



**PUBLIC AGENDA
STANDING POLICY COMMITTEE
ON TRANSPORTATION**

Tuesday, October 10, 2017, 2:00 p.m.

Council Chamber, City Hall

Committee Members:

Councillor R. Donauer, Chair, Councillor Z. Jeffries, Vice-Chair, Councillor C. Block, Councillor S. Gersher, Councillor A. Iwanchuk, His Worship Mayor C. Clark (Ex-Officio)

Pages

1. CALL TO ORDER

2. CONFIRMATION OF AGENDA

Recommendation

That the agenda be confirmed as presented.

3. DECLARATION OF CONFLICT OF INTEREST

4. ADOPTION OF MINUTES

Recommendation

That minutes of regular meeting of the Standing Policy Committee on Transportation held on September 11, 2017 be adopted.

5. UNFINISHED BUSINESS

6. COMMUNICATIONS (requiring the direction of the Committee)

6.1 Delegated Authority Matters

6.1.1 John Lingard - Roadside Signs [File No. CK 6280-1]

6 - 6

Attached is an email from John Lingard dated September 26, 2017.

Recommendation

That the Administration be requested to respond to the writer.

- 6.1.2 Wendell Neubeker - Parking Bylaw - Update Required [File No. CK 6120-2] 7 - 7**

Attached is an email from Wendell Neubeker dated September 8, 2017.

Recommendation

That the Administration be requested to respond to the writer.

6.2 Matters Requiring Direction

6.3 Requests to Speak (new matters)

- 6.3.1 Franny Rawlyk - Traffic Volume and Speeds - 100 Block of 9th Street East [File No. CK 6320-1] 8 - 8**

Attached is an email from Franny Rawlyk dated October 2, 2017, requesting to speak.

Recommendation

That the information be received.

7. REPORTS FROM ADMINISTRATION

7.1 Delegated Authority Matters

- 7.1.1 Request for Encroachment Agreement - 229 21st Street East [Files CK 4090-2 and PL 4090-2] 9 - 12**

Recommendation

1. That the existing encroachment at 229 21st Street East (Lot 42, Block 152, Plan No. 99SA35105, Parcel 120288696) be recognized;
2. That the City Solicitor be requested to prepare the appropriate encroachment agreement, making provision to collect the applicable fees; and
3. That His Worship the Mayor and the City Clerk be authorized to execute the agreement under the Corporate Seal and in a form that is satisfactory to the City Solicitor.

- 7.1.2 Capital Project #2044 – Gravel Street Upgrades [Files CK 6315-1 and TS 6000-13] 13 - 19**

Recommendation

That the report of the General Manager, Transportation & Utilities Department dated October 10, 2017, be received as information.

7.1.3	Infill Lane Paving Requirements [Files CK 6315-1 and TS 6000-1]	20 - 23
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Recommendation

That the report of the General Manager, Transportation & Utilities Department, dated October 10, 2017, be received as information.

7.1.4	Sid Buckwold Bridge Walkway Widening [Files CK 6050-6 and TS 6320-1]	24 - 29
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Recommendation

That the report of the General Manager, Transportation & Utilities Department dated October 10, 2017, be received as information.

7.1.5	Civic Equipment Storage [Files CK 1000-1, x665-1 and PW 634-10]	30 - 32
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Recommendation

That the report of the General Manager, Transportation & Utilities Department dated October 10, 2017, be received as information.

7.2 Matters Requiring Direction

7.2.1	Right-of-Way Temporary Use Fees [Files CK 6320-1 and TS 6320-1]	33 - 49
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Request to speak - James Polley, dated October 3, 2017.

Recommendation

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

1. That the proposed fees for temporary use of the Right-of-Way be approved; and
2. That the City Solicitor be requested to prepare the appropriate bylaw amendment to Bylaw No. 7200, The Traffic Bylaw.

7.2.2	Saskatoon Transit – Charter Policy [Files CK 7300-1 and TR 7301]	50 - 54
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Recommendation

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

That the Saskatoon Transit Charter Policy and Rates be revised as outlined in this report effective February 1, 2018.

7.2.3	Award of Contract – Parking Enforcement System Software [Files CK 6120-3 and PL 6120-1]	55 - 59
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Recommendation

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

1. That the City of Saskatoon enter into an agreement with Tannery Creek Systems Inc. for the provision of parking enforcement system software and support services, subject to the terms outlined in this report;
2. That the current contract for parking enforcement system software and support services, being supplied by the Calgary Parking Authority, be extended to December 31, 2017, for purposes of business continuity; and
3. That the City Solicitor be requested to prepare the appropriate agreements and that His Worship the Mayor and the City Clerk be authorized to execute the agreements under the Corporate Seal.

7.2.4	Inquiry – Former Councillor P. Lorje (March 3, 2014) Time Restrictions for Parking Turnover in Residential Neighbourhoods [Files CK 6120-1 and TS 6120-1]	60 - 67
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Recommendation

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

That the 36-hour parking time limit in residential areas remain unchanged.

Recommendation

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

1. That a speed limit of 90 kph on College Drive from a point 1,600 metres east of Central Avenue to the East City Limit be established; and
2. That the City Solicitor be requested to prepare the appropriate amendment to Bylaw No. 7200, The Traffic Bylaw.

Recommendation

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

1. That the Complete Streets Design and Policy Guide be adopted in principle;
2. That the Administration proceed with preparing a Council Policy based on the Complete Streets Design and Policy Guide provided in this report; and
3. That the implementation plan be approved.

8. URGENT BUSINESS

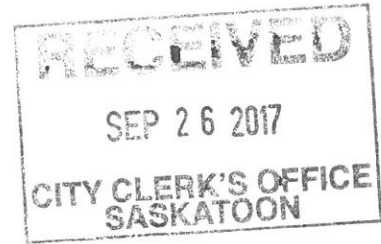
9. MOTIONS (Notice Previously Given)

10. GIVING NOTICE

11. IN CAMERA AGENDA ITEMS

12. ADJOURNMENT

From: City Council
Sent: September 26, 2017 10:52 AM
To: City Council
Subject: Form submission from: Write a Letter to Council



Submitted on Tuesday, September 26, 2017 - 10:51
Submitted by anonymous user: 207.47.248.12
Submitted values are:

Date: Tuesday, September 26, 2017
To: His Worship the Mayor and Members of City Council
First Name: John
Last Name: Lingard
Address: 486 Delaronde Road
City: Saskatoon
Province: Saskatchewan
Postal Code: S7J 4A6
Email: lingards@sasktel.net

Comments:
[Please forward the following concern to the appropriate council committee - perhaps Traffic Safety. Thank you.]

I am writing about those Saskatoon roadside signs which read:

"HIGH COLLISION LOCATION
STRICTLY ENFORCED"

The second line is impossible to understand. Perhaps some collisions are caused by drivers being distracted trying to work out what is being enforced. A location certainly cannot be. More seriously, I would suggest that if a message cannot be understood, it should be clarified - perhaps PAY EXTRA ATTENTION - or else simply removed. I hope council will consider changing these confusing signs.

In conclusion, I should also note that I am disappointed that our road signs (and also bus signs, I believe) use the American spelling for City Centre.

Thank you for considering my letter,

John Lingard

The results of this submission may be viewed at:
<https://www.saskatoon.ca/node/398/submission/196788>

From: Wendell Neubeker <wendis_184@hotmail.com>
Sent: Friday, September 08, 2017 8:55 AM
To: Web E-mail - City Clerks
Subject: Parking Bylaw needs an update

Submitted on Friday, September 8, 2017 - 08:55
Submitted by user: Anonymous
Submitted values are:

First Name: Wendell
Last Name: Neubeker
Email: wendis_184@hotmail.com
Confirm Email: wendis_184@hotmail.com
Neighbourhood where you live: Exhibition
Phone Number: (306) 491-3996

==Your Message==

Service category: Bylaws & Policies

Subject: Parking Bylaw needs an update

Message: I have a bit of a complaint in regards to one of the parking bylaws, specifically the one where you must park at least 10 meters from the corner of an intersection. I understand the need for the bylaw, I just think 10 meters is too far of a distance. For example, I received a ticket for parking 6.4 meters from an intersection in an area where parking on the street is very competitive. My car is a Pontiac G5, so not a large vehicle but nothing smaller than most compact cars. My car measures just over 4.5 meters long. This means that according to this bylaw I must park over 2 car lengths away from the corner, which is outrageous. Even with the parking ticket I received I was still over a complete car length away from the corner which still gives plenty of room to see oncoming traffic. I simply wish to have this bylaw revisited as this is the second time I have received a ticket for this and many other vehicles are just as close to the corners of intersections in this area (Varsity View) on a daily basis. I park there for work.

Attachment:

Would you like to receive a short survey to provide your feedback on our customer service? The information you share will be used to improve the service we provide to you and all of our customers.: No

For internal use only :

<https://www.saskatoon.ca/node/405/submission/194191>

From: City Council
Sent: October 02, 2017 10:14 PM
To: City Council
Subject: Form submission from: Write a Letter to Council



Submitted on Monday, October 2, 2017 - 22:13
Submitted by anonymous user: 108.60.185.149
Submitted values are:

Date: Monday, October 02, 2017
To: His Worship the Mayor and Members of City Council
First Name: Franny
Last Name: Rawlyk
Address: 120 9th Street East
City: Saskatoon
Province: Saskatchewan
Postal Code: S7N 0A2
Email: frawlyk@gmail.com

Comments: I request to speak to the Standing Policy Committee on Transportation on October 10. I will speak about an unresolved issue of traffic volume and speeds on the 100 block of 9th Street east that was identified during the Nutana Traffic Review process. Thank you.

The results of this submission may be viewed at:
<https://www.saskatoon.ca/node/398/submission/197744>

Request for Encroachment Agreement – 229 21st Street East

Recommendation

1. That the existing encroachment at 229 21st Street East (Lot 42, Block 152, Plan No. 99SA35105, Parcel 120288696) be recognized;
2. That the City Solicitor be requested to prepare the appropriate encroachment agreement, making provision to collect the applicable fees; and
3. That His Worship the Mayor and the City Clerk be authorized to execute the agreement under the Corporate Seal and in a form that is satisfactory to the City Solicitor.

Topic and Purpose

The purpose of this report is to seek approval for an existing encroachment for the portions of the building facade located at 229 21st Street East.

Report Highlights

1. The existing encroachment area is 0.38 square metres.
2. The existing building facade extends onto the 21st Street East sidewalk by up to 0.06 metres.

Strategic Goals

This report supports the City of Saskatoon's Strategic Goals of Sustainable Growth and Quality of Life by ensuring that designs of proposed developments are consistent with planning and development criteria and that these designs do not pose a hazard for public safety.

Background

Building Bylaw No. 7306 states, in part, that:

“The General Manager of the Community Services Department shall not issue a permit for the erection or alteration of any building or structure the plans of which show construction of any kind on, under, or over the surface of any public place until permission for such construction has been granted by Council.”

Report

The owner of the property located at 229 21st Street East has requested approval to enter into an encroachment agreement (see Attachment 1). As shown on the Site Plan, the existing building facade encroaches onto the 21st Street East sidewalk by up to 0.06 metres (see Attachment 2). The total area of the encroachment is approximately 0.38 square metres; therefore, it will be subject to an annual charge of \$50.

Public and/or Stakeholder Involvement

There is no public or stakeholder involvement.

Other Considerations/Implications

There are no options, policy, financial, environmental, privacy, or CPTED implications or considerations; a communication plan is not required at this time.

Due Date for Follow-up and/or Project Completion

There is no follow-up report planned.

Public Notice

Public notice, pursuant to Section 3 of Public Notice Policy No. C01-021, is not required.

Attachments

1. Request for Encroachment Agreement dated September 8, 2017
2. Copy of Real Property Report Detailing Existing Encroachment

Report Approval

Written by: Tanda Wunder-Buhr, Commercial Permit Supervisor, Building Standards

Reviewed by: Daisy Harington, Senior Building Code Engineer, Building Standards

Approved by: Randy Grauer, General Manager, Community Services Department

S/Reports/2017/BS/TRANS – Request for Encroachment Agreement – 229 21st St E/lc

Request for Encroachment Agreement dated September 8, 2017



BUILDING STANDARDS
222-3rd AVE NORTH, SASKATOON, SK S7K 0J5

THIS IS NOT AN AGREEMENT

ENCROACHMENT AGREEMENT APPLICATION

SECTION A – PROJECT INFORMATION (to be completed for ALL ENCROACHMENT AGREEMENT APPLICATIONS)
(Please note the approval process may take up to 10 weeks dependent on the Standing Policy Committee Meeting Schedule)

TYPE OF ENCROACHMENT	New Proposed <input checked="" type="checkbox"/>	Revision <input type="checkbox"/>
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PROJECT INFORMATION	Site Address		
	229 - 21st Street East, Saskatoon, Saskatchewan		
	Legal Description (Lot/Block/Plan)		
	Lot 42, Blk/Par 152, Plan No. 99SA35105		

APPLICANT	Contact Name		Company Name (if applicable)		
	Scott D. Waters		Robertson Stromberg LLP		
	Address		City	Province	Postal Code
	600, 105 - 21st Street East		Saskatoon	SK	S7K 0B3
	Phone Number (incl. Area Code)	Email Address		Preferred method of correspondence:	
	(306) 652-7575	s.waters@rslaw.com		MAIL or EMAIL	

OWNER	Contact Name (Official Name that will appear on the Agreement)		Company Name (if applicable)		
	Mark Wolff		102006708 Saskatchewan Ltd.		
	Address		City	Province	Postal Code
	600, 105 - 21st Street East		Saskatoon	SK	S7K 0B3
	Phone Number (incl. Area Code)	Email Address		Preferred method of correspondence:	
	(306) 652-7575			MAIL	

SECTION B – SUBMISSION REQUIREMENTS (to be completed for ALL ENCROACHMENT APPLICATIONS)

ENCROACHMENT AGREEMENT APPLICATION REQUIREMENTS			Submitted	Received (office use only)
	Application Fee	An Encroachment Application Fee of \$100.00 is required to be submitted at the time of application	X	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Existing Encroachment	Current Real Property Report/Surveyor's Certificate that clearly outlines the encroaching areas, including detailed dimensions of all areas that encroach onto City of Saskatoon Property	X	<input type="checkbox"/>
<input type="checkbox"/>	Proposed Future Encroachment	Detailed drawings of the proposed encroaching areas including detailed dimensions of all areas that will encroach onto City of Saskatoon Property. (Once construction is complete, an updated Real Property Report/Surveyor's Certificate will be required to confirm the area of encroachment.)	<input type="checkbox"/>	<input type="checkbox"/>

Upon receipt of the request, the Building Standards Division of the Community Services Department will request approvals from the necessary Departments and Divisions, including Development Services, Building Standards, Transportation & Utilities and any other Department or Division as deemed necessary, depending on the type of encroachment. Upon receipt of the various approvals and that there are no objections to the request; the application will be forwarded to the next available Standing Policy Committee on Transportation meeting for their approval. Once the Standing Policy Committee on Transportation has approved, the City Clerks office will advise the applicant of the Committee's decision and will prepare the agreement. Please note that encroachment agreement requests may take up to 10 weeks to process and is dependent on the Standing Policy Committee Meeting Schedule.

Assuming the encroachment is approved, an annual fee will be applied to the tax notice. This fee is based on the area of encroachment, and is calculated at \$3.25 per square meter. The current minimum fee is \$50.00

DECLARATION & SIGNATURES	I DO HEREBY DECLARE:		
	<ul style="list-style-type: none"> That the issuance of an Encroachment Agreement does not relieve the owner and authorized agents from complying with the requirements of the 2010 National Building Code of Canada, as amended and within the scope of the Uniform Building and Accessibility Standards and That the submission of this application does not give permission for encroachment of any portion of the building, and that all appropriate building permits are required to be obtained prior to the construction of the encroachment. 		
	I certify that I have read and agree to abide by the conditions above, and all information contained within this application is correct.		
	 Applicant Signature	Sept. 8/2017 Date	 Application Received By

RECEIVED

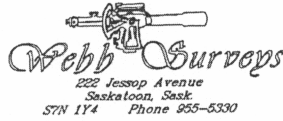
SEP 08 2017

CITY OF SASKATOON

COMMERCIAL PERMIT OFFICER

Copy of Real Property Report Detailing Existing Encroachment

RPR No. 18401



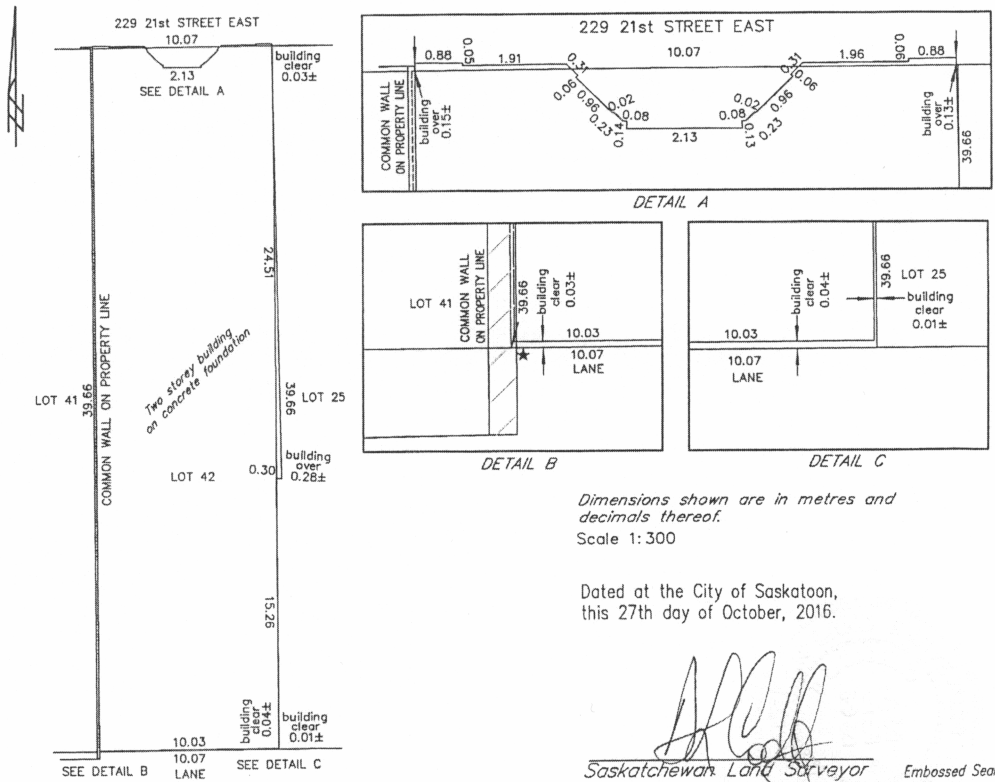
Real Property Report & Sketch Plan

Real Property Report issued to *Mark Wolff*
 Certificate of Title No.: *108762532*
 Date of Title Search: *October 17, 2016*
 Registered Owner: *173458 Canada Inc.*
 Civic Address: *229 21st Street East, Saskatoon*
 Surface Parcel No.: *120288696*
 Legal Description: *Lot 42, In Block 152, in the City of Saskatoon, Saskatchewan Reg'd Plan No. 99SA35105.*
 Registered Easements: *None*
 Date of Survey: *October 20, 2016*



I, Daniel L. Codling, of the City of Saskatoon, in the Province of Saskatchewan, Saskatchewan Land Surveyor, do hereby certify:

1. That I have made the necessary survey to determine the position of the building with reference to the boundaries of the above described property, and that this report is prepared in accordance with Article No. XIII of the Bylaws of the Saskatchewan Land Surveyors Act.
2. That the said building lies entirely within the limits of the above described property, unless otherwise shown.
- ★ 3. That there are no encroachments of adjacent buildings upon the above described property unless otherwise shown.
4. The dimensions indicated on the sketch below show the location of the building as constructed on the above described property, but do not define the lot boundaries. Only survey monuments at property corners define extent of title.
5. The information shown on this sketch plan shall only apply to the date on which this report is issued.
6. The measurements were taken to the foundation at ground level unless otherwise stated.



Dimensions shown are in metres and decimals thereof.
 Scale 1: 300

Dated at the City of Saskatoon, this 27th day of October, 2016.

[Signature]
 Saskatchewan Land Surveyor Embossed Seal

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Capital Project #2044 – Gravel Street Upgrades

Recommendation

That the report of the General Manager, Transportation & Utilities Department dated October 10, 2017, be received as information.

Topic and Purpose

This report is to provide City Council with an update on Capital Project #2044 - Gravel Street Upgrades.

Report Highlights

1. On February 9, 2004, City Council approved the creation of Capital Project #2044 – Gravel Street Upgrades, to facilitate the completion of surface infrastructure and remediation in various areas of the City that were not completed to a paved and curbed standard when originally constructed.
2. Paving of Priority 1 and 2 locations throughout the city have been completed. The Administration is recommending that the program be discontinued and that no further gravel street upgrades be funded through Capital Project #2044 – Gravel Street Upgrades.

Strategic Goals

The gravel street upgrades program supports the Strategic Goal of Moving Around as it pertains to the paving of roadways.

Background

On February 9, 2004, City Council approved the creation of Capital Project #2044 – Gravel Street Upgrades to facilitate the completion of surface infrastructure and remediation in various areas of the city that were not completed to a paved standard when originally constructed. Roadway paving is typically paid for as part of land development and the cost of paving is recuperated through the sale of the developed lots. Major roadways in a new development are funded through pre-paid levies. However, before pre-paid levies came into effect, which made paving roadways a requirement, property owners could opt to not pay for a paved roadway adjacent to their homes.

The 2016 budget included the most recent request for funding for gravel street upgrades. At that time, residential streets were prioritized according to the following criteria:

- Priority 1 – gravel streets with paved roadways on each end
- Priority 2 – gravel streets with property frontage
- Priority 3 – all other, typically side properties leading to a gravel lane

Capital Project #2044 – Gravel Street Upgrades

All Priority 1 and 2 locations were funded and completed with 2016 funding.

A list of all locations funded by Capital Project #2044 – Gravel Street Upgrades since 2004 is outlined in Attachment 1.

Report

There are currently 16 Priority 3 roadways remaining in residential areas (as shown in Attachment 2) and 20 industrial roadways (as shown in Attachment 3) that are still listed in an unpaved condition. All documented gravel streets within City limits are listed in the tables below, excluding rural gravel boundary roads on the perimeter of the City.

Residential Gravel Streets

The following residential locations have been rated as Priority 3 locations:

Neighbourhood	Location	Priority	Surface Cost	Underground Cost
Meadowgreen	19th St W: West of Vancouver Ave	3	\$ 90,000	\$ 0
Buena Vista	2nd St W: West of Belfast Ave	3	196,000	78,000
Mount Royal	30th St W: East of Ave P	3	76,000	0
Westmount	30th St W: West of Ave L	3	91,000	72,000
Hudson Bay Park	31st St W: West of Ave L	3	112,000	86,000
Kelsey/Woodlawn	34th St E: West of 1st Ave	3	81,000	80,000
Kelsey/Woodlawn	34th St E: East of 2nd Ave	3	109,000	21,000
Kelsey/Woodlawn	35th St E: West of 1st Ave	3	82,000	71,000
Kelsey/Woodlawn	36th St E: West of 1st Ave	3	82,000	79,000
Kelsey/Woodlawn	37th St E: West of 1st Ave	3	72,000	75,000
Kelsey/Woodlawn	38th St E: East of 2nd Ave	3	97,000	20,000
Kelsey/Woodlawn	40th St E: West of 2nd Ave	3	92,000	88,000
Dundonald	Hughes Dr: North of 37th St	3	203,000	1,000
Exhibition	St Patrick Ave: South of Taylor St	3	103,000	14,000
Nutana	Idylwyld Pl: East of Idylwyld Cres	3	88,000	57,000
Sutherland	Bryans Ave: South of 108th St	3	104,000	12,000
Totals			\$1,678,000	\$754,000

Capital Project #2044 – Gravel Street Upgrades

Industrial Gravel Streets

In addition to unpaved residential streets, some industrial locations were developed with gravel streets as outlined in the following table:

Neighbourhood	Location	Surface Cost	Underground Cost
Kelsey/Woodlawn	40th St E: Saskatchewan Ave to Ontario Ave	\$ 432,000	\$ 103,000
Kelsey/Woodlawn	Alberta Ave: 38th Street to 39th Street	405,000	172,000
Agriplace	Apex St: North of 60th St W	328,000	3,000
CN Industrial	Portage Ave: End of Pavement to Rail	811,000	270,000
Hudson Bay Industrial	58th St E: Idylwyld Service Rd to Lambert Cres	707,000	24,000
West Industrial	12th St W: Ave R to Ave P	345,000	17,000
West Industrial	Weldon Ave: North of 16th Street	155,000	94,000
West Industrial	Garfield St: Ave R to Ave P	346,000	204,000
West Industrial	12th St W: East of Ave R	360,000	62,000
West Industrial	14th St W: West of Ave P	366,000	0
West Industrial	15th St W: West of Ave P	329,000	77,000
West Industrial	16th St W: West of Ave P	514,000	152,000
West Industrial	17th St W: West of Ave P	292,000	130,000
West Industrial	Ave R S: 11th Street to Garfield St	198,000	107,000
West Industrial	Ave R S: Garfield St to 12th St	181,000	60,000
Kelsey/Woodlawn	Alberta Ave: 39th St to 40th St	382,000	238,000
Hudson Bay Industrial	Lambert Cres: Idylwyld Service Rd to 58th St	1,550,000	418,000
City Park	Princess St: West of 1st Ave N	99,000	66,000
Hudson Bay Industrial	54th St E: East of Idylwyld Service Rd	269,000	0
Hudson Bay Industrial	53rd St E: East of Idylwyld Service Rd	272,000	0
Agriplace	Wakooma St: 160m S of 71st St to 71st St	315,000	0
Airport Business Area	Robin Cr: Cynthia St to 40m S of Cynthia St	110,000	0
Totals		\$8,766,000	\$2,197,000

Given that all Priority 1 and 2 residential streets have now been paved, the Administration is recommending that the program be discontinued. The remaining locations include:

- Priority 3 residential locations that are short segments of roadway connecting to gravel lanes and are functioning more like gravel lanes than through streets.
- Industrial roadways that are located in industrial areas that are typically prone to dust due to business activities in these areas. Dust palliation is applied to control roadway dust in these areas.

Any remaining funds in Capital Project #2044 – Gravel Street Upgrades will be returned to the Reserve for Capital Expenditure.

Paving of these outstanding locations could be funded by adjacent properties as outlined in Bylaw No. 5257, Local Improvements Bylaw.

Options to the Recommendation

Additional funding could be provided to the program at City Council’s discretion. The remaining approximate \$13.4 million in gravel street upgrade work could be funded over a determined timeframe as decided by City Council. Adding this additional upgrade work would require an increase to the mill rate or an impact to capital funding reserves.

Environmental Implications

It is estimated that for every \$1,000,000 worth of construction activity under Capital Project #2044 – Gravel Street Upgrades results in approximate greenhouse gas emissions of 22 tonnes of carbon dioxide equivalents, which corresponds to the amount of fuel four cars burn in one year.

Other Considerations/Implications

There are no public and/or stakeholder involvement, communication, policy, financial, privacy, or CPTED implications or considerations.

Due Date for Follow-up and/or Project Completion

No follow up is required.

Public Notice

Public Notice pursuant to Section 3 of Policy No. C01-021, Public Notice Policy, is not required.

Attachments

1. Capital Project #2044 – Gravel Street Upgrades, Locations Funded Since 2004.
2. Residential Gravel Streets
3. Industrial Gravel Streets

Report Approval

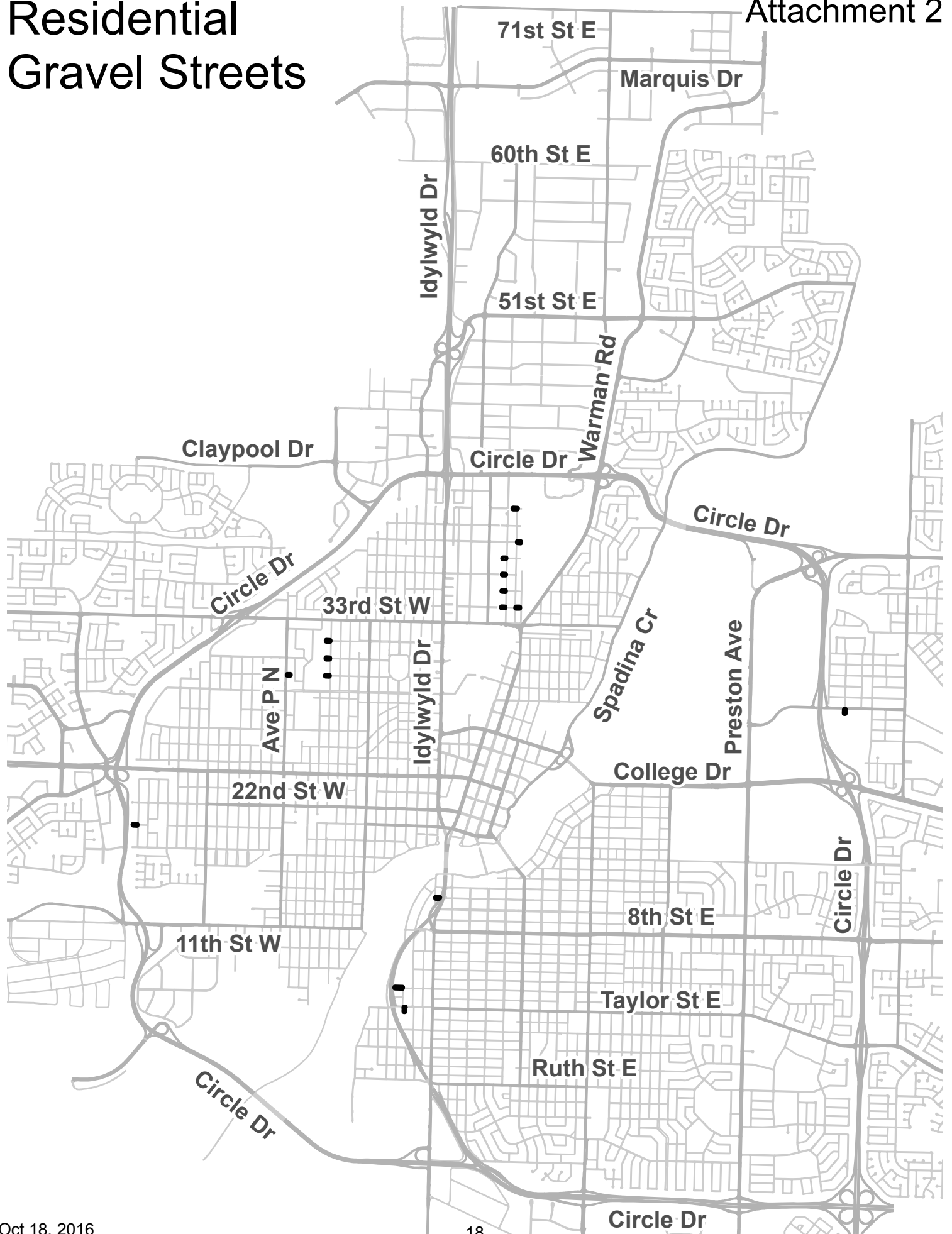
Written by: Rob Frank, Engineering Manager of Asset Preservation,
Major Projects & Preservation
Reviewed by: Dan Willems, Director of Major Projects & Preservation
Approved by: Angela Gardiner, Acting General Manager, Transportation &
Utilities Department

TRANS RF – Gravel Street Upgrades - 2017

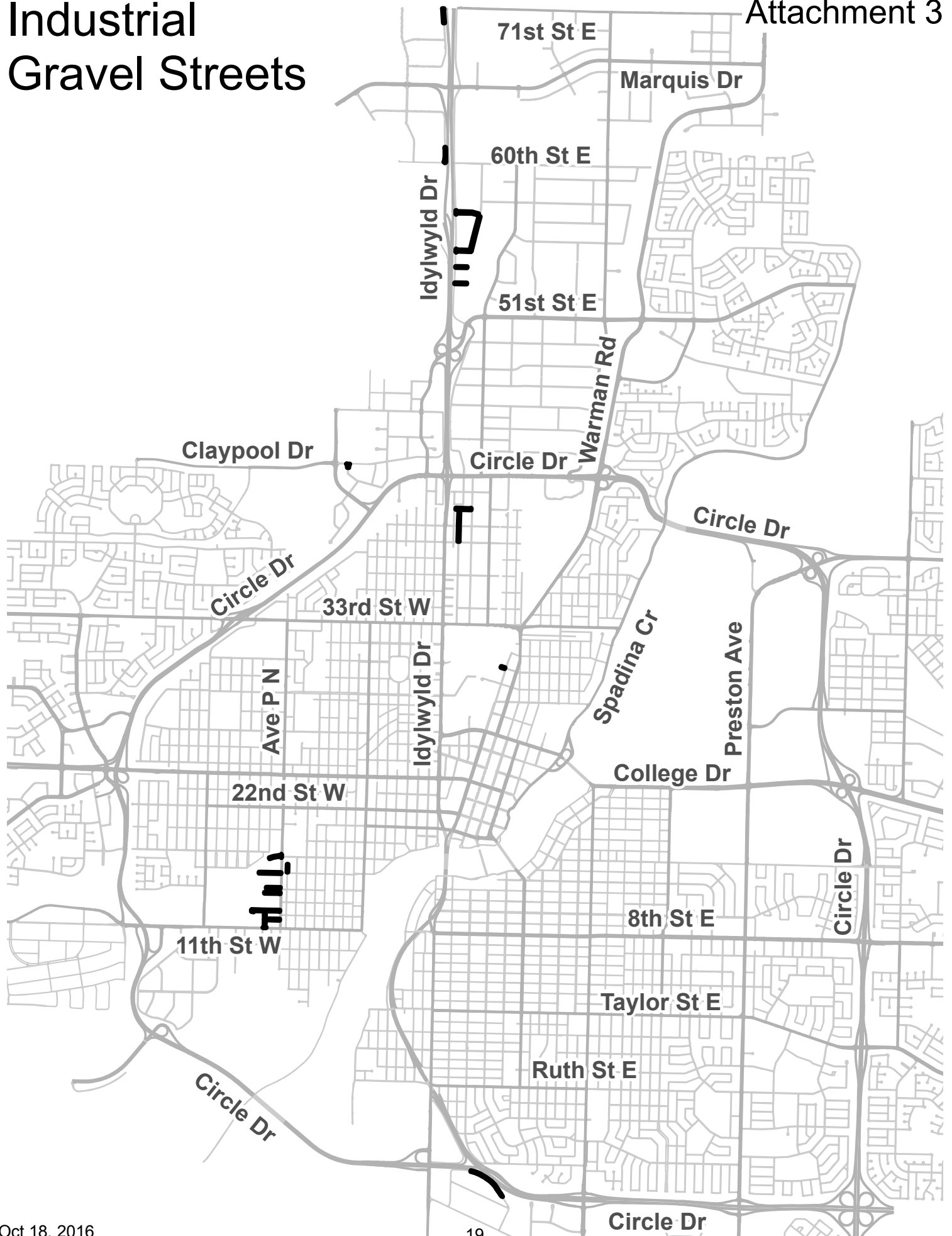
Capital Project #2044 – Gravel Street Upgrades, Locations Funded Since 2004

- 19th St W: Vancouver Ave to Winnipeg Ave;
- 38th St E: Rail to 1st Ave N;
- 37th St E: East of 2nd Ave;
- 39th St E: East of 2nd Ave;
- 40th St E: East of 2nd Ave ;
- Cascade St: East of Clarence Ave S;
- 1600 Block of Avenue E;
- Ave U: 11th Street to Dudley Street;
- Avenue J South at 21st Street West;
- Avenue K South – 17th to 18th Street;
- Avenue L – 18th Street to 19th Street;
- Avenue M – 17th Street to 19th Street (Carryover into 2011);
- Avenue N South – 17th to 18th Street;
- Avenue O – 16th Street to 17th Street (Carryover into 2011);
- Avenue Q – Dudley to 11th Street;
- Avenue T South at 20th Street West;
- Avenue W – North of 37th Street;
- Lauriston Street – 2nd Avenue to 9th Avenue;
- Niderost Street – Melrose Avenue to McPherson;
- Sidewalks – 21st Street West - 5 Blocks;
- Sidewalks – Avenue P – 11th Street to 17th Street;
- Warburton Street – 7th Avenue to 10th Avenue;
- Wheaton Avenue – 46th Street to 47th Street;
- 10th Avenue North – Duchess Street to Warburton Street (funded from the Earth Street and Lanes Program);
- 11th Street – 100 Block;
- 17th Street – Avenue S to Avenue Q (Carryover into 2011);
- 18th Street - Avenue J to Avenue L;
- 18th Street – Avenue L to Avenue N (Carryover into 2011);
- 19th Street – Avenue L to Avenue M;
- 2nd Street – Kilburn Avenue to Belfast.
- 34th Street – 1st Avenue to 2nd Avenue;
- 35th Street – 1st Avenue to 2nd Avenue;
- 36th Street – 1st Avenue to 2nd Avenue;
- 37th Street – 1st Avenue to 2nd Avenue;
- 38th Street – 1st Avenue to 2nd Avenue;
- 40th A Street – Avenue A to Avenue B;
- 41st Street – Ontario Avenue to Quebec Avenue (2007 construction with 2006 budget);
- 107th Street – 335 metres north of 105th Street (funded through the Infrastructure Stimulus Fund); and
- 107th Street – Central Avenue East for 2 blocks.

Residential Gravel Streets



Industrial Gravel Streets



Infill Lane Paving Requirements

Recommendation

That the report of the General Manager, Transportation & Utilities Department, dated October 10, 2017, be received as information.

Topic and Purpose

This report clarifies the requirements to pave lanes during infill and redevelopment in existing areas in the interim, prior to the development of a formal policy.

Report Highlights

1. A summary of the City's previous practice is provided.
2. Information on practices in other municipalities is provided, and the Administration will continue to gather best-practices.
3. Clarity on interim lane paving requirements is outlined in this report.

Strategic Goal

This report supports the Strategic Goal of Moving Around by providing improved safety for all road users (pedestrians, cyclists, and drivers), and helps provide a great place to live, work, and raise a family.

Background

The Standing Policy Committee on Transportation, at its August 16, 2016 meeting received verbal presentations from Jim Siemens and Curtis Olson, Shift Development Inc. related to lane paving for infill development.

City Council, at its meeting held on December 12, 2016, considered the Paved Lane Policy report and resolved:

- “1. That the matter of the paved lane policy be referred to the Administration for a report with respect to the feasibility of creating a round table, to discuss this matter, along with the issues relating to infill and greenfield development; and
2. That the Administration start the framework for development of a paved lane policy based on discussions and consultations at the round table.”

City Council, at its meeting held on June 26, 2017, received an informational report entitled Measures to Incentivize Infill Development, from the General Manager, Community Services Department.

