefit: Reducing the speed limit to 30 km/h would reduce noise pollution even further |
| Clean Air, Water, and Land | | | |
| Waste Reduction and Diversion | | | |
| Storm Water Management | | | |
| Sustainable Food System | | | |

For Further / Future Consideration

- Saskatoon-specific GHG emissions implications for each speed limit option are unknown at this time. However, research on reducing speed limits in urban areas indicates that driver behaviour plays a significant role in fuel consumption and associated GHG emissions. Specifically, the fewer starts/stops and the smoother the acceleration/deceleration, the lower the fuel consumption. Speed limit reductions, when coupled with other traffic calming measures and education promoting calm driving behavior, can reduce fuel use and GHG emissions.
- The impacts to protect the air, water, and/or soil from pollution are unknown.

Principle: Social Equity and Cultural Wellbeing

TBL Outcome - by Principle:

| | |
|---|----------------------|
| Option 1 – 50 km/h Speed Limit (Business As Usual): | No Impact |
| Option 2 – 40 km/h Speed Limit: | Meeting Expectations |
| Option 3 – 30 km/h Speed Limit: | Meeting Expectations |

TBL Outcomes - by Indicator:

| Indicator | Option 1 – 50 km/h Speed Limit (Business As Usual) | Option 2 – 40 km/h Speed Limit | Option 3 – 30 km/h Speed Limit |
|------------------------|--|--|--|
| Equity and Opportunity | | <ul style="list-style-type: none"> Positive Impact: A 40 km/h speed limit improves safety in neighbourhoods. This supports people with disabilities as slower | <ul style="list-style-type: none"> Positive Impact: A 30 km/h speed limit improves safety in neighbourhoods. This supports people with disabilities as slower |

| | | | |
|--|--|---|---|
| | | <p>speed limits enables more mobility.</p> <ul style="list-style-type: none"> • Positive Impact: This especially supports youth and senior mobility and safety to those who are more vulnerable to injury and fatality • Positive Impact: Supports active transportation modes, especially for people who do not have a car | <p>speed limits enables more mobility.</p> <ul style="list-style-type: none"> • Positive Impact: This especially supports youth and senior mobility and safety to those who are more vulnerable to injury and fatality • Positive Impact: Supports active transportation modes, especially for people who do not have a car |
| Diversity and Inclusion | | <ul style="list-style-type: none"> • No Impact / Not Applicable: Applied across all neighbourhoods • Minimum Standard: May increase number of available routes to get to work through active transportation. Everyone should have access to a complete and connected network. • Minimum Standard: Could support a change to move away from car-dependent living by increasing attractiveness and safety of active transportation | <ul style="list-style-type: none"> • No Impact / Not Applicable: Applied across all neighbourhoods • Minimum Standard: May increase number of available routes to get to work through active transportation. Everyone should have access to a complete and connected network. • Minimum Standard: Could support a change to move away from car-dependent living by increasing attractiveness and safety of active transportation |
| Heritage, Arts, and Culture | | | |
| Self Sufficiency and Living with Dignity | | <ul style="list-style-type: none"> • Minimum Standard: Supports safer active transportation, particularly for those who cannot afford cars | <ul style="list-style-type: none"> • Minimum Standard: Supports safer active transportation, particularly for those who cannot afford cars |
| Health and Wellbeing | | <ul style="list-style-type: none"> • Positive Impact: This reduces noise and increases street safety. This makes streets more comfortable and enjoyable for neighbourhoods/residents. | <ul style="list-style-type: none"> • Positive Impact: This reduces noise and increases street safety. This makes streets more comfortable and enjoyable for neighbourhoods/residents. |
| Safety and Resiliency | | <ul style="list-style-type: none"> • Positive Impact: A 40 km/hr speed limit reduces potential for collisions and severity of collisions | <ul style="list-style-type: none"> • Significant Benefit: A 30 km/hr speed limit reduces potential for collisions and severity of collisions even further |

