

CITY OF SASKATOON
2015 NEIGHBOURHOOD TRAFFIC REVIEWS

Lakeview

January 19, 2016

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Lakeview Neighbourhood Traffic Review

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Authorization

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EXECUTIVE SUMMARY

The objective of the Neighbourhood Traffic Management Program is to address traffic concerns within neighbourhoods such as speeding, shortcutting, and pedestrian safety. The program was revised in August 2013 to address traffic concerns on a neighbourhood-wide basis. The revised program involves additional community and stakeholder consultation that provides the environment for neighbourhood residents and City staff to work together in developing solutions that address traffic concerns. The process is outlined in the *Traffic Calming Guidelines and Tools*, City of Saskatoon, 2013.

A public meeting was held in May of 2015 to identify traffic concerns and potential solutions within the Lakeview neighbourhood. As a result of the meeting a number of traffic assessments were completed to confirm and quantify the concerns raised by the residents. Based on the residents input and the completed traffic assessments, a Traffic Management Plan was developed and presented to the community at a follow-up meeting held in November 2015.

A summary of recommended improvements for the Lakeview neighbourhood are included in **Table ES-1**. The summary identifies the locations, the recommended improvement, and a schedule for implementation. The schedule to implement the Traffic Management Plan can vary depending on the complexity of the proposed improvement. According to the *Traffic Calming Guidelines and Tools* document, the time frame may range from short-term (1 to 2 year); medium-term (3 to 5 years) and long-term (5 years plus). Accordingly, the specific time frame to implement the improvements for these neighbourhoods ranges from 1 to 5 years.

The resulting proposed Lakeview Traffic Management Plan is illustrated in **Exhibit ES-1**.

LEGEND

- PROPOSED STOP SIGN
- EXISTING STOP SIGN
- EXISTING YIELD SIGN
- BUS ROUTE
- EXISTING TRAFFIC SIGNAL
- PEDESTRIAN ACTUATED SIGNAL LOCATION

Item	Location	Recommendation	Reason
1	Kingsmere Blvd & Costigan Rd (north)	Median island (on north side)	Reduce speed
2	Kingsmere Blvd & Costigan Rd (south)	Median islands (on north & south sides)	Reduce speed
3	Kingsmere Blvd & Whiteshore Cres (north) / Delaronde Rd	School zone sign on signal overhead	Enhance visiblty of school zone
4	Kingsmere Blvd & Whiteshore Cres (north) / Delaronde Rd	"No parking" sign on Kingsmere Blvd 10m from intersection (on southeast corner)	Improve visibility
5	Kingsmere Blvd & curve between Delaronde Rd & Delaronde Rd	Move existing school zone sign south (across from 50kph sign) & install additional school zone sign on back side of 50kph sign	Improve visibility; reduce speed at beginning of school zone
6	Kingsmere Blvd & Whitewood Rd/Wollaston Cres	"No Parking" sign on Kingsmere Blvd 18m from intersection (on northeast corner)	Improve visibility
7	Kingsmere Blvd & all intersecting streets between Taylor St & Weyakwin Dr	Change all yield signs to stop signs (15 signs total)	Improve safety on bus route
8	Stillwater Dr & Kingsmere Blvd	Median island with additional stop sign (on east side)	Enhance visibility of stop sign; reduce speed for left turn and right turn from Kingsmere Blvd onto Stillwater Dr
9	Stillwater Dr & McKercher Dr	Zebra crosswalks	Improve pedestrian safety
10	Stillwater Dr & Emerald Cres (west)	Zebra crosswalks & curb extension (on southwest corner)	Improve pedestrian safety & reduce speed
11	Taylor St & Weyakwin Dr	Median island with additional stop sign (on south side)	Enhance visibility of stop sign; reduce speed for right turn from Taylor Street
12	Taylor St & Weyakwin Dr	"No Parking" sign on Taylor St 40m from intersection (on southwest corner)	Improve visibility
13	Taylor St - 200m west of Weyakwin Dr	Speed display board facing eastbound traffic	Reduce Speed
14	Crean Lane	Speed study in spring 2016 to determine additional measures	Speeding & traffic volume concerns
15	Lakeshore Crescent	Speed study in spring 2016 to determine additional measures	Speeding & traffic volume concerns



TABLE OF CONTENTS

Executive Summary.....	i
TABLE OF CONTENTS.....	iv
1 Introduction	1
2 Identifying Issues, Concerns, and Possible Solutions	2
2.1 Concern 1 – Speeding and Shortcutting.....	2
2.2 Concern 2 – Pedestrian Safety	3
2.3 Concern 3 – Traffic Control	3
2.4 Concern 4 – Parking	4
2.5 Concern 5 – Maintenance	4
2.6 Concern 6 – Transit	5
3 Assessment	6
3.1 Methodology	6
3.2 Travel Volumes and Travel Speeds	6
3.3 Traffic Control Assessments	9
3.4 Pedestrian Assessments	10
3.5 Collision Analysis	11
4 Plan Development.....	12
4.1 Methodology	12
4.2 Speeding and Shortcutting	12
4.3 Pedestrian Safety	13
4.4 Traffic Control.....	14
4.5 Parking Improvements	14
4.6 Follow Up Consultation – Presentation of Traffic Management Plan	15
4.7 Major Intersection Reviews and Corridor Studies	16
5 Recommended Plan & Cost Estimates.....	17

APPENDIX A – TRAFFIC DATA COLLECTION

APPENDIX B – ALL-WAY STOP ASSESSMENTS

APPENDIX C – PEDESTRIAN DEVICE ASSESSMENTS

APPENDIX D – COLLISION ANALYSIS

APPENDIX E – DECISION MATRIX

APPENDIX F – MEETING NOTES

LIST OF TABLES

Table 3-1: City of Saskatoon Street Classifications and Characteristics	7
Table 3-2: Speed Studies and Average Daily Traffic Counts (2015).....	8
Table 3-3: All-Way Stop Assessments	9
Table 3-4: Pedestrian Assessment	10
Table 4-1: Recommended Speeding and Shortcutting Improvements	13
Table 4-2: Recommended Pedestrian Safety Improvements.....	13
Table 4-3: Recommended Traffic Control Improvements	14
Table 4-4: Recommended Parking Improvements	14
Table 5-1: Traffic Calming Cost Estimate	17
Table 5-2: Traffic Control Signs Cost Estimate.....	18
Table 5-3: Pedestrian Safety Signs Cost Estimate.....	18
Table 5-4: Miscellaneous Signs Cost Estimate	19
Table 5-5: Total Cost Estimate	19
Table 5-6: Lakeview Neighbourhood Recommended Improvements.....	21

LIST OF EXHIBITS

Exhibit 5-1: Recommended Lakeview Traffic Management Plan	20
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1 INTRODUCTION

As the City of Saskatoon continues to grow many neighbourhoods face growing issues such as pedestrian safety, cut-through traffic, and increased speeds on local roads within neighbourhoods. In August 2013, City Council adopted the *City of Saskatoon Traffic Guidelines and Tools* that outlined a procedure for completing traffic reviews on a neighbourhood-wide basis. Prior to this neighbourhood traffic issues were dealt with on a case-by-case basis with mixed results. Since 2013 the formal process has proven to be very successful in providing recommendations that improve neighbourhood traffic conditions and pedestrian safety that were developed by the Administration and residents in collaborative fashion. Accordingly, this report provides the traffic management plan for Lakeview.

The Lakeview neighbourhood is located on the east side of the South Saskatchewan River and is bound by Highway 16 to the south, Weyakwin Drive to the east, Circle Drive to the west, and Taylor Street to the north. The area use is mostly residential, with an elementary school (Lakeview School) on Kingsmere Boulevard, and some commercial land use along Taylor Street.

The development and implementation of the traffic management plan includes four stages:

- **Stage 1** - Identify existing problems, concerns and possible solutions through the initial neighbourhood consultation and the Shaping Saskatoon Website.
- **Stage 2** - Develop a draft traffic plan based on resident's input and traffic assessments.
- **Stage 3** - Present the draft traffic plan to the neighbourhood at a follow-up meeting; circulate the plan to other civic divisions for feedback; make adjustments as needed; and present the plan to City Council for approval.
- **Stage 4** - Implement the proposed measures in specific time frame, short-term (1 to 2 years), medium-term (3 to 5 years) or long-term (5 years plus).

This report present the study findings and recommendations.

2 IDENTIFYING ISSUES, CONCERNS, AND POSSIBLE SOLUTIONS

A public meeting was held in May of 2015 to identify traffic concerns within the neighbourhood. At the meeting, residents were given the opportunity to express their concerns and suggest possible solutions.

The following pages summarize the concerns and suggested solutions identified during the initial consultation with the neighbourhood residents.

2.1 Concern 1 – Speeding and Shortcutting

Shortcutting occurs when non-local traffic passes through the neighbourhood on streets that are designed and intended for low volumes of traffic (i.e. local streets). In the case of Lakeview, the bordering arterial street (Taylor Street) is designated to accommodate larger traffic volumes.

As speeding often accompanies shortcutting, these concerns have been grouped into one category.

Neighbourhood concerns for speeding and shortcutting were at the following locations:

- Kingsmere Boulevard
- Delaronde Crescent
- Lakeshore Crescent
- Kennossee Crescent
- Whiteshore Crescent

Proposed solutions identified by residents:

- Install traffic calming (median islands or speed bumps) or concrete barriers
- Improve visibility of school zone sign
- Install speed display board
- Install “residents only” sign
- Install another entrance/exit to neighbourhood
- Enforcement

2.2 Concern 2 – Pedestrian Safety

It is important to address pedestrian safety concerns to support active transportation. Walking to nearby amenities, as opposed to driving, reduces traffic volumes.

Pedestrian crosswalks need to adhere to the City of Saskatoon Council Policy C07-018 *Traffic Control at Pedestrian Crossings*, November 15, 2004 which states the following:

“The installation of appropriate traffic controls at pedestrian crossings shall be based on warrants listed in the document entitled *Traffic Control at Pedestrian Crossings – 2004* approved by City Council in 2004.”

Neighbourhood concerns regarding pedestrian safety were at the following locations:

- Kingsmere Boulevard & Stillwater Drive
- Kingsmere Boulevard & Whiteshore Crescent / Delaronde Road
- Kingsmere Boulevard & Kingsmere Place
- Stillwater Drive & Emerald Crescent
- Stillwater Drive & McKercher Drive
- Taylor Street & Weyakwin Drive

Proposed solutions identified by residents:

- Improve visibility of school zone signs (either by moving the sign or tree trimming)
- Install active pedestrian corridor (overhead flashing yellow lights)
- Install traffic calming to restrict driver's from passing on the right
- Block side of crosswalk that pedestrian shouldn't be using at Whiteshore Crescent / Delaronde Road
- Extend school zone
- Install pedestrian sign with flashing light
- Add pedestrian connection at Delaronde Crescent crossing Circle Drive
- Add pedestrian connection south of Wollaston Court crossing Circle Drive
- Consider adding pedestrian controlled lights at walkways for pedestrians to cross safely

2.3 Concern 3 – Traffic Control

Traffic control signs are used in order to assign the right-of-way. City of Saskatoon Council Policy C07-007 *Traffic Control – Use of Stop and Yield Signs*, April 26, 2009 states that stop and yield signs are not to be used as speed control devices, to stop priority traffic over minor traffic, on the same approach to an intersection where traffic signals are operational, or as a pedestrian crossing device.

An all-way stop must meet the conditions for traffic volume, collision history, and must have a balanced volume from each leg to operate sufficiently.