This report provided an overview of the various initiatives underway to support the City of Saskatoon's infill targets, and the implementation of both the Growth Plan to Half a Million and City Centre Plan.

Infill Lane Paving Requirements

On July 18, 2017, the initial round table meeting addressing infill was held.

In all new development areas, lanes are paved and developers fund the cost of lane paving. Because infrastructure costs can be spread across all benefiting property owners and included in the price of the lot, there is a funding mechanism in place that does not require input from the mill rate. Infill developments in existing neighbourhoods with gravel lanes do not have such a funding mechanism in place.

It is anticipated the round table process will provide valuable input for the Administration to use in developing a formal paved lane policy that aligns with a greater infill strategy, but until that time no formal policy exists.

The purpose of this report is to provide clarity to infill developers with regards to when a lane will be required to be paved, and who is responsible for paying until a formal policy is developed.

Report

High traffic volumes on unpaved lanes cause service level problems for adjacent residents, and ongoing maintenance liabilities for the City. The intent of the paving requirement is to minimize the impact to adjacent residential neighbours, including dust and increased traffic volumes, resulting from infill and redevelopment.

Previous Practice

When approving infill development, the previous practice required paving of rear lanes adjacent to infill and redevelopment projects in established neighbourhoods determined when the intensity of development significantly exceeded the previous use. There is no formal policy governing this approach, and in the past, the Administration required larger infill projects that increase density to pave the lanes adjacent to their development on a case-by-case basis. This requirement provided a benefit to all residents adjacent to the lane, and helped the community accept the development as there was a service level enhancement made possible from the project.

The requirement for paving adjacent lanes has been applied as shown in the table below:

Land Use	No. of applications where the requirement to pave the adjacent lane was included	
	2014	2015
Commercial or Industrial sites	1	2
Residential	1	5
Waived requirement	-	1

In 2016, no developments were approved that required lane paving.

Practice in Other Municipalities

Several western Canadian municipalities including Edmonton, Regina, and Winnipeg allow for citizen-initiated local improvements including back lane paving. The process is

Infill Lane Paving Requirements

initiated by petition and funded by a tax imposed on the properties affected by the project.

For infill or redevelopment projects, there is no consistent application for the requirement to pave lanes in other municipalities. Below are a few examples that the Administration has investigated:

- City of Regina: Case-by-case depending on impact of project. No specific policy.
- City of Edmonton: Case-by-case depending on impact of project. No specific policy and no exemptions. A developer will typically withdraw their development application when paving a lane is seen as cost-prohibitive for the project.
- City of Red Deer: All buried utilities are located in rear lanes and lanes are not paved. No requirements for developers to pave rear lanes.

Clarity on Lane Paving Requirements

In light of the ongoing discussions at the infill roundtable and the development of a formal policy, Transportation has developed an interim policy to clarify the requirements for lanes to be paved adjacent to infill development projects:

- a. All commercial and/or industrial developments intending to use an existing gravel lane for staff or visitor parking and/or business purposes will be required to pave the entire length of the lane at the time of development.
- b. For residential infill, if traffic meets or exceeds a threshold of 30% increase in total lane trips (as calculated by the Institute of Transportation Engineer's Transportation Impact Analysis for Site Development), the developer will be required to pave the lane from the furthest property line to the nearest city street at the time of development. The entire development would be considered in this calculation.
- c. For Affordable Housing infill projects, the developer will not be required to pave the lane. Affordable Housing is defined in Council Policy C09-002, Innovative Housing Incentives.

Clarifying when a lane will be required to be paved allows for developers to better anticipate their costs during the development of their projects.

Going forward, two issues that will be foundational to any formal policy are as follows:

1. Identifying when densification or increased traffic in a lane trigger the need to upgrade an existing gravel lane to pavement.
2. Once this trigger is met, the funding mechanism that appropriately incentivizes infill; protects the needs of existing residents; and ensures that all developers are treated fairly.

Public and/or Stakeholder Involvement

The Administration is continuing to discuss the development of a formal policy with the development community. Stakeholder consultation through the Developers Liaison Committee and the round table on infill development are ongoing.

Communication Plan

The formal policy, if adopted, will be made available on the City website, and shared with the Saskatoon Home Builder’s Association.

Policy Implications

A formal City Council policy for paving lanes will be developed through the infill roundtable discussions.

Other Considerations/Implications

There are no options, financial, environmental, privacy, or CPTED considerations or implications.

Due Date for Follow-up and/or Project Completion

The Administration will report with recommendations for the development of a formal paved lane policy for infill development after the series of infill development round tables are complete.

Public Notice

Public Notice pursuant to Section 3 of Policy No. C01-021, Public Notice Policy, is not required.

Report Approval

Written by: Jay Magus, Acting Director of Transportation
Approved by: Angela Gardiner, Acting General Manager, Transportation & Utilities Department

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Sid Buckwold Bridge Walkway Widening

Recommendation

That the report of the General Manager, Transportation & Utilities Department dated October 10, 2017, be received as information.

Topic and Purpose

This report provides information on the additional funds required to expand the detailed design work to support the potential widening of the walkway on the Sid Buckwold Bridge to 3.0 metres, and how the walkway widening project aligns with the Active Transportation Plan (AT Plan).

Report Highlights

1. The preliminary cost estimate to complete all the work required to widen the walkway is an additional \$3 million. The cost estimate will be refined as the structural requirements are quantified and the detailed design completed.
2. The additional cost to confirm the feasibility, structural capacity, and required improvements to widen the walkway through the completion of a detailed design is \$40,000.
3. A potential cost savings of \$50,000 could be realized by including the expansion of the walkway in conjunction with the rehabilitation of the bridge.
4. Widening the walkway would enhance the existing sidewalk and cycling networks by making it a more attractive choice for pedestrians and cyclists, supporting and encouraging active transportation trips.
5. Making physical improvements to the Sid Buckwold Bridge walkway was not identified as a priority for the AT Implementation Plan within the next two years.
6. The Administration will report on including the detailed design work with the proposed 2018 capital programs during the 2018 Business Plan and Budget deliberations.

Strategic Goals

This report supports the Strategic Goal of Moving Around by providing active transportation facilities to improve the quality of walking and cycling

This report supports the Strategic Goal of Quality of Life by increasing recreational and leisure opportunities.

This report supports the Strategic Goal of Environmental Leadership by increasing the energy efficiency of transportation.

Background

At its meeting held on November 28, 2016, City Council approved the award of engineering services to Stantec Consulting Ltd. for completion of the design and construction services for rehabilitation of the Sid Buckwold Bridge.

The Standing Policy Committee on Transportation, at its meeting held on June 16, 2017, received verbal presentations from Warrick Baijius, speaking as a member of the Idylwyld Bridge Renovation Committee, which is a committee of the Buena Vista Community Association and Cam McMillan, Walking Saskatoon related to widening of the walkway on the Sid Buckwold Bridge, and resolved:

“That the Administration report back on adding design work on the pedestrian walkway of the Sid Buckwold Bridge in order to modify the walkway, in conjunction with the 2019 rehabilitation project, in support of the Active Transportation Plan.”

Report

Sid Buckwold Bridge Rehabilitation Project

The intent of the bridge rehabilitation program is to cost-effectively upgrade components to the most recent code resulting in a rejuvenated structure that provides additional years of service.

The current scope for the Sid Buckwold Bridge Rehabilitation project planned for 2019 includes the following related to the existing walkway on the east side of the bridge (see Attachment 1):

- Replacing the pedestrian railing;
- Replacing the walkway barriers to increase the height to current code;
- Repairs to the walkway’s concrete surface; and
- Widening the walkway from 1.8 metres to 2.1 metres to accommodate the upgraded barrier design.

Not included in the current scope is widening the walkway to a minimum width of 3.0 metres. The AT Plan, along with a review of best practices, indicate a minimum width of 3.0 metres is recommended for shared pedestrian and cyclist facilities. Preliminary investigation has indicated that the expansion from the planned 2.1 metres width to 3.0 metres width is possible; however, the structure was not originally designed for a 3.0 metre wide walkway and requires improvements. A widening would also require the removal and replacement of the existing stairs and platforms that connect the bridge walkway with the multi-use pathway on the river banks. It is possible that additional retaining walls to accommodate the new width at the approach, stairs and platforms may be required.

The Administration’s preliminary cost estimate to complete all the work required to widen the walkway is an additional \$3 million. A detailed design is required to quantify the required structural changes to achieve a walkway width of 3.0 metres and refine the cost estimate.

Sid Buckwold Bridge Walkway Widening

The additional cost to confirm the feasibility, structural capacity, and required improvements through the completion of a detailed design is \$40,000.

Opportunity Cost of Postponing Widening

Completing the walkway widening concurrently with the currently planned work would result in an estimated construction cost savings of \$50,000. The associated cost savings would be related to the contractor's mobilization and demobilization cost, traffic control savings, and the site administration cost saving due to completing the work concurrently.

The public will also be less impacted if the work is completed concurrently, as it would not require the walkway to be closed for a second time if the walkway widening is completed at a later date.

Active Transportation Considerations

Widening the walkway would enhance the existing sidewalk and cycling networks by making it a more attractive choice for pedestrians and cyclists, supporting and encouraging active transportation trips.

The AT Plan identifies the importance of investing in existing infrastructure, with particular emphasis in areas where there is current or high potential for pedestrian and cyclist demand. The neighbourhoods adjacent to the Sid Buckwold Bridge (Nutana, Riversdale, and Downtown) were identified through the active transportation planning process as some of the neighbourhoods with the highest potential for walking and cycling trip increases.

Further, in these areas with the highest potential for trip increases, the AT Plan recommends establishing a minimum grid network of facilities for All Ages and Abilities within 400 metres of each other. Access to the Sid Buckwold Bridge and the Traffic Bridge from the south side of the South Saskatchewan River are approximately 400 metres apart. On the north side of the river, the separation distance narrows to approximately 320 metres (see Attachment 2).

The AT Plan also states that an important component of improving network connectivity is ensuring existing facilities are of the highest quality and well integrated into the network. Widening the walkway would improve the quality and comfort for pedestrians and cyclists using this connection.

The AT Plan does identify a dedicated active transportation river crossing for the city centre. However, further review to determine the location, along with the feasibility and appropriate timing for installation, is required. The preliminary location identified by the AT Plan for the city centre crossing is between the Broadway and University Bridges. The AT Plan estimated the cost of a city centre river crossing to be \$20 million.

Making physical improvements to the Sid Buckwold Bridge walkway was not identified as a priority for the AT Implementation Plan within the next two years. At this time, the

Administration is working on developing criteria to ultimately provide City Council a detailed prioritized list of active transportation capital projects. This work has just begun, and is expected to take several years.

Public and/or Stakeholder Involvement

The Buena Vista Community Association and Walking Saskatoon have been advised of the contents of this report and advised of their opportunity to speak at the Standing Policy Committee on Transportation regarding its contents. Additional stakeholder involvement would occur as a part of the Bridge Rehabilitation project.

Communication Plan

Project information and traffic restrictions impacting users of the bridge may be communicated through multiple channels including the news media, social media, construction letters, service alerts, and the City website. Advertising in the City Pages may also be an option.

Financial Implications

The cost to complete the detailed design and refine the walkway widening cost estimate is \$40,000; however, there is insufficient funding to undertake this work in 2017. The Administration will report on including this detailed design work with the upcoming report on the AT Implementation Plan.

Other Considerations/Implications

There are no policy, environmental, privacy, or CPTED implications or considerations.

Due Date for Follow-up and/or Project Completion

No further reporting is required at this time.

Public Notice

Public Notice pursuant to Section 3 of Policy No. C01-021, Public Notice Policy, is not required.

Attachments

1. Preliminary Cross Sections
2. Sid Buckwold Bridge Site Context Map

Report Approval

Written by: Danae Balogun, Active Transportation Program Manager, Transportation
Reviewed by: Todd Grabowski, Asset Preservation Manager for Bridges, Major Projects & Preservation
Reviewed by: David LeBoutillier, Acting Engineering Manager, Transportation
Reviewed by: Jay Magus, Acting Director of Transportation
Approved by: Angela Gardiner, Acting General Manager, Transportation & Utilities Department

Figure 1: Cross Section of Existing Walkway (1.8 m wide)

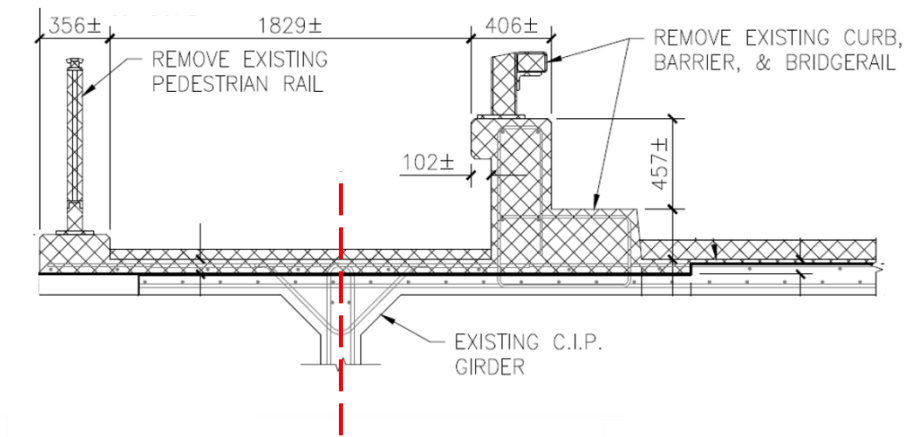


Figure 2: Cross Section of In-Scope Proposed Walkway (2.1 m wide)

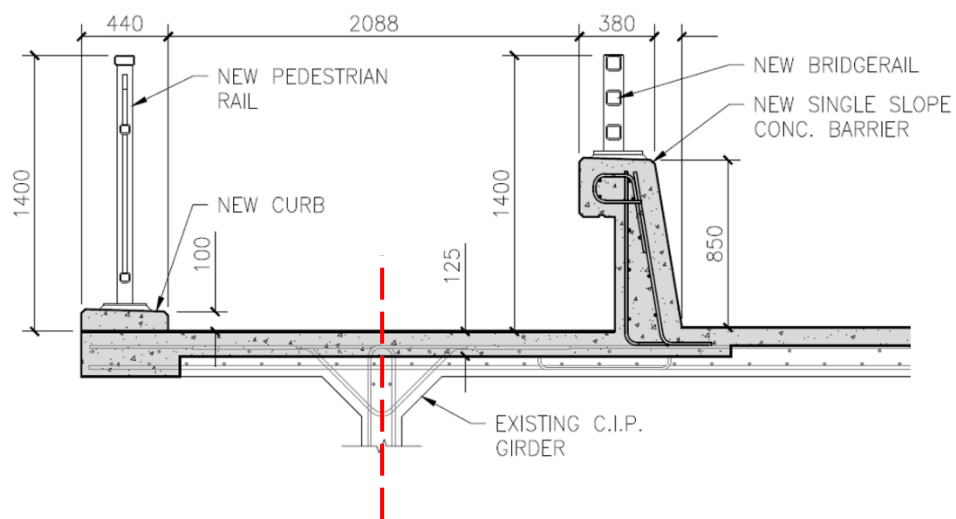
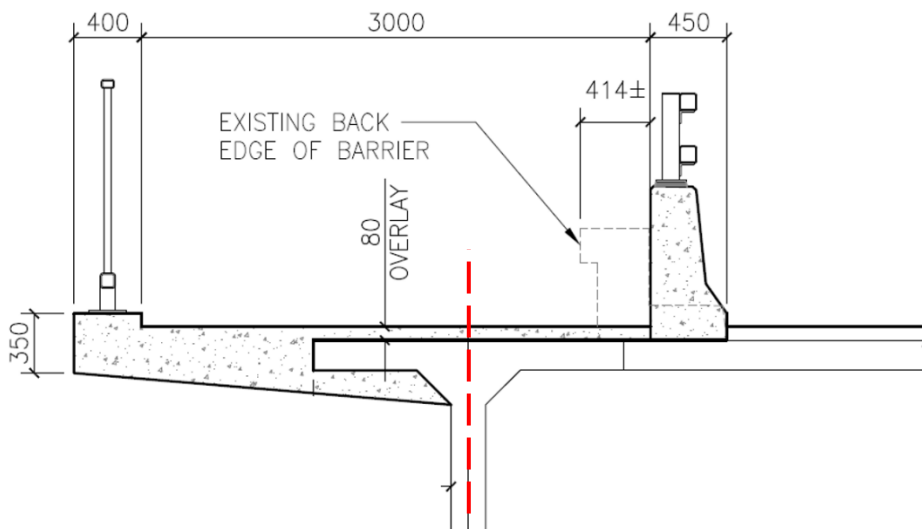


Figure 3: Cross Section of Proposed Walkway (3.0 m wide)



Sid Buckwold Bridge Site Context Map

Legend

- Existing 'AAA' Network
- AT Plan Proposed 'AAA' Network
- Sid Buckwold Bridge Walkway



Civic Equipment Storage

Recommendation

That the report of the General Manager, Transportation & Utilities Department dated October 10, 2017, be received as information.

Topic and Purpose

The purpose of this report is to provide information regarding the Administration's plan to utilize the vacated Transit facility on Avenue C for passive indoor winter storage and temporary office space.

Report Highlights

1. Administration is planning to temporarily utilize the vacant Transit storage facility and office space located on Avenue C and save on monthly facility rental costs of up to \$21,000.
2. Key pieces of heavy equipment integral to the summer operations require secure, heated indoor winter storage.
3. Failure to ensure proper facilities for winter storage puts the City at risk for potential critical failures of equipment systems and a negative impact on spring/summer maintenance programs.

Strategic Goals

This report supports the Strategic Goals of Asset and Financial Sustainability and Moving Around. Utilizing vacant City facilities for operations demonstrates to citizens that the Administration is making sound financial decisions. This ensures key summer road maintenance and water system maintenance programs will not be put at risk and that citizens, visitors and service providers can safely move around the city.

Background

City Yards does not include adequate and appropriate storage facilities required for the City's inactive summer equipment. Historically this equipment was stored at external leased facilities and the Saskatchewan Transportation Company (STC) maintenance facility on King Street. With the pending sale of the STC maintenance facility and the termination of a lease of an external space that no longer met storage needs, the Administration is seeking indoor, heated space for storage of weather sensitive equipment. Winter equipment that is used for daily operations is not addressed in this report.

Report

Utilization of Vacant City Owned Facilities

The Avenue C former Transit office and bus storage facility is presently unoccupied and idle. The Administration is currently evaluating long-term alternatives for the Transit facility and will be providing a report to City Council over the winter.

Civic Equipment Storage

In the meantime, the site offers sufficient temporary and secure, heated indoor storage space for inactive City summer maintenance equipment and, temporary office space for City employees that have been displaced due to the pending sale of the STC maintenance facility.

Approximately 15 temporarily displaced office staff and their respective personal and/or City issued light vehicles will use the south parking lot and access on Avenue C on a daily basis.

Heavy Equipment Integral to Summer Maintenance Operations

The City owns approximately 60 pieces of road and water systems maintenance equipment not required for winter operations. This includes equipment used for street sweeping, asphalt patching, and hydro-vac flushing. This equipment requires heated, indoor storage to ensure that plumbing, electrical and hydraulic systems do not suffer critical failures due to freezing. In 2016, the cost to rent storage space was more than \$21,000 per month.

Winterization and storage of the equipment is underway and will be completed by October 31, 2017. Reactivation of the equipment would occur between March 1 and April 15, 2018. Equipment remains undisturbed over the winter season.

Risks of Outdoor Storage

The City owned summer maintenance equipment is valued at millions of dollars; individual units can be valued up to \$250,000. Unsecured facilities increase the risk of potential theft or vandalism of units. Weather sensitive equipment exposed to freezing temperatures can result in ruptured water systems and damaged hydraulic seals.

These types of damage can result in tens of thousands of dollars in repair costs when equipment is put back into service. Delays in the reactivation of equipment may put spring/summer road and water infrastructure maintenance programs at risk of not meeting service levels.

Options to the Recommendation

The Standing Policy Committee on Transportation may direct Administration to secure private heated indoor storage, and at an expected cost of greater than \$250,000 for the months of November 2017 to April 2018.

The Standing Policy Committee on Transportation may direct Administration to store the summer equipment in existing City-owned outdoor compounds. Equipment repairs due to freezing of temperature sensitive systems could cost upwards of \$100,000 and impact the City's ability to mobilize the equipment in the spring, compromising Level of Service commitments

Communication Plan

Caswell Hill Community Association will be notified of the plan for the temporary use of the vacant Transit facility, including the benefits of having regular 24-hour activity in the

Civic Equipment Storage

area. The Administration will work with the Community Association to implement measures to minimize impacts on adjacent residents.

Other Considerations/Implications

There are no public and/or stakeholder involvement, policy, financial, environmental, privacy, or CPTED implications or considerations.

Due Date for Follow-up and/or Project Completion

To ensure continued operational efficiencies and minimize or negate unplanned maintenance and repairs, summer maintenance equipment needs to be winterized and in an indoor heated facility by November 1, 2017.

Public Notice

Public Notice pursuant to Section 3 of Policy No. C01-021, Public Notice Policy, is not required.

Report Approval

Written by: Cathy Davidson, Operations Support Manager
Reviewed by: Brandon Harris, Director of Roadways & Operations
Approved by: Angela Gardiner, Acting General Manager, Transportation & Utilities Department

TRANS CD – Civic Equipment Storage

Right-of-Way Temporary Use Fees

Recommendation

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

1. That the proposed fees for temporary use of the Right-of-Way be approved; and
2. That the City Solicitor be requested to prepare the appropriate bylaw amendment to Bylaw No. 7200, The Traffic Bylaw.

Topic and Purpose

The purpose of this report is to seek approval of fees for temporary use of Right-of-Way (ROW). Adding fees for temporary use of the ROW will encourage prompt use, limit the amount of time the ROW is unavailable for public use, and discourage excessive closures.

Report Highlights

1. The City does not currently charge for private use of the ROW.
2. A review of other municipalities was undertaken, concluding that all municipalities reviewed charge a fee for ROW usage.
3. A comparison was done between the proposed ROW fees for the City and those applied in other municipalities.

Strategic Goal

This report supports the Strategic Goal of Moving Around by improving safety for all road users (pedestrians, cyclists, and drivers), and optimizing the flow of people and goods in and around the city.

Background

City Council, at its meeting held on April 24, 2017, considered the report Amendments to Bylaw 7200, The Traffic Bylaw – Right-of-Way Fees and Fines and resolved, in part:

- “4. That the Administration enter into discussions with stakeholders related to the fees for Right-of-Way usage and report to the Standing Policy Committee on Transportation before the end of 2017.”

That report is attached for ease of reference (Attachment 1).

Report

The Administration has undertaken a review of other municipalities including Winnipeg, Regina, Calgary, and Edmonton to evaluate their current practices for managing the private temporary use of the public ROW (Attachment 2). All four cities charge a rental fee for private temporary use of their public ROW. The purpose of the rental or usage fee is to ensure that the space that is utilized is the least amount necessary for the

Right-of-Way Temporary Use Fees

purpose intended and to encourage completion of work as quickly as possible to restore the ROW for public use.

The Cities of Winnipeg, Regina and Calgary charge by linear or square meter per day or month. The City of Edmonton arrives at the fee amount by using the area's market value. The Administration does not recommend the Edmonton approach due to the City's limited resources for providing market valuations.

The proposed fees for temporary use of ROW are outlined in Attachment 2. This attachment also presents scenarios and a comparison with the other four comparable cities.

Similar principles for charging rental fees on roadways is successfully being used to manage contractors delivering City projects, resulting in faster completion timelines and smaller work areas.

Through the Downtown Cut the Red Tape pilot project, which the Administration is currently developing, downtown development projects may be eligible for incentives that would off-set these new fees. If the pilot project is approved by City Council, it would apply to all development proposals that have come forward since its introduction at the September 5, 2017 meeting of the Standing Policy Committee on Planning, Development and Community Services.

Public and/or Stakeholder Involvement

The Administration conducted a stakeholder meeting with permit holders and the North Saskatoon Business Association (NSBA) on September 5, 2017. The material covered at this meeting was also emailed to stakeholders for those unable to attend. In general, most attending did not disagree with the proposed fees. One stakeholder had concerns about the impact of the fees upon their customers and the additional administrative effort these proposed changes require from their business. The NSBA raised concerns about potential impacts on inner-city development and to downtown business development from the additional costs. The briefing notes provided to stakeholders via email and at the stakeholder meeting are included as Attachment 3.

Communication Plan

A Frequently Asked Questions (FAQ) and responses have been developed and included as Attachment 4. The final fee structure will be shared with stakeholders and on the website saskatoon.ca.

Policy Implications

Upon approval by City Council, amendments to Bylaw No. 7200, The Traffic Bylaw will be required.

Financial Implications

Revenues generated from these new fees have not been estimated at this time. The information required to estimate revenue from past permits was not part of the old

Right-of-Way Temporary Use Fees

permit process. The new permit process and fee schedule requires the area of Right-of-Way, and the number of days the Right-of-Way will be needed at the time of application.

Once implemented, ROW fees will support increased ROW bylaw enforcement, administrative costs, and staffing to administer and issue the ROW permits.

The Administration's goal is for the proposed fee structure to be revenue neutral to balance the increased enforcement and administrative overhead of the proposed permitting process.

Other Considerations/Implications

There are no options, environmental, privacy, or CPTED considerations or implications.

Due Date for Follow-up and/or Project Completion

If approved, the bylaw update will be targeted for the end of 2017 with implementation of the new fees for May 1, 2018.

Public Notice

Public Notice pursuant to Section 3 of Policy No. C01-021, Public Notice Policy, is not required.

Attachments

1. Report dated April 4, 2017 – Amendments to Bylaw 7200, The Traffic Bylaw – Right-of-Way Fees and Fines
2. Proposed ROW Temporary Use Fees, Scenarios and City Comparisons
3. Right-of-Way Rental Fees – Stakeholder Meeting
4. Frequently Asked Questions

Report Approval

Written by: Chris Helt, Special Projects Manager, Transportation
Reviewed by: David LeBoutillier, Acting Engineering Manager, Transportation
Jay Magus, Acting Director, Transportation
Approved by: Angela Gardiner, Acting General Manager, Transportation & Utilities Department

TRANS CH – Right-of-Way Temporary Use Fees.docx

Amendments to Bylaw 7200, The Traffic Bylaw – Right-of-Way Fees and Fines

Recommendation

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

1. That the majority of Bylaw No. 2954, Streets Use Bylaw be repealed;
2. That a section for Construction, Detour and Street Use, including fines, be added to Bylaw No. 7200, The Traffic Bylaw;
3. That the City Solicitor be requested to prepare the appropriate bylaw amendment to Bylaw No. 7200, The Traffic Bylaw; and
4. That the Administration enter into discussions with stakeholders related to the fees for Right-of-Way usage and report to the Standing Policy Committee on Transportation before the end of 2017.

Topic and Purpose

The purpose of this report is to seek approval to amend Bylaw No. 7200, The Traffic Bylaw to address Right-of-Way (ROW) use by providing additional language and modifying fines. Further discussions will be held for the use of ROW fees.

Report Highlights

1. Bylaw No. 2954, Streets Use Bylaw requires a replacement by a new comprehensive streets use bylaw.
2. Amendments to Bylaw No. 7200, The Traffic Bylaw are proposed to enhance clarification of requirements and update fines for non-compliance with respect to the use of ROW.
3. Fees for usage of ROW are being considered and will be brought forward at a later date for approval following stakeholder consultation on implementing the fees.

Strategic Goal

This report supports the Strategic Goal of Moving Around by improving safety for all road users (pedestrians, cyclists, and drivers), and optimizing the flow of people and goods in and around the city.

Background

There are concerns of unsafe conditions and lack of coordination and/or damage resulting from private usage of ROW. Currently, bylaw inspectors have limited and/or inefficient enforcement abilities with respect to private usage of ROW.

Permits are required but not always obtained for private usage. Since 2016, an administrative fee of \$40 has been charged to recover the administration costs of processing and issuing permits.

Currently, the City of Saskatoon does not charge for private use of the public ROW.

The total ROW permits issued in the past three years are as follows:

- 2016 – 415
- 2015 – 947
- 2014 – 890

The drop in permits issued in 2016 is a result of the administrative fees being introduced with limited enforcement abilities under the current bylaw.

Report

A comprehensive review of Bylaw No. 2954, Streets Use Bylaw will be initiated in late 2017. In the meantime, certain portions of the bylaw that are required to effectively enforce ongoing concerns related to private use of ROW have been reviewed and recommendations for amendments are included in this report.

Amendment – Repeal Streets Use Bylaw and Combine into Traffic Bylaw

Bylaw No. 2954, Streets Use Bylaw provides direction for activities on public ROW. These activities need better clarification of requirements as they are outdated and do not reflect the current needs of the city's citizens. In some cases, duplicate sections are already included in Bylaw No. 7200, The Traffic Bylaw.

Many municipalities have provisions with respect to usage of the public ROW combined with the Traffic Bylaw. The Administration is recommending a similar approach for the City of Saskatoon and that Bylaw No. 2954, Streets Use Bylaw sections 1 to 20 be repealed. The portion of Bylaw No. 2954, Streets Use Bylaw dealing with consensual fighting will remain in sections 21 to 27.

The amendments to Bylaw No. 7200, The Traffic Bylaw would address areas such as closing a portion of the ROW and placing a structure and/or material on public ROW without first acquiring a permit from the City. A ROW permit will continue to outline conditions to safely accommodate motorists, pedestrians, and other users. Also this will ensure that closures for private purposes are coordinated with other planned work on the transportation network. The amendments will also allow removal of anything deemed hazardous from the ROW and recover the costs from the offending party.

The bylaw language amendment will support ROW protection to include: tracking of mud or dirt onto the ROW, allowance of material to enter the street and stoppage of damaging trees, parks or roads. Damage to ROW will be prohibited under the bylaw.

The usage of fines is proposed to discourage offenders taking the chance of being caught and/or paying the fine instead of acquiring a permit to conduct their work. A review of fine amounts from other municipalities was undertaken and the recommended fines can be found in Attachment 1.

ROW Usage Fees

The Administration has undertaken a review of other municipalities including Winnipeg, Regina, Calgary and Edmonton to evaluate their current practices for managing the private use of the public ROW.

All four cities charge a rental fee for private use of their public ROW. The purpose of the usage fee is to provide an incentive to minimize space requirements and to complete work as quickly as possible to restore the ROW for public use. The standard is to charge for linear or square meter per day or month. A sample of fees for use of ROW that may be used is shown in Attachment 2.

Further discussion will be held with impacted stakeholders prior to making a recommendation on the fee schedule for private use of ROW.

Stakeholder Involvement

The Administration is planning a discussion with stakeholders on the implementation of fees for the use of ROW.

Communication Plan

Frequently asked questions have also been developed and included as Attachment 3. Bylaw amendments will be shared with stakeholders and on the City website.

Policy Implications

Upon approval by City Council, amendments to Bylaw No. 7200, The Traffic Bylaw will be required.

Financial Implications

Revenues generated from increased fines have not been estimated at this time as it is anticipated that the amount of fines will act as a deterrent to violations.

Once implemented, ROW fees will support the resources for increased bylaw enforcement of ROW usage.

Other Considerations/Implications

There are no options, environmental, privacy, or CPTED considerations or implications.

Due Date for Follow-up and/or Project Completion

If approved, the bylaw update will be targeted for May 1, 2017, and there will be a follow-up report submitted for approval of fees for use of ROW provided before the end of 2017.

Public Notice

Public Notice pursuant to Section 3 of Policy No. C01-021, Public Notice Policy, is not required.

Attachments

1. Proposed Fines
2. Sample Fees for Use of ROW
3. Frequently Asked Questions

Report Approval

Written by: Chris Helt, Special Projects Manager, Transportation
Reviewed by: Jay Magus, Engineering Manager, Transportation
Angela Gardiner, Director of Transportation
Approved by: Angela Gardiner, Acting/General Manager, Transportation & Utilities Department

TRANS CH – Amendments to Bylaw 7200 – ROW Fees and Fines.dccx

Proposed Fines

Description	Fine Amount
Unauthorized material on street	\$ 500
Use of street or Right-of-Way without a permit	\$ 500
Walking on newly constructed sidewalks or pavement before being opened by City of Saskatoon	\$ 250
Climbing on light standard, pole, tree, railings or fences unless doing necessary repairs	\$ 250
Pull down or deface any sign or printed or written legal notice legally put up	\$ 250
Unauthorized use of sidewalk or boulevard as access for vehicle or machinery	\$ 500
Tracking mud / gravel / dirt / material on street	\$ 250
Allowing material to enter street	\$ 250
Failure to comply with permit conditions	\$1,000
Failure to produce permit when asked to do so by Peace Officer/GM of T&U	\$ 50

Proposed Fees

Type	A	B
	Rental duration < 30 days	Rental Duration >= 30 days
Parking Lane, Protected Bike Lane, Sidewalk, Boulevards, Alleys	\$0.15/m ² /day	Total from column A for first 29 days + \$0.10/m ² /day for days 30+
Traffic Lane (Locals, Collectors)	\$0.30/m ² /day	Total from column A for first 29 days + \$0.25/m ² /day for days 30+
Traffic Lane (Arterial, Expressway)	\$0.50/m ² /day	Total from column A for first 29 days + \$0.40/m ² /day for days 30+

Scenario A

Street bin for 20 days (in parking lane). Assumed size of bin = 16 x 7 feet (4.8768 x 2.1336 meters) = 112 ft² (10.4 m²)

ROW Rental total = \$0.15 x 10.4 x 20 = \$31.20

TOTAL = \$71.20 (includes \$40 admin fee for ROW permit)

Scenario B

Local / Collector street closure for parking and driving lane five vehicles long. Assumed length of vehicle = 5.2 meters, assumed width of parking lane = 2.5 meters and assumed width of traffic lane = 4.5 meters.

- Parking Lane for 20 days - \$0.15 x 13 x 20 = \$39.00
- Traffic Lane for 20 days - \$0.30 x 23.4 x 20 = \$140.40

ROW Rental Total = \$179.40

TOTAL = \$219.40 (includes \$40 admin fee for ROW permit)

Scenario C

Arterial / Expressway street closure for parking and driving lane five vehicles long. Assumed length of vehicle = 5.2 meters, assumed width of parking lane = 2.5 meters and assumed width of traffic lane = 4.5 meters.

- Parking Lane for 20 days - \$0.15 x 13 x 20 = \$39.00
- Traffic Lane for 20 days - \$0.50 x 23.4 x 20 = \$234

ROW rental total = \$273.00

TOTAL = \$313.00 (includes \$40 admin fee for ROW permit)

Scenario D

Local / Collector street closure for parking and driving lane five vehicles long. Assumed length of vehicle = 5.2 meters, assumed width of parking lane = 2.5 meters and assumed width of traffic lane = 4.5 meters.

- Parking Lane for first 29 days - $\$0.15 \times 13 \times 29 = \56.55
 - Parking Lane for days 30-60 - $\$0.10 \times 13 \times 31 = \40.30
 - Traffic Lane for first 29 days - $\$0.30 \times 23.4 \times 29 = \203.58
 - Traffic Lane for days 30-60 - $\$0.25 \times 23.4 \times 31 = \181.35
- ROW rental total = \$481.78

TOTAL = \$521.78 (includes \$40 admin fee for ROW permit)

City Comparison (using above examples)

Type	Winnipeg	Regina	Calgary	Saskatoon (Proposed)
Scenario A	\$ 101.92	\$ 40.80	\$ 74.78	\$ 71.20
Scenario B	\$ 356.72	\$116.20	\$1,139.67	\$219.40
Scenario C	\$ 356.72	\$116.20	\$2,240.33	\$313.00
Scenario D	\$1,070.16	\$308.60	\$3,419.00	\$521.78

Frequently Asked Questions

Why is the language of Bylaw No. 7200, The Traffic Bylaw and Bylaw No. 2954, Streets Use Bylaw being updated?

Some of the language and scenarios currently in these bylaws are outdated and don't reflect today's concerns about usage and the safety of the City's Right-of-Way (ROW).

What is an example of this "outdated language"?

"No person shall ride or drive a horse that is not in every respect fit for use and capable for the work in which it is employed, free from lameness or soreness calculated to cause pain and free from any vice or disease likely to cause accident or injury to persons or property."

Why are fines being added?

Adding specific fines for specific offences allow for a more efficient and quicker response by the City to rectify potentially dangerous situations for the public that are using the ROW.

Is this a 'cash grab'?

Absolutely not. The safety of all ROW users is of utmost importance to the City of Saskatoon. If a person or company is creating unsafe situations or damaging the City's ROW, fines are a way to deter repeat behavior and / or a way to recover the costs to repair the damage done.

Where will the fines collected go?

No fine amounts are being budgeted for as in an ideal situation, all users of the ROW are complying and not creating an unsafe environment or causing any damage to the ROW. As with other fines the City of Saskatoon collects, any collected fines go into the General Revenue account.

When will this new language and fines be in place?

The proposed language update and fines will ideally be in place for May 1, 2017 to be effective for the 2017 construction season.

How many Right-of-Way permits were issued in 2016 and how can a permit be applied for?

Transportation's Customer Service group issued 415 permits in 2016 and are always happy to assist with permit applications. They can be reached Monday to Friday 8:30am to 4:30pm by telephone at 306-975-2454 or by email at rowpermits@saskatoon.ca.

Proposed ROW Temporary Use Fees, Scenarios and City Comparisons

	A	B
	Rental duration < 30 days	Rental Duration >= 30 days
Parking Lane, Protected Bike Lane, Sidewalk, Boulevards, Alleys	\$0.15/m ² /day	Total from column A for first 29 days + \$0.10/m ² /day for days 30+
Traffic Lane (Locals, Collectors)	\$0.30/m ² /day	Total from column A for first 29 days + \$0.25/m ² /day for days 30+
Traffic Lane (Arterial, Expressway)	\$0.50/m ² /day	Total from column A for first 29 days + \$0.40/m ² /day for days 30+

Scenario A

Street bin for 20 days (in parking lane). Assumed size of bin = 16 x 7 feet (4.8768 x 2.1336 meters) = 112 ft² (10.4 m²).

ROW Rental total = \$0.15 (rate) x 10.4 (m²) x 20 (days) = \$31.20

TOTAL = \$71.20 (includes \$40 admin fee for ROW permit)

Scenario B

Local/Collector street closure for parking and driving lane 5 parking spaces long and 20 days. Assumed length of each parking spot = 5.4 meters, assumed width of parking lane = 2.5 meters, assumed width of traffic lane = 4.5 meters. Total length = 27 meters (5 parking spaces x 5.4 meters).