| | | | |
|---------------------|--|--|--|
| | | <ul style="list-style-type: none"> No Impact / Not Applicable: Saskatoon Fire has adopted a requirement of response times and located stations which should be considered. Most of the primary emergency routes are on arterial streets. | <ul style="list-style-type: none"> No Impact / Not Applicable: Saskatoon Fire has adopted a requirement of response times and located stations which should be considered. Most of the primary emergency routes are on arterial streets. |
| Civic Participation | | | |
| Recreation | | <ul style="list-style-type: none"> Minimum Standard: Encourages mobility to facilities, leisure spaces and outdoor activities. Some streets will be more positively impacted than others (e.g. streets without sidewalks, neighbourhoods with less park space). Positive Impact: More people out walking and biking in their neighbourhood increases opportunities for interactions with neighbourhoods, reduces noise in neighbourhoods | <ul style="list-style-type: none"> Minimum Standard: Encourages mobility to facilities, leisure spaces and outdoor activities. Some streets will be more positively impacted than others (e.g. streets without sidewalks, neighbourhoods with less park space). Positive Impact: More people out walking and biking in their neighbourhood increases opportunities for interactions with neighbourhoods, reduces noise in neighbourhoods |

For Further / Future Consideration

- The impacts to support community organizations and community-led efforts are unknown. Some community associations may like to see street safety improvements; a reduced speed limit supports those efforts.

Principle: Economic Benefits

TBL Outcome - by Principle:

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| Option 1 – 50 km/h Speed Limit (Business As Usual): | No Impact |
| Option 2 – 40 km/h Speed Limit: | On Track |
| Option 3 – 30 km/h Speed Limit: | On Track |

TBL Outcomes - by Indicator:

| Indicator | Option 1 – 50 km/h Speed Limit (Business As Usual) | Option 2 – 40 km/h Speed Limit | Option 3 – 30 km/h Speed Limit |
|-----------------------------------|---|--|---|
| Innovation | | | |
| Sustainable Procurement | | | |
| Financial Planning and Resourcing | | <ul style="list-style-type: none"> • Minimum Standard: There will be signage and communications costs. Policies and standards will be followed. • Negative Impact: Additional signs required • Positive Impact: This will be part of the implementation strategy. Number of neighbourhoods that can be signed per year will be determined. Sign locations will be reviewed to see if they are necessary. A blanket speed limit would need fewer signs, changes to arterial access points, school zones, etc. • Minimum Standard: We will try to minimize number of signs but inventory will increase. Considerations include the number of signs needed to communicate the change, frequency of sign maintenance, legal requirements for signage etc. • Minimum Standard: May have more speed violations and require additional police to enforce lower speed limit • Negative Impact: Operational impacts to Saskatoon Transit and Roadways, Fleet and Support Services | <ul style="list-style-type: none"> • Minimum Standard: There will be signage and communications costs. Policies and standards will be followed. • Negative Impact: Additional signs required • Positive Impact: This will be part of the implementation strategy. Number of neighbourhoods that can be signed per year will be determined. Sign locations will be reviewed to see if they are necessary. A blanket speed limit would need fewer signs, changes to arterial access points, school zones, etc. • Minimum Standard: We will try to minimize number of signs, but inventory will increase. Considerations include the number of signs needed to communicate the change, frequency of sign maintenance, legal requirements for signage etc. • Minimum Standard: May have more speed violations and require additional police to enforce lower speed limit • Negative Impact: Operational impacts to Saskatoon Transit and Roadways, Fleet and Support Services |

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| | | <ul style="list-style-type: none"> Negative Impact: More locations may require traffic calming to attain compliance | <ul style="list-style-type: none"> Negative Impact: More locations may require traffic calming to attain compliance |
| Affordability for Users | | <ul style="list-style-type: none"> Positive Impact: Once implementation is complete, ongoing operating costs are reasonable. There will be reduced costs to the health care system and insurance due to reduced collisions. | <ul style="list-style-type: none"> Positive Impact: Once implementation is complete, ongoing operating costs are reasonable. There will be reduced costs to the health care system and insurance due to reduced collisions. |
| Support the Local Economy | | <ul style="list-style-type: none"> Minimum Standard: Will include business groups as stakeholders in engagement | <ul style="list-style-type: none"> Minimum Standard: Will include business groups as stakeholders in engagement |
| Asset Management | | <ul style="list-style-type: none"> Minimum Standard: Light poles or similar will be used to affix sign where possible Minimum Standard: Reducing collisions can reduce damage to existing infrastructure Minimum Standard: Sign poles and pedestrian devices will be built to standard during implementation | <ul style="list-style-type: none"> Minimum Standard: Light poles or similar will be used to affix sign where possible Minimum Standard: Reducing collisions can reduce damage to existing infrastructure Positive Impact: Advance the active transportation plan Minimum Standard: Sign poles and pedestrian devices will be built to standard during implementation |
| Skills and Training | | | |
| Labour Rights and Employment | | <ul style="list-style-type: none"> Minimum Standard: OH&S will be followed during installation | <ul style="list-style-type: none"> Minimum Standard: OH&S will be followed during installation Minimum Standard: Improved options for active transportation may increase access to employment centres |

For Further / Future Consideration

- Implications of carbon pricing are unknown

Other Notes

- A high-level budget / financial analysis for each option is included in the body of the report.