Neighbourhood concerns regarding traffic controls were at the following locations:

- Stillwater Drive & McKercher Drive
- Taylor Street & Weyakwin Drive
- Delaronde Crescent

Proposed solutions identified by residents:

- Install all-way stop (Stillwater Drive & McKercher Drive and Taylor Street & Weyakwin Drive)
- Change yield sign to stop sign

2.4 Concern 4 – Parking

Parking is allowed on all city streets unless signage is posted. According to City of Saskatoon Bylaw 7200, *The Traffic Bylaw*, December 16, 2013, vehicles are restricted from parking within 10 metres of an intersection and one metre of a driveway crossing.

Neighbourhood concerns regarding parking were at the following locations:

- Kingsmere Boulevard & Costigan Road
- Kingsmere Boulevard & Whitewood Road / Wollaston Cres

Proposed solutions identified by residents:

- Parking restrictions
- Parking enforcement

2.5 Concern 5 – Maintenance

Condition of the streets in Lakeview was identified as a concern (i.e. snow clearing, potholes, tree trimming, and temporary traffic calming devices).

Neighbourhood concerns regarding maintenance were:

- Snow build-up on Kingsmere Boulevard
- Trees obstructing signs

2.6 Concern 6 – Transit

Transit:

- Kingsmere Boulevard & Whiteshore Crescent / Delaronde Road – buses stopping/parking during peak hours; buses speeding
- Kingsmere Boulevard & Costigan Road – bus stop creates a blind spot for drivers trying to exit Costigan Road onto Kingsmere Boulevard
- Kingsmere Boulevard & Wollaston Crescent / Whitewood Road - bus stop eastbound on Kingsmere Boulevard obstructs driver's view.

3 ASSESSMENT

3.1 Methodology

Stage 2 of the plan development included developing a draft traffic management plan. This was completed through the following actions:

- Create a detailed list of all the issues provided by the residents.
- Collect historical traffic studies and information the City has on file for the neighbourhood.
- Prepare a data collection program that will provide the appropriate information needed to undertake the assessments.
- Complete the data collection, which may include:
 - Intersection turning moving counts
 - Pedestrian counts
 - Daily and weekly traffic counts
 - Average speed measurements
- Assess the issues by using the information in reference with City policies, bylaws, and guidelines, transportation engineering design guidelines and technical documents, and professional engineering judgement.

The following sections provide details on the data collected for traffic volumes (peak hours, daily, and weekly), travel speed, and pedestrian movements. A map of the traffic data collection is shown in **Appendix A**.

3.2 Travel Volumes and Travel Speeds

Traffic volumes and travel speeds were measured to assist in determining the need for traffic calming devices. In Saskatoon the neighbourhood streets are classified typically as either local or collector streets. Traffic volumes (referred to as Average Daily Traffic) on these streets should meet the City of Saskatoon guidelines shown in **Table 3-1**.

Table 3-1: City of Saskatoon Street Classifications and Characteristics

Characteristics	Classifications					
	Back Lanes		Locals		Collectors	
	Residential	Commercial	Residential	Commercial	Residential	Commercial
Traffic function	Access function only (traffic movement not a consideration)		Access primary function (traffic movement secondary consideration)		Traffic movement and land access of equal importance	
Average Daily Traffic (vehicles per day)	<500	<1,000	<1,000	<5,000	<5,000	8,000-10,000
Typical Speed Limits (kph)	20		50		50	
Transit Service	Not permitted		Generally avoided		Permitted	
Cyclist	No restrictions or special facilities		No restrictions or special facilities		No restrictions or special facilities	
Pedestrians	Permitted, no special facilities		Sidewalks on one or both sides	Sidewalks provided where required	Typically sidewalks provided both sides	Sidewalks provided where required
Parking	Some restrictions		No restrictions or restriction on one side only		Few restrictions other than peak hour	

Travel speeds were measured to determine the 85th percentile speed, which is the speed at which 85 percent of vehicles are travelling at or below. The speed limit in the Lakeview neighbourhood is 50kph, except for school zones where the speed limit is 30kph from September and June, 8:00am to 5:00pm, excluding weekends.

The speed studies and Average Daily Traffic (ADT) on streets where speeding was identified as an issue are summarized in **Table 3-2**.

Table 3-2: Speed Studies and Average Daily Traffic Counts (2015)

Street	Between	Class	Average Daily Traffic (vpd)	Speed (kph)
Lakeshore Crescent	South portion of Crescent	36.5	288	local
Kenossee Crescent	Midblock	41.4	274	
Whiteshore Crescent	St. Bernard School Zone	school=30.4; regular=37.9	356	
Kingsmere Boulevard	Wakaw Crescent to Delaronde Road	55.1	3042	majorcollector
Kingsmere Boulevard	Costigan Road (north) to Costigan Road (south)	51.5	9303	
Kingsmere Boulevard	Christopher Road (north) to Christopher Road (south)	58	5414	
Stillwater Drive	Emerald Crescent (west) to Emerald Crescent (east)	53.8	2822	collector

3.3 Traffic Control Assessments

Yield, stop, and all-way stop controls need to meet City of Saskatoon Council Policy C07-007 *Traffic Control – Use of Stop and Yield Signs*, January 26, 2009.

Turning movement counts were completed to determine the need for an all-way (i.e. three-way or four-way) stop control. Criteria outlined in Council Policy C07-007 that may warrant an all-way stop include a peak hour count greater than 600 vehicles or an ADT greater than 6,000 vehicles per day or when five or more collisions are reported in the last twelve month period and are of a type susceptible to correction by an all-way stop control.

Further conditions that must be met for an all-way stop to be warranted are:

1. Traffic entering the intersection from the minor street must be at least 35% for a four-way stop and 25% for a three-way stop.
2. No other all-way stop or traffic signals within 200m.

Results of the studies are shown in **Table 3-3**.

Table 3-3: All-Way Stop Assessments

Location	Peak Hour Count	Average Daily Traffic (vpd)	# of Collisions within most recent 12 months	% of Traffic from minor street	Traffic Signals or all-way stop within 200m	All-Way Stop Warranted
Stillwater Drive & Emerald Crescent (west)	394	4460	0	15%	no	All-Way Stop Not Warranted
Stillwater Drive & McKercher Drive	810	8470	0	19%	no	
Kingsmere Boulevard & Stillwater Drive	1657	17060	0	7%	no	
Taylor Street & Weyakwin Drive	1365	15990	4	24%	no	

Details of the all-way stop assessments are provided in **Appendix B**.

3.4 Pedestrian Assessments

Pedestrian assessments are conducted to determine the need for pedestrian actuated signalized crosswalks which, in adherence to the City of Saskatoon Council Policy C07-018 *Traffic Control at Pedestrian Crossings*, November 15, 2004, are typically active pedestrian corridor (flashing yellow lights) or pedestrian-actuated signals. A warrant system assigns points for a variety of conditions that exist at the crossing location, including:

- Number of traffic lanes to be crossed;
- presence of a physical median;
- posted speed limit of the street;
- distance the crossing point is to the nearest protected crosswalk point; and
- number of pedestrian and vehicles at the location.

Pedestrian and traffic data is collected during the five peak hours of: 8:00am to 9:00am, 11:30am to 1:30pm, and 3:00pm to 5:00pm.

In addition, if a pedestrian actuated crosswalk is not warranted, a standard marked pedestrian crosswalk, or a zebra crosswalk (i.e. striped) may be considered. A summary of the pedestrian studies are provided in **Table 3-4**.

Table 3-4: Pedestrian Assessment

Location	Number of Pedestrians Crossing During Peak Hours	Results
Stillwater Drive & McKercher Drive	109	Pedestrian Device Not Warranted
Stillwater Drive & Emerald Crescent (west)	38	
Kingsmere Boulevard & Stillwater Drive	18	
Taylor Street & Weyakwin Drive	23	
Kingsmere Boulevard & Delaronde Road/Whiteshore Crescent	148	Existing Pedestrian-Actuated Signal

Details of the pedestrian actuated signal and active pedestrian corridor assessments are provided in **Appendix C**.

3.5 Collision Analysis

The most recently available five year collision statistics (2009 to 2013) were provided by SGI. High-collision locations, typically noted as the locations with an average of two or more collisions per year, were reviewed in more depth to identify trends. These include:

- Taylor Street & Weyakwin Drive
- Kingsmere Boulevard & Whiteshore Crescent / Delaronde Road
- Kingsmere Boulevard & Wollaston Crescent (east)
- Stillwater Drive & Weyakwin Drive

Details of the collision analysis are provided **Appendix D**.

4 PLAN DEVELOPMENT

4.1 Methodology

Stage 3 of the review included finalizing the recommended plan. This was achieved by completing the following steps:

- Based on the assessments, prepare a plan that illustrates the appropriate recommended improvement
- Present the draft plan to the residents at a follow-up public meeting
- Circulate the draft plan to the Civic Divisions for comment
- Revise the draft plan based on feedback from the stakeholders
- Prepare a technical document summarizing the recommended plan and project process

The tables in the following sections provide the details of the recommended traffic management plan, including the location, recommended improvement, and the justification of the recommended improvement.

4.2 Speeding and Shortcutting

As stated in Council Policy C07-007 *Traffic Control – Use of Stop and Yield Signs*, January 26, 2009, “stop signs are not to be used as speed control devices.”

The recommended improvements to address speeding and shortcutting are detailed in **Table 4-1**.

Table 4-1: Recommended Speeding and Shortcutting Improvements

Location	Recommended Improvement	Justification
Kingsmere Boulevard & Costigan Road (north)	Median island (on north side)	Reduce speed
Kingsmere Boulevard & Costigan Road (south)	Median islands (on north & south sides)	Reduce speed
Stillwater Drive & Kingsmere Boulevard	Median island (on east side)	Reduce speed for left-turn and right-turn from Kingsmere Boulevard onto Stillwater Drive
Stillwater Drive & Emerald Crescent (west)	Curb extension (on southwest corner)	Improve pedestrian safety & reduce speed
Taylor Street & Weyakwin Drive	Median island (on south side)	Reduce speed for right turn from Taylor Street
Taylor Street - 200m west of Weyakwin Drive	Speed display board facing eastbound traffic	Reduce Speed
Crean Lane	Speed study in spring 2016 to determine additional measures	Speeding & traffic volume concerns

4.3 Pedestrian Safety

The recommended improvements to increase pedestrian safety are detailed in **Table 4-2**.

Table 4-2: Recommended Pedestrian Safety Improvements

Location	Recommended Improvement	Justification
Kingsmere Boulevard & Whiteshore Crescent (north) / Delaronde Road	School zone sign on signal overhead	Enhance visibility of school zone
Kingsmere Boulevard & curve between Delaronde Road & Delaronde Road	Move existing school zone sign south (across from 50kph sign) & install additional school zone sign on back side of 50kph sign	Improve visibility; reduce speed at beginning of school zone
Stillwater Drive & McKercher Drive	Zebra crosswalks	Improve pedestrian safety
Stillwater Drive & Emerald Crescent (west)	Zebra crosswalks	Improve pedestrian safety & reduce speed

4.4 Traffic Control

The recommended improvements to intersections that will improve the level of safety by clearly identifying the right-of-way through traffic controls are provided in **Table 4-3**.

Table 4-3: Recommended Traffic Control Improvements

Location	Recommended Improvement	Justification
Kingsmere Boulevard & all intersecting streets between Taylor Street & Weyakwin Drive	Change all yield signs to stop signs (15 signs total)	Improve safety on bus route
Stillwater Drive & Kingsmere Boulevard	Median island with additional stop sign (on east side)	Enhance visibility of stop sign
Taylor Street & Weyakwin Drive	Median island with additional stop sign (on south side)	Enhance visibility of stop sign

4.5 Parking Improvements

The recommended improvements to parking that will improve the level of safety are detailed in **Table 4-4**.