Parking Lane for 20 days - \$0.15 (rate) x 67.5 (m²) x 20 (days) = \$202.50

Traffic Lane for 20 days - \$0.30 (rate) x 121.5 (m²) x 20 (days) = \$729.00

ROW Rental Total = \$931.50

TOTAL = \$971.50 (includes \$40 admin fee for ROW permit)

Scenario C

Arterial/Expressway street closure for parking and driving lane 5 parking spots long for 20 days. Assumed length of each parking space = 5.4 meters, assumed width of parking lane = 2.5 meters, assumed width of traffic lane = 3.6 meters. Total length = 27 meters (5 parking spaces x 5.4 meters).

Parking Lane for 20 days - \$0.15 (rate) x 67.5 (m²) x 20 (days) = \$202.50

Traffic Lane for 20 days - \$0.50 (rate) x 97.2 (m²) x 20 (days) = \$972.00

ROW rental total = \$1174.50

TOTAL = \$1214.50 (includes \$40 admin fee for ROW permit)

Scenario D

Local/Collector street closure for parking and driving lane 5 parking spaces long for 60 days. Assumed length of each parking space = 5.4 meters, assumed width of parking lane = 2.5 meters, assumed width of traffic lane = 4.5 meters. Total length = 27 meters (5 parking spaces x 5.4 meters).

Parking Lane for first 29 days - \$0.15 (rate) x 67.5 (m²) x 29 (days) = \$293.63

Parking Lane for days 30-60 - \$0.10 (rate) x 67.5 (m²) x 31(days) = \$209.25

Traffic Lane for first 29 days - \$0.30 (rate) x 121.5 (m²) x 29 (days) = \$1057.05

Traffic Lane for days 30-60 - \$0.25 (rate) x 121.5 (m²) x 31 (days) = \$941.63

ROW rental total = \$2501.56

TOTAL = \$2541.56 (includes \$40 admin fee for ROW permit)

City Comparison using above examples

	Winnipeg	Regina	Calgary	Edmonton	Saskatoon (Proposed)
Scenario A	\$137.00	\$48.96	\$74.78	***	\$71.20
Scenario B	\$1923.00	\$599.40	\$1183.50	***	\$971.50
Scenario C	\$1680.00*	\$511.92**	\$2026.80	***	\$1214.50
Scenario D	\$5703.00	\$1798.20	\$3550.50	***	\$2541.56

*City of Winnipeg does not change prices based on street type

**City of Regina does not change prices based on street type

***City of Edmonton fees are based on market value of the land. For example, temporary parking or storage in a commercial area has an application fee of \$300 + 10% of the market value of the land + the tax equivalent per year. Residential fees use the same calculation except the application fee is \$150.

RIGHT-OF-WAY RENTAL FEES STAKEHOLDER MEETING

Ensuring the safe and unencumbered use of the public right-of-way is a responsibility the City takes seriously. To this end, the City is proposing to implement right-of-way rental fees in 2018 in the interests of minimizing the time and area borrowed for private uses and to provide clear guidelines for guarding public safety during private uses.

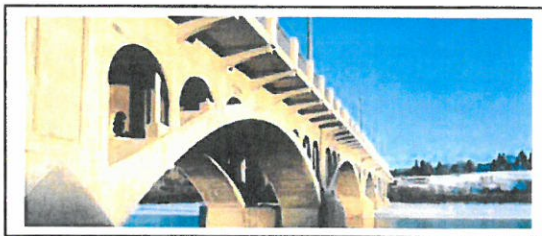
Background

Concerns have been expressed over unsafe conditions, lack of coordination, and damage resulting from the private use of the public right-of-way. An investigation into possible solutions revealed that the following municipalities have addressed these issues by attaching rental fees to the use of public right-of-way:

- Winnipeg
- Regina
- Calgary
- Edmonton

Objectives

The main purpose of introducing usage fees is to provide an incentive to minimize space requirements and to complete work as quickly as possible to restore the right-of-way to public use. The new permit application and rental process will also include avenues to clearly advise renters on the appropriate uses of public right-of-way in the interests of public safety; allow for smoother coordination between concurrent projects; and provides a structure for managing inappropriate uses of the public right-of-way.



Permits

Effective May 23, 2017 changes were made to the Traffic Bylaw to enable bylaw officers and members of the Saskatoon Police Service to enforce the permit requirement by issuing fines for non-compliance. Fines are intended to act as a deterrent as well as a tool to recover the costs associated with repairing damage.

A permit outlines the conditions to safely accommodate motorists, pedestrians, and other users. The permit process also ensures that any closure for private purposes is coordinated with other planned work on the transportation network.

The bylaw amendments also allow the City to now remove anything deemed hazardous from the right-of-way and to recover the costs from offending parties.

Right-of-way permits can be applied for by calling Transportation Division Customer Service M-F, 8:30 to 4:30 pm at 306-975-2454 or by email at rowpermits@saskatoon.ca. If approved, there is currently a \$40 administrative charge.

MORE INFORMATION

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Transportation Division
Christopher.Helt@Saskatoon.ca
306.975.1457

*More information at saskatoon.ca
(enter 'ROW' in search field)*

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Frequently Asked Questions

The City is proposing to introduce rental fees for private use of the public right-of-way. This includes any City-owned property including (but not limited to) roadways, sidewalks, parking lanes, protected bike lanes and alleys.

Q. Why is the City introducing fees for something that was previously available at no charge?

A. As the city grows, the number of requests to borrow the public right-of-way is growing. Increasingly, more and more of the right-of-way is unavailable for public use for extended periods of time. The intent of introducing fees is to incentivize right-of-way renters to minimize the time and area they rent, thereby reducing the public impacts.

Q. What are the fees?

A. The proposed fee structure is as follows:

Type	A	B
	Rental duration < 30 days	Rental Duration > + 30 days
Parking Lane, Protected Bike Lane, Sidewalk, Alley	\$0.15/m ² /day	Total from column A for first 29 days + \$0.10/m ² /day for days 30+
Traffic Lane (Local, Collector)	\$0.30/m ² /day	Total from column A for first 29 days + \$0.25/m ² /day for days 30+
Traffic Lane (Arterial, Expressway)	\$0.50/m ² /day	Total from column A for first 29 days + \$0.40/m ² /day for days 30+

Q. What will the City use the fees for?

A. The fees will be used to cover the administration and enforcement of right-of-way permits and rentals. Staff perform services such as reviewing applications, issuing permits, monitoring work in progress, enforcing permit conditions, and preparing the right-of-way for return to public use.

Q. When will the fees take effect?

A. The proposed new fees are expected to be implemented on May 1, 2018 if approved by City Council.

Q. Are there any exemptions?

A. At present, the fees will only apply to revenue-generating entities. Revenue-neutral organizations requesting use of the public right-of-way for a community service or event will not be charged a rental fee at this time.

Q. If I want to rent the public right-of-way, how does that process work?

A. The first step will be applying for a right-of-way permit. Permit applications can be obtained for \$40 by dropping by City Hall (3rd floor, Transportation Administration), emailing ROWpermits@saskatoon.ca, or calling 306-975-2454.

Q. If I want to rent a section of the roadway that includes public parking spaces, do right-of-way rental fees cover parking?

A. No. Parking reservations need to be made separately and additional fees will apply. Visit Saskatoon.ca (search 'Parking Reservations') or call 306-975-2548.

Q. Are right-of-way rental permits required?

A. Yes. The permit process ensures that right-of-way renters are provided the conditions for safe use of the right-of-way and also enables the City to ensure that right-of-way rentals are coordinated with other public and private uses.

Q. Are there fines for not obtaining a right-of-way rental permit?

A. Yes. In order to protect public safety, it's necessary that the City enforce the permit process. City Bylaw Inspectors or the Saskatoon Police Service can issue a fine for failure to produce a permit.

Q. Are there fines for non-authorized private use of the public right-of-way?

A. Yes. These fines are intended to protect public safety and public property, and they are applicable to anyone—not just right-of-way renters. In addition to the fines set out below, the City is also authorized to recover any additional costs from offending parties. For example, these costs may include recovering damaged right-of-way (roadways, trees, etc.) or removing anything deemed hazardous to public safety.

Description	Fine Amount
Allowing material to enter street	\$250
Tracking mud/gravel/dirt/material on street	\$250
Pulling down or defacing any sign or printed or written legal notice legally put up	\$250
Climbing on light standard, pole, tree, railings or fences unless completing necessary repairs	\$250
Walking on newly constructed sidewalks or pavement before being opened by City of Saskatoon	\$250
Unauthorized material on street	\$500
Use of street of Right-of-Way without a permit	\$500
Unauthorized use of sidewalk or boulevard as access for vehicles or machinery	\$500
Failure to comply with permit conditions	\$1,000

From: City Council
Sent: Tuesday, October 03, 2017 11:54 AM
To: City Council
Subject: Form submission from: Write a Letter to Council



Submitted on Tuesday, October 3, 2017 - 11:53
Submitted by anonymous user: 71.17.30.1
Submitted values are:

Date: Tuesday, October 03, 2017
To: His Worship the Mayor and Members of City Council
First Name: James
Last Name: Polley
Address: 777-60th Street West Site 413 P.O Box 608 RR4
City: Saskatoon
Province: Saskatchewan
Postal Code: S7K 3J7
Email: allans@sasktel.net

Comments: Wants to speak in the event next week, October 10 for the Event Standing Policy Committee on Transportation Meeting - Proposed ROW Fees. Thank you.

The results of this submission may be viewed at:
<https://www.saskatoon.ca/node/398/submission/197815>

Saskatoon Transit – Charter Policy

Recommendation

That the Standing Policy Committee on Transportation recommend to City Council:
That the Saskatoon Transit Charter Policy and Rates be revised as outlined in this report effective February 1, 2018.

Topic and Purpose

Administration has been working on changes to the Saskatoon Transit Charter Policy and Charter rates and are requesting approval to implement the recommendations and findings.

Report Highlights

1. Charter Policy change from using spare capacity to a fee for service model that will ensure Charter rates cover operational costs, align with industry best practices, and are comparable to other Cities.
2. Charter rate increase proposal effective February 1, 2018 with rates as outlined in this report with comparison to current rates in Attachment 1 and comparison to other Cities rates in Attachment 2.

Strategic Goals

This report supports the Strategic Goal of Moving Around, including the 4-Year Priority to change attitudes around public transit and increase Saskatoon Transit ridership, and ensures a service model that aligns with the maximization of resources for Saskatoon Transit's mill rate funded service hours.

Background

Saskatoon Transit offers a charter service to meet the transportation needs of customers requiring private bus service, while providing revenue to the City of Saskatoon. Historically, Charter rates have been reviewed annually by the Administration. The existing Charter rates have been in place since May 1, 2011.

Report

Under the current policy, Saskatoon Transit uses its fleet's spare capacity to offer Citizens a flexible service at a reasonable rate. With many other service providers available for charter service it is time for Saskatoon Transit to move to a fee for service model.

Saskatoon Transit is currently maximizing its scheduled and operational use of mill rate funded service hours. This best practice has reduced spare capacity that was previously available for charter services on a market rate and not cost recovery basis. The proposed policy changes will move Saskatoon Transit's Charter Services to a fee for service program, which is appropriate for non-mill rate services.

Administration is recommending the following Charter rates come into effect on February 1, 2018 and to remain in effect until January 31, 2021 (3 years) at which time Saskatoon Transit Administration will review the rates.

Proposed Rates	Non – Peak	Peak
Charter Rate	\$145.00 (per hour)	\$162.00 (per hour)
Supervisor	\$ 53.00 (per hour)	\$ 80.00 (per hour)
Cancellation Fee	\$130.00	\$190.00
Deadhead Fee	\$ 72.50 (per bus booked)	\$ 81.00 (per bus booked)

The charter rate will continue to be applied from the agreed pick-up time or when the bus arrives at the pick-up location, whichever is later. In addition, Administration is proposing a change from a 1 hour minimum booking to a 1.5 hour minimum booking and to implement a deadhead fee per bus (30 min). A detailed summary of the proposed policy compared to current policy with rates implemented May 1, 2011 is provided in the attached Charter Policy Comparison.

The proposed policy will see a rate increase of 38% (\$105 to \$145) and 8% (\$150 to \$162) respectively for non-peak and peak rates. These proposed rates are comparable to rates in other Cities, which can be found in the attached Charter City Comparisons.

Options to the Recommendation

1. City Council could direct Saskatoon Transit to set different rates.
2. City Council could direct that Saskatoon Transit Charter rates and policy remain unchanged.

These options are not recommended as the proposed rates will ensure that charters are fully cost recovered and not subsidized by the mill rate.

Communication Plan

Should Saskatoon Transit move forward with the recommendation rates, a marketing and communications plan will be developed.

Financial Implications

Administration believes this change would not provide more charter revenue as the increase might discourage some Citizens from booking a charter with Saskatoon Transit which would be offset by the increased rate paid by other bookings. However, it will ensure Charter rates are appropriate for a fee for service that is outside Saskatoon Transit's core service provision and fare revenues.

There would be a cost associated with updating the website and communicating the new information. At this time the Administration is estimating \$5,000; however, Saskatoon Transit would absorb this cost.

Other Considerations/Implications

There are no public or stakeholder involvement, policy, environmental, privacy, or CPTED implications or considerations.

Due Date for Follow-up and/or Project Completion

If approved, the new rates will be effective February 1, 2018.

Public Notice

Public Notice pursuant to Section 3 of Policy No. C01-021, Public Notice Policy, is not required.

Attachments

1. Charter Policy Comparison
2. Charter City Comparisons

Report Approval

Written by: Hidayat Ullah, Accounting Coordinator, Saskatoon Transit
Reviewed by: James McDonald, Director of Saskatoon Transit
Approved by: Angela Gardiner, Acting General Manager, Transportation & Utilities Department

TRANS JM – Saskatoon Transit – Charter Policy

Charter Policy Comparison

	Current Policy	Proposed	Comment
Charter Non-Peak Rate	\$105.00 / hour	\$145.00 / hour	Ensure Full Cost Recovery
Charter Peak & Weekend Rate	\$150.00 / hour	\$162.00 / hour	Ensure Full Cost Recovery
Minimum Charge	1 hours	1.5 hours (with an additional deadhead fee of 30 min)	Aligns Charter policy with Operator guaranteed pay for Full Cost Recovery.
Deadhead Fee – Non Peak	Included in charter rates	\$72.50 / bus booked	Ensure Full Cost Recovery
Deadhead Fee – Peak	Included in charter rates	\$81.00/ bus booked	Ensure Full Cost Recovery
Supervisor – Non Peak Rate	\$50.00 / hour	\$53.00 / hour	Special request or special circumstances only.
Supervisor – Peak Rate	\$75.00 / hour	\$80.00 / hour	Special request or special circumstances only.
Late Cancellation Fee– Non Peak	\$100.00	\$130.00	
Late Cancellation Fee - Peak	\$147.00	\$190.00	
Standby Time – Non Peak	\$100.00 / hour	\$130.00 / hour	
Standby Time– Peak	\$147.00 / hour	\$190.00 / hour	
Parking Meters		No change	
Pub Crawl Deposit		No change	

Attachment 2

Charter City Comparisons

City	Non-Peak	Peak	Charging From	Rate Effective Date	Rate Update	Minimum Booking
Regina	\$162.50	\$195.00	Pickup Time	1-Jan-17	When Fares Increase	1 hour
Winnipeg	\$131.00	N/A	Garage	1-Sep-17	Annually	2 hour
Edmonton	\$141.00	N/A	Garage	1-Jan-17	Annually	1 hour
Saskatoon Proposed	\$145.00	\$162.00	Pickup Time	1-Feb-18	Every 3 years.	1.5 hour

Award of Contract – Parking Enforcement System Software

Recommendation

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

1. That the City of Saskatoon enter into an agreement with Tannery Creek Systems Inc. for the provision of parking enforcement system software and support services, subject to the terms outlined in this report;
2. That the current contract for parking enforcement system software and support services, being supplied by the Calgary Parking Authority, be extended to December 31, 2017, for purposes of business continuity; and
3. That the City Solicitor be requested to prepare the appropriate agreements and that His Worship the Mayor and the City Clerk be authorized to execute the agreements under the Corporate Seal.

Topic and Purpose

The purpose of this report is to obtain approval to award a contract for the provision of parking enforcement system software and support services related to operation of the City of Saskatoon's FlexParking system.

Report Highlights

1. In June of 2017, the City of Saskatoon (City) issued a Request for Proposals for the services of an experienced parking operator to provide parking enforcement system software and support services; three proposals were received.
2. After evaluating the proposals, the Administration recommends that Tannery Creek Systems Inc., the preferred proponent, be selected to provide the parking enforcement system software service for a three-year term.
3. The current agreement with Calgary Parking Authority requires extension to December 31, 2017, in order to provide business continuity and ensure a smooth transition to the new vendor.

Strategic Goals

This report supports the City's Strategic Goal of Moving Around by developing an integrated transportation network that is practical and useful. This report also supports the Strategic Goal of Asset and Financial Sustainability by securing important revenue streams.

Background

The City's current FlexParking system was procured in 2014 and commissioned in 2015. Included in the procurement was the requirement for a software system that would link the paid session data from the terminals with the hardware (vehicle and hand-held tablets) used by the enforcement officers. This software link, currently provided by the Calgary Parking Authority, allows officers to verify vehicles in violation and conduct appropriate enforcement. The service contract with Calgary Parking Authority expired on August 31, 2017.

Award of Contract – Parking Enforcement System Software

In preparation for a new contract to continue provision of these services, the Administration determined that procuring external support through competitive Request for Proposals was the appropriate delivery method for the project, based on a number of factors, including:

- a) there is very limited capacity of existing staff to perform the work;
- b) the requirement is for very specialized services;
- c) expected timeline of delivery is urgent;
- d) the need for this service is infrequent, so in-house expertise is limited; and
- e) the work can be most efficiently supplied by an expert vendor.

On March 27, 2017, City Council authorized the Administration to issue a Request for Proposals for these services.

Report

Request for Proposals

On June 30, 2017, the City issued a Request for Proposals on SaskTenders seeking qualified vendors to provide the required parking enforcement system software link to operate the parking system in Saskatoon. Services required and requested included:

- a) system interfacing with pay station and parking application database;
- b) uploading and hosting paid parking sessions;
- c) providing real-time infraction processing;
- d) providing effective collection of license plate data;
- e) providing relevant software support;
- f) creating tickets and capturing photographs; and
- g) managing and storing related ticket data.

The Request for Proposals closed on July 13, 2017; three qualified proposals were received:

- a) ACCEO Solutions Inc. – Saint-Laurent, Quebec;
- b) Calgary Parking Authority – Calgary, Alberta; and
- c) Tannery Creek Systems Inc. – Vaughan, Ontario.

Proponent Selection

An evaluation and ranking of proposals was based on the following scoring criteria:

- a) Previous Parking System Operations Experience – 25 points;
- b) System Reliability and Service Support – 25 points;
- c) System Integration – 25 points;
- d) Adaptability, Flexibility, and Innovation – 5 points; and
- e) Fee for Service – 20 points.

Award of Contract – Parking Enforcement System Software

The evaluation was completed by an internal review/evaluation committee comprised of seven members representing three divisions. The committee breakdown is as follows:

- a) Corporate Revenue Division – one member;
- b) Information Technology Division – two members; and
- c) Community Standards Division – four members.

Results of the evaluation determined that the proposal submitted by Tannery Creek Systems Inc. best met the requirements of the Request for Proposals and achieved the highest score, demonstrating the following:

- a) over ten years' experience in the parking industry;
- b) experience working for numerous municipalities across Canada and the United States;
- c) demonstrated knowledge of the City's business needs and scope of the contract;
- d) strong customer focus and service support;
- e) innovative and responsive approach; and
- f) competitive pricing.

As a result, the Administration recommends entering into a three-year agreement to begin January 1, 2018, following design, implementation, and testing with Tannery Creek Systems Inc. as the provider of the necessary parking enforcement system software and support services.

Terms of the agreement are as follows:

- a) three-year agreement with Tannery Creek Systems Inc. for the period January 1, 2018, to December 31, 2020;
- b) value of the three-year agreement is \$330,000 plus applicable taxes;
- c) deliverables of the agreement include the noted enforcement software data links, hand-held hardware for issuing citations, and applicable ongoing information technology support. Contractual payments will not begin until the system has been fully tested and displayed to function and is accepted by the City;
- d) termination of the agreement can occur due to failed performance or disregard to any of the technical deliverables necessary to meet contract obligations; and
- e) an option to renew exists for up to three one-year terms, subject to the City requiring the service, the budgetary funds existing, the City being satisfied with the service, and the parties reaching agreement with respect to the terms of any such renewal.

Current Contract Extension

The current parking enforcement software link is being provided by Calgary Parking Authority. The original contractual relationship ended August 31, 2017.

While efforts were made to ensure the Request for Proposals process was completed by the end of the original contract, negotiation with the new supplier, Tannery Creek Systems Inc., identified that an appropriate design and implementation time will require the existing vendor to offer services on a month-to-month basis, up to a maximum date of December 31, 2017. The amount of required work for testing and implementation of the new enforcement software and hardware requires this timeline. In the interest of business continuity, this will help to ensure the new system is designed and implemented in an appropriate manner.

Under Corporate Purchasing Procedure Policy No. A02-027, Section 10.2, an initial two-month extension, ending October 31, 2017, was granted under administrative authority to exceed a contract value by no more than 25% in order to maintain parking enforcement business continuity. In order to complete full implementation with the new vendor, a further two-month extension to December 31, 2017, is required by City Council under the same purchasing policy provision.

Financial terms of the agreement will see the new vendor being paid only after full testing, implementation, and acceptance. As such, approval of the extension of the current contract with Calgary Parking Authority has a neutral financial impact.

Options to the Recommendation

The award recommendation was made through a competitive procurement process involving an objective and transparent scoring and selection method. The services procured are a fundamental requirement to operating the FlexParking system in Saskatoon. As a result, no further options are offered to the recommendation of award provided in this report.

Public and/or Stakeholder Involvement

The procurement of the parking enforcement software service is for internal business needs to deliver parking services. No further public or stakeholder consultation is required.

Financial Implications

Award of the contract to Tannery Creek Systems Inc. would result in a total contract value of \$330,000, plus applicable taxes, over a three-year term. Appropriate provisions will be included in the 2018 budget, and onward, to cover this expense.

The extension of the agreement with the current vendor is valued at \$40,000, excluding taxes. This extended provision does not overlap with the new vendor which means this extension creates no increased financial implications to the City.

For contextual purposes, parking operations generate approximately \$10 million annually from paid parking, permitting, and ticket revenue. After supporting the

Award of Contract – Parking Enforcement System Software

expenses of operations, the remaining approximate \$8 million is directed toward general revenue to support the mill rate, repaying the vendor-financed contract with Cale Systems Inc., and supporting various programs, including streetscape improvement, Business Improvement District support, and the Community Support Officer Program.

Other Considerations/Implications

There are no environmental, policy, privacy, or CPTED considerations; a communication plan is not required at this time.

Due Date for Follow-up and/or Project Completion

With this contract in place, no further follow-up is expected.

Public Notice

Public notice, pursuant to Section 3 of Public Notice Policy No. C01-021, is not required.

Report Approval

Written by: Andrew Hildebrandt, Director of Community Standards
Approved by: Randy Grauer, General Manager, Community Services Department

S/Reports/2017/CS/TRANS – Award of Contract – Parking Enforcement System Software/ks

Inquiry – Former Councillor P. Lorje (March 3, 2014) Time Restrictions for Parking Turnover in Residential Neighbourhoods

Recommendation

That the Standing Policy Committee on Transportation recommend to City Council:
That the 36-hour parking time limit in residential areas remain unchanged.

Topic and Purpose

This report provides information on parking time limits in residential neighbourhoods.

Report Highlights

1. Extending parking time limits in residential neighbourhoods would raise operating costs by a minimum of \$330,000 and have significant negative operational impacts.
2. Extending parking time limits would interfere with enforcement efforts of Bylaw No. 7200, The Traffic Bylaw.

Strategic Goal

This report supports the Strategic Goal of Moving Around by providing improved safety for all road users (pedestrians, cyclists, and drivers), and helps provide a great place to live, work, and raise a family.

This report supports the Strategic Goal of Asset and Financial Sustainability by providing annual sweeping and snow removal programs that are responsive to the needs of citizens, preserves air quality, reduces the amount of debris in stormwater runoff, improves road safety and mobility, and improves overall city cleanliness for Saskatoon citizens and visitors.

Background

In 1997 City Council resolved that Bylaw No. 7200, The Traffic Bylaw be amended to reduce the then 48-hour parking time limit in residential neighbourhoods to a 36-hour parking time limit (Attachment 1). The change was implemented to reduce the notice period and allow for earlier removal of private vehicles from the street to improve upon the efficiency and effectiveness of roadway operations and work productivity for street cleaning, snow removal, maintenance, and construction activities.

The following inquiry was made by Former Councillor P. Lorje at the meeting of City Council held on March 3, 2014:

“Will the Administration please review the requirement for parking turnover of private vehicles in residential neighbourhoods. Currently cars have to be moved at least every 36 hours. This poses a difficulty for people who wish to park their

car and go away for the weekend. Can consideration be given to lengthening the time restriction to 48, 60 or 72 hours.”

At its meeting held on June 12, 2017, the Standing Policy Committee on Transportation considered the Street Cleaning and Sweeping Service Level report and resolved:

“That the Standing Policy Committee on Transportation recommend to City Council Budget Deliberations, Option 1 of the report of the General Manager, Transportation & Utilities Department dated June 12, 2017, which is an increase to the annual budget allocation to meet the current service level.”

At its meeting held on September 11, 2017, the Standing Policy Committee on Transportation requested the correspondence from Dennis and Patricia Dowd dated August 31, 2017 be joined to the file regarding the 36-hour parking limit.

Report

An extension of parking time limits in residential areas would have significant financial and operational impacts to the City, as well as issues in relation to enforcement of Bylaw No. 7200, The Traffic Bylaw.

Financial and Operational Impacts

1. Loss of productivity: Extending the parking time limit would mean less time available for roadway operations and work productivity. As an example, road work planned for Wednesday would require that ‘No Parking’ signs be erected on Monday. If it takes until 10:00 a.m. on Monday to erect the signs, vehicles cannot be removed from the street until after 10:00 a.m. on Wednesday. This creates three hours of lost time for the crews Wednesday morning since road work typically begins by 7:00 a.m. While it is possible to mitigate this by erecting the signage three days in advance, it was the case prior to the 1997 amendment that ‘No Parking’ signs in place for a longer period of time were more prone to being vandalized, moved, or ineffective due to the lengthier notice period. These issues may re-emerge if the parking time limit and corresponding notice period are extended.
2. Additional signage: For the street sweeping program, an extended 48-hour parking time limit would require signage to be in place for four-to-five days, while the current stock of signage is sufficient for only three-to-four days. This would mean that approximately 1,200 additional signs would be required at a cost of \$180,000. This cost would increase if a 60 or 72-hour parking time limit were implemented. For information on the signage see Attachment 2.
3. Weather considerations:
 - i) An extended parking time limit would create greater uncertainty in anticipating the weather forecast since the further away the scheduled work is intended to commence, the less reliable the weather forecast. Unforeseen weather would impact the ability to undertake street sweeping, and require work crews to collect and redeploy signage, only to return the signage to the originally planned work area at a later date. The

- estimated increased cost for street sweeping sign co-ordination would be \$150,000.
- ii) Currently 'No Parking' signage is installed for snow removal during a day shift and the snow removal occurs overnight the next day. Extending the parking time limits to 48-hours would add an additional day of weather variability to the snow removal notice. It is estimated that this would result in 50% more snow removal cancellations and 50% more signing co-ordination re-work due to weather. The total winter program cost may not change; however, there would be a considerable increase of unproductive work resulting in less snow being removed for the same cost.
4. Ability to meet level of service: With further advanced notice required for signage within the sweeping program, there would be a greater chance that weather would disrupt the sweeping schedule. Additional weather disruptions would result in increased cancellations and rescheduling, extending the program delivery time currently experienced by residents.

Enforcement

The current parking time limit provides for timely response to resident concerns and discourages residents from parking junked or inoperable vehicles on residential streets. Enforcement officers are able to take action and remove vehicles that are being inappropriately stored on the street rather than in a garage where they are permitted. The parking time limits also serve to notify police that there may be a stolen and then abandoned vehicle left on a residential street.

Options to the Recommendation

City Council could direct the Administration to proceed with amending Bylaw No. 7200, The Traffic Bylaw, to extend the parking time limit in residential areas from 36-hours. This is not recommended as this would result in substantially increased costs, interfere with efficient roadway operations, and provide a decreased level of customer service to address resident concerns.

Communication Plan

No communication plan is required at this time. Should City Council decide to proceed with extending the parking time limit, the Traffic Bylaw will require amendments and a communication plan will be developed.

Other Considerations/Implications

There are no public and/or stakeholder involvement, policy, financial, environmental, privacy, or CPTED implications or considerations.

Due Date for Follow-up and/or Project Completion

No follow-up is planned unless City Council direction is to proceed with an extended 60 or 72-hour parking time limit.

Inquiry – Former Councillor P. Lorje (March 3, 2014) Time Restrictions for Parking Turnover in Residential Neighbourhoods

Public Notice

Public Notice pursuant to Section 3 of Policy No. C01-021, Public Notice Policy, is not required.

Attachments

1. Minutes of Regular Meeting of City Council, Monday, September 8, 1997
2. Signage Information

Report Approval

Written by: Jay Magus, Acting Director, Transportation
Reviewed by: Brandon Harris, Director, Roadways and Operations
Andrew Hildebrandt, Director, Community Standards
Approved by: Angela Gardiner, General Manager, Transportation & Utilities
Department

TRANS JM – Inq. – Former C Lorje (Mar 3-2014) Time Restrictions for Parking Turnover

ATTACHMENT

1. Bylaw No. 7690.

REPORT NO. 17-1997 OF THE PLANNING AND OPERATIONS COMMITTEE

Composition of Committee

Councillor R. Steernberg, Chair
Councillor P. McCann
Councillor J. Postlethwaite
Councillor P. Roe
Councillor D. Atchison

1. **Global Parking Restriction**
(File No. CK. 6120-2)

- RECOMMENDATION:**
- 1) that the maximum 48-hour global parking restriction be changed to a maximum of 36 hours; and
 - 2) that the City Solicitor amend Bylaw No. 7200, the Traffic Bylaw, to reflect this change.

ADOPTED.

Your Committee has considered and concurs with the following report of the General Manager, Transportation Department dated July 24, 1997:

“BACKGROUND

For a number of operational activities that the City performs, such as snow removal, street sweeping, various construction work, etc., the removal of parked cars is a major impediment to doing an effective and efficient job. Currently, a person shall not park a vehicle on a City street for more than 48 hours, except as otherwise indicated by either a sign or within the Traffic Bylaw. This means that 48 hours' notice must be given between the time 'No Parking' signs are erected for street cleaning, snow removal, construction, etc., and the time when the vehicles can be ticketed and towed.

B17) Enquiry - Councillor Birkmaier (June 23, 1997)
Safety -Boychuk Drive Construction
(File No. 6001)

RECOMMENDATION: that the following report be received as information.

At its meeting on August 11, 1997, City Council resolved, in part;

“that Administration be requested to consider the construction of a pathway for pedestrians and bicycles on the most westerly portion of Boychuk Drive to the Lakeview/Lakewood area.”

Report of the General Manager, Public Works Department, August 25, 1997:

“City Council has requested that the Administration address the concern that the Briarwood Community Association has in regard to the requirement for students to have a walkway or sidewalk from the Briarwood Neighbourhood to the schools in the Lakeridge Neighbourhood. The route requested would be from the north leg of Briarwood Road, adjacent to Boychuk Drive, and then into the Lakeridge Neighbourhood.

The long-term plan is to have pedestrians follow the sidewalks from the westerly extension of the south leg of Briarwood Road to cross Boychuk Drive at the intersection of Heritage Drive. Due to the development of the Briarwood Neighborhood, this leg of Briarwood Road will not be constructed for a minimum of two years.

A second alternative is to build a pathway adjacent to Boychuk Drive. The cost estimate to build a crusher-dust pathway is approximately \$20,000. The developers of the Briarwood Neighbourhood were asked to contribute towards the cost of the pathway, but refused the request. The School Boards were asked to contribute, but indicated they do not have the funds. The City of Saskatoon does not have a funding source to build the pathway other than the Sidewalk/Pathway Retrofit Program, which was not approved in the 1997 Capital Plan. The Public Works Department will be recommending that this project be approved as part of the Sidewalk/Pathway Retrofit Program in the 1998 Capital Budget for construction in 1998.”

COMMUNICATION STRATEGY

A public service announcement will be released and an advertisement in the City Page section of the Star-Phoenix will be printed in order to inform the public of the change to the City of Saskatoon's global parking restriction."

Signage Information

Sign Details

Third generation signs are currently used that are improved and optimized each year (first generation signs are much more expensive). They cost approximately \$150 each and Roadways & Operations worked extensively with the Sign Shop over the past several years during the production of these. The signs are heavy duty reversible handle, prismatic reflective coating which are significantly less than omniscube reflective surface used in first generation signs.

The expected life span of the signs is 10 years. Numerous signs are stolen and many are roughed up, scratched and bent if not properly handled. Staff have put in place handling and tracking processes to extend the life span as much as possible. Sign rack modules (300 signs per rack) have been designed to mount on flat deck trucks that allow staff to put in and out at waist height for sign handling protection and ergonomics supportive of preventing injuries when handling. 300 signs at 15.5lbs each = 4,650 lbs plus rack.

The estimated inventory is 4,800 signs.

Impact of extending the 36-hour parking restriction to 48 hours.

It is estimated that an additional 1,200 signs would be required if the 36-hour parking restriction was extended to 48 hours. This estimate is based on scaling the current inventory required to manage 36 hours of restrictions, to the number of signs required to manage 48 hours of restrictions.

Accordingly, 1,200 additional signs x \$150 / sign = \$180,000

College Drive Speed Limit

Recommendations

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

1. That a speed limit of 90 kph on College Drive from a point 1,600 metres east of Central Avenue to the East City Limit be established; and
2. That the City Solicitor be requested to prepare the appropriate amendment to Bylaw No. 7200, The Traffic Bylaw.

Topic and Purpose

The purpose of this report is to provide additional information to support a reduced speed limit along portions of College Drive.

Report Highlights

Construction of an interchange at College Drive and McOrmond Drive is underway and requires an amendment to the existing speed limit to ensure safe and efficient traffic flows.

Strategic Goals

This report supports the Strategic Goal of Moving Around by improving safety for all road users (pedestrians, cyclists, and drivers), and optimizing the flow of people and goods in and around the city.

Background

City Council at its meeting held on March 23, 2015, approved a report from the General Manager, Transportation & Utilities Department to change the classification of College Drive, between the CPR tracks and the city limits, to Urban Expressway in order to improve connectivity into the Holmwood Sector.

Establishing the classification of the roadway and speed limit in advance is required to proceed with design of the interchange. A speed limit of 90 kph is being recommended for this purpose.

Report

The Administration uses the Transportation Association of Canada (TAC) Geometric Design Guide to design the roadway network to ensure safe and efficient traffic flows. The recommended speed limits for new and/or modified roadways are based on road classification, adjacent land use, driver behaviour and familiarity, and/or 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.

TAC indicates that the design speed for freeways and expressways should be designed with the highest practical design speed to promote traffic mobility, efficiency and safety,

College Drive Speed Limit

and that provision should be made for a speed that satisfies nearly all drivers, that being the 85th percentile speed (which is the speed at which 85 percent of vehicles are travelling at or below). TAC does not indicate that design speed should be a certain amount above the posted speed limit although most Western Canadian jurisdictions use a design speed 10 km/h higher than the posted speed limit. This provides for a factor of safety for vehicles travelling above the speed limit.

The interchange at College Drive and McOrmond Drive was originally designed for a speed limit along College Drive of 80 kph. A review of the design criteria considering an increase of the speed limit from 80 kph to 90 kph was completed, and the findings are as follows:

- The physical infrastructure of the interchange itself can accommodate the slight increase to the speed limit.
- The clear zone, which is the area where a vehicle leaving the road can travel without the potential of striking an object, requires an additional 2.5 metres of width. The piers and abutment walls for the interchange will be protected by barriers so therefore are not impacted, but two cantilever overhead sign structures would need to be re-designed.
- The size of the lettering on the guide signage is impacted by the speed limit as the higher the speed, the larger the letters need to be. A detailed review of the sign design is required to confirm if larger signs are required, which in turn may impact the design of the cantilever structures (I-beam and foundation sizes).

Based on this review, the Administration is recommending that with minor design changes, a maximum allowable speed limit of 90 kph could be safely accommodated along College Drive.

A review of this speed limit will be required upon consideration of an additional access point into the Brighton neighbourhood consistent with that contained in the approved Concept Plan. During the design phase of this access point, the appropriate speed limit will be reviewed to ensure that the intersection can operate efficiently and safely.

Options to the Recommendation

Maintaining the existing 100 kph maximum allowable speed is an option but is not recommended. The design of the entrance ramps for the interchange would need to be redesigned and may require additional land. A change of this magnitude would result in delays to the interchange project and require reconstruction of portions of the interchange.

Policy Implications

Upon approval by City Council, amendments to Bylaw No. 7200, The Traffic Bylaw will be required.

Financial Implications

The incremental cost for the design changes to accommodate a 90 kph speed limit have not yet been quantified. If they cannot be borne by the current funding for the project, a further report will be presented.

Other Considerations/Implications

There are no public and/or stakeholder involvement, communications, environmental, privacy, or CPTED considerations or implications.

Due Date for Follow-up and/or Project Completion

Completion of the interchange is planned for October 2018. Timing of the design and construction of the additional access point from College Drive into the Brighton neighbourhood is dependent upon the pace of development.

Public Notice

Public Notice pursuant to Section 3 of Policy No. C01-021, Public Notice Policy, is not required.

Report Approval

Written by: Jay Magus, Acting Director of Transportation
Approved by: Angela Gardiner, Acting General Manager, Transportation & Utilities Department

TRANS JM – College Drive Speed Limit.docx

Complete Streets Design and Policy Guide

Recommendations

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

1. That the Complete Streets Design and Policy Guide be adopted in principle;
2. That the Administration proceed with preparing a Council Policy based on the Complete Streets Design and Policy Guide provided in this report; and
3. That the implementation plan be approved.

Topic and Purpose

The purpose of this report is to adopt the Complete Streets Design and Policy Guide (the Guide) and implementation strategy as the basis for the development of new policies and standards that includes consideration for all transportation modes during the design process of street building.

Report Highlights

1. The Guide provides information on how Saskatoon's streets can be designed for all modes and users of all ages and abilities.
2. The Guide is a supporting document of the Growth Plan to Half a Million.
3. The Guide includes principles on street design that complement land use and consider the transportation system as a whole.
4. The Guide includes a toolkit of street treatments that provides options for consideration by designers based on the intended function of the street.
5. The Guide includes the identification of implementation opportunities which includes programs, processes, policies, and monitoring.