Principle: Good Governance

TBL Outcome - by Principle:

Option 1 – 50 km/h Speed Limit (Business As Usual):

Option 2 – 40 km/h Speed Limit:

Option 3 – 30 km/h Speed Limit:

On Track

Meeting Expectations

Meeting Expectations

TBL Outcomes - by Indicator:

| Indicator | Option 1 – 50 km/h Speed Limit (Business As Usual) | Option 2 – 40 km/h Speed Limit | Option 3 – 30 km/h Speed Limit |
|-----------------------------------|--|--|--|
| Ethical and Democratic Governance | <ul style="list-style-type: none"> Minimum Standard: Gather feedback through engagement with stakeholders. Gather feedback through engagement with the public (open survey and statistically relevant survey) | <ul style="list-style-type: none"> Minimum Standard: Gather feedback through engagement with stakeholders. Gather feedback through engagement with the public (a representative survey and an open public survey). No Impact / Not Applicable: The City of Saskatoon is committed to safety and the options would improve safety. Response to common citizen-driven idea in Neighbourhood Traffic Reviews. Positive Impact: There has been a disconnect between a safe speed limit, posted speed limit and street design, and what is considered an appropriate safe speed by adjacent residents Positive Impact: Engagement with school boards, Saskatoon Police, Saskatoon Fire, Saskatchewan Government Insurance (SGI), accessibility groups, walking groups etc. Minimum Standard: Looking at all neighbourhoods at once and producing a technical analysis. | <ul style="list-style-type: none"> Minimum Standard: Gather feedback through engagement with stakeholders. Gather feedback through engagement with the public (a representative survey and an open public survey). No Impact / Not Applicable: The City of Saskatoon is committed to safety and the options would improve safety. Response to common citizen-driven idea in Neighbourhood Traffic Reviews. Positive Impact: There has been a disconnect between a safe speed limit, posted speed limit and street design, and what is considered an appropriate safe speed by adjacent residents Positive Impact: Engagement with school boards, Saskatoon Police, Saskatoon Fire, Saskatchewan Government Insurance (SGI), accessibility groups, walking groups etc. Minimum Standard: Looking at all neighbourhoods at once and producing a technical analysis. |

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| | | <p>This will be applied to all streets equally despite street design which will make some streets seem comfortable and others feel very slow; this could lead to a compliance problem. Traffic calming may be considered to address this issue.</p> | <p>This will be applied to all streets equally despite street design which will make some streets seem comfortable and others feel very slow; this could lead to a compliance problem. Traffic calming may be considered to address this issue.</p> |
| Effective Service Delivery | | <ul style="list-style-type: none"> • Minimum Standard: Stakeholder engagement will identify risks. Saskatoon Police helping to identify compliance issues and procedures to mitigate. A risk assessment for preferred option will be completed to determine procedures. Risks include compliance, education, enforcement, calming measures. • Positive Impact: This work is for the benefit of residents/neighbourhoods. This is being responsive to issues that have been raised. | <ul style="list-style-type: none"> • Minimum Standard: Stakeholder engagement will identify risks. Saskatoon Police helping to identify compliance issues and procedures to mitigate. A risk assessment for preferred option will be completed to determine procedures. Risks include compliance, education, enforcement, calming measures. • Positive Impact: This work is for the benefit of residents/neighbourhoods. This is being responsive to issues that have been raised. |
| Education, Communication, Engagement, Capacity Building | | <ul style="list-style-type: none"> • Positive Impact: Engagement with internal stakeholders • Positive Impact: Two surveys were completed to obtain opinions on revising speed limits in residential areas. Several stakeholder meetings have occurred to date. • Positive Impact: Communications plan is being used to share information about potential options and impacts of each option • Minimum Standard: Enhances partnerships and buy-in through stakeholder engagement. | <ul style="list-style-type: none"> • Positive Impact: Engagement with internal stakeholders • Positive Impact: Two surveys were completed to obtain opinions on revising speed limits in residential areas. Several stakeholder meetings have occurred to date. • Positive Impact: Communications plan is being used to share information about potential options and impacts of each option • Minimum Standard: Enhances partnerships and buy-in through stakeholder engagement. |