Table 4-4: Recommended Parking Improvements

Location	Recommended Improvement	Justification
Kingsmere Boulevard & Whiteshore Crescent (north) / Delaronde Road	"No parking" sign on Kingsmere Boulevard 10m from intersection (on southeast corner)	Improve visibility
Kingsmere Boulevard & Whitewood Road / Wollaston Crescent	"No Parking" sign on Kingsmere Boulevard 18m from intersection (on northeast corner)	Improve visibility
Taylor Street & Weyakwin Drive	"No Parking" sign on Taylor Street 40m from intersection (on southwest corner)	Improve visibility

4.6 Follow Up Consultation – Presentation of Traffic Management Plan

The initial recommended improvements were presented at a follow-up public meeting in November 2015. Recommended improvements that were not supported by the residents were eliminated or altered accordingly. A decision matrix detailing the list of recommended improvements presented at the follow-up meeting are included in **Appendix E**. A decision matrix for additional comments received after the draft traffic plan is also included in **Appendix E**.

The recommendations were circulated to the Civic Divisions (including Police Services, Light & Power, Saskatoon Fire Department, Environmental Services, and Transit) to gather comments and concerns. General support was received. Transit was concerned about the proposed curb extension at the intersection of Stillwater Drive and McKercher Drive, as their drivers are currently expected to turn left to go northbound at this intersection. The curb extension was removed from the plan.

4.7 Major Intersection Reviews and Corridor Studies

The mandate for the Neighbourhood Traffic Management Reviews is to focus on neighbourhood streets such as local roads and collector roads. As almost all neighbourhoods are bound by arterial streets, such as Taylor Street, it is not uncommon to have residents raise issues regarding these streets. However, arterial streets are much more complex than local or collector streets due to larger traffic volumes, different types of drivers (commuters), coordinated traffic signals, transit accommodation, and potentially many commercial accesses. To properly address these, the typical transportation engineering approach would require a corridor study or a major intersection review, both of which are expensive and require significant resources. Through the Neighbourhood Traffic Reviews, the City is compiling a list of issues on arterial streets. The Transportation Division is working to prioritize the issues, identify the work requirements, and secure funding to complete these types of assessments.

5 RECOMMENDED PLAN & COST ESTIMATES

Stage 4, the last stage of the process, is to install the recommended improvements for the Lakeview neighbourhood within the specified timeframe. The timeframe depends upon the complexity and cost of the solution. A short-term time frame is defined by implementing the improvements within 1 to 2 years; medium-term is 3 to 5 years; and long-term is 5 years plus.

The placement of signage will be completed short-term (1 to 2 years).

Major intersection reviews are based on the number of other locations to be reviewed city-wide and the availability of funding. The timeline for review will be medium-term (3 to 5 years).

The estimated costs of the improvements included in the Neighbourhood Traffic Management Plan are outlined in the following tables:

- **Table 5-1:** Traffic Calming Cost Estimate
- **Table 5-2:** Traffic Control Signs Cost Estimate
- **Table 5-3:** Pedestrian Safety Signs Cost Estimate
- **Table 5-4:** Miscellaneous Signs Cost Estimate
- **Table 5-5:** Traffic Counts Cost Estimate
- **Table 5-6:** Total Cost Estimate

Table 5-1: Traffic Calming Cost Estimate

Location	Device	Cost Estimate		Time Frame
		Temporary	Permanent	
Kingsmere Boulevard & Costigan Road (north)	Median island (on north side)	\$500	\$5,000	1 to 5 years (traffic calming devices will be installed temporarily until proven effective)
Kingsmere Boulevard & Costigan Road (south)	Median islands (on north & south sides)	\$1,000	\$10,000	
Stillwater Drive & Kingsmere Boulevard	Median island (on east side)	\$500	\$5,000	
Stillwater Drive & Emerald Crescent (west)	Curb extension (on southwest corner)	\$500	\$45,000	
Taylor Street & Weyakwin Drive	Median island (on south side)	\$500	\$5,000	
Taylor Street - 200m west of Weyakwin Drive	Speed display board facing eastbound traffic	\$0	\$5,000	
Totals		\$3,000	\$75,000	

Table 5-2: Traffic Control Signs Cost Estimate

Location	Device	Number of Signs	Cost Estimate	Time Frame
Kingsmere Boulevard & all intersecting streets between Taylor Street & Weyakwin Drive	Stop sign	15	\$3,750	1 to 2 years
Stillwater Drive & Kingsmere Boulevard	Stop sign	1	\$250	
Taylor Street & Weyakwin Drive	Stop sign	1	\$250	
Totals		17	\$4,250	

Table 5-3: Pedestrian Safety Signs Cost Estimate

Location	Device	Cost Estimate	Time Frame
Kingsmere Boulevard & Whiteshore Crescent (north) / Delaronde Road	School zone sign	\$250	1 to 2 years
Kingsmere Boulevard & curve between Delaronde Road & Delaronde Road	School zone sign	\$250	
Stillwater Drive & McKercher Drive	Zebra crosswalks	\$500	
Stillwater Drive & Emerald Crescent (west)	Zebra crosswalks	\$500	
Total		\$1,500	

Table 5-4: Miscellaneous Signs Cost Estimate

Location	Device	Number of Signs	Cost Estimate	Time Frame
Kingsmere Boulevard & Whiteshore Crescent (north) / Delaronde Road	"No parking" sign	1	\$250	1 to 2 years
Kingsmere Boulevard & Whitewood Road / Wollaston Crescent	"No parking" sign	1	\$250	
Taylor Street & Weyakwin Drive	"No parking" sign	1	\$250	
Totals		3	\$750	

Table 5-5: Traffic Counts Cost Estimate

Location	Details	Permanent
Crean Lane	3-day traffic volumes and speed studies	\$250
Lakeshore Crescent	3-day traffic volumes and speed studies	\$250
Total		\$500

Table 5-6: Total Cost Estimate

Category	Signing, Temporary Traffic Calming, Traffic Counts (2016)	Permanent (Beyond 2016)
Traffic Calming	\$3,000	\$75,000
Traffic Control Signs	\$4,250	\$0
Pedestrian Safety Signs	\$1,500	\$0
Miscellaneous Signs	\$750	\$0
Traffic Counts	\$500	\$0
Totals	\$10,000	\$75,000

The total cost estimate for the signage and temporary traffic calming to be installed in 2016, and the additional traffic counts, is **\$10,000**. The total cost estimate for the installation of future permanent devices, including the active pedestrian corridor, and sidewalks, is **\$75,000**.

Resulting from the plan development process, the recommended improvements, including the location, type of improvement, and schedule for implementation are summarized in **Table 5-7**. The resulting recommended Lakeview neighbourhood Traffic Management Plan is illustrated in **Exhibit 5-1**.

LEGEND

- PROPOSED STOP SIGN
- EXISTING STOP SIGN
- EXISTING YIELD SIGN
- BUS ROUTE
- EXISTING TRAFFIC SIGNAL
- PEDESTRIAN ACTUATED SIGNAL LOCATION

Item	Location	Recommendation	Reason
1	Kingsmere Blvd & Costigan Rd (north)	Median island (on north side)	Reduce speed
2	Kingsmere Blvd & Costigan Rd (south)	Median islands (on north & south sides)	Reduce speed
3	Kingsmere Blvd & Whiteshore Cres (north) / Delaronde Rd	School zone sign on signal overhead	Enhance visiblty of school zone
4	Kingsmere Blvd & Whiteshore Cres (north) / Delaronde Rd	"No parking" sign on Kingsmere Blvd 10m from intersection (on southeast corner)	Improve visibility
5	Kingsmere Blvd & curve between Delaronde Rd & Delaronde Rd	Move existing school zone sign south (across from 50kph sign) & install additional school zone sign on back side of 50kph sign	Improve visibility; reduce speed at beginning of school zone
6	Kingsmere Blvd & Whitewood Rd/Wollaston Cres	"No Parking" sign on Kingsmere Blvd 18m from intersection (on northeast corner)	Improve visibility
7	Kingsmere Blvd & all intersecting streets between Taylor St & Weyakwin Dr	Change all yield signs to stop signs (15 signs total)	Improve safety on bus route
8	Stillwater Dr & Kingsmere Blvd	Median island with additional stop sign (on east side)	Enhance visibility of stop sign; reduce speed for left turn and right turn from Kingsmere Blvd onto Stillwater Dr
9	Stillwater Dr & Mc Kercher Dr	Zebra crosswalks	Improve pedestrian safety
10	Stillwater Dr & Emerald Cres (west)	Zebra crosswalks & curb extension (on southwest corner)	Improve pedestrian safety & reduce speed
11	Taylor St & Weyakwin Dr	Median island with additional stop sign (on south side)	Enhance visibility of stop sign; reduce speed for right turn from Taylor Street
12	Taylor St & Weyakwin Dr	"No Parking" sign on Taylor St 40m from intersection (on southwest corner)	Improve visibility
13	Taylor St - 200m west of Weyakwin Dr	Speed display board facing eastbound traffic	Reduce Speed
14	Crean Lane	Speed study in spring 2016 to determine additional measures	Speeding & traffic volume concerns
15	Lakeshore Crescent	Speed study in spring 2016 to determine additional measures	Speeding & traffic volume concerns