Strategic Goal

This report supports the Strategic Goal of Moving Around by improving the safety of all road users (pedestrians, cyclists, and drivers), and helps provide a great place to live, work, and raise a family.

Background

The Growth Plan was approved in principle by City Council in 2016. The directions of the Growth Plan provide guidance for civic investments in infrastructure and support programs over the short, medium, and long-term that will shape growth patterns and increase transportation choices, in order to achieve the social, economic, and environmental aspirations of the community. The Guide is a supporting document of the original Growth Plan work.

Report

Complete streets provide safe connections for users of all ages, abilities, and modes of travel where design is centered on the context of the street corridor. The Guide (Attachment 1) was developed to support street design that accommodates the safe

movement of people by multiple modes and of all ages and abilities, and to provide an explanation on how to accomplish that goal. The Guide includes transportation principles, links land use context and transportation, describes street types within Saskatoon, identifies a toolkit of street design treatments, and outlines strategies for implementation.

The Guide is a supporting document of the Growth Plan to Half a Million, Corridor Growth component, and supports the goals and vision laid out through that process. The Guide provides a strategy for achieving the goals of multi-modal transportation, identifying priority users for different street types, and linking land use to street function and user priority. These processes will be important in achieving the City's multi-modal transportation goals as opportunities for streets to be retrofitted arise throughout Saskatoon. The Guide can also be used to design new streets in new development areas so they can better serve the anticipated user groups, whether that be pedestrians, cyclists, personal automobiles, transit, or goods movement.

The policy derived from the Guide will be implemented as a part of the Saskatoon Transportation Strategy (Attachment 2) to ensure a consistent approach to transportation-related policies and plans. Other standards and policies will also be examined and modified to be consistent with the principles of Complete Streets. Some of the projects that will need to be completed, in addition to the implementation strategy outlined in the Guide, include:

- Incorporating policies from the Guide into the Saskatoon Transportation Strategy and Official Community Plan;
- Review and update of the City of Saskatoon Design and Development Standards Manual;
- Educate staff members about the direction for new and retrofit street design; and
- Develop a system for identifying opportunities for street retrofit.

A more detailed, long-term implementation strategy has been outlined in Section 6 of the Guide.

Public and/or Stakeholder Involvement

Public input into the development of the Guide was obtained through the Growth Plan to Half a Million engagement process, focusing primarily on the principles of Complete Streets.

Since much of what the Guide presents is technical, focusing on how to achieve the Complete Streets principles through a specific design approach and toolkit, stakeholder involvement was primarily focused on internal City stakeholder engagement. Appropriate internal divisions comprised the steering committee that led the development of the Guide.

Communication Plan

The Complete Streets Design and Policy Guide is an important tool for stakeholders involved in designing and developing new and future infrastructure. A communications

plan has been developed to ensure that land developers and community liaisons are aware of and understand the key issues identified in the guide, and are consequently able to inform members of the public of how these principles will be integrated in future project work. The campaign will begin in October and will centre around presentations and supporting materials for specific internal and external audiences, as well as general information updates in the City Manager's newsletter, and on the City's website.

The plan will also be communicated through the development and delivery of individual projects in order to help the public better understand the reasons why certain decisions are made in the design process.

Financial Implications

The Guide will be used to review and update the City of Saskatoon Design and Development Standards and also required changes to development levies. Cost estimates for individual projects will be developed during scope and design of specific projects.

Other Considerations/Implications

There are no options, policy, environmental, privacy, or CPTED considerations or implications.

Due Date for Follow-up and/or Project Completion

The Administration will prepare a Council Policy based on the Guide included in this report for presentation to the SPCT on Transportation in early 2018.

Public Notice

Public Notice pursuant to Section 3 of Policy No. C01-021, Public Notice Policy, is not required.

Attachment

1. Complete Streets Design and Policy Guide
2. Saskatoon's Transportation Strategy – Supporting Plans and Policies

Report Approval

Written by: Chelsea Lanning, Transportation Engineer
Reviewed by: Lesley Anderson, Director of Planning and Development
Jay Magus, Acting Director of Transportation
Approved by: Angela Gardiner, Acting General Manager, Transportation & Utilities

TRANS CL – Complete Streets Design and Policy Guide



COMPLETE STREETS DESIGN AND POLICY GUIDE



www.growingfwd.ca

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PART 1: Introduction



For several decades, street corridors in many cities have been designed, managed and maintained in an increasingly auto-centric way. Some major roadways can have six or more wide travel lanes. Intersections are typically wider than travel lanes, with turn lanes and signal timing plans designed to minimize delays to vehicles. Public expectations have evolved to assume that roadways be designed and managed to limit congestion for vehicles. In other words, society has come to expect that city streets will be designed, operated and maintained in a way that supports safe and efficient movement of vehicles as their primary function.

Inadvertently, urban streets in many communities have now become barriers to healthy and balanced urban places, as illustrated in **Figure 1** below. Wide streets designed for vehicles often lack safe, comfortable walking and bicycling experiences, as travel speeds tend to increase on wider streets, with limited space

and priority given to people of varying levels of mobility and confidence. These barriers also extend to transit; as driving is made more convenient, transit ridership is reduced, and increased levels of service less justifiable. On congested roadways, transit is often stuck in the same ‘bottlenecks’ as those driving personal vehicles, ultimately discouraging sustainable modes and encouraging driving.

Figure 1 shows a functioning street for its intended user, the motorist. This method of design will not be sustainable moving forward as the diversity of road users increases on streets. The challenge will be making the transition of cities from an auto-oriented street design to a complete street model that incorporates all the design factors that influence a street corridor.



Figure 1 - ‘Incomplete’ Street Example (22nd Street)

The challenges of traditional urban roadway design also affect the land uses that surround them. With auto-oriented development patterns, urban streets are less likely to be places where people will want to live, work or play. Major streets are often unaccommodating and become barriers to residential land uses. Retail and office developments are typically set back from the street, separated from the adjacent street by large parking areas. In turn, uses permitted in these areas tend to be lower density, with high parking requirements and design standards that ultimately promote driving.

A “Complete Streets” model is one of many strategies changing how cities are being planned and designed. In existing urban areas, guidelines for complete streets can help to encourage and support infill and densification on major roads, and balance accommodation for all modes of travel within the public right-of-way. For newer growth areas, the guidelines can be used to shape the City’s street design standards, which may incorporate many of the principles and tools in the **Complete Street Design and Policy Guide (the Guide)**.

With this in mind, complete streets imply more than just physical changes to a community’s streets. The implementation of a complete streets model must extend across planning, design, maintenance and funding for land use and transportation projects. A guide for complete streets can be achieved through clear policies and guidelines that influence land use and transportation plans, as well as include street design standards that will influence new and retrofit projects.

The Guide will direct planners and engineers to work collaboratively with the community and developers to consistently design the public right-of-way and ensure land uses are integrated, contributing to a people-oriented street environment that works for everyone.

The Guide is divided into six parts as follows:

Part 1	Introduction
Part 2	Vision for a Complete Street
Part 3	Context
Part 4	Complete Street Typologies
Part 5	Toolkit for Complete Street Design
Part 6	Opportunities for Implementation

Figure 2 - Policy and Design Guide Outline



1.1 How will the Guide be Used?

The Guide provides an updated way of looking at street design in Saskatoon, considering aspirations for both land uses and roadway planning, and intentionally connecting them through the selection of appropriate street treatments.

Planners and designers can apply necessary treatments to address street functions rather than simply service traffic patterns and needs. Moving away from standard templates, **the Guide** provides a customizable design tool for achieving the many goals of an individual street section.

The most impactful application for **the Guide** is on the existing street system. Individual treatments that are critical to creating a complete street can be implemented in Saskatoon over time as opportunities arise through redevelopment projects.

The current standard for street design in new neighbourhoods needs to be revised. **The Guide** will provide the justification, means, and information needed to effect change on the City's expanding street network.

The Guide is also meant to be an accessible resource for City staff, City Council and the residents of Saskatoon. **The Guide** will be a source of consistent information, using a common language that may be used by planners, designers and citizens to work collaboratively on design options for neighbourhoods and major streets throughout the City.

Complete street treatments may be developed through public engagement sessions to highlight what's possible and discuss treatments options and outcomes with the community. Designers can then use these discussions to create drawing standards for each treatment style to ensure safety and reliability of City Streets.

1.2 How Will Complete Street Treatments be Implemented?

The City's **Design and Development Standards Manual (the Manual)** provides the process and design information for streets and other utilities required for new subdivision development, as well as infill areas. **The Guide** can be used to update **the Manual** with design treatments that may be used in new areas of the City.

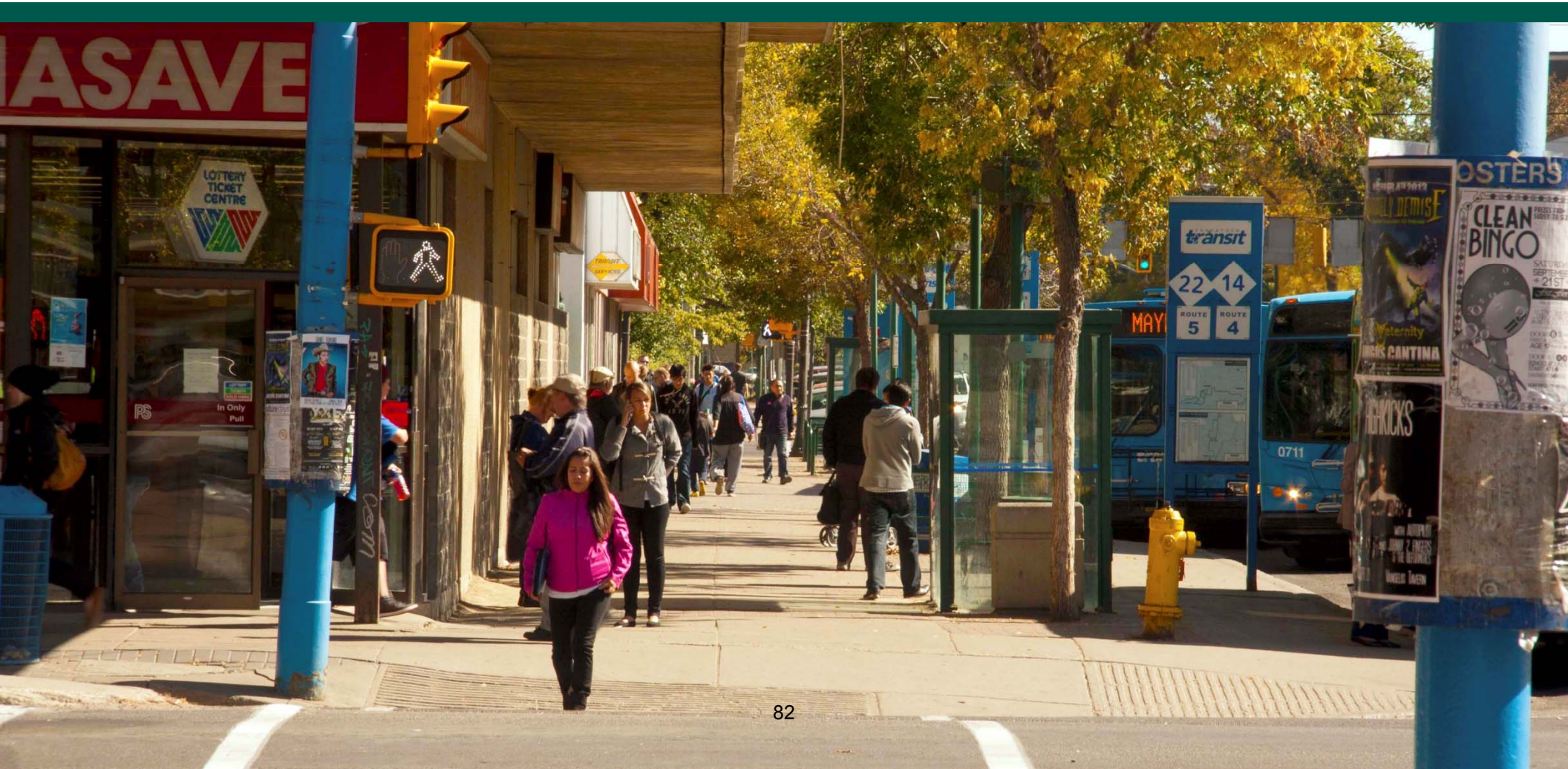
However, a more immediate need of **the Guide** is to retrofit existing streets. This need stems from the **Growth Plan to Half a Million (Growth Plan)**, in which many of Saskatoon's streets and land uses are being transformed to support sustainable growth patterns and to reshape how people move around the community.

The complete street treatments contained in **the Guide** will be most effective for transforming the established areas of the City through ongoing initiatives such as:

- Existing road improvements to entire sections or localized changes to intersections;
- Road and sidewalk rehabilitation projects, providing opportunities to reallocate street space;
- Street operations and maintenance programs to better support specific travel modes, as well as mobility needs for all ages and abilities throughout the year and across the network; and;
- Infill or redevelopment projects in neighbourhoods and along major streets incorporated through to the roadway.

The City can use **the Guide** to work with residents on these and other initiatives to achieve a complete streets model in the most critical areas as identified in the **Growth Plan**.

PART 2: Vision for a Complete Street



Bicycle lanes, walkability, vulnerable user safety, and traffic volumes are all topics that are being discussed increasingly by the public, politicians and municipal staff in Saskatoon. These topics all make up components of a connected city and when consideration is given to each of them, the result is a complete street.

Complete streets provide safe connections for users of all ages, abilities, and modes of travel where design is centered on the context of the street corridor.

This section of **the Guide** outlines what a complete street 'is' and 'is not' as well as what success would look like in Saskatoon.

2.1 What a Complete Street Is

Complete Streets are streets designed to address the context of the street while providing safe access for all intended users. Pedestrians, bicyclists, motorists and transit riders of all ages and abilities must be able to safely move along and across a complete street. In support of the land uses they serve, complete streets help build strong, livable and vibrant communities.

Complete streets are unique, and so are the guides for each community. For Saskatoon, complete streets are designed to:

- ✓ **Enhance safety for all modes.** Appropriate facilities designed as separated or shared spaces enhance safety and comfort for everyone. For vulnerable users such as pedestrians and bicyclists, addressing perceived and real safety concerns will serve to not only reduce serious collisions, but will ultimately increase usage of these sustainable modes.



- ✓ **Expand transportation choice.** Visibility of attractive and comfortable pedestrian, bicycling and transit facilities will serve to create greater awareness of the transportation options available in Saskatoon. In turn, increased use of these facilities will motivate people to consider opportunities that can contribute toward personal and community goals.
- ✓ **Support universal accessibility.** At any point of a journey, everyone is a pedestrian. As such, the design of sidewalks, crossings and connections with private properties can create barriers for people with physical and/or cognitive disabilities. Universal accessibility is essential not only to support individuals with mobility challenges, but also to make public spaces comfortable for everyone.

- ✓ **Enhance connection to community.** Complete streets are complementary to the surrounding land uses. They provide space for people to move around, within, and between communities, as well as places for people to live, work, shop and play. They can also support the development and creation of a vibrant public realm, extending businesses into the street space with patios, parklets or simply with better access.
- ✓ **Develop a sense of place.** Ultimately, most community streets should be comfortable and desirable places for people. Rather than simply transport people, complete streets should be designed as comfortable and desirable public places for community to gather.

2.2 What a Complete Street Is Not

In addition to knowing what a complete street is, it is equally important to acknowledge what a complete street is not. This will ultimately assist in shaping **the Guide** and support discussions with the public, City Council and staff. For Saskatoon, complete streets are:

- ✗ **Not focused solely on the automobile.** While there remains the need for some streets to serve the primary function of moving large volumes of traffic – such as on-ramps to highways – there are often other functions of a street that must be considered in the design and configuration of the network. Where vulnerable users, such as pedestrians and bicyclists are present, the street design should provide safe and comfortable facilities to enhance safety for all road users.



- ✘ **Not a ‘one-size-fits-all’ solution.** In every community, the public right-of-way for streets is often limited and even constrained. In other words, it is unlikely that the needs of all modes can be accommodated on one street. Although streets can be designed to share space in many instances, a network of varying streets types is often required to comfortably accommodate the individual needs of each mode. A grid system promotes a network approach where some streets may serve cars, transit and pedestrians effectively while parallel streets may prioritize pedestrians and bicyclists and serve lower volumes of traffic.



- ✘ **Not necessarily a prescriptive design.** In most built areas of Saskatoon, the available space and uses for the existing street network are already established. Rather than look for an off-the-shelf solution or design standard, complete streets are typically created by understanding the constraints and opportunities to yield unique solutions suited to context and based on guidelines or a toolkit of best practices.
- ✘ **Not an ‘all or nothing’ proposition.** Building new streets and retrofitting existing ones can be expensive. Beyond the obvious surface works, underground and above-ground utilities and property can dramatically increase the cost for even the smallest road projects. Rather than commit to the full implementation of retrofit projects, a phased approach toward implementing a complete street will enable the more critical matters to be dealt with in the short-term and other features to be added over time as resources become available. In this regard, complete streets may be achieved in stages, particularly when managing funding to transform existing roadways. It is important that the community understand that a phased implementation is possible or likely depending on the individual project. Phasing a project can also help create early community support, allowing users to experience the change as a low-cost trial before making a full investment in the ultimate solution.

2.3 What Can Be Achieved?

Saskatoon's **Growth Plan** requires more choices for getting around the community, sustainable land uses, as well as creating livable and vibrant communities. The City seeks to enact policies and objectives for building and retrofitting safe, economically productive, cost-effective, and active street space. A flexible **Guide** will provide a blueprint for designing, building (retrofitting), operating, and maintaining complete streets. This approach also creates longevity, adaptability, and allows for effective implementation in order to achieve the vision for complete streets.

The Vision

“Saskatoon will plan, design, operate and maintain existing and new streets to effectively support movement of people of all ages and levels of mobility by: providing appropriate facilities that support pedestrians, bicyclists, transit vehicles as well as motor vehicles; and integrating the street environment with existing and future land uses.”

In support of the vision, a complete streets approach for Saskatoon seeks to develop a transportation network that will better serve and support sustainable growth through all seasons.

Principle 1: Serve and support existing and planned land use and built form context.

Streets in Saskatoon will be designed to create active environments that support surrounding land use patterns and accommodate the built form of the sites. Additionally, land use patterns along many corridors will be better integrated with the street system supporting an active pedestrian environment and providing attractive connections with other modes.

Principle 2: Encourage people to travel by walking, bicycling and transit.

Even where automobiles and heavy vehicles are significant, steps will be taken to ensure that accessible and attractive pedestrian, bicycle and transit facilities and treatments are provided along key corridors.

Principle 3: Provide transportation options for people of all ages and abilities through universal design.

The transportation system will be designed to support the needs of all segments of the population including children, youth, seniors, and those with mobility challenges.

Principle 4: Enhance the safety and security of urban streets.

The safety and security of all street users, especially the most vulnerable people (children, the elderly, and those with mobility challenges) and modes (pedestrians and bicyclists), will be integral to the design of every street.

Principle 5: Create a network of streets that offers mobility options for all users.

A dense network of local, collector and arterial streets will provide attractive facilities that support walking, bicycling, transit, vehicles and goods movement. In urban areas of the City, a grid system of streets will provide options to prioritize and allocate shared or dedicated space for each user group throughout the network as opposed to all on one street.

Principle 6: Provide opportunities for improved health and recreation to people in the community.

Complete streets not only contribute to the quality of life within a community, they are necessary to improve personal health. From sidewalks and bicycle lanes to accessible bus shelters, complete streets can improve pedestrian safety while reducing congestion and emissions. Complete streets encourage people to walk and bike for short trips, and support social interactions within the street that will strengthen the sense of community. By improving travel safety, complete streets have a positive effect on the health of both the community and the people living in it. Increased walking and bicycling lowers the risk of obesity and the host of health problems that come with it.

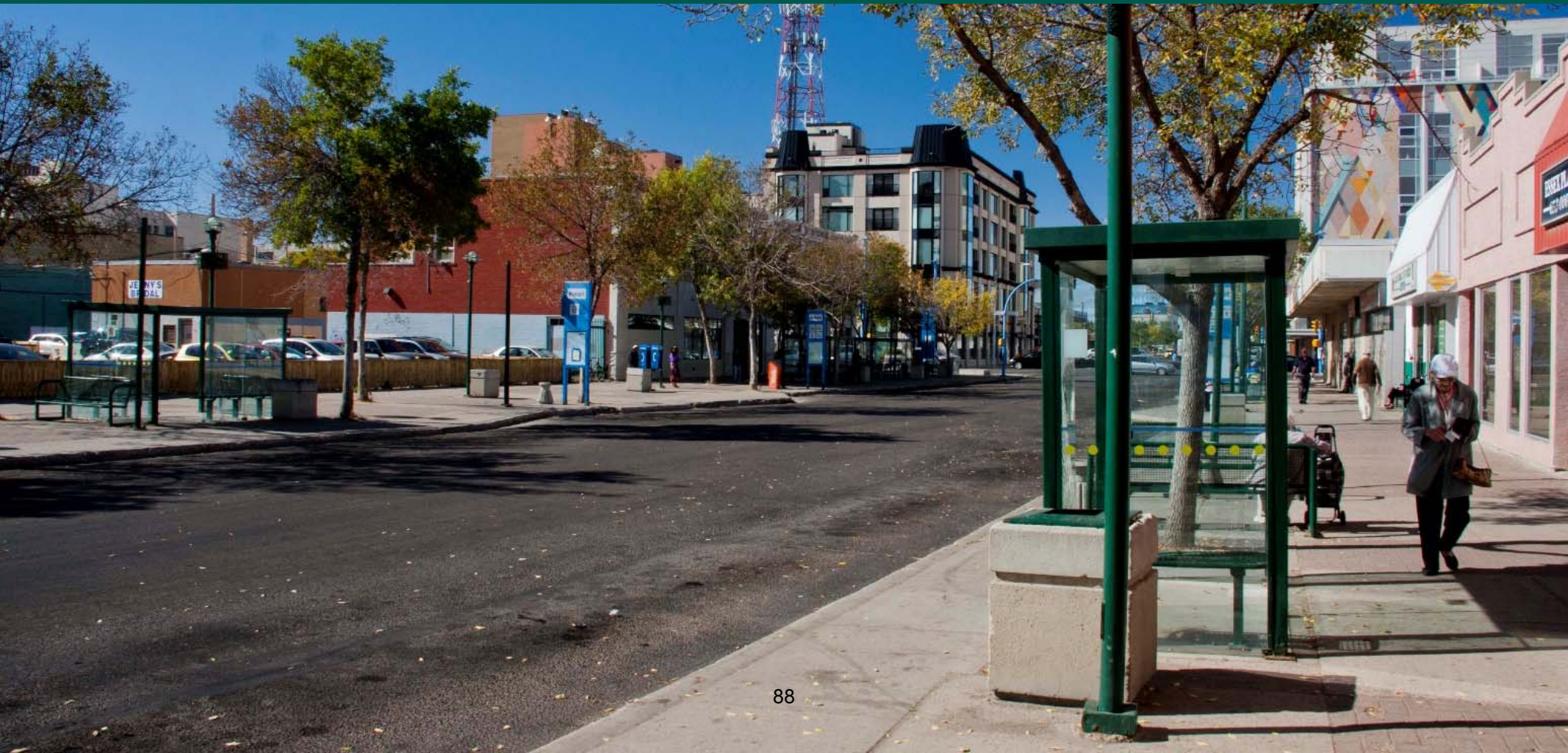
Principle 7: Promote the economic well-being of both businesses and residents.

Complete streets will be designed to encourage street activity by creating a place for people to socialize, deepening a sense of community. An urban street redevelopment project is a proven method for revitalizing an area and attracting new development. In turn, complete streets can boost the economic value for businesses and can increase property values for both business owners and residents, who are generally willing to pay more to live in walkable communities.

Principle 8: Create public space within the street corridor.

Complete streets can provide a space where people feel comfortable to congregate and, in some cases, form an extension of other public-oriented spaces.

PART 3: Context



Community context is one of the most central, yet frequently overlooked, parameters in designing streets. Through implementation of **the Guide**, the City aims to ensure that the context of adjacent communities and future land uses are first understood, and then incorporated in the street design process, impacting the desired character of the public realm.

The context for complete streets in the long-term begins with what currently exists combined with the City’s current plans for communities that may include new suburban neighbourhoods, redevelopment areas and neighbourhood infill. The context also includes consideration of both area and corridor specific development plans that will shape aspirations for specific streets. Both area and corridor specific context may be used to define the functions that streets should serve and support – or typologies. The street typologies in turn provide guidance on priorities for each travel mode and subsequently shape the selection of complete street treatments.

Today, Saskatoon’s streets have been designed to support the growing needs for automobiles and heavy vehicles, particularly on major roadways. This approach has in turn affected how new and existing roadways are being designed, operated and maintained.

As a basis to consider streets differently, the City must not only incorporate complete street treatments, but also change how streets are planned and designed based on their ‘context’. A more holistic approach will shift the current emphasis away from traditional thinking of streets as a ‘utility’ within the community, aiming to advance priorities for transit, pedestrian and bicycle facilities. This is essential to advance aspirations for sustainable growth and mobility as presented in the **Growth Plan**.

This section of **the Guide** is intended to position ‘context’ as the foundational element of the City’s street design process moving forward.

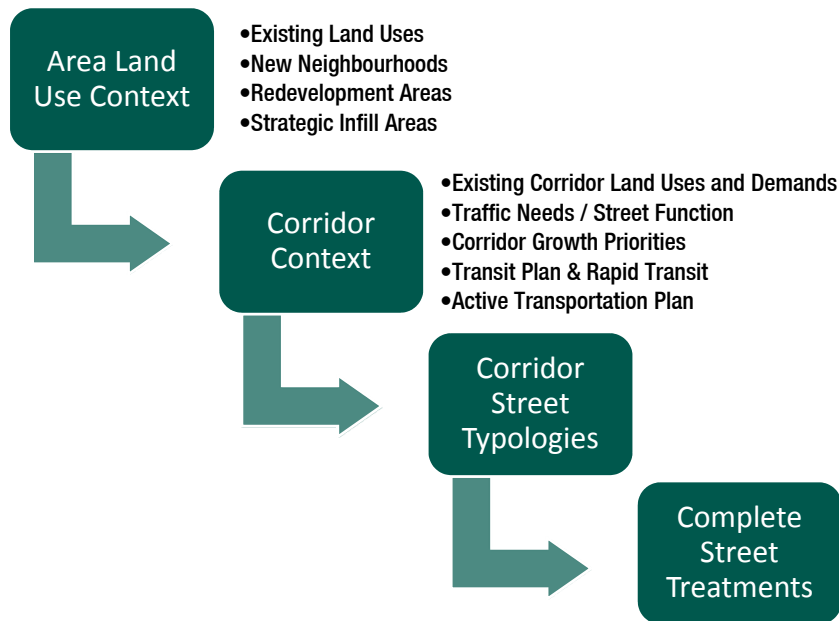


Figure 3 - Complete Streets Process Diagram

3.1 What Exists Today

The City of Saskatoon is committed to realizing an increasingly sustainable community, with an enhanced quality of life consistent with the vision and core strategies of the City’s Strategic Plan. Over time, the built form of the community has been shaped by a variety of sector plans, neighbourhood concept plans and local areas plans (Figure 4). In determining the context for complete streets, there is much that can be derived from the land uses, built form and transportation networks that exist today.

NUTANA LOCAL AREA PLAN

BROADWAY AREA MIXED USE



Figure 4 - Typical Local Area Plan

Consistent with many communities across North America, Saskatoon uses a conventional hierarchy of roadway classifications to design and operate streets. Freeways and expressways are designed to carry significant amounts of passenger cars and trucks across the City at higher speeds and do not generally support walking, bicycling or transit. Major and minor arterials accommodate large volumes of traffic between neighbourhoods with remaining space allocated to accommodate walking and bicycling. Collectors and local streets facilitate all modes of travel to, from and within neighbourhoods. Figure 5 illustrates the existing roadway classification system in Saskatoon.

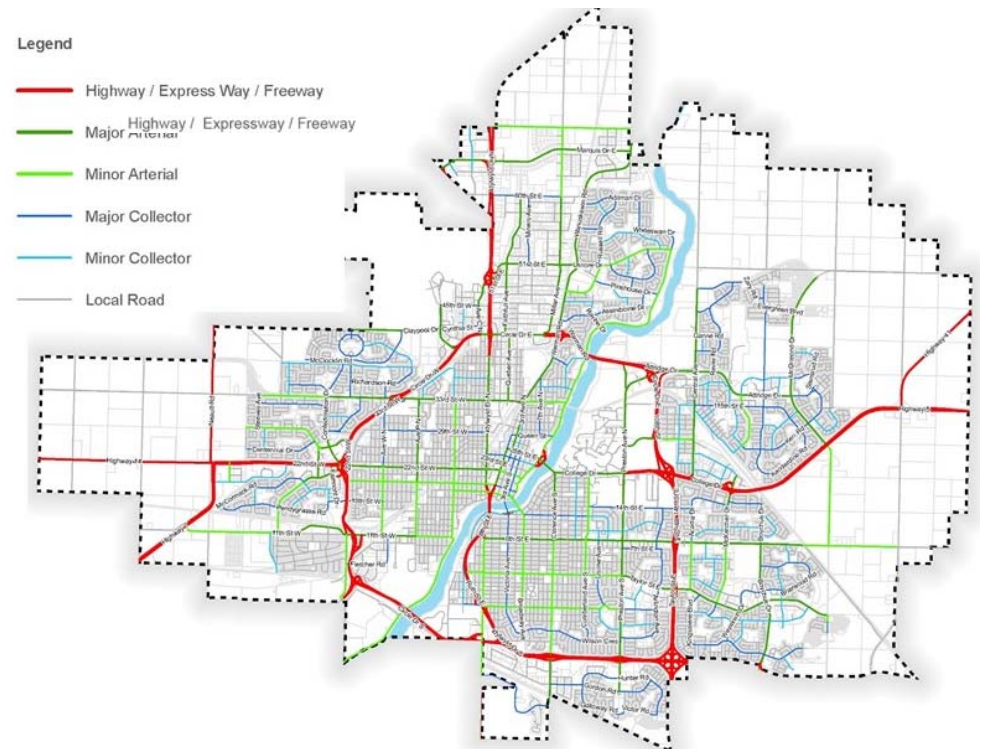


Figure 5 - Existing Street Classifications

Since most streets in Saskatoon have been classified based on their vehicle serving functions – such as daily traffic volumes and patterns – design decisions are meant to accommodate the largest vehicles and highest traffic volumes. For example, the expressways and major arterials in Saskatoon typically carry four to six lanes of traffic at higher speeds with wide travel lanes. Parking is restricted in favour of long-term mobility and safety for traffic. Provisions for walking, bicycling and transit have traditionally not been integral to the design and are at best given secondary consideration in capital projects for new and existing roadways. However, the City’s existing pedestrian, bicycling and transit facilities can inform the context of specific streets. The land uses that surround the corridor are considered as impacts on the roadway network rather than integral to the street design and treatments.

The safe and efficient movement of goods within and through the City is essential to economic development and the competitiveness of businesses within Saskatoon and the Region. The City’s major goods movements routes (**Figure 6**) are another key parameter to be considered in shaping needs considerations within the broader aspirations and context for major roads.

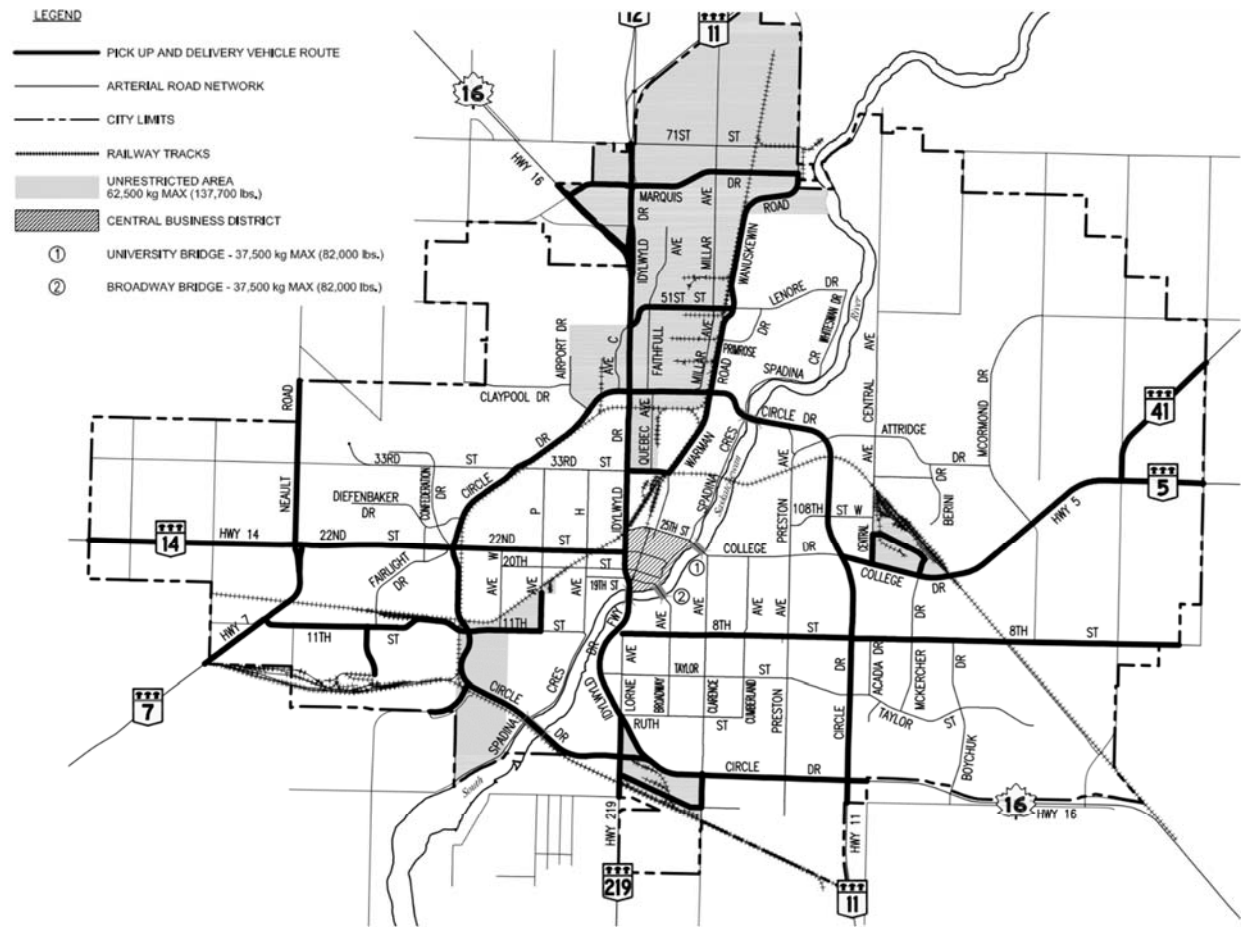


Figure 6 - Pick Up and Delivery Vehicle Routes

3.2 Future Street Context

The City has several clear and robust plans that will serve to shape area growth toward a population of half a million people within the existing municipal boundaries. In addition to the plans for new neighbourhoods in Blairmore, University Heights and Holmwood, the City has identified strategic infill areas for downtown, north downtown and the University of Saskatchewan where more compact, mixed-use growth is planned. The City has also developed an infill strategy to accommodate growth within established residential neighbourhoods where a higher mixture of uses is envisioned, and where major streets transition from barriers to becoming an integral part of the surrounding areas as shown in **Figure 7**.

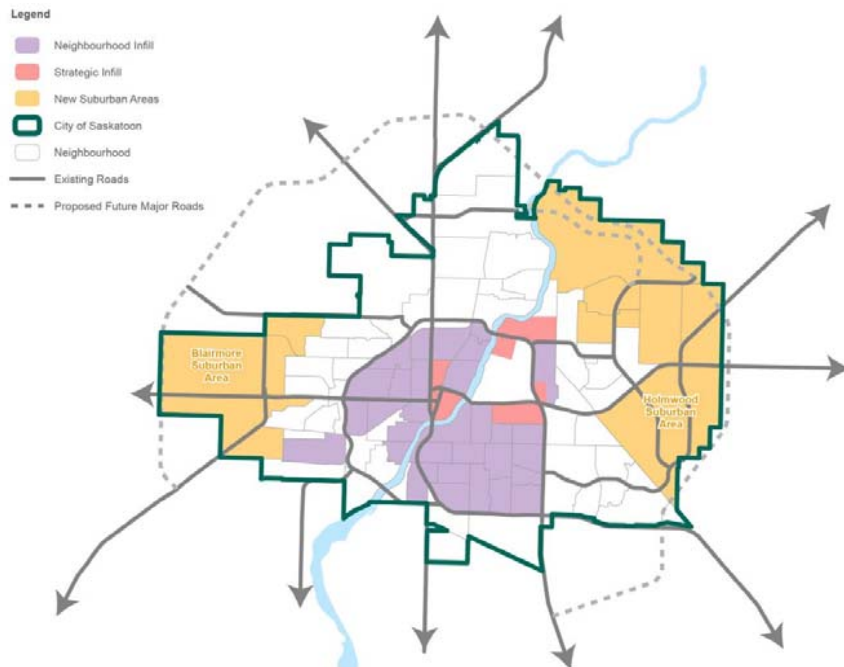


Figure 7 - Future Growth Areas

The context for complete streets is to be drawn out of these plans. In many areas, major roadways are preserved to support mobility for vehicle travel with enhanced accommodations for walking and bicycling. In the urban centres of neighbourhoods and strategic growth areas, major roadways are an integral part of the planned community and must be designed to enable movement to thriving neighbourhoods. Increasingly, major roadways through these areas must support broader mobility needs that prioritize pedestrians, bicyclists and transit.

The more immediate contexts when considering complete street treatments are aspirations for corridor land uses and mobility. The **Growth Plan** provides further direction for more sustainable growth adjacent to major corridors across the City, as well as aspirations for walking, bicycling and transit mobility. The **Growth Plan** identifies aspirations for mobility along several corridors across the City in terms of accommodating transit, walking and bicycle facilities. To determine the context of the street in the design process, the following key features of the **Growth Plan** need to be considered:

a. Corridor Growth: This must be designed to advance the City’s commitment toward sustainable growth and provide more vibrant places that bring communities together (**Figure 8**). The high and moderate priority growth corridors rely on streets that support a vibrant and integrated environment with land uses that provide for users of all modes. If street design does not respond to the context, many of these major corridors will remain auto-centric and unwelcoming to sustainable forms of redevelopment and travel.