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| | | Promotes outreach through those organizations. | Promotes outreach through those organizations. |
| Monitoring, Reporting and Compliance | <ul style="list-style-type: none"> Minimum Standard: Data monitoring related to speed concerns and traffic calming requests will be completed. This will not be used to revisit speed limits. Survey data was used to gather amount of support from the public. | <ul style="list-style-type: none"> Minimum Standard: Debriefs are typically completed after implementation Minimum Standard: Data monitoring related to speed concerns and traffic calming requests will be completed. This will not be used to revisit speed limits. Survey data was used to gather amount of support from the public. Positive Impact: Researched other cities, best practices etc. Minimum Standard: This will result in a traffic bylaw change and traffic calming policy change Minimum Standard: Procedures will be followed | <ul style="list-style-type: none"> Minimum Standard: Debriefs are typically completed after implementation Minimum Standard: Data monitoring related to speed concerns and traffic calming needs will be completed. This will not be used to revisit speed limits. Survey data was used to gather amount of support from the public. Positive Impact: Researched other cities, best practices etc. Minimum Standard: This will result in a traffic bylaw change and traffic calming policy change Minimum Standard: Procedures will be followed |
| Agility and Adaptiveness | | <ul style="list-style-type: none"> Minimum Standard: Communication will be adaptive and responsive. The approved option should be applied consistently. Changing speed limits can lead to confusion and lack of compliance. Positive Impact: This is a change/reform to neighbourhood speed limits. This relates to the Safe Systems approach and is a shift in mind-set. Positive Impact: Police enforcement, a communication plan and traffic calming will be used to resolve issues of non-compliance Positive Impact: A pilot can lead to confusion and mixed results. | <ul style="list-style-type: none"> Minimum Standard: Communication will be adaptive and responsive. The approved option should be applied consistently. Changing speed limits can lead to confusion and lack of compliance. Positive Impact: This is a change/reform to neighbourhood speed limits. This relates to the Safe Systems approach and is a shift in mind-set. Positive Impact: Police enforcement, a communication plan and traffic calming will be used to resolve issues of non-compliance Positive Impact: A pilot can lead to confusion and mixed results. |

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| | | <p>The Montgomery Place neighbourhood changed speed limits but local experience is not necessarily transferable to other neighbourhoods. Edmonton piloted a few streets before implementing fully. Prince Albert, Warman and Martensville already have a 40 km/h speed limit. Lessons will be learned from their experiences. Research around vehicular collisions and speed limits also informs this project and the consequences of the options.</p> | <p>The Montgomery Place neighbourhood changed speed limits but local experience is not necessarily transferable to other neighbourhoods. Edmonton piloted a few streets before implementing fully. Lessons will be learned from their experiences. Research around vehicular collisions and speed limits also informs this project and the consequences of the options.</p> |
| <p>Roles, Responsibilities and Rewards</p> | | | |

For Further / Future Consideration

- Impacts to take actions to ensure that the organization's policies, initiatives, infrastructure, and services are reliable and effective (over both the short- and long-term) are unknown. Traffic calming measures may be required to ensure compliance. Traffic calming policy may need to be updated.

Saskatoon Transit Feedback

A reduction change in speed limit along residential streets and collector streets will impact Saskatoon Transit's delivery of total service hours to the City's overall transit network. Some routes would be impacted to a greater effect than others. In some cases, some routes may be impacted minimally while in other cases with greater impact. Obviously, a speed reduction to 30 km/h would have a greater impact on total service hours delivered than would a reduction to 40 km/h. Transit cannot state at this time to what extent these service hours would be affected with absolute certainty until further data is compiled and analyzed. Based on our initial analysis, there are many factors to consider which all contribute to overall bus travel times, frequency and average bus speeds. This level of data collection and analysis is doable but will require more time.

Saskatoon Transit has begun the process of compiling historical speed data to further conduct such a thorough and accurate analysis. Data has been requested for specific routes and sections of residential and collector streets where buses are travelling 50 km/h or below and where these potential speed reductions would take effect. Once this data has been collected and analyzed, Saskatoon Transit will be in a much better position to comment on the degree to which these changes will impact Transit operations and the amount of additional service hours will be required to maintain the current level of transit service and frequency.

In preparation for a future more detailed response on what these service hour impacts may be, Saskatoon Transit will continue to extract and review this data so that our analysis will be thorough, based on reliable and complete data.

Anticipated Schedule