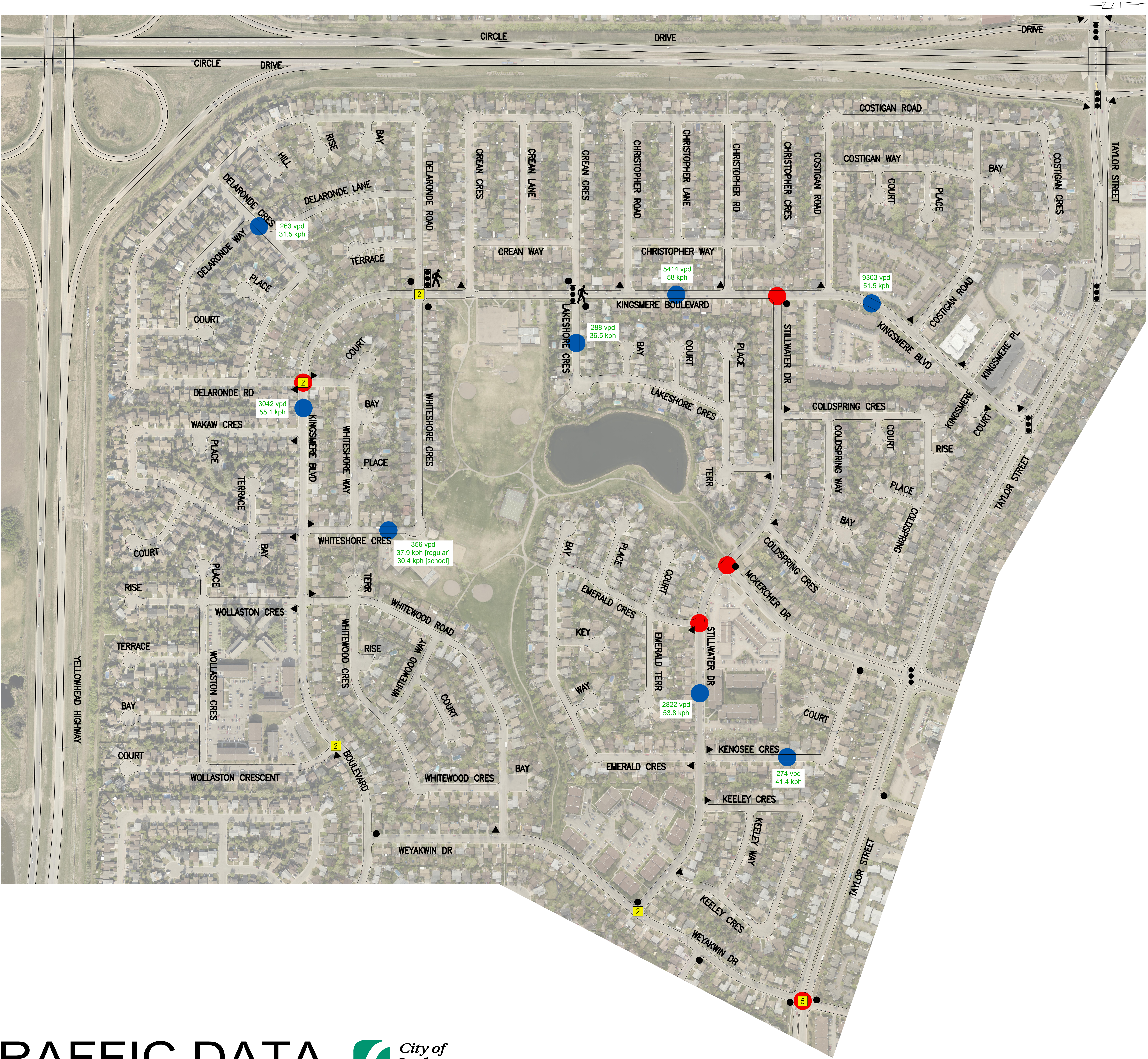


Exhibit 5-1

Table 5-6: Lakeview Neighbourhood Recommended Improvements

Item	Location	Recommendation	Reason
1	Kingsmere Boulevard & Costigan Road (north)	Median island (on north side)	Reduce speed
2	Kingsmere Boulevard & Costigan Road (south)	Median islands (on north & south sides)	Reduce speed
3	Kingsmere Boulevard & Whiteshore Crescent (north) / Delaronde Road	School zone sign on signal overhead	Enhance visibility of school zone
4	Kingsmere Boulevard & Whiteshore Crescent (north) / Delaronde Road	"No parking" sign on Kingsmere Boulevard 10m from intersection (on southeast corner)	Improve visibility
5	Kingsmere Boulevard & curve between Delaronde Road & Delaronde Road	Move existing school zone sign south (across from 50kph sign) & install additional school zone sign on back side of 50kph sign	Improve visibility; reduce speed at beginning of school zone
6	Kingsmere Boulevard & Whitewood Road/Wollaston Crescent	"No Parking" sign on Kingsmere Boulevard 18m from intersection (on northeast corner)	Improve visibility
7	Kingsmere Boulevard & all intersecting streets between Taylor Street & Weyakwin Drive	Change all yield signs to stop signs (15 signs total)	Improve safety on bus route
8	Stillwater Drive & Kingsmere Boulevard	Median island (on east side)	Enhance visibility of stop sign; reduce speed for left-turn and right-turn from Kingsmere Boulevard onto Stillwater Drive
9	Stillwater Drive & McKercher Drive	Zebra crosswalks	Improve pedestrian safety
10	Stillwater Drive & Emerald Crescent (west)	Zebra crosswalks & curb extension (on southwest corner)	Improve pedestrian safety & reduce speed
11	Taylor Street & Weyakwin Drive	Median island (on south side)	Reduce speed of drivers making right-turn from Taylor Street onto Weyakwin Drive; Additional location for stop sign on Weyakwin Drive
12	Taylor Street & Weyakwin Drive	"No Parking" sign on Taylor Street 40m from intersection (on southwest corner)	Improve visibility
13	Taylor Street - 200m west of Weyakwin Drive	Speed display board facing eastbound traffic	Reduce Speed
14	Crean Lane	Speed study in spring 2016 to determine additional measures	Speeding & traffic volume concerns

APPENDIX A: TRAFFIC DATA COLLECTION



APPENDIX B: ALL-WAY STOP ASSESSMENTS

All-way Stop Assessment (Policy C07-007 – Traffic Control – Use of Stop & Yield Signs)

Step 1:

The following conditions must be met for all-way stop control to be considered:

i) The combined volume of traffic entering the intersection over the five peak hour periods from the minor street must be at least 25% of the total volume for a three-way stop control, and at least 35% of the total volume for a four-way stop control.

ii) There can be no all-way stop control and traffic signal within 200 metres of the proposed intersection being considered for all-way stop control on either of the intersecting streets.

Location	Condition 1: % of Traffic from minor street	Condition 2: Traffic Signals or all-way stop within 200m	All-Way Stop Warrant
Stillwater Drive & Emerald Crescent (west)	15% (no)	no	Conditions NOT met.
Stillwater Drive & McKercher Drive	19% (no)	no	
Kingsmere Boulevard & Stillwater Drive	7% (no)	no	
Taylor Street & Weyakwin Drive	24% (no)	no	

Conditions not met. No need to proceed to Step 2.

APPENDIX C: PEDESTRIAN DEVICE ASSESSMENTS

Pedestrian Corridor Assessment:

Stillwater Drive & Emerald Cres:

Time (15 minute intervals)	Vehicle Counts		Pedestrian Counts							P.C. Warrant Points	Periods Wrnt'd (1=Yes)	Points of Wrnt'd Periods
			Total Both Sides					Factored Counts				
	15 min.	30 min.	Child	Teen	Adult	Senior / Impaired	Total	15 min.	30 min.			
7:00												
7:15												
7:30												
7:45												
8:00	64	64										
8:15	78	142	1				1	1	1	142		
8:30	87	165							1	165		
8:45	64	151										
9:00		64										
9:15												
9:30												
9:45												
AM Totals	293		1				1					
11:30	42		3				3	3				
11:45	44	86	6				6	6	9	774		
12:00	52	96	1				1	1	7	672		
12:15	64	116	10				10	10	11	1,276		
12:30	63	127							10	1,270		
12:45	76	139										
13:00	38	114										
13:15	44	82										
Noon Totals	423		20				20					
14:00												
14:15												
14:30												
14:45												
15:00	70	70	5				5	5	5	350		
15:15	63	133	3				3	3	8	1,064		
15:30	67	130	6				6	6	9	1,170		
15:45	71	138	1				1	1	7	966		
16:00	71	142							1	142		
16:15	104	175	1				1	1	1	175		
16:30	90	194							1	194		
16:45	100	190	1				1	1	1	190		
17:00		100							1	100		
17:15												
17:30												
17:45												
18:00												
18:15												
18:30												
18:45												
19:00							✓					
19:15							✓					
19:30							✓					
19:45							✓					
20:00							✓					
20:15							✓					
20:30							✓					
20:45							✓					
PM Totals	636		17				17					
Totals	1,352		38				38					
			100%				100%	<<< install crosswalk on this side of the int.				
			West Crosswalk =				30					
			East Crosswalk =				8					

SUMMARY

Total Warranted PC Points:

or

/ period

Highest PC point value: 1,276

at

Average PC point value: 577

No. of periods warranted:

Stillwater Drive & McKercher Drive:

Time (15 minute intervals)	Vehicle Counts		Pedestrian Counts							P.C. Warrant Points	Periods Wrnt'd (1=Yes)	Points of Wrnt'd Periods
			Total Both Sides					Factored Counts				
	15 min.	30 min.	Child	Teen	Adult	Senior / Impaired	Total	15 min.	30 min.			
7:00												
7:15												
7:30												
7:45												
8:00	86	86										
8:15	88	174	2				2	2	2	348		
8:30	98	186	11				11	11	13	2,418		
8:45	88	186	3				3	3	14	2,604		
9:00		88							3	264		
9:15												
9:30												
9:45												
AM Totals	360		16				16					
11:30	57		1				1	1				
11:45	65	122	10				10	10	11	1,342		
12:00	59	124	12				12	12	22	2,728		
12:15	69	128	3				3	3	15	1,920		
12:30	91	160	5				5	5	8	1,280		
12:45	98	189							5	945		
13:00	57	155	1				1	1	1	155		
13:15	58	115	1				1	1	2	230		
Noon Totals	554		33				33					
14:00												
14:15												
14:30												
14:45												
15:00	79	79										
15:15	86	165	6				6	6	6	990		
15:30	98	184	16				16	16	22	4,048		
15:45	92	190	3				3	3	19	3,610		
16:00	101	193	4				4	4	7	1,351		
16:15	118	219	15				15	15	19	4,161		
16:30	118	236	5				5	5	20	4,720		
16:45	106	224	11				11	11	16	3,584		
17:00		106							11	1,166		
17:15												
17:30												
17:45												
18:00												
18:15												
18:30												
18:45												
19:00												
19:15												
19:30												
19:45												
20:00												
20:15												
20:30												
20:45												
PM Totals	798		60				60					
Totals	1,712		109				109					
			100%				100%					
			West Crosswalk =				39					
			East Crosswalk =				70	<<< install crosswalk on this side of the int.				

<<< install crosswalk on this side of the int.

SUMMARY

Total Warranted PC Points: or / period
Highest PC point value: 4,720 at
Average PC point value: 2,524
No. of periods warranted:

Kingsmere Blvd & Delaronde/Whiteshore Cres:

Time (15 minute intervals)	Vehicle Counts		Pedestrian Counts							P.C. Warrant Points	Periods Wrnt'd (1=Yes)	Points of Wrnt'd Periods
			Total Both Sides					Factored Counts				
	15 min.	30 min.	Child	Teen	Adult	Senior / Impaired	Total	15 min.	30 min.			
7:00												
7:15												
7:30												
7:45												
8:00	122	122	2				2	2	2	244		
8:15	134	256	3				3	3	5	1,280		
8:30	147	281	19				19	19	22	6,182	1	6,182
8:45	142	289	13				13	13	32	9,248	1	9,248
9:00		142							13	1,846		
9:15												
9:30												
9:45												
AM Totals	545		37				37					15,430
11:30	84		2				2	2				
11:45	79	163	16				16	16	18	2,934		
12:00	87	166	6				6	6	22	3,652		
12:15	75	162	9				9	9	15	2,430		
12:30	102	177	1				1	1	10	1,770		
12:45	74	176	3				3	3	4	704		
13:00	79	153							3	459		
13:15	60	139	1				1	1	1	139		
Noon Totals	640		38				38					
14:00												
14:15												
14:30												
14:45												
15:00	90	90	2				2	2	2	180		
15:15	110	200	7				7	7	9	1,800		
15:30	159	269	37				37	37	44	11,836	1	11,836
15:45	156	315	5				5	5	42	13,230	1	13,230
16:00	118	274	4				4	4	9	2,466		
16:15	125	243	3				3	3	7	1,701		
16:30	144	269	12				12	12	15	4,035		
16:45	167	311	3				3	3	15	4,665		
17:00		167							3	501		
17:15												
17:30												
17:45												
18:00												
18:15												
18:30												
18:45												
19:00												
19:15												
19:30												
19:45												
20:00												
20:15												
20:30												
20:45												
PM Totals	1,069		73				73					25,066
Totals	2,254		148				148					
			100%				100%					
			North Crosswalk =					44	<<< install crosswalk on this side of the int.			
			South Crosswalk =					104				

SUMMARY

Total Warranted PC Points: 40,496 or 10,124 / period
 Highest PC point value: 13,230 at
 Average PC point value: 4,753
 No. of periods warranted: 4