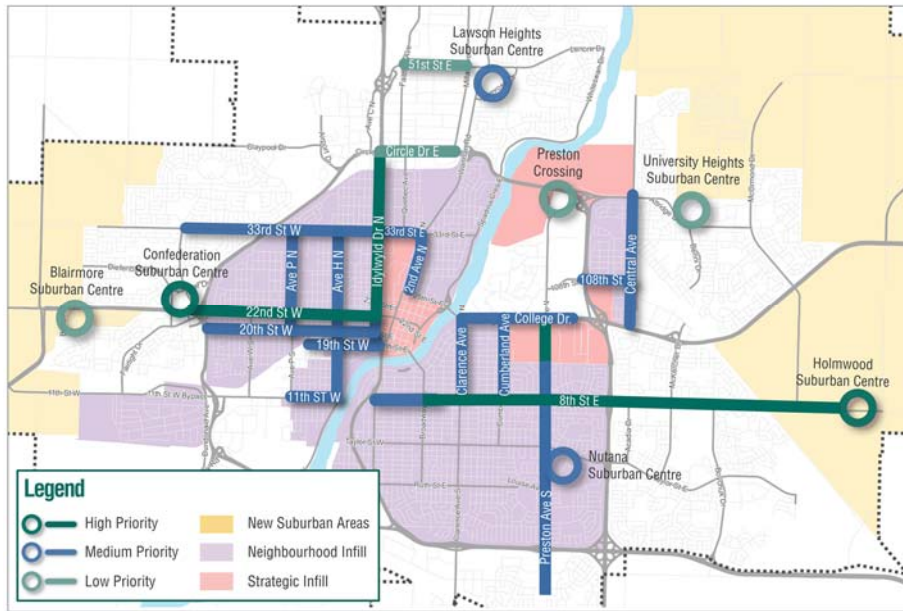


Figure 8 - Corridor Growth Priorities

b. Bus Rapid Transit (BRT) and Frequent Transit Corridors: Defined within the Transit Plan (**Figure 9**), they form the spine of the transit system and provide transportation choices for people travelling across the City. For the BRT plan to be successful, these corridors must be surrounded by transit-oriented land uses as envisioned in the **Growth Plan**. The corridors themselves must be comfortable and accessible for transit passengers as well as pedestrians, with attractive connections to the bicycle network.

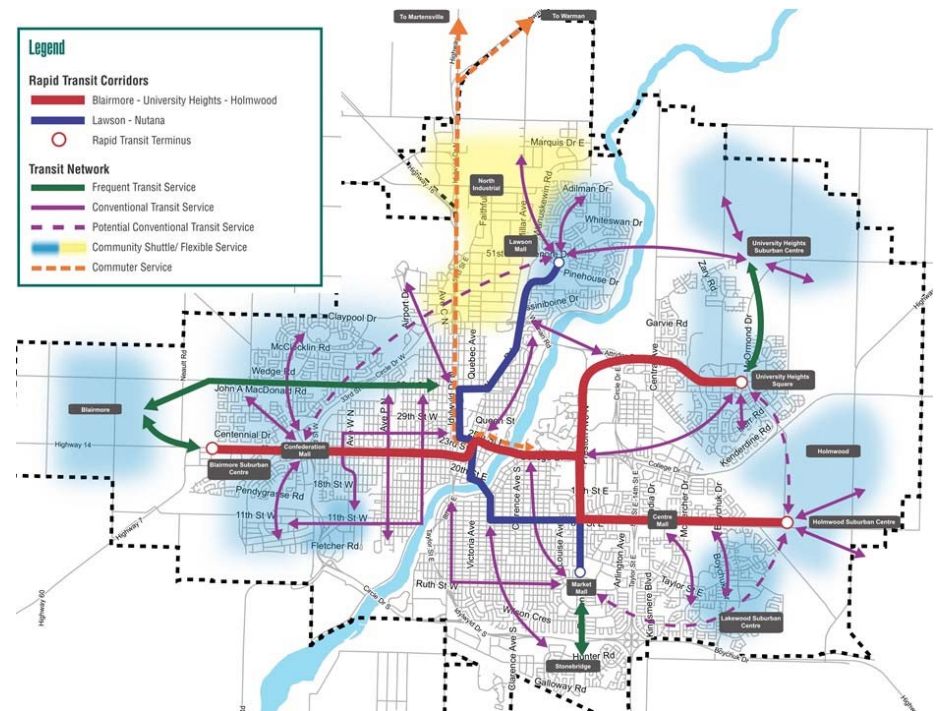


Figure 9 - Transit Plan

c. Active Transportation Corridors: To achieve many aspects of the **Growth Plan**, active transportation corridors are integral to success. The **Active Transportation Plan (AT Plan)** promotes walking and bicycling with a comprehensive plan of bicycle and pedestrian facilities across the City. An “All Ages and Abilities” (AAA) bicycle network supports bicycle facilities that are comfortable and attractive for all users and is identified in **(Figure 10)**.

Recognizing that everyone is a pedestrian for all or part of each trip they take (regardless of mode), the **AT Plan** also identifies sidewalk gaps on major roadways across the City as they exist today **(Figure 11)**. Higher vehicle volumes combined with speeds along these roadways – many of which include transit – create barriers to walking, particularly for more vulnerable persons like children, youth, seniors and people with physical and cognitive disabilities. More detailed maps can be found in the **AT Plan**.

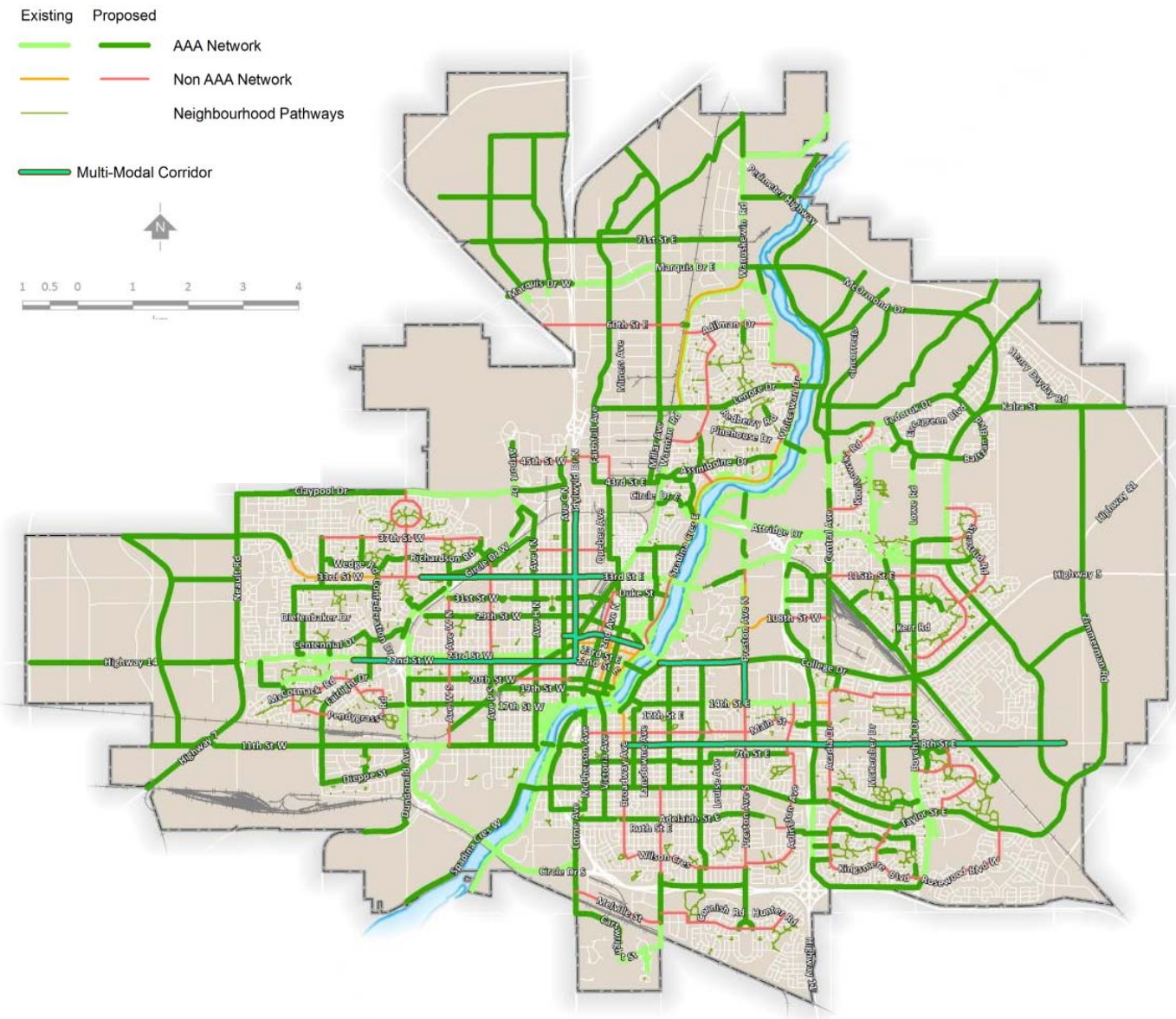


Figure 10 - All Ages and Abilities Bicycle Network

- Recommended Sidewalks - Major Roads
- 2 Sidewalks Recommended
 - 1 Sidewalk Recommended
- Proposed Multi-Use Pathway Network
- Multi-Use Pathway
 - Proposed Multi-Use Pathway
- H Hospitals
 - L Library
 - A Campground
 - R Community Recreation
 - Park
 - School Sites
 - Commercial Districts
 - Institutional Districts



Figure 11 - Sidewalk Gaps on Major Roadways

3.3 Putting It All Together

As noted above, setting the context for a specific street or corridor is a process that starts with understanding the existing land uses and street classifications as well as the existing road, transit, bicycle and pedestrian networks – this is where the City is at today. Similarly, the process must also incorporate the City’s plans to accommodate future growth and to evolve the transit, bicycle and pedestrian networks – this is where the City is going.

Putting it all together, the process of setting the context of the street involves the consideration of many different plans and technical inputs (**Figure 12**). In this way, the context of the street inherently places priority on the various land uses that are being served by the street as well as the travel modes that are required to make the street successful. The various combinations of land use and travel mode priority for the City’s streets are defined through a suite of street typologies and are described further in **Section 4**.

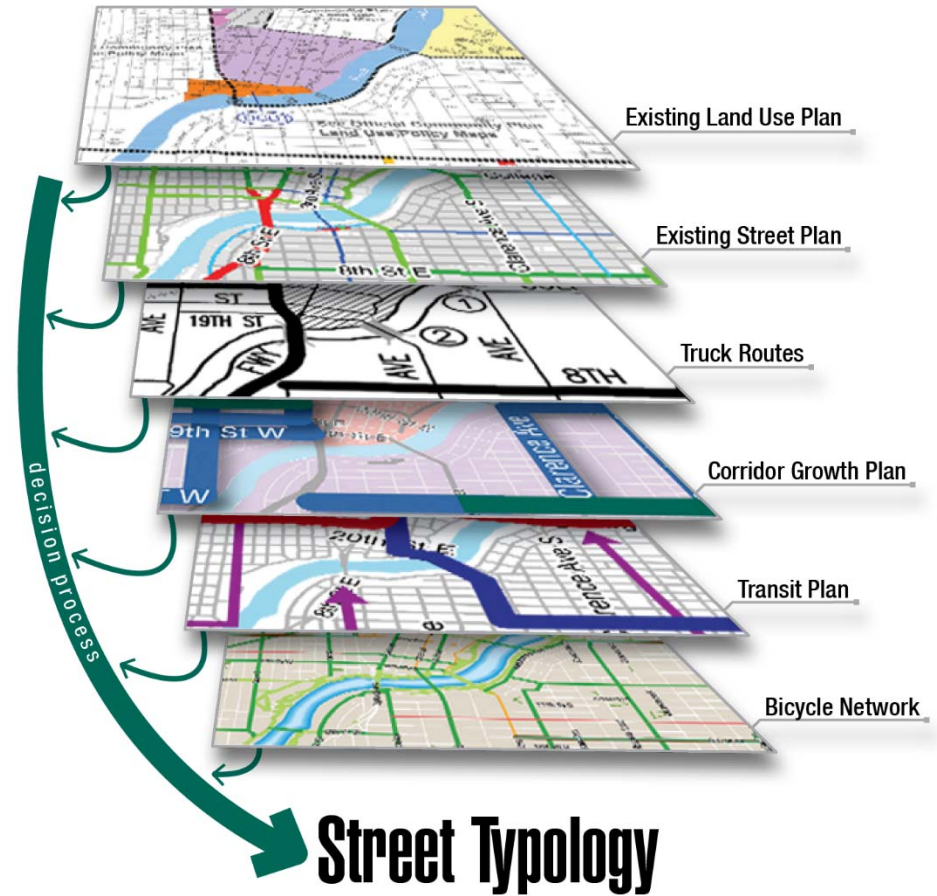
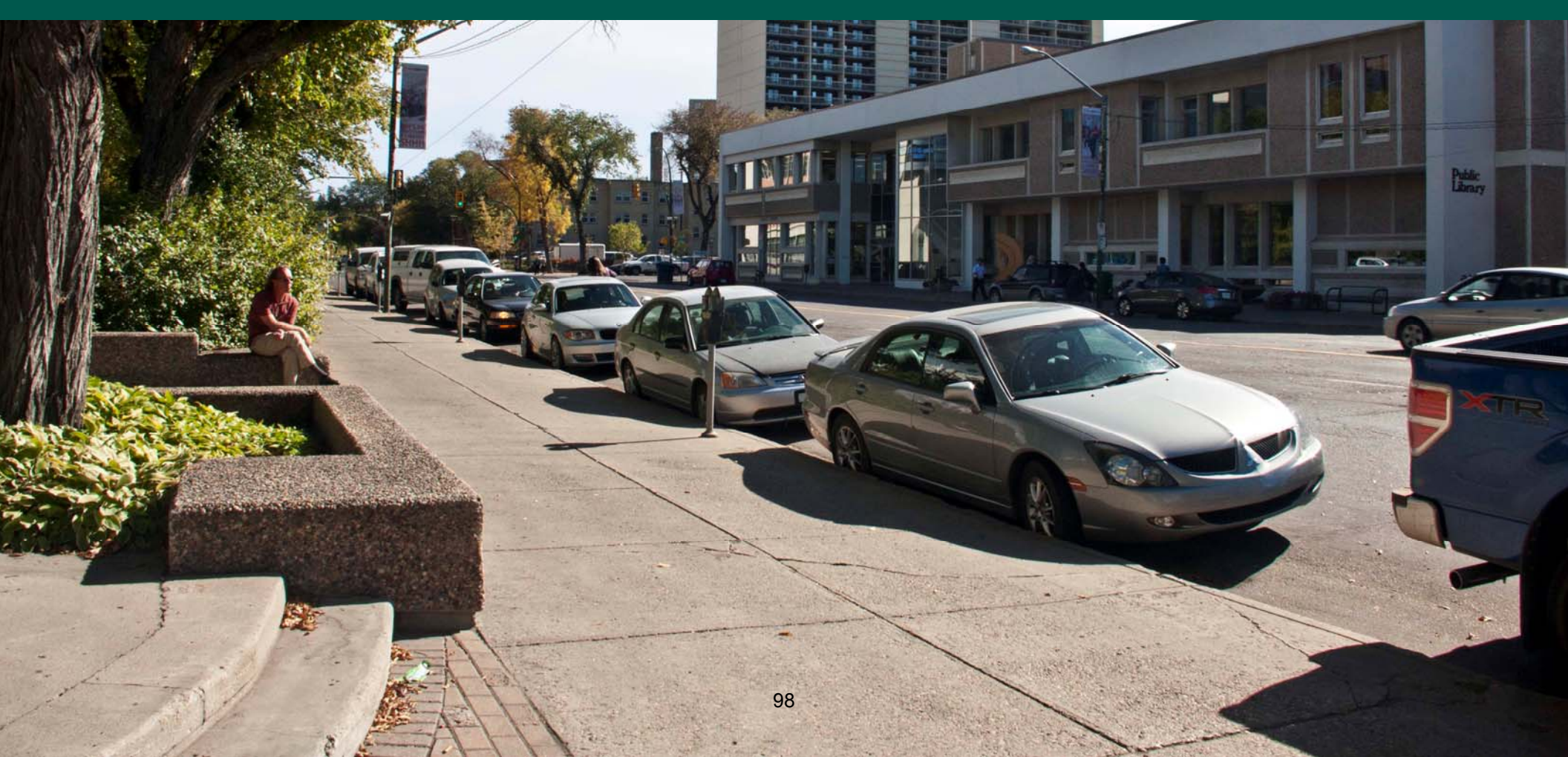


Figure 12 - Street Context Inputs

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PART 4: Complete Street Typologies



Strengthening the connection between street designs, land use character, and their multi-modal functions is important to the success of this complete streets initiative. To bolster this, the City may consider a new typology of streets that goes beyond the traditional street classifications. Unlike the existing street classification system, these street typologies capture the differing land uses and multi-modal conditions and expectations that exist along many major corridors.

As land use character and transportation functions of most major corridors vary from one end to the other, so too should the design and operation of the street. Much like an urban main street, sections of 22nd Street inside Circle Drive are expected to support a greater scale, density and mixture of land uses along with BRT and a much-improved pedestrian environment. West of Circle Drive, however, 22nd Street will continue to be surrounded by lower density suburban land use patterns and accommodate higher volumes of traffic. All elements of the street and land uses that surround them should be designed and operated accordingly.

Rather than alter the existing street classification system, this section of **the Guide** outlines a set of street typologies that may be used to reimagine and rebalance priorities on all new and existing urban roadways in Saskatoon. The street typologies refine and add definition to the generalized existing functional classification system.

The governing features of the complete street typologies being considered for Saskatoon are briefly described in **Figure 13**.

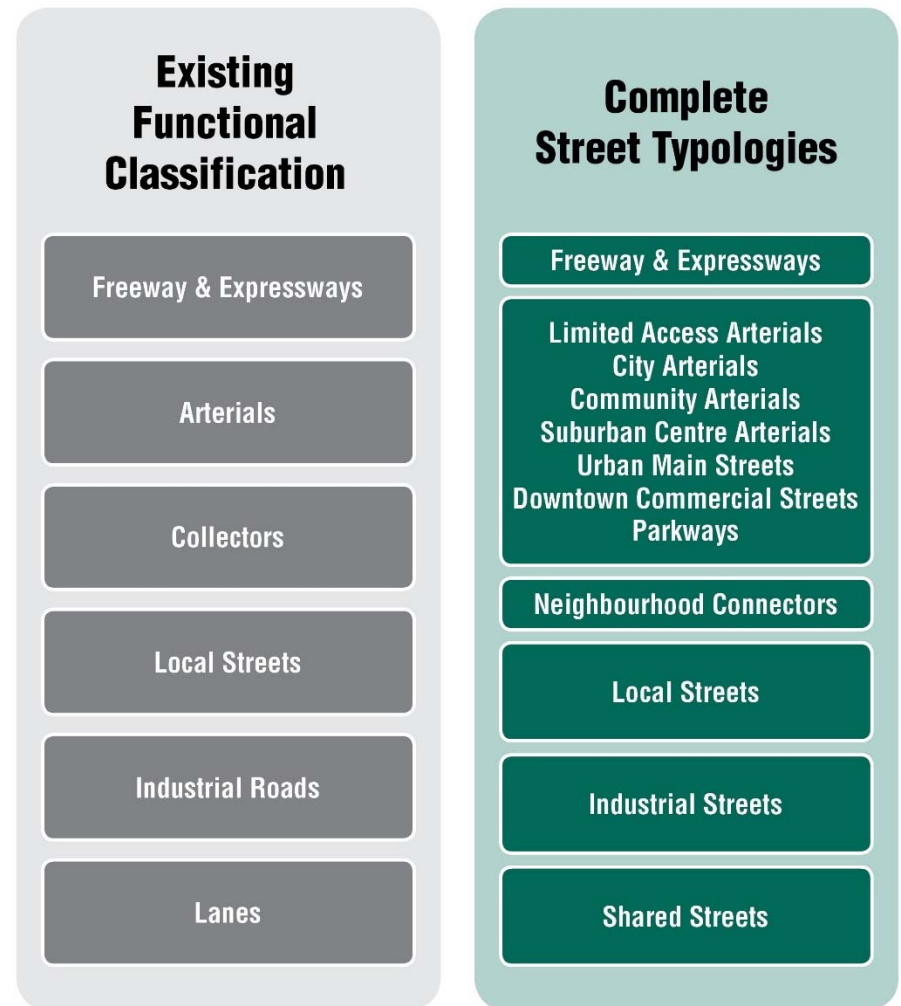


Figure 13 - Recommended Complete Street Typologies

When design is centred around the context of the surrounding area, it is important to identify the land uses that are being served and the modal priority that is required for the specific street. In this way, the role or purpose of the street is represented through the typology and the inherent prioritization of travel modes.

Figure 14 highlights the transportation modes and land uses that each street typology prioritizes.

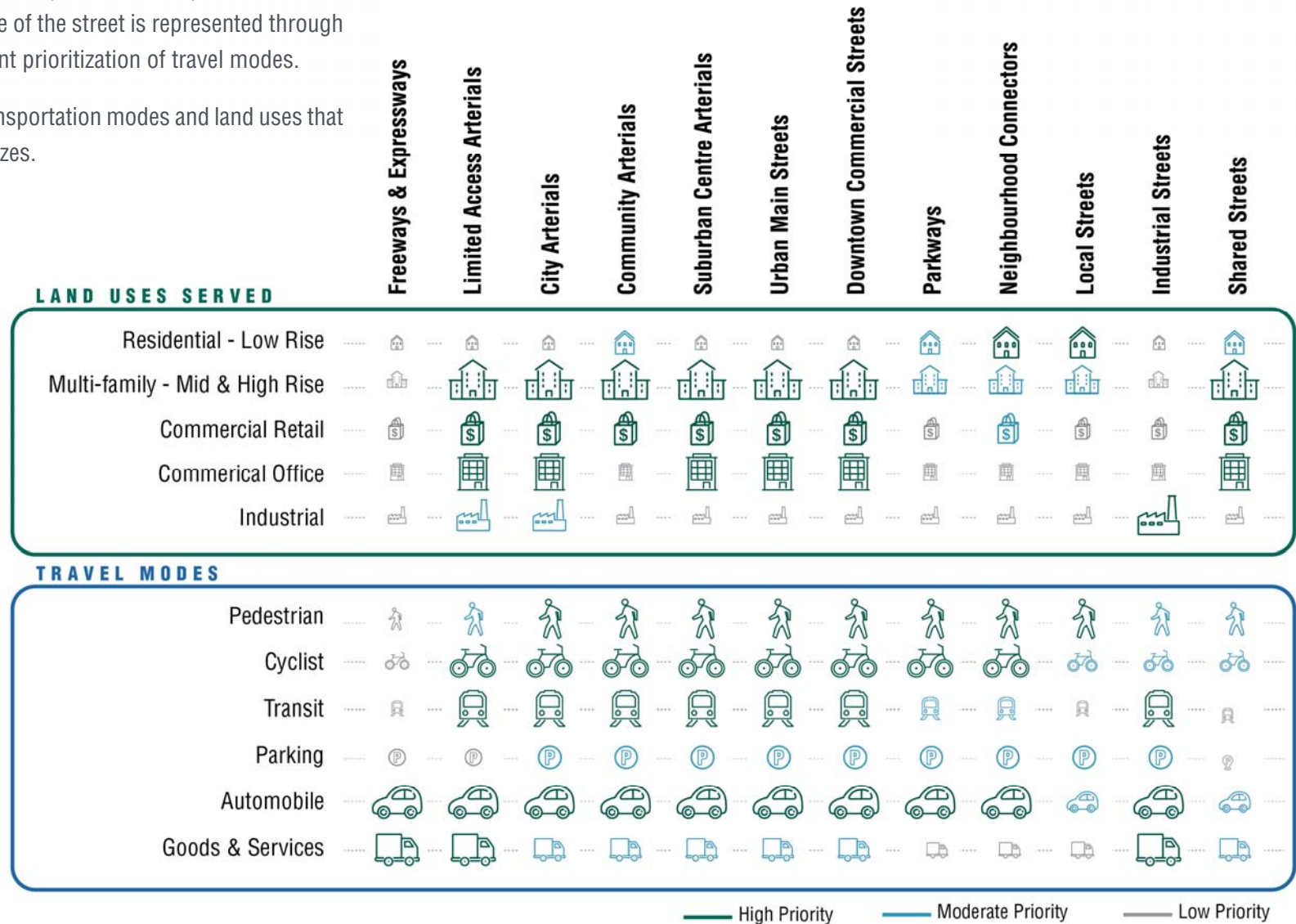


Figure 14 - Principle Features for Each Street Typology

FREEWAYS AND EXPRESSWAYS

Designed to support large volumes of traffic, freeways and expressways move vehicles to, from and through the city, rather than supporting or integrating with the localized land use patterns that surround them. This is generally achieved with several travel lanes and grade-separated interchanges providing connections to other freeways and expressways, city arterials, and limited access arterials.

They function as a primary route for passenger cars and heavy vehicles, and are essential for the reliable and safe movement of people, goods and services that support the economy of Saskatoon and the surrounding area. These roadways are largely located outside the established urban areas of the city and have large buffers or right-of-ways that separate them from surrounding land uses. As development increases around these areas, the main function of this typology should always be vehicle movement.

LAND USES SERVED

- Residential - Low Rise ... 
- Multi-family - Mid & High Rise ... 
- Commercial Retail ... 
- Commerical Office ... 
- Industrial ... 

TRAVEL MODES




- Pedestrian ... 
- Cyclist ... 
- Transit ... 
- Parking ... 
- Automobile ... 
- Goods & Services ... 



Figure 15 - Freeway & Expressway Typology Example

Land Uses	Separated with large buffer areas
Modes of Travel	Passenger cars and heavy vehicles Limited or no access for pedestrians and bicyclists Multi-use pathways for pedestrians and bicyclists
Access	Freeways, Expressways, and City Arterials No access to minor roads or individual properties
Built Form	Developments front away from right-of-way or are set back significantly Sound barriers should be considered adjacent to residential land use
Examples	Idylwyld Freeway south of 19th Street Circle Drive east of the river College Drive east of Preston Avenue

LIMITED ACCESS ARTERIALS

Limited access arterials are intended to connect the communities of Saskatoon, serving travel across the city, and providing connections to and from freeways and expressways and other major roadways. They serve large volumes of passenger cars and trucks throughout the day. In most cases, these corridors will support rapid transit services and facilities – such as bus only lanes – carrying passengers across the city. Attractive and accessible connections will be required to planned park-and-ride lots and rapid transit stations nearby limited access arterials.

Most limited access arterials will remain separated from the land uses that surround them with buffered areas in the form of greenspace in some suburban and urban areas of the city.

Land Uses	Retail, office, and residential
Modes of Travel	Passenger cars, heavy vehicles, and buses Multi-use pathways or sidewalks and protected bicycle lanes for pedestrians and bicyclists
Access	Community and Suburban Centre Arterials Limited access to individual properties
Built Form	Buffer provided between street and development Building orientation does not prioritize the street
Examples	Preston Avenue north of College Drive 22 nd Street west of Circle Drive Attridge Drive

LAND USES SERVED

Residential - Low Rise ...	
Multi-family - Mid & High Rise ...	
Commercial Retail ...	
Commercial Office ...	
Industrial ...	

TRAVEL MODES







Pedestrian ...	
Cyclist ...	
Transit ...	
Parking ...	
Automobile ...	
Goods & Services ...	



Figure 16 - Limited Access Arterial Example

CITY ARTERIALS

Intended to connect communities of Saskatoon, city arterials serve travel between the neighbourhoods and provide connections to and from freeways and expressways, serving large volumes of passenger cars and trucks. In many cases, they will include frequent transit services to local area land uses and travel across the city. In these cases, transit facilities should be accessible and attractive for people of all ages and abilities throughout the year.

Unlike limited access arterials, city arterials will maintain connections to surrounding land uses.

Land Uses	Integrated with mixture of retail, office, and residential
Modes of Travel	<p>Passenger cars and heavy vehicles</p> <p>If transit is present, priority treatments required for stations and stops</p> <p>Multi-use pathways or sidewalks and protected bicycle lanes for pedestrians and bicyclists</p>
Access	<p>Community and Suburban Centre Arterials</p> <p>Access to individual properties to be managed</p>
Built Form	<p>Buildings should be street-oriented</p> <p>Building orientation could back the street but pedestrian linkages would be present</p>
Examples	<p>Idylwyld Drive between 20th and 38th Street</p> <p>25th Street east of Idylwyld Drive</p> <p>Central Avenue south of Attridge Drive</p>

LAND USES SERVED

- Residential - Low Rise ... 
- Multi-family - Mid & High Rise ... 
- Commercial Retail ... 
- Commercial Office ... 
- Industrial ... 

TRAVEL MODES

- Pedestrian ... 
- Cyclist ... 
- Transit ... 
- Parking ... 
- Automobile ... 
- Goods & Services ... 



Figure 17 - City Arterial Example

COMMUNITY ARTERIALS

Community arterials serve travel needs between neighbourhoods in Saskatoon, rather than intra-city travel patterns. This street type is largely surrounded by and supports residential land uses, with small commercial nodes that are designed to serve local community needs.

Community arterials are designed to serve moderate volumes of traffic and support frequent, conventional and neighbourhood transit services. In many cases, these streets also form the spine of the active transportation system in Saskatoon with attractive and accessible pedestrian and bicycle facilities.

Land Uses	Medium to low density residential with commercial nodes
Modes of Travel	Passenger cars and transit Dedicated space for pedestrians and bicyclists Bicycle lanes and wide sidewalks Secondary route for delivery vehicles
Access	Other Arterials, Neighbourhood Connectors and Local Streets Direct access to adjacent land uses
Built Form	Residential buildings fronting the street Commercial nodes typically set back from the street with parking in front
Examples	Broadway Avenue south of 8 th Street Taylor Street Avenues H, P, and W

LAND USES SERVED

- Residential - Low Rise ... 
- Multi-family - Mid & High Rise ... 
- Commercial Retail ... 
- Commercial Office ... 
- Industrial ... 

TRAVEL MODES

- Pedestrian ... 
- Cyclist ... 
- Transit ... 
- Parking ... 
- Automobile ... 
- Goods & Services ... 



Figure 18 - Community Arterial Example

SUBURBAN CENTRE ARTERIALS

These are intended to support access to, from and within designated suburban centres from all areas of the city. Although most of these streets are generally auto-centric today, they need to provide multi-modal connections within suburban centres for large numbers of people walking, bicycling, driving and using transit. These street types will support frequent, and in some cases rapid, transit services planned for the city where dedicated lanes and unique stations may be integral to the corridor design.

Over time, land uses along suburban centre arterials may be closer to the street, but likely remain buffered by greenspace, sidewalks as well as multi-use pathways.

Land Uses	Surrounded by commercial, retail, and office with medium density residential
Modes of Travel	Passenger cars, frequent or rapid transit with transit priority treatments Dedicated pedestrian and bicycling facilities required
Access	Other Arterials, Neighbourhood Connectors and Local Streets Some access to larger parcels, other access through side streets
Built Form	Buildings located close to street, buffered by and integrated with greenspace and sidewalks
Examples	Primrose Drive Confederation Drive south of Milton Street McEown Avenue

LAND USES SERVED

- Residential - Low Rise ...
- Multi-family - Mid & High Rise ...
- Commercial Retail ...
- Commerical Office ...
- Industrial ...

TRAVEL MODES

- Pedestrian ...
- Cyclist ...
- Transit ...
- Parking ...
- Automobile ...
- Goods & Services ...



Figure 19 - Suburban Arterial Example

URBAN MAIN STREETS

Urban main streets will serve as the nucleus of local neighbourhoods and economies, providing residents with daily essentials that include businesses and services of all varieties. These streets are required to bring communities together, rather than function as barriers within them, therefore they need to support a vibrant public realm with street facing land uses.

Urban main streets may be of varying length and designed to prioritize walking, bicycling, transit, and in some cases, will accommodate short-term parking and loading for local shops and restaurants. In many areas, they will support the frequent and rapid transit services planned for Saskatoon. It is therefore essential that the street be accommodating to transit-oriented land use designs, with dense, mixed-uses surrounding the corridor and ground floor commercial retail uses.

Land Uses	Medium-density commercial, retail, office, and residential
Modes of Travel	Passenger cars and heavy vehicles permitted Priority treatments for pedestrians and bicyclists Along BRT corridors, dedicated bus lanes are essential with transit stations
Access	Other Arterials, Neighbourhood Connectors and Local Streets No direct vehicle access to land uses
Built Form Examples	Buildings located close to and fronting street, Broadway Avenue north of 8 th Street 20 th Street between Avenue E and Idylwyld Drive

LAND USES SERVED

- Residential - Low Rise ... 
- Multi-family - Mid & High Rise ... 
- Commercial Retail ... 
- Commercial Office ... 
- Industrial ... 

TRAVEL MODES

- Pedestrian ... 
- Cyclist ... 
- Transit ... 
- Parking ... 
- Automobile ... 
- Goods & Services ... 



Figure 20 - Urban Main Street Example

DOWNTOWN COMMERCIAL STREETS

In Saskatoon, downtown commercial streets are concentrated in the City Centre and North Downtown areas and serve one of Saskatoon’s primary employment areas, with a growing mixture of residential, retail and office land uses.

Although these streets can serve regional travel and their designs should support large volumes of traffic as well as frequent and rapid transit services, the streets themselves must be comfortable and accessible for people throughout the day and night. These downtown areas and streets are comprised of short blocks with crossings at intersections and mid-blocks as required.

The street design should reflect the character of the land uses and building architecture that surrounds downtown commercial streets.

Land Uses	Medium to high density mixed-use commercial, retail, office, and high density residential
Modes of Travel	Passenger cars and rapid transit with stations and priority treatments Priority treatments for pedestrians and bicyclists
Access	Closely spaced cross-streets and laneways or shared streets No direct vehicle access to land uses
Built Form	Buildings located close to and fronting street
Examples	Downtown Avenues including 1 st , 2 nd , 3 rd , and 4 th Downtown Streets 21 st , 22 nd , 23 rd , and 25 th

LAND USES SERVED

Residential - Low Rise ...	
Multi-family - Mid & High Rise ...	
Commercial Retail ...	
Commercial Office ...	
Industrial ...	

TRAVEL MODES

Pedestrian ...	
Cyclist ...	
Transit ...	
Parking ...	
Automobile ...	
Goods & Services ...	



Figure 21 - Downtown Commercial Street Example

PARKWAYS

Generally characterized by long, uninterrupted stretches of roadway running alongside Saskatoon’s open space corridors such as the South Saskatchewan River, parkways provide space for and support an extensive greenway system with trees that line much of the corridor.

With longer stretches of uninterrupted flow for traffic, it is essential to provide safe and accessible crossing locations for pedestrians and bicyclists. With limited land uses that directly surround parkways, transit is not typically provided along these corridors.

Land Uses	Park space and greenway
Modes of Travel	Passenger cars Multi-use pathways along corridor or sidewalks and bike lanes for pedestrians and bicyclists
Access	Limited or no access to adjoining land uses
Built Form	Few buildings with many trees
Examples	Spadina Crescent Saskatchewan Crescent

LAND USES SERVED

- Residential - Low Rise ... 
- Multi-family - Mid & High Rise ... 
- Commercial Retail ... 
- Commercial Office ... 
- Industrial ... 

TRAVEL MODES

- Pedestrian ... 
- Cyclist ... 
- Transit ... 
- Parking ... 
- Automobile ... 
- Goods & Services ... 



Figure 22 - Parkways Example

NEIGHBOURHOOD CONNECTORS

Neighbourhood connectors are through streets that traverse several neighbourhoods, carrying traffic within and between communities, and forming the spine of the walking and bicycling facilities connecting residential areas.

Neighbourhood connectors must balance the flow of people between neighbourhoods, and their street characteristics may be different across the City. They should generally be two lane roadways with comfortable and accessible pedestrian facilities as well as dedicated or shared space for bicyclists. Intersections should be designed for the comfort and safety of pedestrians and bicyclists.

Neighbourhood connectors will serve both conventional and community bus services connecting users to frequent and rapid transit corridors.

Land Uses	Low density residential with some connection to commercial activity
Modes of Travel Access	All modes with priority for pedestrians and bicyclists Local streets, arterials Driveway access
Built Form Examples	Residential setbacks apply 29 th Street West Stensrud Road Wilson Crescent

LAND USES SERVED

- Residential - Low Rise ... 
- Multi-family - Mid & High Rise ... 
- Commercial Retail ... 
- Commercial Office ... 
- Industrial ... 

TRAVEL MODES

- Pedestrian ... 
- Cyclist ... 
- Transit ... 
- Parking ... 
- Automobile ... 
- Goods & Services ... 



Figure 23 - Neighbourhood Connector Example

LOCAL STREETS

Typically surrounded by and providing access to residential land uses, local streets are perhaps the most abundant street type in the city, serving local trips, and characterized by having lower volumes of traffic traveling at slower speeds. These street types contribute toward the quality of life for area residents and are designed to maintain slow speeds as the streets are places to walk, bike and even play. Local streets provide connections to nearby parks and other community services as well as transit stops on the connector and arterial roadway system.

Local streets are generally narrow and do not serve through traffic. They are no more than two travel lanes with parking on one or two sides, depending on the road width.

Land Uses	Single and low density multi-family residential
Modes of Travel	Passenger cars with priority for pedestrians and bicyclists
Access	Neighbourhood Connectors, Arterials, Urban Main Streets Full driveway access
Built Form	Residential setbacks apply

LAND USES SERVED

- Residential - Low Rise ... 
- Multi-family - Mid & High Rise ... 
- Commercial Retail ... 
- Commercial Office ... 
- Industrial ... 

TRAVEL MODES

- Pedestrian ... 
- Cyclist ... 
- Transit ... 
- Parking ... 
- Automobile ... 
- Goods & Services ... 



Figure 24 - Local Street Example

INDUSTRIAL STREETS

Providing access to and from the City’s industrial areas, industrial streets are essential to support movement of goods and access for people working in these areas. These streets are essential for the City’s economy both in established urban areas and the expanding North Industrial Area. They also need to provide transportation choices for area employees. Industrial zoning permits commercial and other land uses intended to support area businesses and industrial uses.

Industrial streets must generally support larger vehicles influencing the road width and turning radius at intersections. Additionally, these areas must be supported with attractive transit service and bicycling facilities, in addition to supporting comfortable and accessible pedestrian facilities.

When designing industrial streets, careful attention should be given to discourage and minimize cut-through traffic on nearby residential streets.

Land Uses

Light and heavy industrial

Modes of Travel

Heavy vehicle access is critical

Buffered pedestrian and bicycle facilities

Transit and sidewalk on both sides of street

Access

Full access to abutting properties

Built Form

Buildings set back from the street

Examples


Cynthia Street

Faithfull Avenue

Millar Avenue

LAND USES SERVED

Residential - Low Rise ... 

Multi-family - Mid & High Rise ... 

Commercial Retail ... 

Commercial Office ... 

Industrial ... 