Kingsmere Blvd & Stillwater Dr:

Time (15 minute intervals)	Vehicle Counts		Pedestrian Counts							P.C. Warrant Points	Periods Wrnt'd (1=Yes)	Points of Wrnt'd Periods
			Total Both Sides					Factored Counts				
	15 min.	30 min.	Child	Teen	Adult	Senior / Impaired	Total	15 min.	30 min.			
7:00												
7:15												
7:30												
7:45												
8:00	205	205	1				1	1	1	205		
8:15	239	444	4				4	4	5	2,220		
8:30	227	466	4				4	4	8	3,728		
8:45	260	487	1				1	1	5	2,435		
9:00		260							1	260		
9:15												
9:30												
9:45												
AM Totals	931		10				10					
11:30	123		1				1	1				
11:45	155	278							1	278		
12:00	136	291	1				1	1	1	291		
12:15	146	282							1	282		
12:30	144	290										
12:45	124	268										
13:00	138	262	1				1	1	1	262		
13:15	115	253							1	253		
Noon Totals	1,081		3				3					
14:00												
14:15												
14:30												
14:45												
15:00	142	142										
15:15	206	348										
15:30	230	436	2				2	2	2	872		
15:45	280	510							2	1,020		
16:00	210	490	2				2	2	2	980		
16:15	244	454							2	908		
16:30	260	504	1				1	1	1	504		
16:45	280	540							1	540		
17:00		280										
17:15												
17:30												
17:45												
18:00												
18:15												
18:30												
18:45												
19:00												
19:15												
19:30												
19:45												
20:00												
20:15												
20:30												
20:45												
PM Totals	1,852		5				5					
Totals	3,864		18				18	<<< install crosswalk on this side of the int.				
			100%				100%					
			North Crosswalk =				12					
			South Crosswalk =				6					

<<< install crosswalk on this side of the int.

SUMMARY

Total Warranted PC Points: or / period
Highest PC point value: 3,728 at
Average PC point value: 1,003
No. of periods warranted:

Taylor St & Weyakwin Dr:

Time (15 minute intervals)	Vehicle Counts		Pedestrian Counts							P.C. Warrant Points	Periods Wrnt'd (1=Yes)	Points of Wrnt'd Periods
			Total Both Sides					Factored Counts				
	15 min.	30 min.	Child	Teen	Adult	Senior / Impaired	Total	15 min.	30 min.			
7:00												
7:15												
7:30												
7:45												
8:00	247	247	3				3	3	3	741		
8:15	293	540	1				1	1	4	2,160		
8:30	256	549	1				1	1	2	1,098		
8:45	236	492	1				1	1	2	984		
9:00		236							1	236		
9:15												
9:30												
9:45												
AM Totals	1,032		6				6					
11:30	179											
11:45	173	352										
12:00	233	406	2				2	2	2	812		
12:15	181	414							2	828		
12:30	200	381	2				2	2	2	762		
12:45	190	390	1				1	1	3	1,170		
13:00	188	378	1				1	1	2	756		
13:15	151	339	2				2	2	3	1,017		
Noon Totals	1,495		8				8					
14:00												
14:15												
14:30												
14:45												
15:00	199	199	2				2	2	2	398		
15:15	279	478	3				3	3	5	2,390		
15:30	316	595							3	1,785		
15:45	289	605										
16:00	269	558										
16:15	336	605										
16:30	330	666	2				2	2	2	1,332		
16:45	363	693	2				2	2	4	2,772		
17:00		363							2	726		
17:15												
17:30												
17:45												
18:00												
18:15												
18:30												
18:45												
19:00												
19:15												
19:30												
19:45												
20:00												
20:15												
20:30												
20:45												
PM Totals	2,381		9				9					
Totals	4,908		23				23	<<< install crosswalk on this side of the int.				
			100%				100%					
			West Crosswalk =				6					
			East Crosswalk =				17					

SUMMARY

Total Warranted PC Points: or / period
 Highest PC point value: 2,772 at
 Average PC point value: 1,331
 No. of periods warranted:

Pedestrian Actuated Signal Assessment:

Stillwater Drive & Emerald Cres:

Location & Roadway Classification: Stillwater & Emerald - collector & local
Date of Count: Day of wk: Thurs Mth, Day, Yr: May 21/15
Weather: fair
Traffic Control Devices: stop sign
Current Pedestrian Control: none
Other Notes:

Number of travel lanes passing through the crosswalk(s) 2 lanes
Is there a physical median in this crosswalk(s)? n (y or n)
Speed limit (or 85th percentile speed) 50 km/h
☐ 85th percentile (check one)
☐ Posted Limit
Distance to nearest protected crosswalk 1,000 m
Location: none
Type:
Is the orientation of this crosswalk(s) N-S? y (y or n)
Duration of pedestrian count 5 hrs

Elementary:	38	Total Warranted PC Points:		or	/ period
High School:		Highest PC point value:	1,276	at	
Adult:		Active Ped Corridor Points:			
Senior:		Pedestrian Actuated Signal Points:	34		
Vehicles passing through crosswalk(s):	1,352				

ACTIVE PEDESTRIAN CORRIDOR NOT WARRANTED
PEDESTRIAN ACTUATED SIGNAL NOT WARRANTED

****Install device at the West Crosswalk ****

(Note: Standard and Zebra crosswalks can be installed on both sides if pedestrian volumes are approximately equal.)

Time (15 minute intervals)	Vehicle Counts				Pedestrian Counts							
	SB	WB	NB	EB	West Crosswalk				East Crosswalk			
					Child	Teen	Adult	Senior / Impaired	Senior / Impaired	Adult	Teen	Child
7:00												
7:15												
7:30												
7:45												
8:00		28	24	12								
8:15		42	12	24	1							
8:30		40	27	20								
8:45		29	8	27								
9:00												
9:15												
9:30												
9:45												
AM Totals		139	71	83	1							
11:30		15	8	19	3							
11:45		14	5	25	6							
12:00		17	5	30	1							
12:15		20	8	36	10							
12:30		17	14	32								
12:45		33	9	34								
13:00		18	4	16								
13:15		15	5	24								
Noon Totals		149	58	216	20							
14:00												
14:15												
14:30												
14:45												
15:00		36	7	27	1							4
15:15		20	7	36	3							
15:30		20	5	42	3							3
15:45		32	7	32								1
16:00		24	2	45								
16:15		36	9	59	1							
16:30		28	9	53								
16:45		28	15	57	1							
17:00												
17:15												
17:30												
17:45												
18:00												
18:15												
18:30												
18:45												
19:00												
19:15												
19:30												
19:45												
20:00												
20:15												
20:30												
20:45												
PM Totals		224	61	351	9							8
Totals		512	190	650	30							8
					West Crosswalk = 30				East Crosswalk = 8			

Stillwater Drive & McKercher Drive:

Location & Roadway Classification: Stillwater & McKercher
Date of Count: Day of wk: Thurs Mth, Day, Yr: May 21/15
Weather: fair
Traffic Control Devices: stop sign
Current Pedestrian Control: standard
Other Notes: _____

Number of travel lanes passing through the crosswalk(s) 2 lanes

Is there a physical median in this crosswalk(s)? y (y or n)

Speed limit (or 85th percentile speed) 50 km/h

☐ 85th percentile (check one)

☐ Posted Limit

Distance to nearest protected crosswalk 1,000 m

Location: none

Type: _____

Is the orientation of this crosswalk(s) N-S? y (y or n)

Duration of pedestrian count 5 hrs

Elementary:	109	Total Warranted PC Points:		or	/ period
High School:		Highest PC point value:	4,720	at	
Adult:		Active Ped Corridor Points:			
Senior:		Pedestrian Actuated Signal Points:	47		
Vehicles passing through crosswalk(s):	1,712				

ACTIVE PEDESTRIAN CORRIDOR NOT WARRANTED
PEDESTRIAN ACTUATED SIGNAL NOT WARRANTED

****Install device at the East Crosswalk ****

(Note: Standard and Zebra crosswalks can be installed on both sides if pedestrian volumes are approximately equal.)

Time (15 minute intervals)	Vehicle Counts				Pedestrian Counts							
	SB	WB	NB	EB	West Crosswalk				East Crosswalk			
					Child	Teen	Adult	Senior / Impaired	Senior / Impaired	Adult	Teen	Child
7:00												
7:15												
7:30												
7:45												
8:00	9	46		31								
8:15	18	48		22	1							1
8:30	21	54		23	4							7
8:45	24	33		31	2							1
9:00												
9:15												
9:30												
9:45												
AM Totals	72	181		107	7							9
11:30	20	22		15	1							
11:45	23	18		24	2							8
12:00	21	19		19	4							8
12:15	28	29		12								3
12:30	31	37		23	5							
12:45	30	42		26								
13:00	21	23		13								1
13:15	20	17		21	1							
Noon Totals	194	207		153	13							20
14:00												
14:15												
14:30												
14:45												
15:00	27	34		18								
15:15	32	19		35	3							3
15:30	42	25		31	2							14
15:45	23	40		29	1							2
16:00	44	34		23	4							
16:15	47	42		29	1							14
16:30	53	35		30	4							1
16:45	39	35		32	4							7
17:00												
17:15												
17:30												
17:45												
18:00												
18:15												
18:30												
18:45												
19:00												
19:15												
19:30												
19:45												
20:00												
20:15												
20:30												
20:45												
PM Totals	307	264		227	19							41
Totals	573	652		487	39							70
					West Crosswalk = 39				East Crosswalk = 70			

Kingsmere Blvd & Delaronde/Whiteshore Cres (existing pedestrian actuated signal):

Location & Roadway Classification: Kingsmere & Delaronde/Whiteshore
Date of Count: Day of wk: Mon/Tues Mth, Day, Yr: Jun 8/15
Weather: fair
Traffic Control Devices: stop sign
Current Pedestrian Control: PAS
Other Notes: _____

Number of travel lanes passing through the crosswalk(s) 2 lanes

Is there a physical median in this crosswalk(s)? n (y or n)

Speed limit (or 85th percentile speed) 50 km/h

☐ 85th percentile (check one)

☐ Posted Limit

Distance to nearest protected crosswalk 1,000 m

Location: none

Type: _____

Is the orientation of this crosswalk(s) N-S? n (y or n)

Duration of pedestrian count 5 hrs

Elementary:	148	Total Warranted PC Points:	40,496	or	10,124	/ period
High School:		Highest PC point value:	13,230	at		
Adult:		Active Ped Corridor Points:	4			
Senior:		Pedestrian Actuated Signal Points:	68			
Vehicles passing through crosswalk(s):	2,254					

ACTIVE PEDESTRIAN CORRIDOR WARRANTED

PEDESTRIAN ACTUATED SIGNAL NOT WARRANTED

****Install device at the South Crosswalk ****

(Note: Standard and Zebra crosswalks can be installed on both sides if pedestrian volumes are approximately equal.)

Time (15 minute intervals)	Vehicle Counts				Pedestrian Counts							
	SB	WB	NB	EB	North Crosswalk				South Crosswalk			
					Child	Teen	Adult	Senior / Impaired	Senior / Impaired	Adult	Teen	Child
7:00												
7:15												
7:30												
7:45												
8:00	11	58	25	28								2
8:15	16	70	20	28	1							2
8:30	14	60	28	45	1							18
8:45	23	51	13	55	6							7
9:00												
9:15												
9:30												
9:45												
AM Totals	64	239	86	156	8							29
11:30	7	34	9	34								2
11:45	3	25	7	44	1							15
12:00	9	28	4	46	5							1
12:15	4	26	8	37	2							7
12:30	8	31	11	52	1							
12:45	6	20	11	37	3							
13:00	4	28	15	32								
13:15	2	21	7	30	1							
Noon Totals	43	213	72	312	13							25
14:00												
14:15												
14:30												
14:45												
15:00	3	33	7	47								2
15:15	4	41	12	53	3							4
15:30	21	45	7	86	7							30
15:45	19	35	11	91	1							4
16:00	8	23	10	77	3							1
16:15	5	32	11	77								3
16:30	8	40	16	80	9							3
16:45	9	38	13	107								3
17:00												
17:15												
17:30												
17:45												
18:00												
18:15												
18:30												
18:45												
19:00												
19:15												
19:30												
19:45												
20:00												
20:15												
20:30												
20:45												
PM Totals	77	287	87	618	23							50
Totals	184	739	245	1,086	44							104
					North Crosswalk = 44				South Crosswalk = 104			

Kingsmere Blvd & Stillwater Dr:

Location & Roadway Classification: Kingsmere & Stillwater Dr - major collector & collector
Date of Count: Day of wk: Tues Mth, Day, Yr: Sep 22/15
Weather: fair
Traffic Control Devices: stop sign
Current Pedestrian Control: zebra crosswalks
Other Notes: _____

Number of travel lanes passing through the crosswalk(s) 2 lanes

Is there a physical median in this crosswalk(s)? n (y or n)

Speed limit (or 85th percentile speed) 50 km/h

☐ 85th percentile (check one)

☐ Posted Limit

Distance to nearest protected crosswalk 460 m

Location: Taylor St

Type: TS

Is the orientation of this crosswalk(s) N-S? n (y or n)

Duration of pedestrian count 5 hrs

Elementary:	18	Total Warranted PC Points:		or	/ period
High School:		Highest PC point value:	3,728	at	
Adult:		Active Ped Corridor Points:			
Senior:		Pedestrian Actuated Signal Points:	36		
Vehicles passing through crosswalk(s):	3,864				

ACTIVE PEDESTRIAN CORRIDOR NOT WARRANTED
PEDESTRIAN ACTUATED SIGNAL NOT WARRANTED

****Install device at the North Crosswalk ****

(Note: Standard and Zebra crosswalks can be installed on both sides if pedestrian volumes are approximately equal.)

Time (15 minute intervals)	Vehicle Counts				Pedestrian Counts							
	SB	WB	NB	EB	North Crosswalk				South Crosswalk			
					Child	Teen	Adult	Senior / Impaired	Senior / Impaired	Adult	Teen	Child
7:00												
7:15												
7:30												
7:45												
8:00	46	30	129									1
8:15	49	29	161		4							
8:30	80	31	116		4							
8:45	88	34	138		1							
9:00												
9:15												
9:30												
9:45												
AM Totals	263	124	544		9							1
11:30	56	18	49									1
11:45	76	15	64									
12:00	66	16	54		1							
12:15	69	25	52									
12:30	74	15	55									
12:45	48	15	61									
13:00	60	23	55		1							
13:15	50	12	53									
Noon Totals	499	139	443		2							1
14:00												
14:15												
14:30												
14:45												
15:00	67	22	53									
15:15	132	23	51									
15:30	121	24	85		1							1
15:45	128	23	129									
16:00	113	21	76									2
16:15	144	19	81									
16:30	161	25	74									1
16:45	165	15	100									
17:00												
17:15												
17:30												
17:45												
18:00												
18:15												
18:30												
18:45												
19:00												
19:15												
19:30												
19:45												
20:00												
20:15												
20:30												
20:45												
PM Totals	1,031	172	649		1							4
Totals	1,793	435	1,636		12							6
					North Crosswalk = 12				South Crosswalk = 6			

Taylor St & Weyakwin Dr:

Location & Roadway Classification: Taylor St & Weyakwin - arterial & collect

Date of Count: Day of wk: Tues Mth, Day, Yr: Sep 22/15

Weather: fair

Traffic Control Devices: stop sign

Current Pedestrian Control: zebra

Other Notes: _____

Number of travel lanes passing through the crosswalk(s) 6 lanes

Is there a physical median in this crosswalk(s)? y (y or n)

Speed limit (or 85th percentile speed) 50 km/h

☐ 85th percentile (check one)

☐ Posted Limit

Distance to nearest protected crosswalk 530 m

Location: McKercher Dr

Type: TS

Is the orientation of this crosswalk(s) N-S? y (y or n)

Duration of pedestrian count 5 hrs

Elementary:	23	Total Warranted PC Points:		or	/ period
High School:		Highest PC point value:	2,772	at	
Adult:		Active Ped Corridor Points:			
Senior:		Pedestrian Actuated Signal Points:	53		
Vehicles passing through crosswalk(s):	4,908				

ACTIVE PEDESTRIAN CORRIDOR NOT WARRANTED
PEDESTRIAN ACTUATED SIGNAL NOT WARRANTED

****Install device at the East Crosswalk ****

(Note: Standard and Zebra crosswalks can be installed on both sides if pedestrian volumes are approximately equal.)

Time (15 minute intervals)	Vehicle Counts				Pedestrian Counts									
	SB	WB	NB	EB	West Crosswalk				East Crosswalk					
					Child	Teen	Adult	Senior / Impaired	Senior / Impaired	Adult	Teen	Child		
7:00														
7:15														
7:30														
7:45														
8:00	13	129	61	44								3		
8:15	19	96	83	95								1		
8:30	9	77	86	84								1		
8:45	15	80	57	84								1		
9:00														
9:15														
9:30														
9:45														
AM Totals	56	382	287	307								6		
11:30	14	47	27	91										
11:45	16	41	28	88										
12:00	11	51	34	137								2		
12:15	18	44	30	89										
12:30	21	45	39	95								2		
12:45	12	65	41	72								1		
13:00	19	45	39	85	1									
13:15	10	25	29	87	1							1		
Noon Totals	121	363	267	744	2							6		
14:00														
14:15														
14:30														
14:45														
15:00	11	60	25	103								2		
15:15	14	66	42	157	1							2		
15:30	14	78	49	175										
15:45	10	68	37	174										
16:00	11	64	30	164										
16:15	16	78	34	208										
16:30	11	72	39	208	1							1		
16:45	13	64	50	236	2									
17:00														
17:15														
17:30														
17:45														
18:00														
18:15														
18:30														
18:45														
19:00														
19:15														
19:30														
19:45														
20:00														
20:15														
20:30														
20:45														
PM Totals	100	550	306	1,425	4							5		
Totals	277	1,295	860	2,476	6							17		
					West Crosswalk =				6	East Crosswalk =				17

APPENDIX D: COLLISION ANALYSIS

Street 1	Street 2	All Collisions (2009 – 2013)	All collisions - 2013	Right Angle, Left Turn, Right Turn only	Right Angle, Left Turn, Right Turn only – 2013	Average (2009 – 2013)
Taylor St	Weyakwin Dr	23	4	15	3	5
Kingsmere Blvd	Whiteshore/Delaronde	11	2	6	0	2
Kingsmere Blvd	Wollaston Cres (east)	9	1	6	0	2
Stillwater Dr	Weyakwin Dr	8	1	6	1	2
Kingsmere Blvd	Whiteshore Way	6	1	4	0	1
Kingsmere Blvd	Whiteshore/Wakaw	4	1	3	1	1
Kingsmere Blvd	Wollaston/Whitewood	7	1	3	1	1
Stillwater Dr	Emerald Cres (west)	4	0	3	0	1
Kingsmere Blvd	Kingsmere Pl	4	1	2	1	1
Kingsmere Blvd	100 block (cul-de-sac)	3	0	1	0	1
Kingsmere Blvd	Costigan Rd (north)	4	1	1	1	1
Kingsmere Blvd	Stillwater Dr	5	0	1	0	1
Kingsmere Blvd	Christopher Rd (north)	2	0	1	0	0
Kingsmere Blvd	Christopher Rd (south)	3	1	1	0	1
Stillwater Dr	McKercher Dr	8	4	1	0	2
Kingsmere Blvd	Costigan Rd (south)	1	0	0	0	0
Kingsmere Blvd	Crean Cres (north)	1	1	0	0	0
Kingsmere Blvd	Crean Cres (south)	1	0	0	0	0
Kingsmere Blvd	Wakaw Cres	0	0	0	0	0
Costigan Cres	Costigan Bay	0	0	0	0	0
Costigan Cres	Costigan Cres (300/400 block)	1	0	0	0	0
Costigan Cres	Costigan Way (south)	1	1	0	0	0
Christopher Cres	Christopher Rd (east)	1	0	0	0	0
Christopher Cres	Christopher Rd (west)	2	1	0	0	0
Christopher Cres	Christopher Lane (east)	1	0	0	0	0
Christopher Cres	Christopher Cres (400/600 block)	0	0	0	0	0
Delaronde Cres	Delaronde Terr	0	0	0	0	0
Delaronde Cres	Delaronde Lane (north)	1	0	0	0	0
Delaronde Cres	Delaronde Rise	1	1	0	0	0
Delaronde Cres	Delaronde Hill	0	0	0	0	0
Wakaw Cres	Wakaw Crt	0	0	0	0	0
Wollaston Cres	Wollaston Bay	0	0	0	0	0
Wollaston Cres	Wollaston Crt	0	0	0	0	0
Lakeshore Cres	Lakeshore Bay	0	0	0	0	0
Lakeshore Cres	Lakeshore Terr	0	0	0	0	0
Stillwater Dr	Coldspring Cres (west)	0	0	0	0	0
Stillwater Dr	Lakeshore Cres	1	0	0	0	0
Stillwater Dr	Coldspring Cres (east)	0	0	0	0	0
Stillwater Dr	Emerald Cres (east)	1	1	0	0	0
Stillwater Dr	Keeley Cres (west)	0	0	0	0	0
Stillwater Dr	Keeley Cres (east)	4	0	0	0	1
Emerald Cres	Emerald Pl	0	0	0	0	0
Keeley Cres	Keeley Way (west)	1	0	0	0	0
McKercher Dr	Kenosee Cres	0	0	0	0	0