TRAVEL MODES

Pedestrian ... 

Cyclist ... 

Transit ... 

Parking ... 

Automobile ... 

Goods & Services ... 



Figure 25 - Industrial Street Example

SHARED STREETS

Shared streets are provided in both residential as well as the downtown areas of Saskatoon. Within the downtown area, they provide access for service delivery vehicles, and support increasing numbers of walking and bicycling trips. Shared streets are used to access commercial buildings, office buildings, high rise residences, entertainment venues, and restaurants.

With their narrow width and limited delineation, shared streets are designed for slower speeds where all modes can safely intermingle. In the established downtown areas, street furnishings may be used to create attractive people places and increase street activity. In some cases, access to shared streets may be discouraged by passenger cars, with exceptions for taxis and other commercial vehicles. In residential areas, they provide access to rear yards and allow for service vehicles. They have not been designed for all users, but function as such.

Land Uses	High density commercial retail, office, and residential
Modes of Travel	Passenger cars, heavy vehicles, pedestrians, and bicyclists
Access	Full access to abutting properties
Built Form	Buildings located on or very close to property line

LAND USES SERVED

- Residential - Low Rise ... 
- Multi-family - Mid & High Rise ... 
- Commercial Retail ... 
- Commercial Office ... 
- Industrial ... 

TRAVEL MODES

- Pedestrian ... 
- Cyclist ... 
- Transit ... 
- Parking ... 
- Automobile ... 
- Goods & Services ... 



Figure 26 - Shared Street Example

For context purposes only, the street typologies that reflect specific functions for corridors as outlined in the **Growth Plan** have been broadly assigned to the City's existing roadway network and illustrated in **Figure 27**. In this regard, the street treatments described in **the Guide** may be applied to these street typologies when making capital investments or roadway rehabilitation as well as through redevelopment. The City should reference these street typologies when considering reclassification of the existing and new neighbourhood street systems.

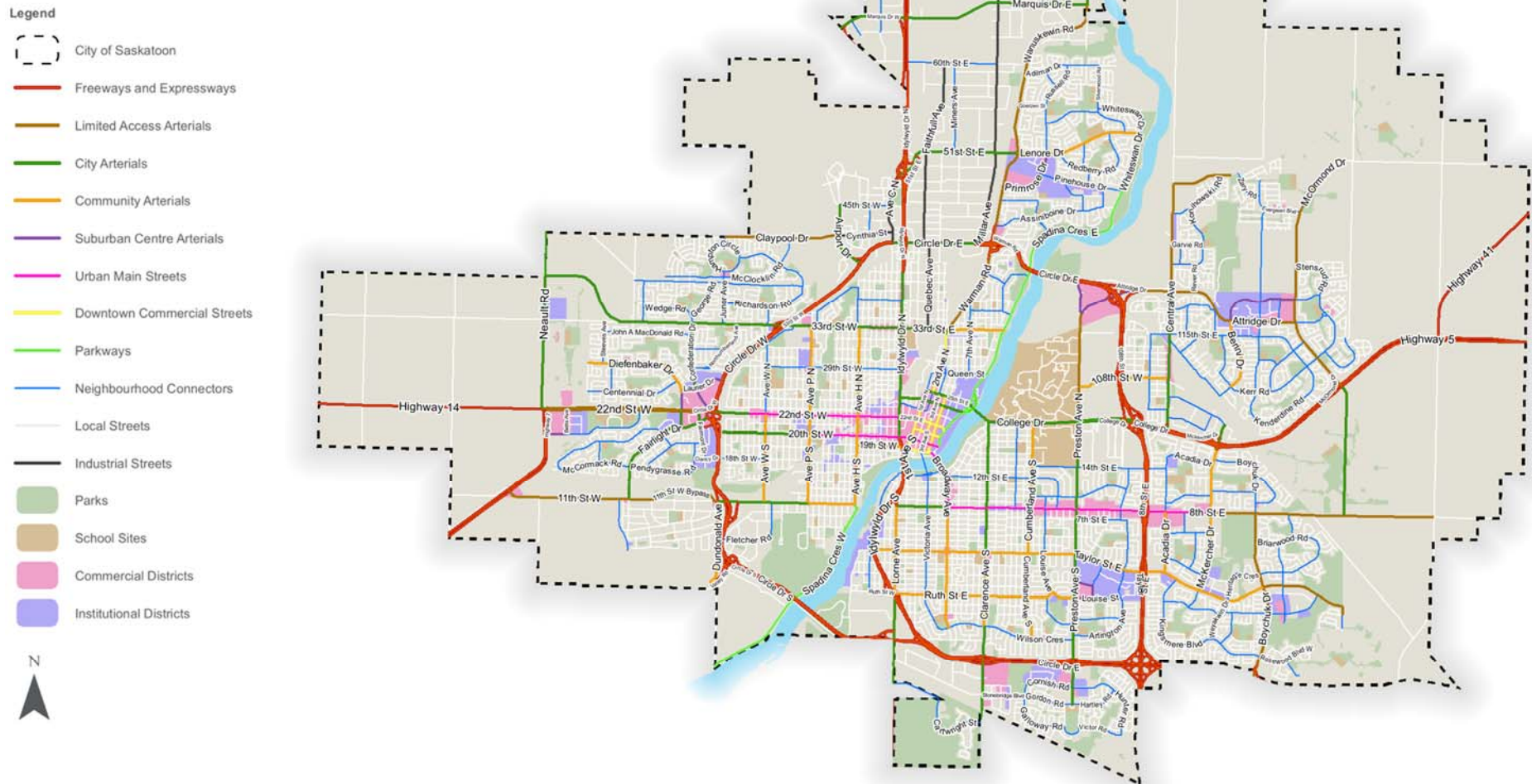
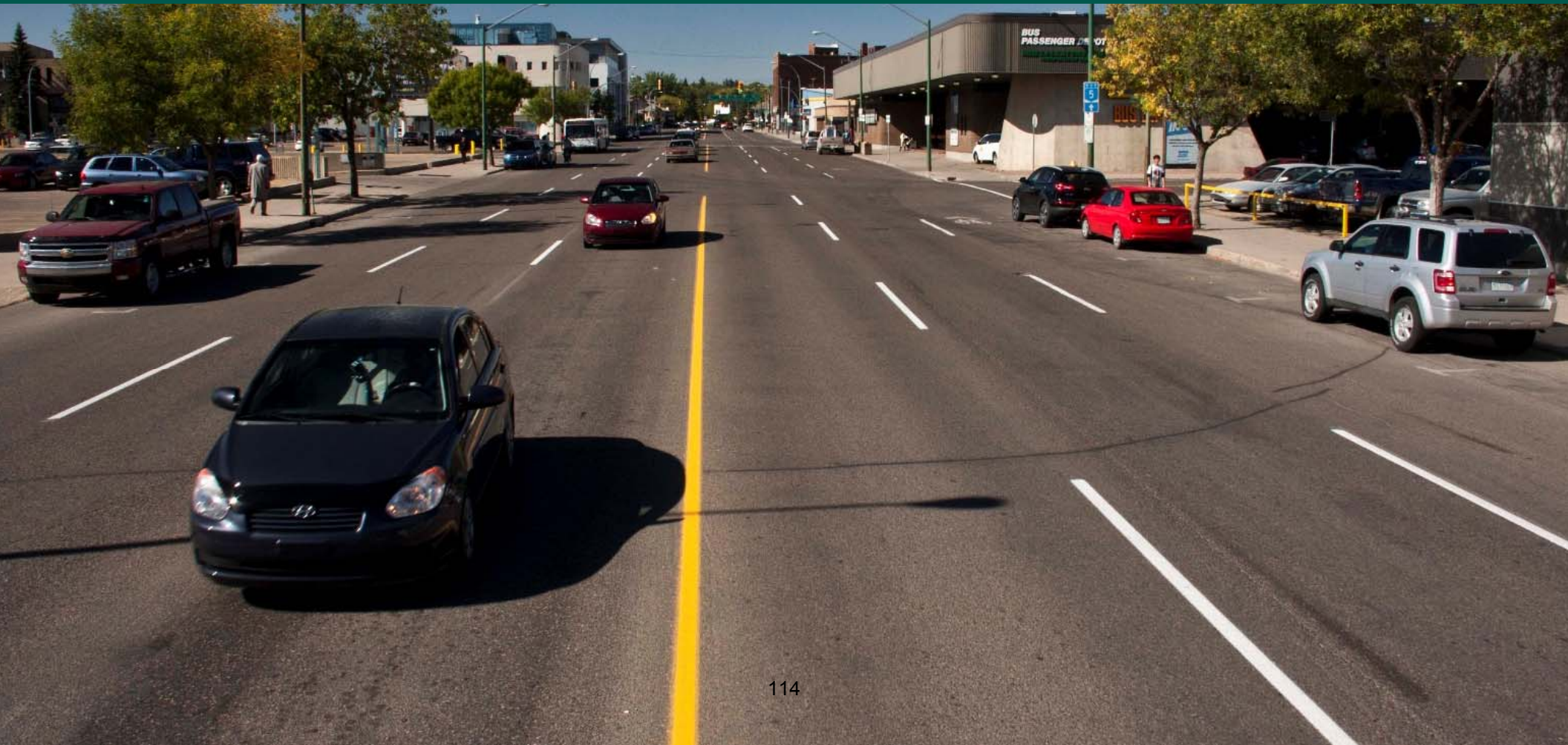


Figure 27 - Potential Street Typologies

PART 5: Toolkit for Complete Street Design



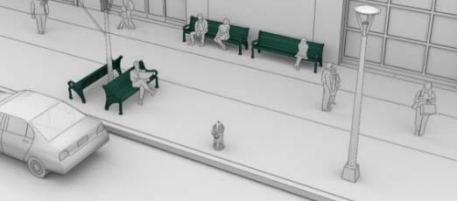
The design of streets in Saskatoon has evolved over the last 100 or so years. At one time, streets were designed for people to get around by streetcar, walking and bicycling. Street fronts and the uses that surrounded them were very much integrated with each other. As the City has grown, more and more people are driving and with vehicles increasing in size – particularly light and heavy trucks – street designs have become less friendly to people walking, bicycling and using transit. Additionally, land uses that surround these auto-centric corridors have turned away from the streets that serve them. With these land use patterns and street designs, fewer people are present on many of the major streets of Saskatoon.

Achieving the City’s aspirations for sustainable growth, vibrant streets and a multi-modal transportation system requires a shift in how new streets are being built and changing the design of existing streets in Saskatoon. Within established areas of the City, roadways need to be redesigned over time through capital improvements focused on implementation of treatments for alternative modes. Completely rebuilding streets in Saskatoon to achieve a shift in modes is neither realistic nor practical. However, a ‘toolkit’ of complete street treatments may be used as a guide to achieve certain outcomes with certain street typologies.

This section of **the Guide** highlights some of the most important complete street treatments that will be critical to Saskatoon’s success. The discussion of individual treatments is organized into three parts, including sidewalks (between the edge of curb and building or right-of-way), streets (between the street curbs) and intersections as summarized in **Figure 28**. For each treatment, conceptual illustrations are provided along with a description of the treatment and any specific design guidance and considerations for application in Saskatoon.


I. Sidewalks

- ✓ Sidewalk Areas
- ✓ Other Sidewalk Treatments



II. Streets

- ✓ Minimum Desired Lane Widths
- ✓ Transit Lanes
- ✓ Bicycle Facilities
- ✓ Neighbourhood Street Treatments
- ✓ Alternative Curbside Treatments



III. Intersections

- ✓ Intersection Geometry
- ✓ Pedestrian Facilities
- ✓ Bicycle Facilities
- ✓ Transit Priority

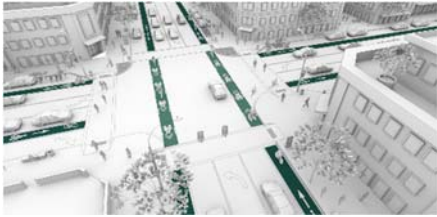


Figure 28 - Essential Complete Street Treatments

5.1 Sidewalks

Every trip begins and ends with or is entirely made by walking. In their most basic form, sidewalks play a vital role in encouraging and facilitating people of all ages and abilities to get around the City. They can support a vibrant public realm and create a sense of place for people to interact, as well as connecting people on the street with adjacent land uses and enable us to use other modes such as bikes and cars as well as transit. Transit relies on an accessible and attractive sidewalk system to get passengers safely to and from their bus.

As part of the public realm, sidewalks will contribute to the vibrancy of urban areas in the City. They must be safe, comfortable and attractive to encourage people to linger and participate in face-to-face activities that in turn can support the businesses and community as a whole. Using the principles below, **the Guide** sets a high standard for accessibility, safety, comfort, aesthetics and environmental protection.

- ✓ **Accessible to All.** Regardless of age or physical ability, sidewalk areas and crossings must be supportive of people walking, using mobility aids, and/or pushing strollers. They must have continuous, unobstructed pathways for everyone to move.
- ✓ **All Weather Access.** Sidewalks should be capable of providing areas of shade during warmer months of the year and have neighbouring space for snow storage during winter periods.
- ✓ **Public Realm Opportunities.** Sidewalk areas can provide space beyond the walking realm for everything from benches and cafes to trees and awnings for sun protection.

5.1.1 Sidewalk Areas

Sidewalk area design must consider three sidewalk zones in terms of both size and allocation of space. Consistent with the street typologies, these choices must be influenced by the desired land use and transportation outcomes. **Figure 29** illustrates the three sidewalk zones that are briefly described below: Frontage Zone, Pedestrian Zone and Furnishing Zone.

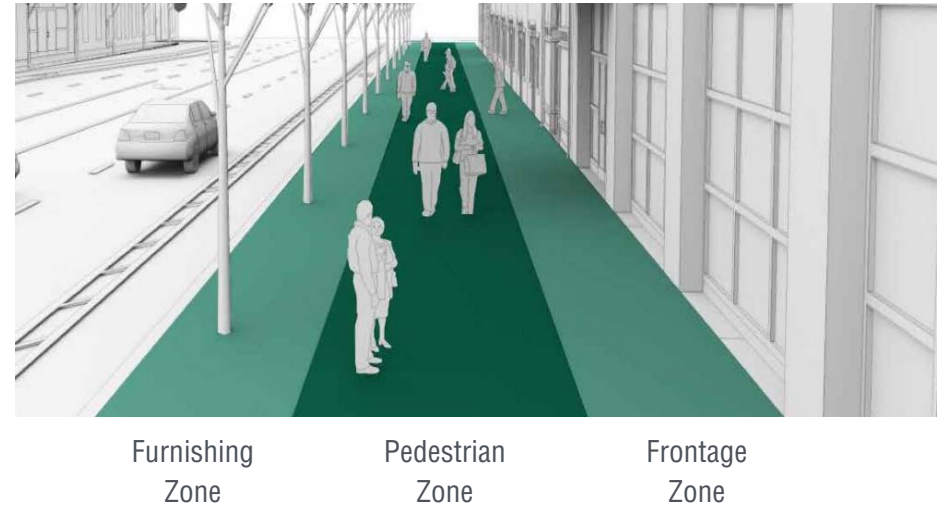


Figure 29 - Sidewalk Areas

- The **Frontage Zone** is the interface between buildings and the walking area on the sidewalk. On some street types, these zones can provide space for cafes, plazas and greenspace in front of buildings. This added space to the sidewalk area can be used to enhance activity and vibrancy of urban streets in the downtown area and urban centres across the City. On many streets, the frontage zone may include room for the installation of, and access to, the curb stop and other utilities.

- The **Pedestrian Zone** is identified by the sidewalk area, providing accessible, unobstructed space for people to move along the street. The sidewalk areas are typically made of concrete and the width should vary depending on the anticipated pedestrian activity. For accessibility, the minimum width of the pedestrian zone should not be less than **1.8m**.
- The **Furnishing Zone** provides buffer area between the Pedestrian Zone and street to increase the comfort and safety of pedestrians. This zone can also be used to support landscaping, snow storage, amenities and other active street furnishings such as seating, lighting, bike parking, etc. In the absence of a frontage zone this zone may be required to include utility access.

Although the allocation of sidewalk space must be considerate and supportive of accommodating desired modes of travel, the design must also be complementary to the land use character that immediately surrounds the corridor and desired public realm along the street. The following descriptions highlight the desirable allocation of sidewalk areas in general terms for each street typology. These guidelines can be used to refresh design standards for new and existing streets in Saskatoon. It should be noted that sidewalk areas are not provided on freeways and expressways or shared streets typologies, and thus not described in **the Guide**.

LIMITED ACCESS ARTERIALS

City arterial streets (limited access) in Saskatoon support large volumes of higher speed traffic across the City. Land uses surrounding the corridor are often set back from these major streets and pedestrian access is generally along side streets. Sidewalks today are typically limited to one side only with the expectation of installation on both sides as future redevelopment occurs or as part of local area changes. In support of transit services, sidewalks are recommended on both sides of limited access arterial streets. The pedestrian zones on these streets should be a minimum of **2.5m** wide, with a **1.5m** wide furnishing zone and a minimum **1.2m** frontage zone.



Figure 30 – Limited Access Arterial Streets

CITY & SUBURBAN CENTRE ARTERIAL STREETS

City arterials and suburban centre arterial street types are typically two lane or four lane roadways supporting moderate traffic volumes and serving access to nearby properties. Sidewalks are desirable on both sides of the street as many will be surrounding active land uses and served by transit. The pedestrian zones should be a minimum of **2.5m** wide, with a minimum **1.75m** wide furnishing zone consisting of grass and utilities to buffer pedestrians from the adjacent street. The frontage zone should depend on building setbacks and landscaping requirements.



Figure 31 - City & Suburban Centre Arterial Streets

COMMUNITY ARTERIAL STREETS

Community arterial streets serve travel needs between neighbourhoods in Saskatoon. This street type is largely surrounded by and supports residential land uses with small commercial nodes. Sidewalks are desirable on both sides where moderate levels of traffic, transit service, bicycling, and walking is supported as well as on-street parking. The pedestrian zone on this street type should be a minimum of **1.8m** wide, with a **1.35m** furnishing zone for utilities and separation from adjacent street traffic on streets without on-street parking. On streets with on-street parking, where no furnishing zone is provided, the frontage zone may be a minimum of **1.55m**.



Figure 32 - Community Arterial Streets

DOWNTOWN COMMERCIAL/URBAN MAIN STREETS

Many downtown streets in Saskatoon already support vibrant street fronts with space for walking, leisure activity and other street functions. As the **Growth Plan** is realized, urban main streets will extend across the City along high priority growth and rapid transit corridors. As the most vibrant and walkable areas of the City, wide pedestrian zones of unobstructed area are essential for accommodating high volumes of pedestrians.

The furnishing zones should be wide enough to support street functions such as parking meters, street furniture and bike parking in addition to trees and landscaping. The frontage zone should be supportive of, and provide access and visibility to the land uses that line the downtown commercial and urban main streets. The minimum widths for the pedestrian zone, furnishing zone, and frontage zones should be **2.5m**, **1.75m**, and **1.0m** respectively.



Figure 33 - Downtown Commercial/Urban Main Streets

NEIGHBOURHOOD CONNECTORS & LOCAL STREETS

Neighbourhood connectors and local streets support local walking to adjacent properties as well as passing through the community. Today, most of these street types have sidewalks on both sides with low and medium density residential uses surrounding them. With on-street parking permitted on one or both sides, the sidewalk width should be a minimum of **1.8m**, with a minimum **0.5m** furnishing zone to provide separation from the street.



Figure 34 - Neighbourhood Connectors & Local Streets

INDUSTRIAL STREETS

Sidewalk coverage in industrial areas of the City today is limited. Many of these areas are served by transit, and have commercial and institutional land uses that generate walking trips. A lack of sidewalks presents barriers to walking and accessing transit, but also increases safety exposure for pedestrians and limits accessibility.

The pedestrian zone on this street type should be a minimum **1.8m** wide, with a minimum **0.5m** furnishing zone. Bollards may be used to protect pedestrians where turning vehicles can present safety issues at driveways to adjacent properties. Loading docks and driveways that cross sidewalks should be clearly delineated and accessible for pedestrians.

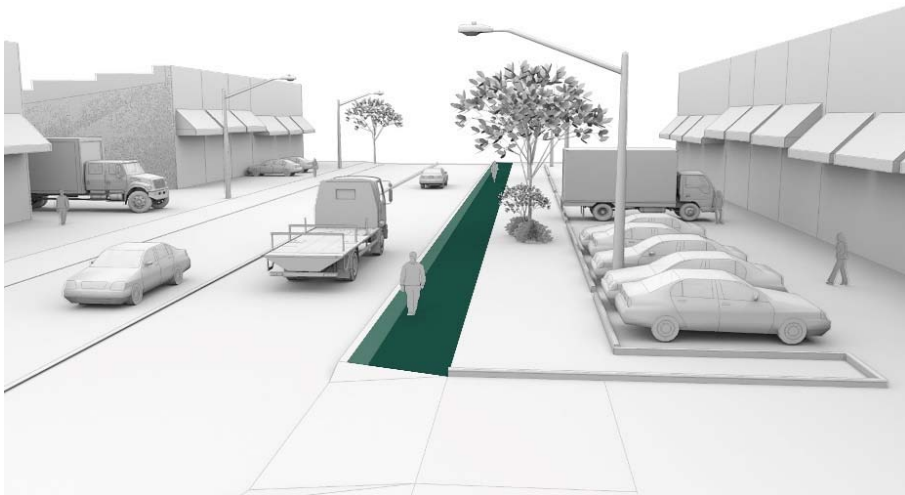


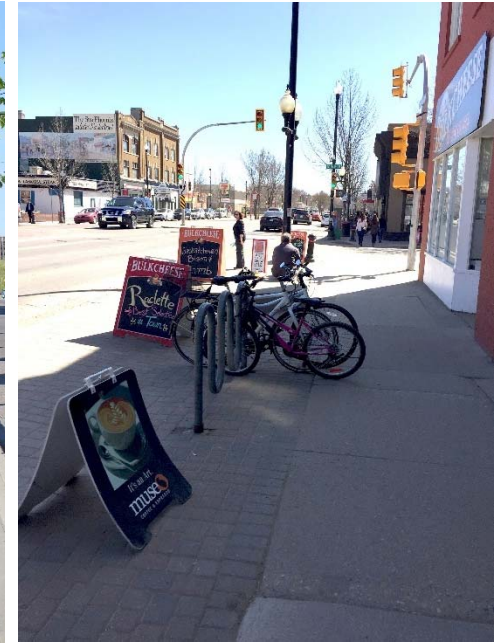
Figure 35 - Industrial Streets

5.1.2 Other Sidewalk Treatments

Sidewalk area designs must go beyond providing the basic treatments. Pedestrians and businesses thrive where larger sidewalk areas are provided with amenities such as landscaped buffers from the street, lighting, seating, and shade. Conversely, sidewalk areas that are cluttered with too many facilities and poorly designed treatments can impact accessibility and mobility for everyone. In turn, this can have a negative impact on the surrounding land uses that may be less accessible and inviting to visitors.

The sidewalk area also serves other essential functions to accommodate facilities for other modes of travel. Functional treatments in the furnishing zones for seating, bus stops, and shelters as well as bicycle parking can make the urban areas of Saskatoon more accessible and attractive for other modes.

This section of **the Guide** identifies a selection of design treatments for the frontage and furnishing zones that are critical to the success of most urban main street, suburban centre arterial, and downtown commercial street typologies.



SEATING

Comfortable places to sit in urban areas are essential. It gives people an opportunity to rest, wait for others and/or socialize. Well-designed areas with seating can serve as a gathering place for people and a vital part of the public realm for active streets.

Key Design Considerations:

- Seating can be provided in a variety of forms including chairs, benches, planters, and steps
- Public seating can be located either in the furnishing zone of the street and/or the frontage zone adjacent to building areas
- Seating must be located in protected areas away from the typical flow of pedestrians
- The location of seating must not affect mobility and accessibility of the pedestrian zone
- Benches should ideally be separated from the adjacent parking and travel lanes ❶ and placed at the pedestrian zone edge
- Where possible, physical barriers and/or landscaping should be part of the separation between the street and seating areas
- Benches should also be separated from other street furniture such as lighting, trees, and hydrants
- Some benches should be provided with armrests for those requiring stability while seating and rising, and some without to assist those in wheelchairs
- Seating should be separated from the pedestrian zone, away from building entrances, and not connected to adjacent buildings. ❷

Street Typology	Primary Application
Freeways & Expressways	
Limited Access Arterials	
City Arterials	
Community Arterials	
Suburban Centre Arterials	
Urban Main Streets	✓
Downtown Commercial Streets	✓
Parkways	
Neighbourhood Connectors	
Local Streets	
Industrial Streets	
Shared Streets	

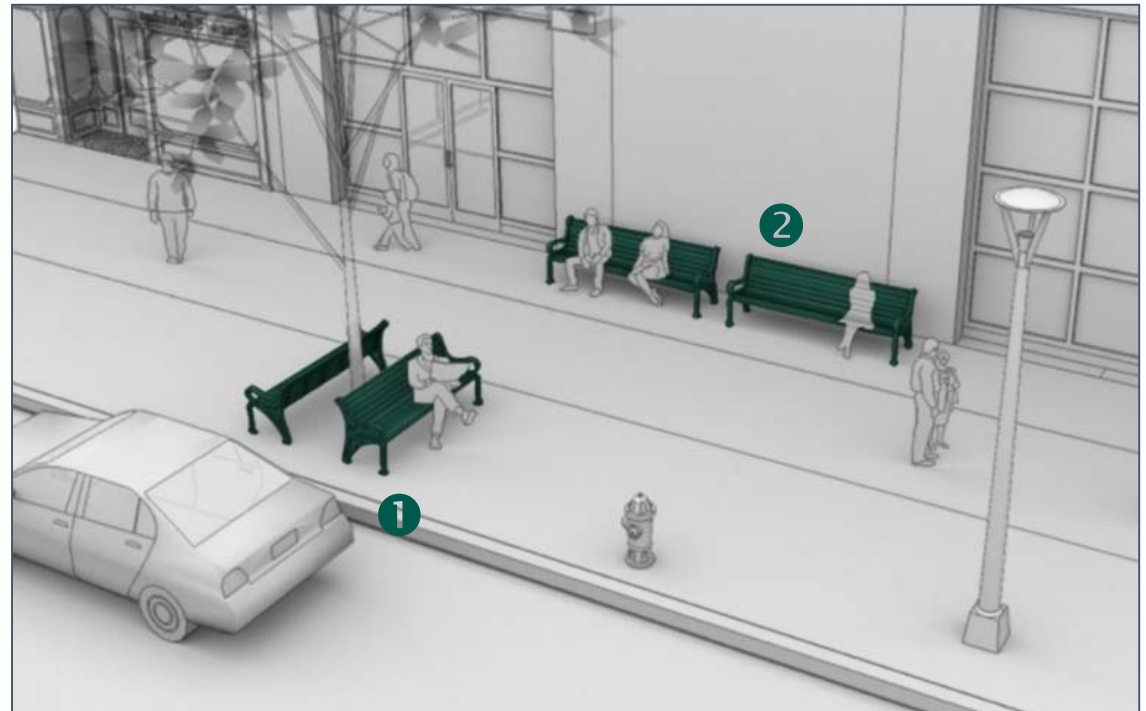


Figure 36 - Seating

BICYCLE PARKING

Visible on-street bicycle parking is essential for urban areas of Saskatoon to increase the bicycling mode share. Whether for short visits to shops, to pick something up, or longer-term stays, on-street bike parking should be designed to provide a safe, visible place to store bikes.

Key Design Considerations:

- Bicycle parking is ideally suited to non-residential streets of the City where bicycling demand is highest
- Bicycle racks in sidewalk areas should only be considered where there are no space constraints that may impact accessibility of the pedestrian zone
- Bicycle rack designs should support the frame of the bike at two points, provide access for different bike sizes/designs, allow locking at two locations, and be easily accessible
- No matter the size or number of bicycle stalls provided, bicycle racks must be installed so that parked bicycles do not block either the pedestrian zone or safe access to the adjacent curb
- Bicycle racks should be set back slightly from the adjacent curb of the street ❶
- Racks should be installed to park bicycles at a 45-degree angle or more from the curb within the furnishing zone
- When provided individually, multiple bicycle parking racks should be sufficiently separated to permit access from both sides and separated from adjacent street furniture ❷ and hydrants ❸

Street Typology	Primary Application
Freeways & Expressways	
Limited Access Arterials	
City Arterials	
Community Arterials	
Suburban Centre Arterials	✓
Urban Main Streets	✓
Downtown Commercial Streets	✓
Parkways	
Neighbourhood Connectors	
Local Streets	
Industrial Streets	
Shared Streets	

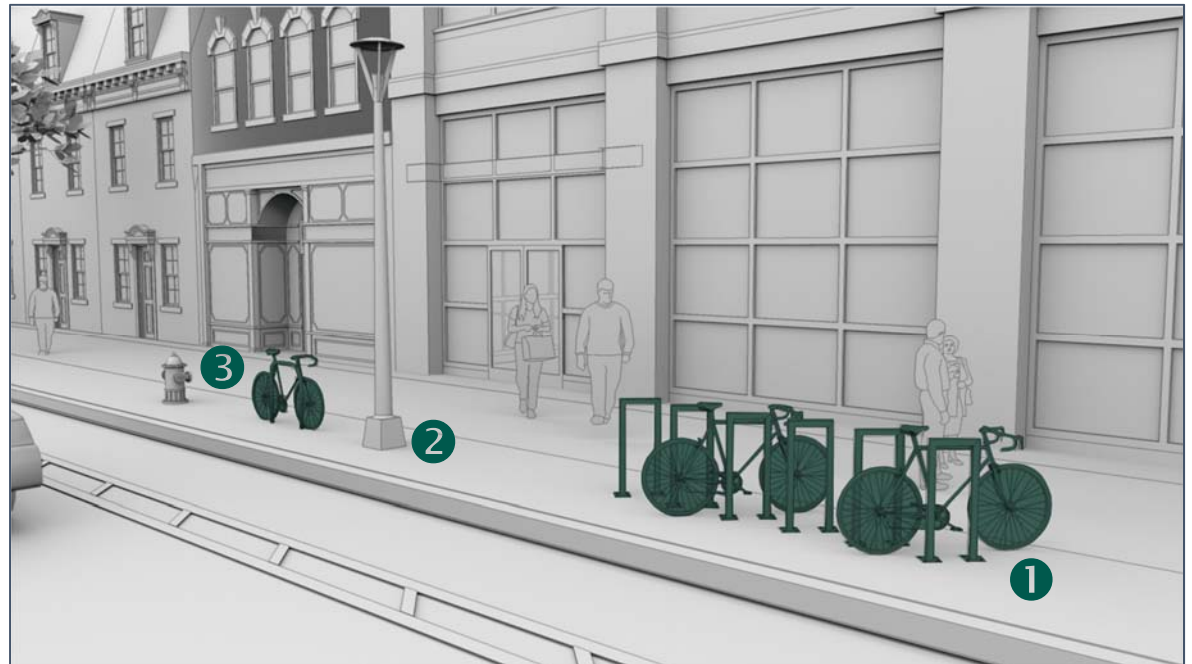


Figure 37 - Bicycle Parking

CONTINUOUS, LEVEL SIDEWALKS ACROSS DRIVEWAYS

Regardless of the design, pedestrians on sidewalks have priority over vehicles entering and exiting driveways. Driveways can either cross the sidewalk area or create a break in the sidewalk to support vehicle access entering and exiting adjacent properties. By design, this treatment can unintentionally give vehicles the priority over pedestrians crossing their path and increase exposure for those walking. Furthermore, changing sidewalk grades across driveways can make it difficult for people using mobility aids.

Key Design Considerations:

- In high pedestrian areas of the City, pedestrian zones of the sidewalk area should be designed with a continuous grade across driveways and laneways
- If the sidewalk is concrete, the surface treatment should not depress to better accommodate vehicles travelling across the path of pedestrians
- The design of driveways in these areas should encourage drivers to always look for, and expect to yield to, pedestrians
- The pedestrian zone should be of continuous width across the driveway for a consistent pedestrian experience
- The furnishing zone between the pedestrian zone and street should form the apron area for vehicles to cross the sidewalk
- In constrained areas where the furnishing zone is not sufficient width, a curb extension may be considered where on-street parking is present

Street Typology	Primary Application
Freeways & Expressways	
Limited Access Arterials	
City Arterials	
Community Arterials	
Suburban Centre Arterials	✓
Urban Main Streets	✓
Downtown Commercial Streets	✓
Parkways	
Neighbourhood Connectors	
Local Streets	
Industrial Streets	
Shared Streets	

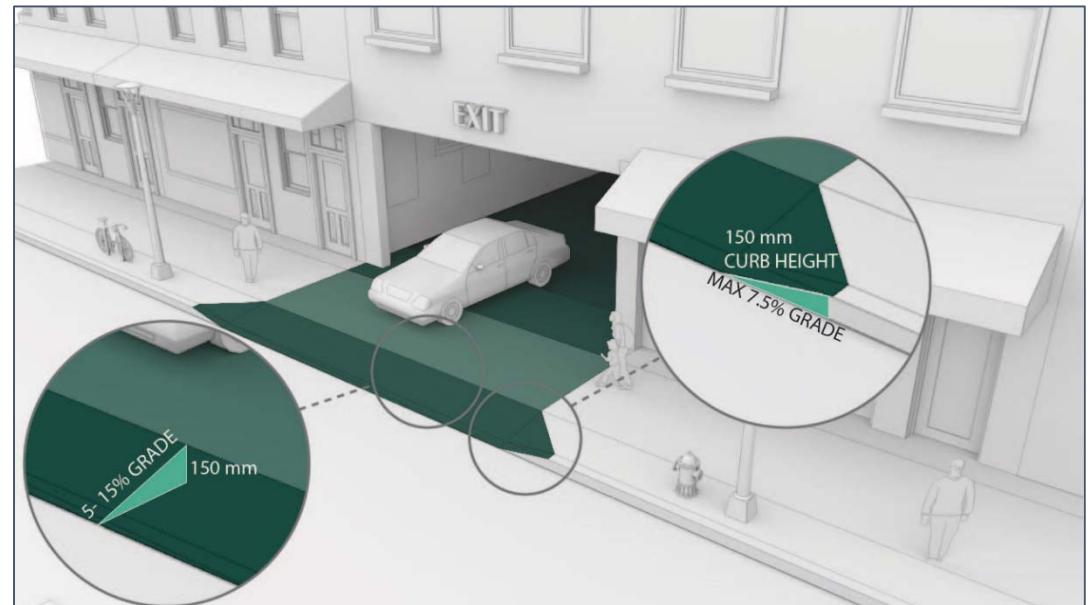


Figure 38 - Continuous, Level Sidewalks Across Driveways

BUS STOP / SHELTERS

Sidewalk areas provide space for transit passengers to wait for buses at stops and support other transit amenities such as passenger information, lighting, seating, trash receptacles, and shelters.

Key Design Considerations:

- Ideally, bus stops and shelter areas are located within the furnishing zones, clear of the pedestrian zone
- They should be designed to be safe, convenient, and accessible for passengers of all mobility levels
- For most of the City, the length of transit stops should be designed to support access for conventional, and articulated buses on major roadways such as city arterials, suburban centre arterials, urban main streets and downtown commercial streets
- Near-side intersection and far-side intersection stops require sufficient space between the corner and the nearest parking stall
- For express bus services and stops on major roadways, far-side bus stops are preferred unless constrained by space and/or to support near-side transfers to cross-street routes
- Conventional stops should be set back from intersections and equipped with landing zone for passengers to enter and exit the bus ①
- Landing zones should be provided for all doors, clear of obstruction and allow for sufficient space between the edge of curb and the pedestrian zone
- Bus shelters are typically considered where passenger activity is highest. The designs are determined on a site-by-site basis
- Shelters at most bus stops in Saskatoon are varied, but typically enclosed on three sides with access from the sidewalk and protection from the adjacent street
- When behind the sidewalk, shelters should be off-set slightly from the property line, and separated from any building structure
- For nearside stops, shelters should be separated from nearby cross-walks so as not to impact driver sight lines.

Street Typology	Primary Application
Freeways & Expressways	
Limited Access Arterials	✓
City Arterials	✓
Community Arterials	✓
Suburban Centre Arterials	✓
Urban Main Streets	✓
Downtown Commercial Streets	✓
Parkways	
Neighbourhood Connectors	✓
Local Streets	
Industrial Streets	✓
Shared Streets	



Figure 39 - Bus Stop/Shelter

SIDEWALK CAFES

Sidewalk cafes can be encouraged where commercial activity is highest on main street and downtown commercial street types. The extension of restaurants into the public way brings activity to the street and forms an important part of the public street realm.

Key Design Considerations:

- Sidewalk Cafes are regulated by the **City of Saskatoon Zoning Bylaw No. 8770**, by the **Use of Sidewalk, Boulevards and Parking Stalls – Vending Policy No. C09-013**, and by the **Sidewalk Café and Parking Patio Guidelines**
- Licenses for sidewalk cafes are issued through the City of Saskatoon Business License Program. The review and approval process involves input from other internal and external departments including the Health Region, Police, Fire, Transportation, Planning and Development, and the local Business Improvement District. As relevant Saskatchewan Liquor and Gaming Authority is also consulted
- Sidewalk cafes must be designed clear of the pedestrian zone to ensure adequate movement and accessibility for all mobility levels
- The width of a sidewalk café should be of consistent width, extending along the full frontage of the restaurant ①
- The entrance through to the front door should remain clear of furniture ②
- If alcohol is served at the sidewalk café business, barriers must be provided and attached to the ground
- Awnings, umbrellas and/or heat is desirable for weather protection and to increase functionality
- Landscaping of a temporary nature, and high-quality street furniture to increase functionality and visual aesthetics is encouraged, and must be removed at the end of season

Street Typology	Primary Application
Freeways & Expressways	
Limited Access Arterials	
City Arterials	
Community Arterials	
Suburban Centre Arterials	
Urban Main Streets	✓
Downtown Commercial Streets	✓
Parkways	
Neighbourhood Connectors	
Local Streets	
Industrial Streets	
Shared Streets	

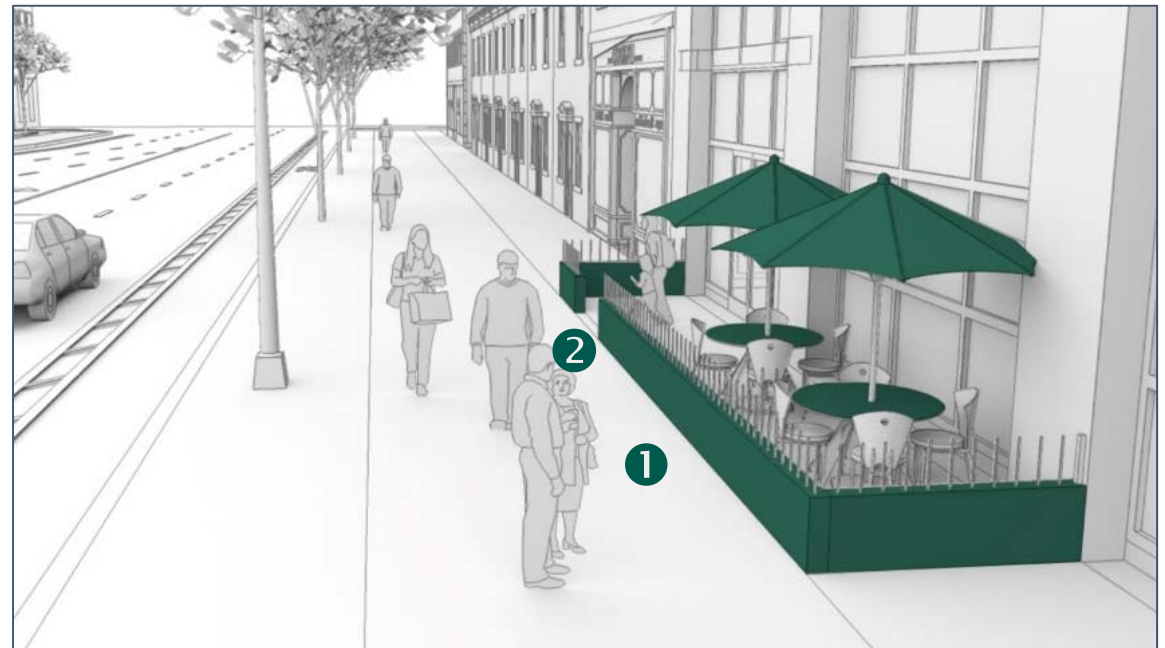


Figure 40 - Sidewalk Cafes

PLAZAS

Plazas can provide additional walking space for pedestrians, and add vibrancy to the public realm on many urban streets in downtown Saskatoon. Plazas can either be created as part of the public right-of-way or connected with private development. Ideally, they should be located adjacent to transit hubs or other pedestrian generators, and should be easy to access from all sides. Larger plazas – such as in front of City Hall – can and should host activities such as markets, art displays, culture performances, and other community events.