APPENDIX E: DECISION MATRIX

Decision Matrix – Items presented at the November 5, 2015 meeting

Item	Location	Recommendation	Reason	Group 1: Goran Lazic	Group 2: Justine Nyen	Group 3: Jay Magus	Decision
Kingsmere Blvd							
1	Costigan Rd (north)	Median island on south leg	Reduce speed				Revised. Moved to north leg so bus stop does not restrict traffic flow.
2a	Stillwater Dr	Median island on south leg (based on approval from Transit) & curb extension on southeast corner	Improve pedestrian safety, reduce speed & ensure drivers cannot pass on right	May be excessive; either median island or curb extension. Curb extension should be on west leg. Questionable benefit of curb extension on southeast corner	this is preferred (over 2b); consider curb extension on northwest side instead of median island; residents parking and backing out of driveway may be effected so give consideration	Some hesitancy, may create a traffic flow problem	Removed. Coordination with Transit Services to move bus stop and concerns with nearby driveways. Install median islands at Costigan Rd (south) to address speeding.
2b	Costigan Rd (south)	Median Island on north leg	Reduce speed		2a is preferred		Revised. Install median islands on north & south sides. Chosen location instead of Stillwater Dr (65m south) because Transit, parking, and traffic flow will not be effected.
3	Whiteshore Cres (north) / Delaronde Rd	Median island on south leg	Reduce speed; enhance visibility of school zone		Pedestrian sign on median instead of school zone. Maybe put school zone on signal overhead instead.	Consider "no parking" on west side of Kingsmere instead, north of Delaronde Rd; tree trimming needed	Removed. Install school zone sign on signal overhead instead. Not standard to install pedestrian sign with Pedestrian-Activated Signal. Install "no parking" sign 10m from intersection on southeast corner.
4	Curve between Delaronde Rd & Delaronde Rd	Move existing school zone sign south (across from 50kph sign)	Improve visibility; reduce speed at beginning of school zone				Carried.
5	Whitewood/Wollaston	Parking resrictions on northeast corner to driveway (803 Kingsmere Blvd)	Improve visibility		Visibility issues due to tree (west side) and parked cars within "10m zone"		Carried. Notice will be sent to resident to ensure they are aware of restrictions prior to installation.
6	All intersecting streets between Taylor St & Weyakwin Dr	Change all yield signs to stop signs (15 signs total)	Stop signs warranted along bus routes to improve safety				Carried.
Stillwater Dr							
7	Kingsmere Blvd	Median island on east leg	Enhance visibility of stop sign; reduce speed for left turn and right turn from Kingsmere Blvd onto Stillwater Dr				Carried.
8	McKercher Dr	Zebra crosswalks & curb extension on south side	Improve pedestrian safety; reduce speed; eliminate drivers from passing on right				Removed. Transit requires space to make left turn. Further improve pedestrian safety by moving the advertisement signs next to the park path to improve visibility.
9	Emerald Cres (west)	Median island on east leg	Improve pedestrian safety & reduce speed	Consider pedestrian light or curb extension instead of island			Revised. Install zebra crosswalks & curb extension on southwest corner (majority of pedestrians crossed on west side)
Taylor St & Weyakwin Dr							
10	-	Median island on south leg	Reduce speed of drivers making right turn from Taylor St onto Weyakwin Dr; Additional location for stop sign on Weyakwin Dr	Ensure there's still room for 2 lanes (1 through/left & 1 right) on Weyakwin Dr; consider pedestrian improvements			Carried.
11	-	Parking restrictions on southwest corner (on Taylor St to first driveway approximately 40m)	Improve visibility		consider adding parking restrictions on northeast side too.		Carried. Existing parking restrictions on the north side. Visibility is adequate on the southwest corner.
12	-	Include location on speed display board priority list (facing eastbound traffic)	Reduce Speed	Consider having one on the westbound side too		Move to Kingsmere Blvd	Carried.

Decision Matrix – Additional Issues raised at November 5, 2015 meeting

Item	Location	Concern	Decision
1	Crean Lane at both ends (Crean Cres & Way)	Drivers looping from school and speeding down Crescent, not yielding at intersections. Lots of children in the area.	Speed study in the spring to determine speeds.
2	Taylor St between Kingsmere & Acadia	Winter snow maintenance should be improved; slippery up hill & vehicles getting stuck	Forward to Public Works for further consideration.
3	Stillwater Dr between McKercher & Weyakwin Dr	Snow pushed on the side reducing width of traffic lanes resulting in congestion	Forward to Public Works for further consideration.
4	Kennossee Cres	shortcutting	7-day traffic volume study indicated average of 274 vehicles per day; this is within the acceptable range for a local roadway (1,000 vehicles per day)
5	Kingsmere Blvd near Lakeshore Cres (south)	trees blocking school zone signs	Trees were trimmed at the time of site check. No further recommendations.
6	Kingsmere Blvd in front of Lakeview School	Snow clearance needed; U-turns	Forward to Public Works & Saskatoon Police Services for further consideration.
7	Stillwater Dr - driveway across from Keeley Cres	parking causing visibility issues; restrictions needed	"No Parking" signs are already installed.
8	Stillwater Dr & Weyakwin Dr	parking causing visibility issues on northwest corner; restrictions needed	"No Parking" signs are already installed.
9	Lakeshore Cres	speeding midblock; speed study was placed around curve and too far south therefore results are not accurate	Re-do speed study further north (midblock) in spring 2016.
10	Kingsmere Blvd	Clear trees	Need specific locations
11	McKercher Dr & Taylor St	green is too long for east/west	Document for further consideration as part of Intersection Improvements.
12	Taylor St - Arlington to Circle Dr	Traffic signal timing coordination required; leave Arlington Ave on green to catch red light at Circle Dr	Document for further consideration as part of Corridor Studies for further consideration.
13	Arlington Ave & Taylor	large tree obstructing driver's view	Trees were trimmed at the time of site check. No further recommendations.
14	Kingsmere Blvd & Taylor St	potholes	Forward to Public Works for further consideration.
15	Acadia Dr & Taylor St	potholes; running red lights	Forward to Public Works and Saskatoon Police Services for further consideration.
16	Taylor St	parking shouldn't be allowed in front of businesses	Document for further consideration as part of Corridor Studies.

APPENDIX F: MEETING NOTES

**Lakeview Neighbourhood
Traffic Review
Thursday, May 14, 2015, 7:00 – 9:00 P.M.
Lakeview School**

Facilitators:

- Mitch Riabko & Kathy Dahl (Great Works Consulting)

Agenda

- Welcome & introductions
- Presentation from the Transportation Division
- Small group discussions
- Small group discussion – report back to large group
- Next Steps
- Question / Answers

Councillor Paulsen sends her regrets as she is unable to attend

Presentation from Transportation Division – Lakeview Neighbourhood Traffic Review
(Presented by Justine Nyen – Traffic Engineer)

Presentation Outline:

- Neighbourhood Review Process
- Timeline for Lakeview Review
- Sources of Information
- Concerns Received
- Description of Traffic Calming & Pedestrian Safety Devices

Neighbourhood Review Process:

- **August 2013** – New process; neighbourhood review vs issue by issue; eight neighbourhoods reviewed per year
- **Mandate** – Reduce & calm traffic, improve safety within neighbourhoods
- **2014** – Varsity View, Nutana, Brevoort Park, Haultain, Holliston, City Park, Westmount, Hudson Bay Park, Caswell Hill
- **2015** – Lakeview, Meadowgreen, Adelaide-Churchill, Montgomery Place, Confederation Park, Avalon, Greystone Heights, Mount Royal

Timeline for Lakeview Review:

- **Stage 1** – Identify issues & possible solutions through community consultation (May to fall 2015)
- **Stage 2** – Develop a draft traffic plan (fall 2015)
- **Stage 3** – Present draft traffic plan to community for feedback (fall 2015)
- **Stage 4** – Implement the changes over time

Sources of Information:

- Past Studies
- Collision Analysis
- Feedback from Public Consultation
- Traffic Counts & Assessments

Concerns Received:

- Kingsmere Boulevard – Speeding
 - Kingsmere Boulevard & Whitewood Road – difficult to see westbound cars on Kingsmere (coming off of Whitewood) due to parked cars
 - Kingsmere Boulevard & Whiteshore Crescent – currently Pedestrian-Activated Signal; drivers speeding around curve NB not stopping when light is red and nearly hitting peds
 - Kingsmere Boulevard & Costigan Rd (north) – bus stop and parking obstructs drivers view on Costigan
- Lakeshore Cres – speeding
- Stillwater Dr & Emerald Cres – cars not yielding to pedestrians
- McKercher Dr & Stillwater – pedestrian safety concerns; many children crossing; install 3-way stop
- Taylor St & Weyakwin – difficult to cross or turn onto Taylor

Traffic Calming Devices (Examples of devices used in Saskatoon):

1. Speed Display Boards
2. Raised Median Island – narrows road; provides center refuge for pedestrians
3. Curb Extensions – narrows road
4. Roundabouts
5. Diverter – used to address high traffic volumes
6. Right-in/right-out island - used to address high traffic volumes
7. Directional Closure – restrict movements onto the street from one direction
8. Raised median through intersection – restrict movements
9. Full closure

Pedestrian Devices:

1. Standard crosswalk
2. Zebra crosswalk (striped pavement markings)
3. Active pedestrian corridor (flashing yellow lights)
4. Pedestrian-activated signals

Presentation from Saskatoon Police Services

Unable to attend.

- **Saskatoon Police Services: 306-975-8300 OR 306-975-8068 to report a traffic complaint or a concern.**

Small Group Discussions

- Breakout into small groups to discuss traffic concerns in Lakeview and potential solutions

Group 1: Jay Magus (City Facilitator)

1. Kingsmere Boulevard – speeding
2. Delaronde Crescent (west) – Speeding, particularly northbound
3. Kingsmere Boulevard & Delaronde Road (south) - Yield signs are difficult to see and in poor locations; enforcement needed
4. Kingsmere Boulevard & Delaronde Road (south) - Difficult to see northbound; enforcement
5. Kingsmere Boulevard & Delaronde Road (south) - Difficult to see westbound; enforcement
6. Kingsmere Boulevard & Whiteshore Crescent/Wakaw - Why not red?
7. Kingsmere Boulevard & Wollaston Crescent/Whitewood - Bus stop eastbound on Kingsmere Boulevard is hard to see. Move it east a space.
8. Another entrance/exit into neighbourhood needed
9. Bike path around the neighbourhood
10. Highway, south of Wollaston Court - Pedestrian exit; bollards
11. Circle Drive & Delaronde Road (north) - Pedestrian connection
12. Speed on Circle Drive South
13. Taylor Street - 5 school zones; remove them
14. Taylor Street & McKercher Drive - Signal length needs to be reviewed northbound onto McKercher Drive
15. Wollaston Court - Turn around traffic; “Residents Only” sign
16. Yellowhead Highway - Air brakes
17. Kingsmere Boulevard & Kingsmere Place - Congestion; too many pedestrians
18. Kingsmere Boulevard & driveway south of Lakeshore Crescent - Hedges need to be trimmed
19. Kingsmere Boulevard & parking lot north of Lakeview School - Mud path; should be paved
20. Kingsmere Boulevard & curve south of Whiteshore Crescent (north) - Install concrete barriers
21. Kingsmere Boulevard (in front of Lakeview School) - Plow the entire length of the school require should be plowed
22. Stillwater Drive & Emerald Crescent - Drivers don't stop at the pedestrian crossing
23. Driveway off of Stillwater Drive near McKercher Drive (west of intersection on south side) - Condition, safety, community working with Constable and CofS staff
24. Kingsmere Boulevard between Whiteshore Crescent & Wollaston Crescent - Visibility of school zone
25. Kingsmere Boulevard & south of Whiteshore Crescent - Visibility of school zone
26. Whiteshore Crescent - U-turns in front of St. Bernard
27. Skateboard Centre/Park needed
28. Mail box concerns
29. Kingsmere Boulevard & Christopher Road (south) - 5m parking restriction needed on north side of intersection
30. Kingsemere Boulevard at Wollaston Crescent (both sides of crescent) - 5m parking restriction needed
31. Kingsmere Boulevard - Passing on right

Group 2: Justine Nyen (City Facilitator)

1. Kingsmere Boulevard – speeding
 - a. Kingsmere Boulevard & Stillwater Drive – pedestrian safety; drivers speeding around curve and not stopping for pedestrians; car stops for pedestrian and drivers passing on right; driving onto sidewalk due to speeds; long wait to make a left turn onto Kingsmere; bus stop nearby so many pedestrians crossing; pedestrian device needed; traffic calming, perhaps median islands needed; speed display board needed on curve; icy in the winter due to the hill
 - b. Kingsmere Boulevard & Whiteshore Cres/Delaronde Rd – buses stopping/parking during peak hours; buses speeding; pedestrians crossing on opposite side of pedestrian-activated signal; difficult to see or hear oncoming drivers as a pedestrian due to the road curve; consider blocking side of crosswalk pedestrians shouldn't be using; houses and fences have been hit due to speed; speeding onto Delaronde; extend school or improve the visibility of the signage at the curve between Delaronde Rd; install traffic calming along curve or at intersection; improve visibility of school zone sign
 - c. Kingsmere Boulevard & Costigan Rd – difficult to see; difficult to turn left
2. Enforcement needed:
 - a. Rolling through stop signs (McKercher Dr & Stillwater Dr)
 - b. Left turn (Kingsmere Blvd & Stillwater Dr)
 - c. Speeding on Kingsmere Blvd (curve between Delaronde Rd)

Next Steps

1. Continue monitoring traffic issues in your neighbourhood
2. Mail-in or email comments no later than June 14/15
3. Additional public input via City on-line Community Engagement webpage no later than June 14/15

<http://shapingsaskatoon.ca/discussions/lakeview-neighbourhood-traffic-review-meeting>

4. Traffic count data collection – spring/summer 2015
5. City review of public input and data collected from traffic studies and prepare draft Traffic Plan
6. Follow-up public input meeting to provide input on draft
7. Determine revisions and finalize Traffic Plan
8. Present Traffic Plan to City Council for approval

Question & Answer

Resident: Can you post draft traffic plan to website prior to next meeting? And notify the Community Association?

City: Yes the plans are usually posted online one week prior.

Facilitator: Community Association will be notified

Resident: Focus on moving traffic on larger roads. Transport through city.

Resident: Speeding is the concern. Consider practical options. It all comes down to budget.

Resident: School zone on Kingsmere should be along entire stretch from Delaronde way to the other side of the school.

Resident: 30kph signs on the street really help.

Resident: What are the plans for Circle Drive and Boychuk Dr?

City: A geotechnical consultant has been hired. They're preparing an RFQ for design-build. The City is trying to acquire money from the province for this project. This likely won't happen until next spring.

Resident: Consider traffic around schools. Parking, picking up, dropping off etc.

Resident: Why aren't they running 2 shifts for construction of the cloverleaf? Not overtime, just 2 shifts. Can't understand why we don't have 2 shifts.

City: We paved the ramps on the cloverleaf last year at night and this is expensive.

Resident: I've been taking Circle Drive South home with the University Bridge closure, and a couple days ago traffic was backed up all the way to Clarence Ave. It was a parking lot. Should work 2 shifts for the construction at the cloverleaf to get traffic moving.

List of Representatives

Mitch Riabko, Kathy Dahl – Great Works Consulting, Facilitators

Angela Gardiner – City of Saskatoon, Transportation & Utilities, Transportation Director

Jay Magus – City of Saskatoon, Transportation & Utilities, Engineering Manager

Shirley Matt – City of Saskatoon, Transportation & Utilities, Traffic Management Supervisor

Justine Nyen – City of Saskatoon, Transportation & Utilities, Traffic Management

Mariniel Flores – City of Saskatoon, Transportation & Utilities, Traffic Management

Lanre Akindipe – City of Saskatoon, Transportation & Utilities, Infrastructure Engineer

Goran Lazic – City of Saskatoon, Transportation & Utilities, Traffic Operations Engineer

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Mark Emmons – City of Saskatoon, Planning & Development, Planner – Neighbourhood Planning

Konrad Andre – City of Saskatoon Planning & Development, Senior Planner

Ellen Pearson – City of Saskatoon Planning & Development, Planner

**Lakeview Neighbourhood
Traffic Review
Thursday, November 5, 2015, 7:00 – 9:00 P.M.
St. Bernard School**

Facilitators:

- Mitch Riabko & Kathy Dahl (Great Works Consulting)

Agenda

- Welcome & introductions
- Presentation from the Transportation Division
- Small group discussions
- Small group discussion – report back to large group
- Next Steps
- Question / Answers

Presentation from Transportation Division – Lakeview Neighbourhood Traffic Review
(Presented by Justine Nyen – Transportation Engineer)

Presentation Outline:

- Neighbourhood Traffic Management Program
- How We Got Here
- What We Heard
- What We Did
- What We Propose

Neighbourhood Traffic Management Program:

- Address neighbourhood traffic issues:
 - Speeding concerns
 - Short-cutting concerns
 - Pedestrian safety
 - Intersection safety
- August 2013 – changes to program
 - Neighbourhood-wide review
 - More community / stakeholder feedback
 - Efficient use of staff resources

How We Got Here:

- May 2015 – Initial Traffic Meeting
- May to November 2015 – gather feedback, conduct traffic studies, collect data, develop traffic plan
- November 2015 – Follow Up Traffic Meeting - display proposed traffic plan and gather feedback

What We Heard:

- A. Speeding/Traffic Volumes:
 - Kingsmere Blvd – especially near Lakeview School and around curves
 - Taylor St
 - Delaronde Rd

- Whiteshore Cres (school zone)
- Lakeshore Cres
- Kennossee Cres

B. Pedestrian Safety:

- Kingsemere Blvd – drivers passing on right when a pedestrian is in the crosswalk; drivers not yielding to pedestrians
- Stillwater Dr
- Taylor St & Weyakwin Dr

C. Intersection Safety:

- Kingsmere Blvd – visibility issues due to parked cars; not stopping at yield signs on intersecting streets
- Kingsmere & Stillwater – not slowing down for turns
- Taylor & Weyakwin – difficult to turn left from Weyakwin
- Taylor & McKercher – review signal timing

What We Did:

- Collected Data:
 - Past studies
 - Comments from initial meeting
 - Resident responses (phone calls, emails, letters)
 - Recorded comments from Shaping Saskatoon discussions
 - 5 Intersection / Pedestrian counts
 - 7 – 7 day traffic count (24 hour) & Average Speed measurements
 - Collision history
- Field Reviews
- Assessed the Issues
- Generated proposed recommendations

What We Propose:

- Crosswalk upgrades – 1 location
- Traffic calming – 8 locations
- Parking restrictions – 2 locations
- Stop signs (intersecting streets on Kingsmere Blvd)
- Speed display board – 1 location
- **Saskatoon Police Services: 306-975-8300 OR 306-975-8068 to report a traffic complaint or a concern.**

Small Group Discussions

- Breakout into small groups to discuss traffic concerns in Lakeview and potential solutions

Group 1: Goran Lazic (City facilitator)

- Group was in support of recommendations with the following comments:

- Item #2a – Kingsmere Blvd & Stillwater Dr median island & curb extension on southeast corner – may be excessive. Select island or curb extension. Curb extension should be on west leg. Not sure if southeast corner would benefit.
- Item #3 – Kingsmere Blvd & Whiteshore Cres (north) / Delaronde Rd median island on south leg – nobody was in against it but not sure how well it will work
- Item #9 – Stillwater Dr & Emerald Cres (west) median island on east leg – group was in support but also consider pedestrian light or curb extension instead
- Item #10 – Taylor St & Weyakwin Dr median island on south leg – will island reduce the approach to single lane? Make sure there are 2 lanes (one for left/through and another for right). Also consider pedestrian improvements.
- Item #12 – Speed display board on Taylor St – group was in support but consider having one for westbound traffic as well.
- Other:
 - Stillwater Dr between McKercher to Weyakwin Dr – snow pushed on the side reducing width of traffic lanes resulting in congestion
 - Kenossee Cres – shortcutting; no measures proposed to address this concern.
 - Taylor St between Kingsmere Blvd & Acadia Dr – winter snow maintenance should be improved. Slippery up the hill and vehicles getting stuck.
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Group 2: Justine Nyen (City facilitator)

- Item #2a – Kingsmere Blvd & Stillwater Dr median island & curb extension – preferred location is Stillwater as opposed to Costigan Rd (Item #2b). Instead of median island consider curb extension on northwest corner. Consideration for residents parking and backing out of driveways.
- Item #3 – Kingsmere Blvd & the curve between Delaronde Rd (north) & Delaronde Rd (south) – consider installing pedestrian sign on median instead of school zone sign. Maybe install school zone sign on pedestrian activated signal overhead
- Item #5 – Kingsmere Blvd & Whitewood/Wollaston – visibility issues due to trees and parked cars. Maybe parking enforcement can issue warnings for the “10m rule”.
- Item #11 – Taylor St & Weyakwin Dr parking restrictions on the southwest corner to improve visibility – consider installing on the northeast corner also.
- Other:
 - Kingsmere Blvd (further east) – trees blocking school zone sign
 - School zones should be in effect 24/7
 - Snow clearance needed in front of Lakeview School
 - Stillwater Dr & driveway across from Keeley Cres – visibility issues due to parking. Install parking restrictions to improve sightlines
 - Stillwater Dr & Weyakwin Dr – visibility issues due to parked cars on northwest corner
 - Lakeshore Cres – speeding at midblock
 - School zone – U-turns in front of Lakeview School. Police should do a blitz to educate drivers.

Group 3: Jay Magus (City facilitator)

- Item #2a – Kingsmere Blvd & Stillwater Dr median island and curb extension – some hesitation; may create a traffic problem
- Item #3 – Kingsmere Blvd & Whiteshore Cres (north)/Delaronde Rd – consider “no parking” on west side of Kingsmere north of Delaronde Rd. Tree trimming needed.
- Other:
 - Clear trees:
 - around school zone sign
 - on Kingsmere
 - McKercher Dr & Taylor St – too long green on east/west phase
 - Traffic signal timing on Taylor St - leave at green light on Arlington Ave, catch red at Circle Dr.
 - Traffic signal operation – Taylor St & Weyakwin Dr

Next Steps

1. Mail-in or email comments no later than Dec 5/15
2. Additional public input via City on-line Community Engagement webpage no later than Dec 5/15

<http://shapingsaskatoon.ca/discussions/lakeview-neighbourhood-traffic-review-meeting>

3. Additional consultation if required
4. Present traffic plan to City Council for approval
5. What happens after City Council approval? Implementation begins. Signs and temporary traffic calming will be installed as early as next spring (2016)
6. What if I don't agree? Request time to speak at City Council meeting

Q&A

Resident: There's a focus on pedestrian safety with this review. Should consider movement of traffic.

City: The neighbourhood traffic reviews are to address issues within the neighbourhood streets. We've developed another program, major intersection reviews, where we address traffic movement on major roadways, as well as safety.

Resident: Arlington Ave & Taylor St – why does left turn signal not come on sometimes?

City: Detection needed. At least 3-4 vehicles must be queued in the left turn bay for the protected left turn signal to activate.

Resident: Sometimes there are 15 vehicles behind me and it doesn't come on.

City: The detector may have been malfunctioning. We'll look into it.

Resident: Arlington Ave & Taylor St – large tree obstructing driver's view. Should be trimmed.

City: We'll follow up.

Resident: Stillwater Dr & Kingsmere Blvd – if vehicles are restricted to pass on the right the left turning vehicles will create backlog down the street (mostly an issue for southbound traffic).

Resident: Would you consider doing one side at a time?

City: We'd implement everything at once if the recommendation is carried.

Resident: Kingsmere & Taylor – potholes. Also at Acadia & Taylor.

Resident: Better system for calling to report a pothole. Prompted with too many questions.

Resident: Taylor & Acadia – running red lights. Allowing parking in front of businesses on Taylor St. Not needed (also parking in area where it's signed as "no parking").

Resident: Circle mall – there's a berm on Taylor & 8th where there's room to expand and improve traffic flow.

List of Representatives

Mitch Riabko – Great Works Consulting, Facilitators

Jay Magus, Justine Nyen, Goran Lazic – City of Saskatoon, Transportation & Utilities