Key Design Considerations:

- The plaza design should be an extension of the sidewalk area adjacent to, and part of the pedestrian zone. By extension, plazas can also encourage walking trips both destined to the adjacent site and as a short-cut
- Design considerations should include, but not be limited to wayfinding signage, permeable surface materials/landscaping, bicycle parking, seating, gathering areas, and space for events and/or food services
- Permanent displays of public art or cultural amenities within the Plaza should be encouraged to create an identity for the area while encouraging displays of local talent.
- Plazas should provide a variety of seating choices such as benches, low walls, stairs, and landscaping containers
- Bicycle parking racks may be encouraged in and around plazas if they are visible and do not restrict accessibility

Street Typology	Primary Application
Freeways & Expressways	
Limited Access Arterials	
City Arterials	
Community Arterials	
Suburban Centre Arterials	
Urban Main Streets	✓
Downtown Commercial Streets	✓
Parkways	
Neighbourhood Connectors	
Local Streets	
Industrial Streets	
Shared Streets	

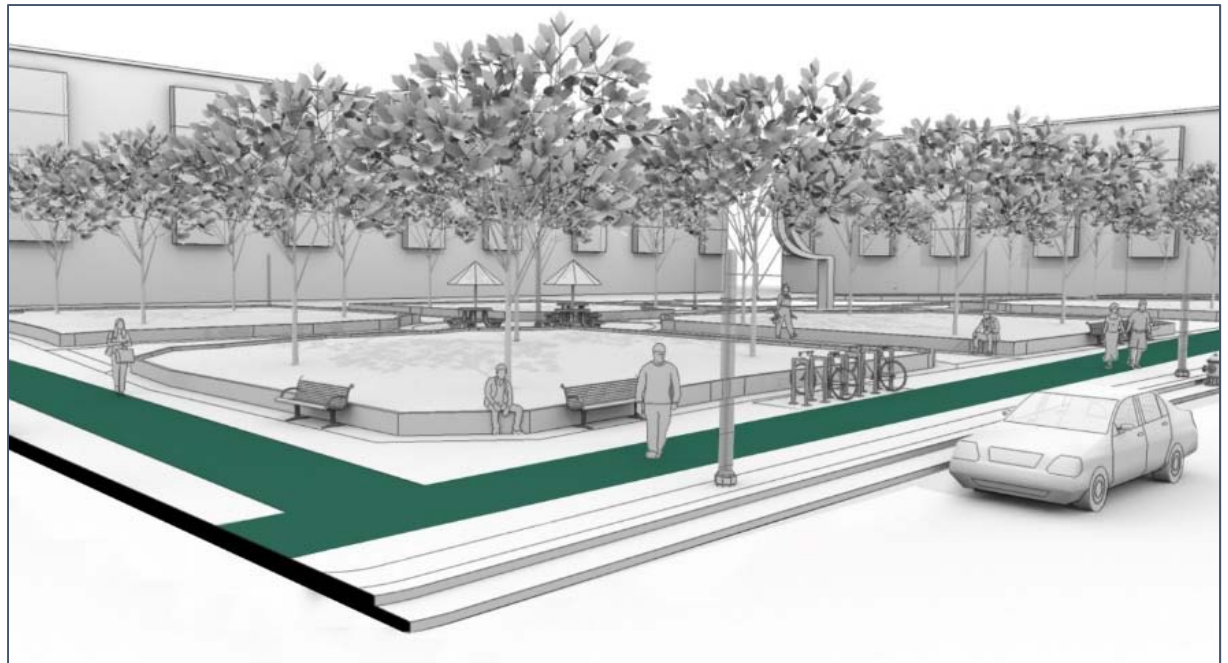


Figure 41 - Plazas

5.2 Streets

Streets make up a significant portion of all public space in most cities. They are the lifeblood of communities, supporting economic and social interactions. Streets support mobility for people, be it by car, transit, biking or walking. They support access to goods and services within and beyond Saskatoon, and economic interactions for many businesses. Increasingly, streets are serving the needs of different travel modes and for varied purposes.

In the established and growing areas of the City, street designs have increasingly favoured larger vehicles. This has created barriers for other modes. Wide streets that prioritize large vehicles create comfort and safety issues for the most vulnerable people on our streets, bicyclists and pedestrians. If goals for increased walking, bicycling, and transit are to be realized, the allocation and design of street space must change.

This section of **the Guide** provides a ‘toolkit’ of treatments for accommodating bicycles, transit, and vehicles within the street environment. **The Guide** also considers other uses of the street to support vibrancy and an active street environment. Recognizing that space is limited in much of the established street system, trade-offs must be considered for different modes and needs to support adjacent land uses. No single template or cross-section will work effectively in all situations.

The design of streets in Saskatoon must not only consider today’s needs, but aspirations for the future. Fortunately, these changes may not need to happen all at once. Space can be incrementally altered in phases to achieve the ultimate configuration or long-term goals.



5.2.1 Bicycle Facilities

With Saskatoon's population expected to double to half a million people, change in the City is inevitable. The City's **AT Plan** provides transportation options designed to improve accessibility, comfort, and safety of walking, bicycling, and other forms of active transportation in Saskatoon.

Providing a complete and interconnected network of bicycle facilities throughout Saskatoon is critical to supporting and encouraging more people choosing to cycle. Expanding and enhancing Saskatoon's bicycle network includes upgrading existing facilities, ensuring that new neighbourhoods have adequate places for bicycling, and addressing gaps in the existing network. The **AT Plan** supports the principles of creating a quality bicycle network for All Ages and Abilities (AAA) with facility types that will increase comfort for more people in the community.

This Guide provides design and application guidance on two basic forms of bicycling facilities: exclusive facilities where roadway space is designated for bicyclists; and shared facilities where roadway space is integrated. The selection and design of different bicycling facilities must recognize that bicyclists are vulnerable road users that can be seriously injured in even minor collisions.



MULTI-USE PATHWAYS

The City’s natural beauty and abundance of multi-use pathways encourage residents to bicycle as a form of commuting, exercise and leisure. Much of the existing network in Saskatoon is made up of paved multi-use pathways located along the Meewasin River Valley and along street right-of-ways.

Multi-use pathways are an integral part of the City’s planned AAA bicycling network intended to encourage a broad cross-section of people to bicycle. A system of multi-use pathways has been identified as part of the AAA network along corridors where sufficient right-of-ways are available, parallel to major arterials with limited driveway access. Planned multi-use pathways that have been identified in the Meewasin Trail Study have also been recognized in the **AT Plan**.

Key Design Considerations:

- Used where there is sufficient space in the public right-of-way as well as a limited number of intersections, alleyways, and driveways
- Must accommodate and manage conflicts between all permitted users such as bicyclists, pedestrians, and skateboarders
- Standard markings and signage are required along the pathways to identify safety hazards, remind users to keep right except to pass, yield to people walking, and yield at intersections
- Consider design treatments that ensure proper sight-lines to reduce potential for collisions on multi-use pathways and at intersections
- Provide lighting to improve visibility and safety
- The width of a multi-use pathway depends on the volume of bicyclists and pedestrians
- Monitor usage through provision of automated counters along pathways
- Multi-use pathways should be cleared of snow in the winter
- Centrelines should be considered once the number and mix of users requires it

Street Typology	Primary Application
Freeways & Expressways	✓
Limited Access Arterials	✓
City Arterials	✓
Community Arterials	
Suburban Centre Arterials	
Urban Main Streets	
Downtown Commercial Streets	
Parkways	✓
Neighbourhood Connectors	
Local Streets	
Industrial Streets	
Shared Streets	



Figure 42 - Multi-Use Pathways

PROTECTED BICYCLE LANES

Protected bicycle lanes are designed to physically separate people bicycling from motor vehicles. There are several design options for this type of infrastructure including installing them at the same grade of the adjacent sidewalk but separate from pedestrian areas, or at street level and separated from vehicles by a barrier. A dense network of protected bicycle lanes has been recommended within the downtown core as this will accommodate the high demand for and potential growth of bicycling within the area. Protected bicycle lanes are part of the AAA bicycling network providing direct access to downtown Saskatoon and other commercial centres throughout the City.

Key Design Considerations:

- Protected lanes are recommended on streets with larger blocks and limited residential and commercial driveways
- Suggested on corridors with high bicycling potential
- Protected bicycle lanes are typically used on multi-lane streets with higher traffic volumes
- Bicycle lane symbol should be used to define dedicated space for bicyclists
- Barriers used to separate bicyclists can include features such as bollards, curbs, or planters and should be marked by two solid white lines with diagonal hatching ❶
- The width of a one-way protected bicycle lane should be sufficiently wide to support higher speeds and avoid catch basins along the curb ❷
- All-year maintenance, including snow clearance of protected bike lanes on busy routes, should be a priority and considered during design

Street Typology	Primary Application
Freeways & Expressways	
Limited Access Arterials	✓
City Arterials	✓
Community Arterials	
Suburban Centre Arterials	✓
Urban Main Streets	✓
Downtown Commercial Streets	✓
Parkways	
Neighbourhood Connectors	
Local Streets	
Industrial Streets	
Shared Streets	

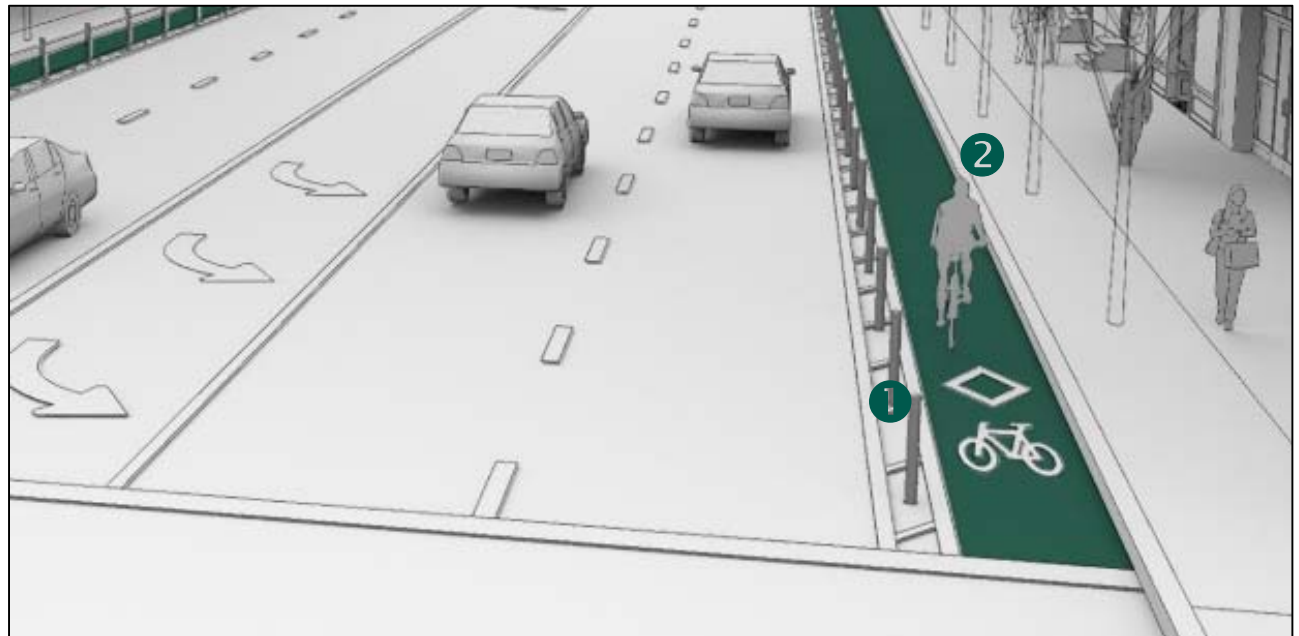


Figure 43 - Protected Bicycle Lanes

BICYCLE LANES (OPTIONAL BUFFER)

Conventional or buffered bicycle lanes are similar to protected lanes in that they are separated from the adjacent travel lane. Unlike protected bike lanes, buffered bicycle lanes do not provide physical barriers such as bollards, curbs or planters, and are generally considered more comfortable than conventional painted bicycle lanes due to the spatial separation between bicyclists and adjacent traffic lanes. Conventional and buffered bicycle lanes are not considered AAA bicycling facilities.

Key Design Considerations:

- May be used anywhere a AAA facility is determined as not necessary or there is limited space
- Suggested on corridors where vehicle speeds and volumes are high and there is on-street parking
- May be used on streets with two or more lanes
- Bicycle lane symbol should be used to define dedicated space for bicyclists
- Buffers may be placed either between the bicycle lane and the motor vehicle lane or between the bicycle lane and parked vehicles, or both
- Buffer area should be marked by two solid white lines with diagonal hatching ❶
- The width of a one-way conventional or buffered bicycle lane should be consistent across the City ❷
- Limited use on roadways with several driveways to adjacent properties
- Coloured asphalt or paint may be used to highlight prominence of bike lanes at intersections and conflict zones including laneways and driveways
- All-year maintenance, including snow clearance of bike lanes on busy routes, should be a priority and considered during design
- Buffered bicycle lanes are preferred on 4 or more lane roadways, and lanes without a buffer can be used on 2/3 lane roadways

Street Typology	Primary Application
Freeways & Expressways	
Limited Access Arterials	
City Arterials	✓
Community Arterials	✓
Suburban Centre Arterials	✓
Urban Main Streets	
Downtown Commercial Streets	
Parkways	✓
Neighbourhood Connectors	
Local Streets	
Industrial Streets	✓
Shared Streets	

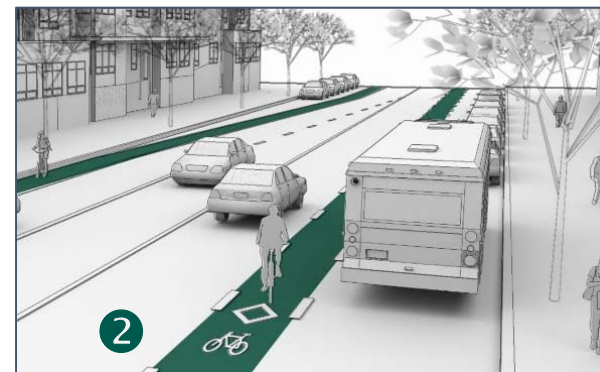
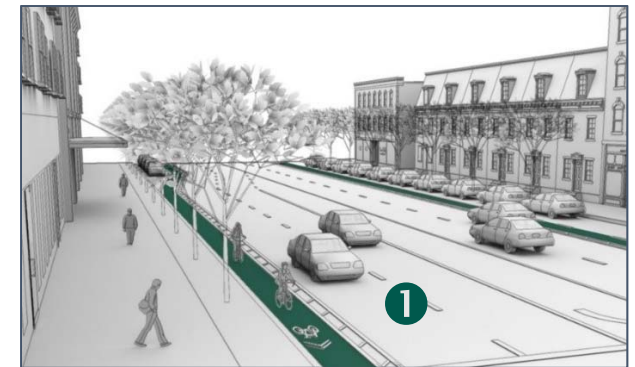


Figure 44 - Bicycle Lanes (Optional Buffer)

BICYCLE BOULEVARDS

Bicycle boulevards are recommended on streets with low volumes and speeds that typically serve neighbourhood travel. Most applications of bicycle boulevards provide an alternate route where bicycle facilities on parallel arterial streets may not be appropriate. Bicycle boulevards are shared roadways with operating conditions that prioritize people bicycling on the street and that have been designed to limit exposure to motor vehicles.

Key Design Considerations:

- Bicycle boulevards are critical to achieving the goals for the AAA bicycling network by providing a high standard of safety and comfort to a broad cross-section of people
- Bicycle boulevards are most suitable for roads classified as local streets or shared streets with less than 2,000 vehicles per day
- Bicycle boulevards should have signs, pavement markings, traffic calming measures and specialized crossing treatments that calm traffic and discourage through-trips by motor vehicles
- As part of the AAA bicycle network, bicycle boulevards should be priority routes for snow removal to bare asphalt within 24 hours of snowfalls
- An important component of bicycle boulevards are intersection treatments with major roadways
- Vehicle movements may be restricted to discourage shortcutting vehicles and maintain low traffic speeds and volumes

Street Typology	Primary Application
Freeways & Expressways	
Limited Access Arterials	
City Arterials	
Community Arterials	
Suburban Centre Arterials	
Urban Main Streets	
Downtown Commercial Streets	
Parkways	
Neighbourhood Connectors	
Local Streets	✓
Industrial Streets	
Shared Streets	✓

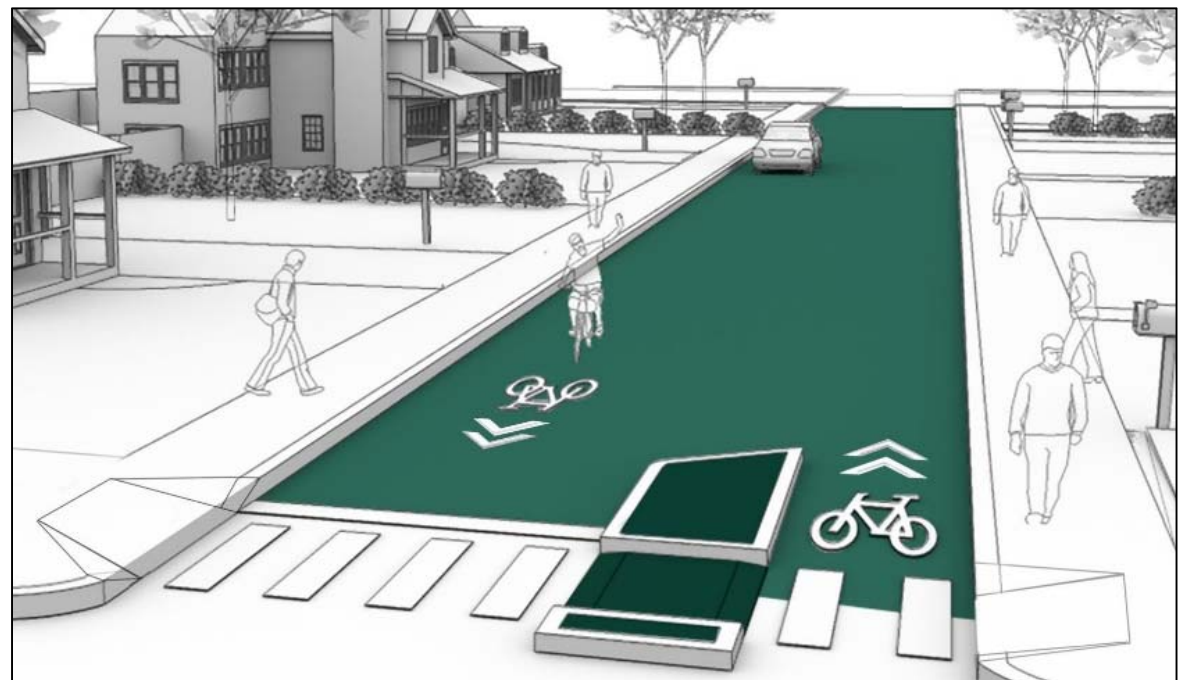


Figure 45 - Bicycle Boulevards

SHARED-USE LANES

Where it is not feasible or appropriate to provide separated bicycle lanes, there may be some streets where bicyclists, motorists, and transit vehicles share travel lanes. Saskatoon has historically utilized shared lanes throughout downtown. Marked shared bicycle lanes are indicated by specific bicycle symbol called shared lane markings or ‘sharrows.’ Sharrows are meant to remind road users that bicycles will share the street lanes as a vehicle when facilities are not present. **The AT Plan suggests that no additional shared-use lanes be installed as every street in Saskatoon has shared use space for people driving, riding transit or bicycling.**

Key Design Considerations:

- Although the **AT Plan** does not promote implementing additional marked shared lanes, they are recognized in this toolkit for maintenance purposes and where other treatments may not be viable
- Should not be used on streets with greater than 50km/hr speed limits, or where traffic volumes are higher than 5,000 vehicles per day
- Shared lane markings should be placed on a location that is outside the door zone of parked vehicles
- Consider removal of travel and/or parking lanes as well as median areas to accommodate a bicycle lane before using marked shared use lanes
- Marked shared use lanes are flexible to the presence of on-street parking and driveways

Street Typology	Primary Application
Freeways & Expressways	
Limited Access Arterials	
City Arterials	
Community Arterials	
Suburban Centre Arterials	
Urban Main Streets	
Downtown Commercial Streets	
Parkways	
Neighbourhood Connectors	✓
Local Streets	✓
Industrial Streets	
Shared Streets	

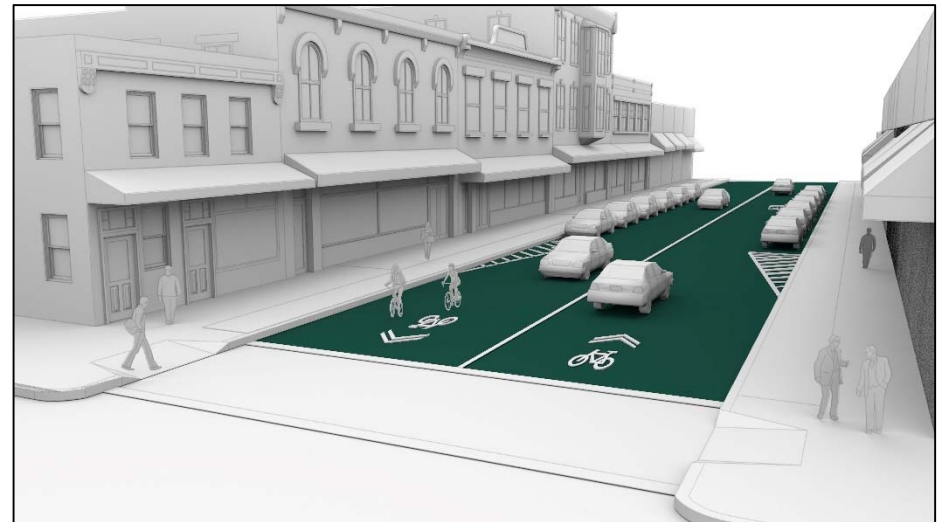


Figure 46 - Shared Use Lanes

5.2.2 Transit

Ultimately, rapid transit is intended to provide attractive transportation choice while at the same time shaping and supporting higher density growth with a mixture of land uses. Rapid transit systems are also unique from the rest of the transit system providing identifiable corridors, mostly or entirely separated travel lanes, and enhanced transit stations for the comfort of passengers.

Saskatoon's **Growth Plan** identifies Bus Rapid Transit (BRT) corridors that will form the spine of the transit system. As bus service increases across Saskatoon, more routes will be directed toward the Red Line BRT illustrated in **Figure 9**. Blue Line BRT will be implemented as required. Customers will experience a bus every 5 minutes along major corridors such as 22nd Street, College Drive, Preston Avenue, and 8th Street. In the long-term, the Red Line BRT corridor will provide approximately 22 km of bus-only lanes and 25 stations between Blairmore, University Heights and Holmwood, with direct connections to the Downtown and University areas.

The following discussion within this section of **the Guide** describes the three forms of bus lanes – curb, centre and side running. In most communities, curb bus lanes are often the starting point for higher capacity BRT facilities. In turn, the higher capacity facilities such as centre and side running may eventually be the pre-condition to Light Rapid Transit if ridership increases significantly.



CURB BUS LANES

Curb bus lanes operate on the right side of multi-lane roadways, typically alongside the curb and sidewalk area. Along streets with bulb-outs, curb bus lanes may be off-set or separated by parking or transit stop areas. As a minimum, curb bus lanes can be distinguished by pavement markings and overhead signage. Coloured asphalt depicting segments of bus lanes is used in some communities to increase awareness through conflict zones, but is not essential. These lanes are generally open to right turn vehicles at intersections and function as turn lanes to driveways for adjacent sites. Where space permits, bus lanes in many communities can also operate as shared bus/bicycle lanes.

Key Design Considerations:

- Standard markings and signage separating bus lanes is essential to discourage use of bus lanes by other traffic
- Curb bus lanes are typically created with the removal of a travel lane, parking lane or other street treatments such as centre medians and/or boulevards
- Periods of operation for bus only may be flexible and expanded from peak only to all-day use as service frequency and ridership increases.
- Timeframes should ensure sufficient service operation to avoid ‘empty lane’ syndrome
- Bus lanes may be separated to bypass buses at stations
- Curb-side parking should ideally be limited or restricted on corridors with curb bus lanes
- Measures to reduce conflicts with right-turn vehicles should be considered through signage, particularly at minor intersections
- Stops or stations on curb bus lanes are generally spaced more than **400m** apart in urbanized areas and over **800m** in suburban parts of the community
- The minimum width of a bus lane should be no less than the permissible curb width for typical travel lanes, possibly wider if shared with bicyclists

- Station dimensions should be typically designed for anticipated passenger loads with the ability to support two spaces for buses. In the downtown areas of the City, the length of stations will be longer to support multiple routes picking up and dropping off passengers at multiple locations
- Bus stops and lanes must be a priority for snow clearance
- Monitoring and enforcing of unauthorized vehicle use is essential
- Camera enforcement with tow-away service is usually needed for peak-only curb bus lanes

Street Typology	Primary Application
Freeways & Expressways	
Limited Access Arterials	✓
City Arterials	
Community Arterials	
Suburban Centre Arterials	✓
Urban Main Streets	✓
Downtown Commercial Streets	✓
Parkways	
Neighbourhood Connectors	
Local Streets	
Industrial Streets	
Shared Streets	

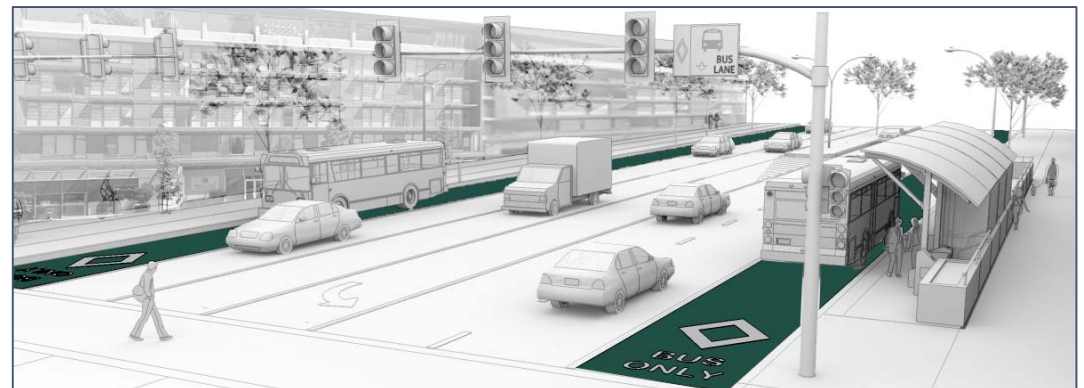


Figure 47 - Curb Bus Lanes

SIDE BUS LANES

Side running bus lanes provide dedicated space for bus use only. As a separated area of the road, conflicts with general purpose traffic are limited to signalized intersections and minor cross-streets where applicable. In comparison to curb bus lanes, side bus lanes serve to reduce transit travel times and increase reliability for transit customers. The configuration of side running bus lanes prevents use for general purpose traffic or parking at any time and would eliminate access to adjacent property driveways and most minor intersections. Side running bus lanes are typically most effective on street blocks without driveway access and where passenger activity is highest on one side of the street.

Key Design Considerations:

- Side bus lanes could potentially be used on the Red Line BRT corridors identified in the **Growth Plan**
- Side-running bus lanes typically require reallocation of space for vehicles and involve major changes to the roadway and utilities
- Consider the impacts on general purpose traffic across the network of roadways, not just the street supporting BRT
- Access to minor cross-streets and properties are restricted along the side of the street accommodating side running bus lanes
- Snow clearance of stop areas and bus lanes must be a priority
- Stops or stations on side bus lanes are generally **400m** apart in urbanized areas and over **800m** in suburban parts of the community
- Standard pavement markings and signage is essential for discouraging use of bus lanes by other traffic
- The bus lane width should be sufficiently wide enough to support two-way bus services and to ultimately support conversion to LRT
- Station dimensions should be typically designed for anticipated passenger loads with the ability to support two spaces for buses. In the downtown and university areas of the City, the length of stations will be longer to support multiple routes picking up and dropping off passengers at multiple locations

Street Typology	Primary Application
Freeways & Expressways	
Limited Access Arterials	✓
City Arterials	
Community Arterials	
Suburban Centre Arterials	✓
Urban Main Streets	✓
Downtown Commercial Streets	✓
Parkways	
Neighbourhood Connectors	
Local Streets	
Industrial Streets	
Shared Streets	

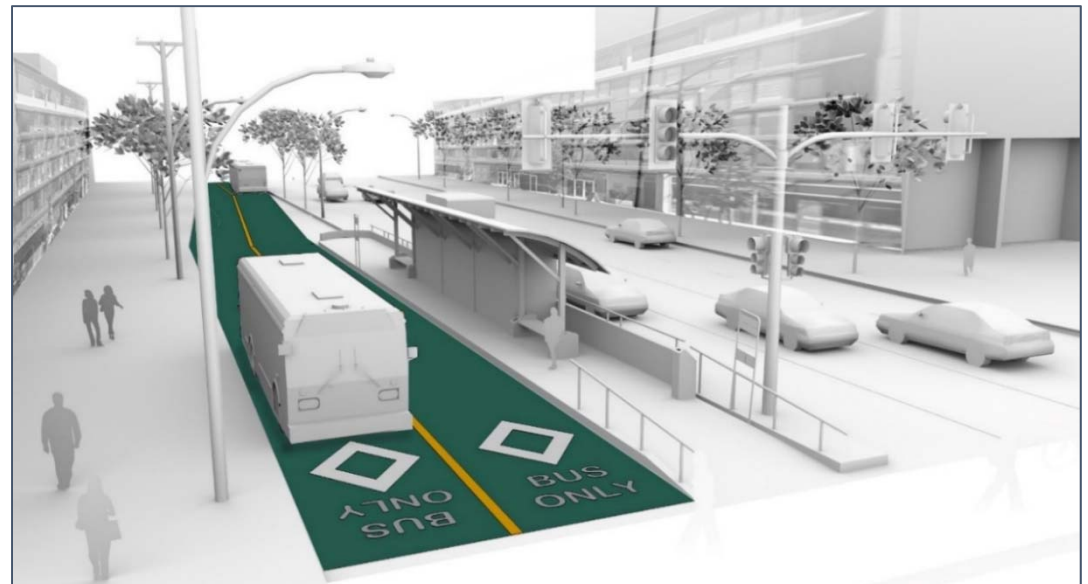


Figure 48 - Side Bus Lanes

CENTRE BUS LANES

Centre bus lanes provide dedicated space for bus use only. Unlike curb bus lanes, conflicts with general purpose traffic are limited to signalized intersections where left turn vehicles must be accommodated – typically with left turn lanes – and mid-block left turn access is restricted. Centre bus lanes eliminate any impacts from right turn vehicles, including mid-block access to minor streets and adjacent properties. Right turn access to all properties and adjacent intersections could be maintained throughout. The separation from other traffic allows centre bus lanes to provide better service and capacity with fewer conflicts that may impact travel time and reliability relative to curb bus lanes.

Key Design Considerations:

- Centre bus lanes could potentially be provided on the Red Line BRT corridors identified in the **Growth Plan** in the long-term
- Space for centre bus lanes are created with the removal of travel lanes, parking lanes or other street treatments such as centre medians and/or boulevards
- Consider the impacts on general purpose traffic across the network of roadways, not just the street supporting BRT
- Consider the impacts on property access and circulation patterns along the corridor, especially left turn restrictions
- Stops or stations on centre bus lanes are generally spaced **400m** apart in urbanized areas and over **800m** in suburban parts of the community
- Standard pavement markings and signage is essential for discouraging use of bus lanes by other traffic
- The bus lane width should be sufficiently wide to support two-way bus services and ultimately conversion to LRT
- Station dimensions should be typically designed for anticipated passenger loads with the ability to support two spaces for buses. In the downtown and university areas of the City, the length of

stations will be longer to support multiple routes picking-up and dropping-off passengers at multiple locations

- Snow clearance of stop areas and bus lanes must be a priority
- Coloured pavement may be used to highlight the prominence of bus lanes to other drivers, but is not essential

Street Typology	Primary Application
Freeways & Expressways	
Limited Access Arterials	✓
City Arterials	
Community Arterials	
Suburban Centre Arterials	✓
Urban Main Streets	✓
Downtown Commercial Streets	✓
Parkways	
Neighbourhood Connectors	
Local Streets	
Industrial Streets	
Shared Streets	

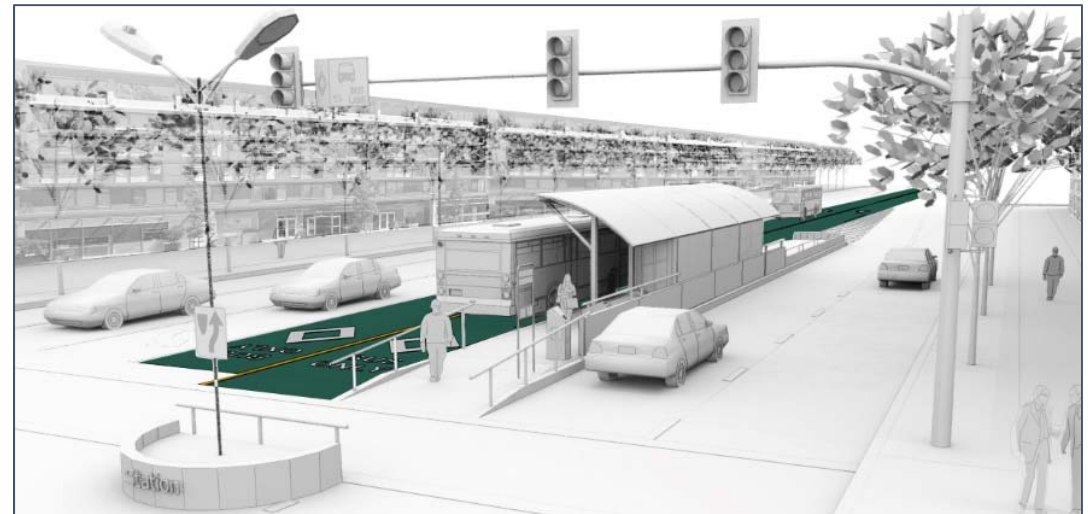


Figure 49 - Centre Bus Lane

5.2.3 Alternative Curbside Treatments

The **Growth Plan** supports long-term policies for sustainable modes of travel as well as creating vibrant street environments in the downtown, along high priority growth corridors and in suburban centres. In support of improving mobility for everyone and encouraging sustainable modes, **the Guide** identifies alternative curbside treatments and uses along downtown commercial street, urban main street and suburban centre arterial street typologies.

Continuing to increase accessible parking stalls in critical locations where sidewalk areas and crossings are also accessible is essential to improving mobility for people with physical and cognitive challenges. Curbside space may also be used for on-street bicycle parking or even bike share stations if the City considers such a program as well as supporting other sustainable modes that include electric vehicle charging stations and car share parking spaces.

As extensions of the urban realm in urban areas, Saskatoon may consider curbside space being used to support sidewalk activity. The City currently allows the implementation of parking patios – or temporary platforms installed over parking space for public seating areas.



ACCESSIBLE ON-STREET PARKING

Accessible on-street parking contributes toward overall mobility and accessibility of an area, and by providing for people with physical disabilities, street designs support everyone. The City designates accessible parking throughout the busiest areas of the city such as the downtown and main street areas. In Business Improvement Districts (BIDs), vehicles with accessibility placards can park in loading zones for the same fully allotted time period as allowed in standard parking stalls (typically 3 hours) and in standard stalls for as long as they need.

Key Design Considerations:

- Accessible parking should only be considered where there is parallel on-street parking
- The City designates accessible parking on a request basis
- Accessible parking should only be provided on roadways with a less than 2% slope where there are accessible curb ramps nearby
- Accessible parking should be located in areas that are close to accessible building entrances, ideally nearby public facilities such as health care facilities, and libraries
- Parking spaces should be marked with standard signage and pavement markings to increase compliance. Signage should be placed at the head of each parking stall for visibility
- Residents using accessible parking must have accessible parking placards placed clearly on their dashboard inside the vehicle
- Accessible parking stalls can be accommodated on a request basis anywhere on-street parking is permitted

Street Typology	Primary Application
Freeways & Expressways	
Limited Access Arterials	
City Arterials	
Community Arterials	
Suburban Centre Arterials	
Urban Main Streets	✓
Downtown Commercial Streets	✓
Parkways	
Neighbourhood Connectors	✓
Local Streets	✓
Industrial Streets	
Shared Streets	

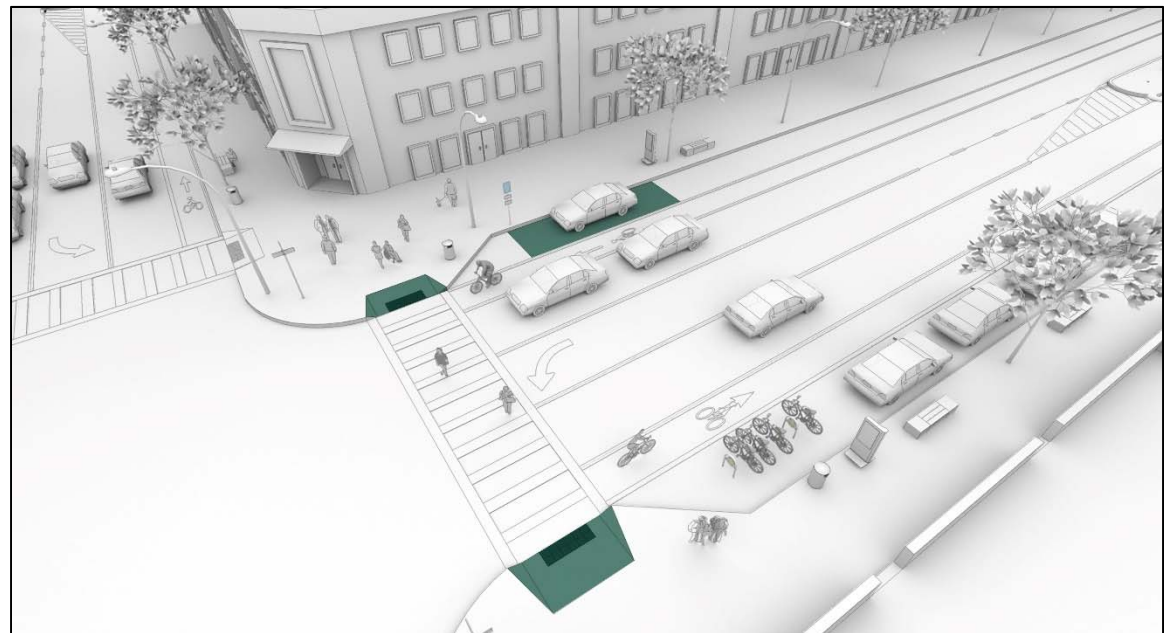


Figure 50 - Accessible On-Street Parking

ON-STREET BICYCLE PARKING

Secure, visible bicycle parking is essential for encouraging bicycling to the City’s downtown and main street areas. Although public bicycle parking is typically provided within the furnishing zone of the sidewalk area, on-street bicycle parking should also be considered in the busiest areas of the City. As AAA bicycling facilities in the City’s downtown area increase, the City may wish to consider implementation of a bike share program. Design for bike share parking is similar to on-street bicycle parking treatments.

Key Design Considerations:

- Consider provision of on-street bicycle parking where demand is high and the furnishing zone width is constrained
- Bicycle racks must be permanently installed to a paved surface and protected by bollards or other fixed methods ①
- The typical length of an on-street parking stall can accommodate 10 or more bicycle parking stalls
- Bicycle racks must need minimal maintenance with adequate clearances from adjacent parking stalls ②
- Bicycle rack designs should support the frame of the bike at two points, provide access for all different bike sizes, allow locking at two locations, and be easily accessible
- No matter the size or number of bicycle stalls provided, bicycle racks must be installed so that parked bicycles do not block adjacent travel or bike lanes

Street Typology	Primary Application
Freeways & Expressways	
Limited Access Arterials	
City Arterials	
Community Arterials	
Suburban Centre Arterials	
Urban Main Streets	✓
Downtown Commercial Streets	✓
Parkways	
Neighbourhood Connectors	
Local Streets	
Industrial Streets	
Shared Streets	



Figure 51 - On-Street Bicycle Parking

5.2.4 Calming Treatments for Urban Streets

With street treatments for each mode as previously described, the City will want to ensure that traffic operates at speeds suitable to the context of the roadway. Vehicle speeds on urban main street, downtown commercial street and suburban center arterial street typologies must be sensitive to the larger presence of people walking, bicycling, and using transit, as well as the vibrancy of land uses that surround them. In many cases, these people may be crossing streets to visit destinations between nearby intersections. Higher traffic volumes combined with higher speeds can remain a barrier for all modes regardless of the design treatments, and will impact desirability for street-oriented land uses. Along these streets, drivers should expect to move at slower speeds despite being a non-residential area with higher traffic volumes.

Neighbourhood Traffic Management Guidelines and Tools is a document developed by the City to address concerns about traffic in residential areas on public lanes, local, and collector streets. The report also identifies the types of traffic calming measures that will be considered to address neighbourhood traffic related issues. These treatments include horizontal deflection (curb extensions, raised medians, roundabouts, and choker points), vertical deflection (raised crosswalk, textured crosswalk, raised intersection, speed hump, speed table, and speed cushion) as well as obstructions (diverter, right-in/right-out island, full closure, directional closure, and intersection channelization).

Beyond the neighbourhood traffic calming measures that apply to local and collector roadways, **the Guide** provides a toolkit of treatments that may be considered to manage travel speeds on non-residential street typologies – urban main streets, downtown commercial streets, suburban centre arterials and community arterials.

DESIRED LANE WIDTHS

In built up urban areas, the configuration and width of roadways impacts the availability of space on Saskatoon's streets. Every metre of the right-of-way should be treated as valuable space where trade-offs are typically required to support mobility, comfort for travel, and creating spaces for people. Conversely large lane widths for vehicles can significantly reduce the space that is most needed for priority modes such as bicycling and pedestrians.

In newer or expanding areas of the City where the right-of-way is less constrained, design standards have been established in the **City of Saskatoon Design and Development Standards Manual**. For example, recommended arterial and collector road travel lane widths are set at **3.6m**. Bike and parking lane width standards are generally set at **1.5m** and **2.4m** respectively. As is the case in most cities, these vehicle travel lane standards are conservatively large, and the widths for bicycle, parking and pedestrian facilities often reflect a minimum acceptable dimension.

The travel lane widths used on urban streets can vary from one community to the next, whereas minimum bicycle and parking lane widths are similar to those used in Saskatoon. A wide travel lane that is referred to in the **Design and Development Standards Manual** for collector and arterial roads may be appropriate on high volume streets and/or truck routes. In these cases, wider lanes are important to ensure safe, efficient movement of larger vehicles on higher speed corridors.

On streets where there is a larger presence of pedestrians and bicyclists as well as street-oriented land uses, most types of motor vehicles can operate with **3.2m** lane widths for through travel lanes and **3.0m** for turn lanes. Narrower lane widths will typically manage traffic speeds and increase comfort and safety for vulnerable road users.

Transportation Association of Canada research has found that there is limited safety benefit for automobiles derived by widening lanes beyond **3.2m**. In fact, the research found that widening beyond **3.7m** may be a detriment to road safety.

For freeways and limited access street typologies, the City may continue to utilize the wider lane widths and provide protected space for bicyclists and pedestrians where present. For city arterials, community arterials, suburban centre arterials, urban main street and downtown commercial street typologies, consideration should be given toward reducing travel lane width design standards. Narrower lane widths will improve safety and comfort in those areas where pedestrians and bicyclists are most present and will further support street-oriented lane use patterns. In some short road segments, mid-block pinch points and through intersections, lane widths for all modes may be reduced to manage space while maintaining visibility and awareness.

Key Design Considerations:

- Consider using narrower travel lane widths on streets with high volumes of pedestrians and bicyclists
- In some areas, short sections of travel lane may reduce even further at mid-block pinch points or intersections
- Wide bicycle and parking lanes should be discouraged
- With narrower lane widths, the appropriate boulevard/furnishing zone should be present to accommodate snow storage



Figure 52 - Desired Lane Width

MID-BLOCK NARROWINGS

Mid-block narrowing is already found along many non-residential streets of Saskatoon such as 2nd Ave downtown. Beyond creating a narrower lane width, this treatment functions as a ‘pinch point’ on the roadway with extensions of the curb on both sides of the street. Mid-block narrowing has been demonstrated to reduce vehicle speeds on major roadways during all periods of the day and can provide a street crossing where there are land uses with high pedestrian activity between intersections.

Key Design Considerations:

- Mid-block narrowing is most effective on two lane roadways with parking on either side of the street ❶
- The location and landscape treatments should not impact driver sight-lines
- Mid-block narrowing should be as wide as the nearby parking space and of sufficient length to be visible and increase driver awareness
- Minimum lane widths for all modes as previously described can be used through the mid-block narrowing area
- Lanes for bicyclists should continue through the narrowing where space permits. ❷ Otherwise, shared lane markings should be used to increase driver awareness. This shared use lane configuration should be avoided in locations where bicyclists must ride uphill
- Crossings should be universally accessible for all ages and abilities with proper ramp design ❸
- Consideration may also be given toward using tactile warning strips
- Areas may be used for temporary snow storage while clearing during winter months. Snow plow operators require visual queues to the edge of curb when narrowing is not visible

Street Typology	Primary Application
Freeways & Expressways	
Limited Access Arterials	
City Arterials	
Community Arterials	✓
Suburban Centre Arterials	✓
Urban Main Streets	✓
Downtown Commercial Streets	✓
Parkways	✓
Neighbourhood Connectors	✓
Local Streets	
Industrial Streets	
Shared Streets	

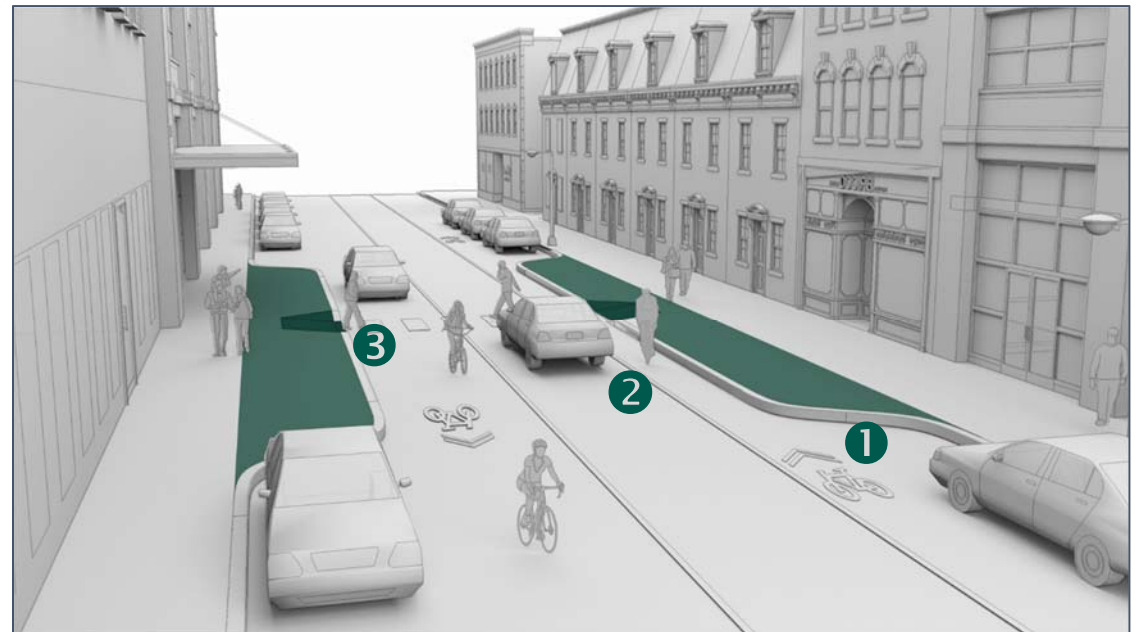


Figure 53 - Mid-Block Narrowing

MID-BLOCK CENTRE MEDIAN ISLANDS

Centre median islands located between intersections can provide another form of ‘pinch point’ in the roadway to manage speeds and improve pedestrian crossings on urban streets in Saskatoon. Centre medians narrow the travel lanes from the middle of the roadway. Provided that there is ample space for landscaping, they can serve to ‘green’ the roadway and absorb storm water.

Key Design Considerations:

- Median islands with pedestrian crossings should be placed at locations where land uses on both sides of the roadway attract pedestrians ❶
- Islands should be sufficiently wide for pedestrians to stand comfortably, protected from traffic, and long enough to be a visible change to the roadway
- Pavement markings should be used to increase visibility of the median island for drivers on both approaches ❷
- The crossing for pedestrians should be designed to be universally accessible
- On busier four lane roadways, the pedestrian crossing should be angled through the median so that pedestrians are facing oncoming traffic
- Centre median islands can be designed with or without mid-block narrowing
- Space for sidewalks should not be constrained, and bicycle lanes should continue through the median island treatment area ❸
- Where shared use lanes are used, pavement markings will increase driver awareness. The shared use lane configuration should be avoided in locations where bicyclists must ride uphill

Street Typology	Primary Application
Freeways & Expressways	
Limited Access Arterials	
City Arterials	
Community Arterials	✓
Suburban Centre Arterials	✓
Urban Main Streets	✓
Downtown Commercial Streets	✓
Parkways	✓
Neighbourhood Connectors	✓
Local Streets	
Industrial Streets	
Shared Streets	

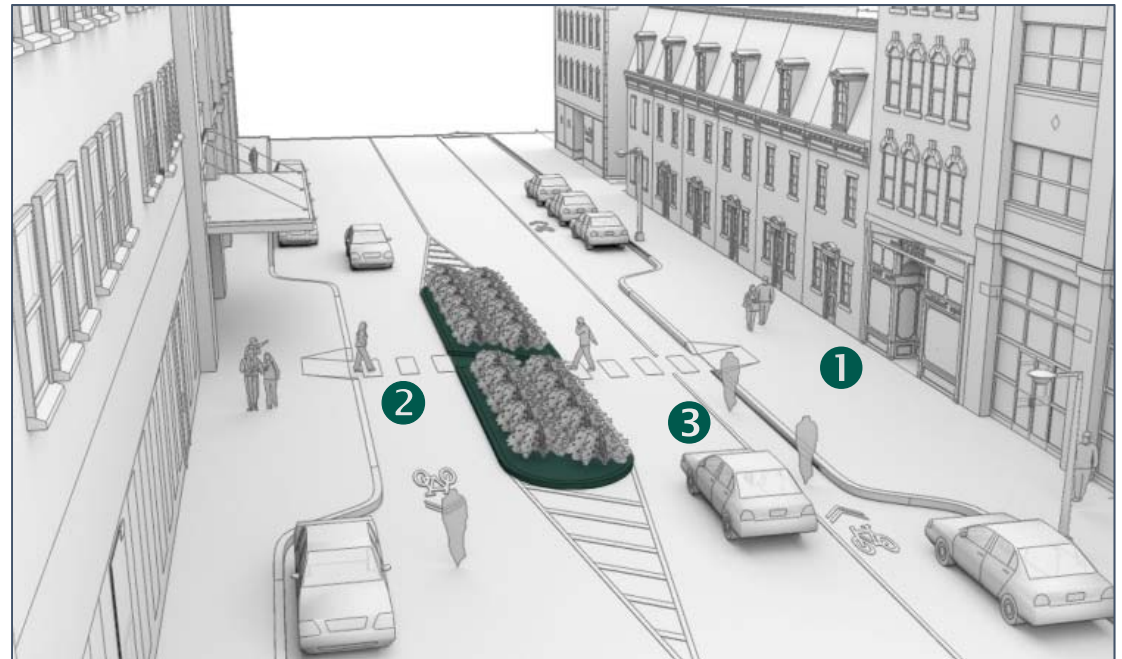


Figure 54 - Mid-Block Centre Median Islands

5.3 Intersections

While sidewalk area and street design treatments can provide reasonable separation between modes and street users, most intersections bring every mode together. There are 12 different movements that vehicles, transit, bicycles and pedestrians each can take at an intersection – most of which have conflicts with each other.

While much emphasis in the design of intersections has typically been placed on minimizing delays for vehicles, this is where most collisions occur for all travellers. As the most vulnerable street users, the consequences of collisions for pedestrians and bicyclists are significant, and large intersections in most cities cumulatively form barriers for walking and bike trips as well as transit customers. This is particularly true for people with disabilities.

Good intersection design must strive to make all modes comfortable and safe. Reducing the barriers for all modes and making them accessible will ultimately make the City's intersections supportive of people of all ages and abilities. As a minimum, the space and travelled pathway for all modes entering the intersection should be clear and visible, and, ideally, dedicated space will increase awareness and respect when crossing paths of different users. This makes intersections more intuitive and predictable for all modes passing through.

This section of **the Guide** provides a 'toolkit' of treatments for accommodating pedestrians, bicyclists, transit, and vehicles within the intersection environment. Much like streets, the toolkit does not offer a template for intersections, but rather a range of treatments for each mode on the most critical features of complete streets.

Any changes to retrofit intersections must be cognizant of the long-term goals and needs for all modes while considering context. In the transit-oriented areas of the City where walking, bicycling, and transit use is expected to grow, steps should be taken to accommodate this change before the needs or demands are present.

5.3.1 Pedestrian Treatments for Urban Street Intersections

Beyond the sidewalk area treatments described earlier in **the Guide**, pedestrian treatments at intersections are vitally important to the walkability and accessibility of Saskatoon. Wide sidewalks with attractive street furnishings and active uses within the frontage zones cannot overcome the barriers to walking created by poorly designed intersections. Along with bicyclists, pedestrians can be the most vulnerable travellers entering signalized and un-signalized intersections, and the cumulative impacts of auto-centric intersection designs can ultimately create significant barriers to walking and in turn the vibrancy of streets.

With commitments for increased walking in Saskatoon, the need for attractive streets accommodating people of all ages and mobility levels requires intersection treatments to be designed for pedestrians. Intersections must be designed to reduce vehicles speeds and increase the visibility and safety of pedestrians while minimizing conflicts between vehicles and vulnerable modes. The geometry of intersections must better accommodate people with physical and cognitive disabilities, ensuring that the City is accessible and comfortable for everyone.

This section of **the Guide** highlights a few of the most critical treatments for pedestrian prioritized intersections on those typologies where the prominence of pedestrians is greatest and traffic volumes are highest – such as urban main streets, downtown commercial streets and suburban centre arterials.

CORNERS & CURB RADII

Perhaps the most significant challenge with intersection geometry is the balance between accommodating larger vehicles and managing speeds of most traffic making turns in the intersection. The design of corner curbs and particularly the radius can also impact crossing distance for pedestrians.

There are two basic design features to consider when determining the appropriate corner radii at an intersection. The first is the effective turn radius ① of vehicles turning corners where sufficient clearance is required for larger vehicles. This is essentially the space needed for vehicles to make a right-turn from one lane to another that may cross parking and bicycle lanes. Another consideration is the actual curb radius ② of the intersection corner being designed more for pedestrian safety and comfort in mind. Minimizing the actual curb radius will ensure that pedestrian crossing times are reduced. Pedestrian safety and comfort crossing major roadways is essential for urbanized areas of the City, and in high pedestrian areas, use of channelized right-turn islands should be avoided.

Key Design Considerations:

- Larger corner radii will increase the length of the crosswalk and crossing time for pedestrians
- A smaller corner radius reduces crossing distance, time, and improves design with two pedestrian ramps that are better aligned with the crosswalk
- Vehicle turning speeds should be limited through an intersection (less than 20km/hr) to improve pedestrian safety
- The actual curb radius design should be defined after considering the effective curb radius.
- The effective curb radius may be minimized by choosing the smallest design vehicle possible, allowing vehicles to cross-over beyond the nearest receiving lane and permit emergency vehicles to utilize the full area of the intersection for making turns

- Considerations to determine curb radius should include: the street types, uses, number and width of receiving lanes, the volumes of large vehicles, and other street uses

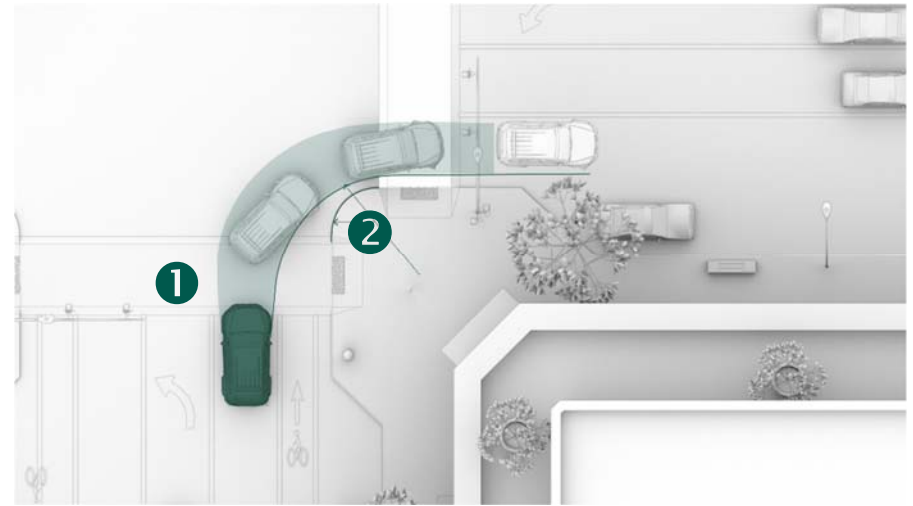


Figure 55 - Curb Radii (Detail)

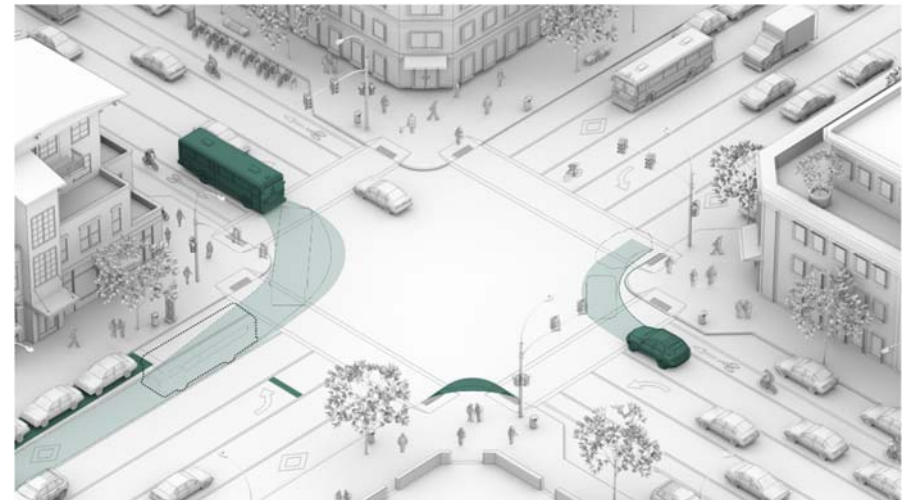


Figure 56 - Curb Radii

CENTRE MEDIAN CROSSING ISLANDS

In busy pedestrian areas of the City, centre median crossing islands may be provided at signalized and un-signalized locations. They provide pedestrians refuge in the centre of multi-lane streets. For urban main street, downtown commercial street, and suburban centre arterial street typologies with larger volumes of pedestrians crossing the street, median island treatments can be designed to reduce exposure to traffic. Although typically used at signalized intersections, median islands can be used at un-signalized intersections permitting pedestrians to cross in two stages, with a standing area in the middle of the street.

It should be noted that these are different than centre median islands used on major streets to provide separation between higher speed traffic through an intersection and not to accommodate pedestrians.

Key Design Considerations:

- Crossing islands should be considered on multi-lane streets where crossing distances are four or more lanes
- Centre median crossing islands should extend on both sides of the crosswalk area ①
- Medians should be the same width as the crosswalk to provide adequate refuge for pedestrians
- The pedestrian crosswalk should extend through the island seamlessly without grade changes to be universally accessible ②
- Turning vehicles must be accommodated in the design. Larger vehicles will likely cross into other lanes
- Signalized crossings must be timed to allow pedestrians to clear the entire intersection in one stage.
- Pavement markings should be considered to guide motorists around the crossing islands
- Where on-street parking exists, curb extensions may be considered in combination with crossing islands

- The depressed crosswalk through the centre median can accumulate gravel and snow. It is important to keep this area clear

Street Typology	Primary Application
Freeways & Expressways	
Limited Access Arterials	
City Arterials	
Community Arterials	
Suburban Centre Arterials	✓
Urban Main Streets	✓
Downtown Commercial Streets	✓
Parkways	
Neighbourhood Connectors	
Local Streets	
Industrial Streets	
Shared Streets	

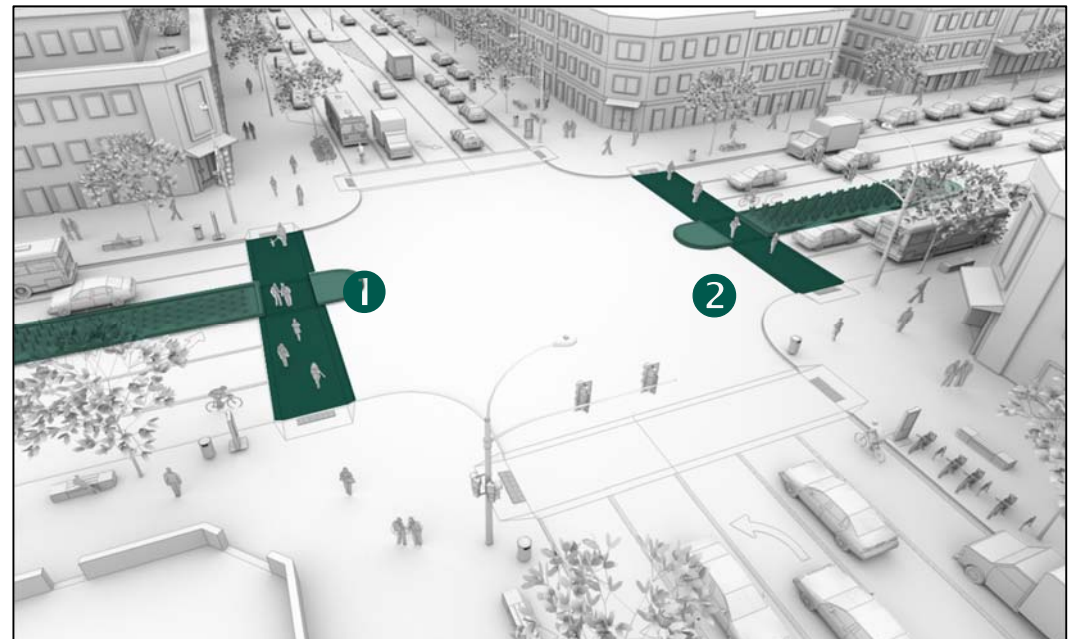


Figure 57 - Centre Median Crossing Islands

CURB EXTENSIONS & RAMPS

As suggested, curb extensions are essentially extending the sidewalk area around intersection corners. Curb extensions and ramps can be used at both signalized and un-signalized intersections to reduce the crossing distance and exposure for pedestrians. They also provide space for pedestrians to stand comfortably without impacting the pedestrian zone of the sidewalk. Curb extensions narrow the roadway to manage vehicle speeds through the intersection, creating shorter crossing distances and times for pedestrians at signalized intersections, and enhanced traffic and transit flow on these busy streets. Curb extensions and ramps for pedestrians are important at major intersections where pedestrian activity is highest.

Key Design Considerations:

- Curb extensions may be used on one or multiple corners of the intersection and are typically used in areas where on-street parking is provided ❶
- Intersection curb extensions are important at locations where pedestrian traffic is high and where there are demonstrated pedestrian safety issues
- Consider the impacts on larger vehicles in the design of curb extensions
- The curb extension design should extend into the roadway to the same width as the parking area ❷
- The length of curb extensions should be consistent with parking setbacks or restrictions from major intersections
- Travel and bike lanes can be narrowed to minimum lane widths through the intersection to accommodate curb extensions ❸
- Curb ramps must be universally accessible, contained within the crosswalk and have limited slope between sidewalk and roadway. Detectable warning strips should be considered in busy pedestrian areas ❹
- Curb extensions can be used for temporary snow storage and should be marked for snow clearing equipment
- Considering and retaining the location of existing storm drainage early in the design will minimize costs
- Curb extensions can also form bus bulbs described later in **the Guide**

Street Typology	Primary Application
Freeways & Expressways	
Limited Access Arterials	
City Arterials	
Community Arterials	✓
Suburban Centre Arterials	✓
Urban Main Streets	✓
Downtown Commercial Streets	✓
Parkways	✓
Neighbourhood Connectors	✓
Local Streets	
Industrial Streets	
Shared Streets	

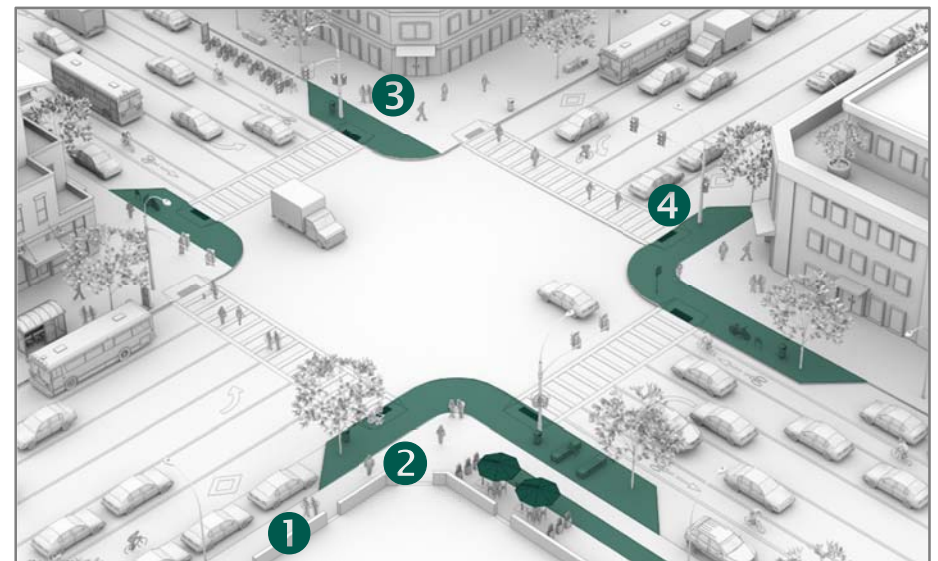


Figure 58 - Curb Extension & Ramps

STANDARD AND ENHANCED CROSSWALKS

Crosswalks for signalized and un-signalized intersections not only define the space for pedestrians to cross, but are also essential to increase driver awareness. The space provided must be visible and of sufficient size to support the pedestrian demand. On busier streets with higher pedestrian activity, crosswalks form the protected space for people of all ages and mobility levels to safely cross the street.

Saskatoon has two principal crosswalk design treatments. The most common or standard treatment consists of two parallel lines with a stop bar located behind the crosswalk area. ❶ This standard crosswalk treatment is used at both signalized and un-signalized intersections on all classes of roadways. The more enhanced form of crosswalk – zebra style – is more visible for drivers as they approach and travel through the intersection. They consist of bars running perpendicular to pedestrian traffic across the intersection. ❷

Key Design Considerations:

- Crosswalks should be located and aligned to maximize visibility of pedestrians and to reflect the desired walk path – thus minimizing walk times
- The enhanced crosswalk treatment should be considered where driver awareness needs to be heightened
- Enhanced crosswalks may be suited to intersections near transit stops and stations, adjacent to schools, seniors’ homes, hospital facilities, and other areas with high pedestrian activity
- Ramps for pedestrians to cross should be universally accessible with reasonable grades between sidewalk and street areas
- Standard crossings may be used at most other locations outside the busiest pedestrian areas of the City and where standard signalized and un-signalized intersections exist
- Pedestrian crosswalk requests must adhere to the policy **C07-018 Traffic Control at Pedestrian Crossing**. This policy provides the following hierarchy of typical pedestrian crossing applications: Standard Crosswalk, Zebra

Crosswalk, Pedestrian Corridor, Active Pedestrian Corridor, and Pedestrian Actuated Signal

Street Typology	Standard Crosswalk Applications	Enhanced Crosswalk Applications
Freeways & Expressways		
Limited Access Arterials	✓	
City Arterials	✓	
Community Arterials	✓	✓
Suburban Centre Arterials	✓	✓
Urban Main Streets		✓
Downtown Commercial Streets		✓
Parkways	✓	✓
Neighbourhood Connectors	✓	
Local Streets	✓	
Industrial Streets	✓	
Shared Streets	✓	

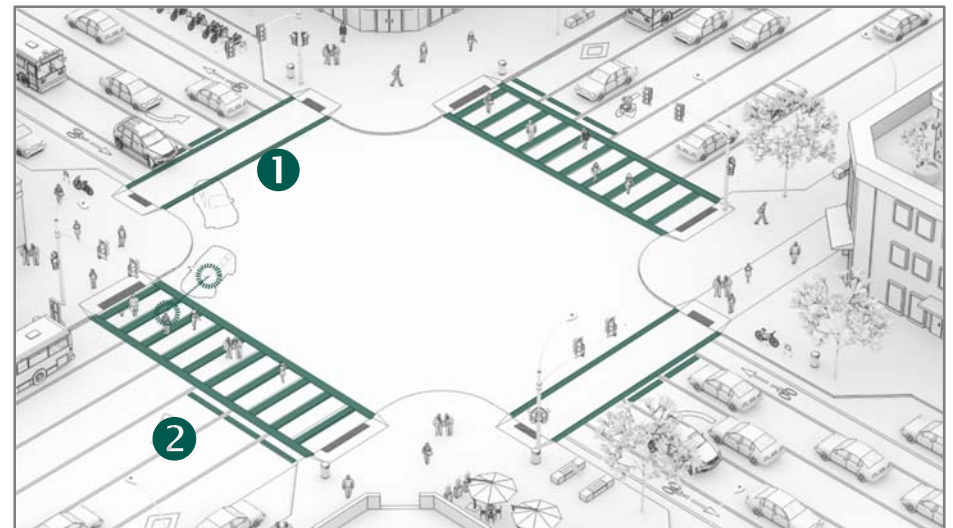


Figure 59 - Standard & Enhanced Crosswalks

TRAFFIC SIGNALS

Intersection traffic signals are installed in Saskatoon when warranted by traffic volumes, pedestrian activity and other considerations. They are typically implemented to manage delays at busy intersections and to reduce overall travel times for vehicles on cross-streets. As such, implementation of traffic signals is generally centred on cross-streets of major roadways such as the city arterial, suburban centre arterial, urban main street and downtown commercial street typologies.

Many streets can be made more complete simply through signal timing and other design measures. Roadway and intersection traffic signals can be designed to achieve many goals – sometimes in support of each other. Signal timings can be arranged to minimize delays for vehicles by optimizing isolated intersection and/or through coordination of green times between signals on major streets. The timing and features of traffic signals can also be designed to accommodate walking and bicycling and increase safety and priority for vulnerable road users. Areas of high pedestrian activity can have automatic pedestrian signals, instead of requiring the button to be pushed. While faster speeds without signals can reduce travel times for automobiles and transit, the comfort and safety for pedestrians and bicyclists cannot be compromised.

Key Design Considerations

- Consider multi-modal benefits and impacts of the design and timing of all signalized intersections
- Synchronized or coordinated signal timings are preferred on most arterial roadways and should be set at or below the posted speed suited for the street typology. Signals on other roadways such as community arterials, urban main streets and downtown commercial streets should be coordinated for 30km/hr to 40km/hr.
- Install bicycle signal-heads for signalized intersection on existing and planned bicycle routes

- Signals on bicycle routes should be timed and designed for bicycle commute trip speeds of 15 to 20km/hr
- Countdown signals for pedestrians should be considered at all signalized intersections with high pedestrian activity
- Consider installing accessible pedestrian signals at all intersections with high pedestrian activity such as on downtown commercial street, urban main street, and suburban centre arterial typologies to help users who are visually impaired
- All legs of a signalized intersection should have a marked crosswalk unless there is no pedestrian access on either corner
- Curb extensions and transit bulbs can be used to reduce the crossing times for pedestrians at signalized intersections and improve overall mobility for traffic in many cases
- Advanced right-turn on red where pedestrian and traffic volumes are highest such as on downtown commercial streets may be warranted
- In areas where pedestrian demands may consume much of the green time for traffic, an advanced right-turn signal for traffic will permit a few more vehicles to get through the area while pedestrians wait.
- Signals and signage prioritizing transit should be implemented on the Red and Blue Line BRT corridors and all timing along these routes should be designed to prioritize buses



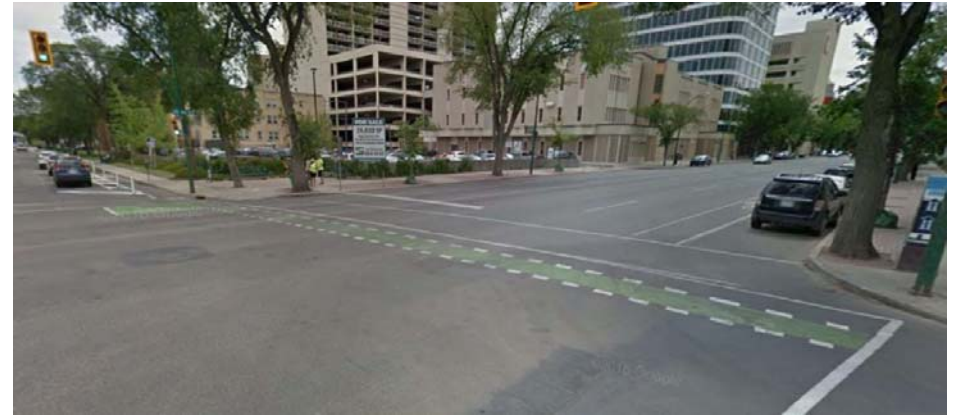
5.3.2 Bicycle Facilities at Intersections

The **Active Transportation Plan (AT Plan)** envisions the implementation of 350km of bicycling facilities across the City over the next 30 years. Bicyclists are among the most vulnerable road users, with many collisions occurring at intersections resulting in significant injuries or fatalities. As illustrated in **Figure 60**, many of the collisions involving bicyclists occur along some of the busiest corridors within the Central Business District, along 8th Street East, 22nd Street West, 20th Street West, 33rd Street West, and Idylwyld Drive.

Good intersection design can make bicycling more comfortable, more attractive, and reduces conflicts between motor vehicles and pedestrians. Some of the principles used to guide the design of bicyclists through the intersection include:

- Providing a continuous and clear route for bicyclists through the intersection
- Ensuring visibility of bicyclists for motorists approaching and entering the intersection using pavement markings and signage
- Managing conflicts with turning vehicles as well as pedestrians crossing at the intersection
- Designing signals to accommodate clearance times for bicyclists through the intersection

This section of **the Guide** outlines specific design treatments for bicycle facilities through intersections that must be addressed when implementing the **AT Plan**. For more detailed information on the design standards for those treatments presented in **the Guide**, the **National Association of City Transportation Officials (NACTO) Bicycle Guide** and **Massachusetts Department of Transportation Separated Bike Lane Planning and Design Guide** provides excellent guidance on designing protected bicycle lanes at intersections.



BICYCLE LANES AT INTERSECTIONS

Bicycle friendly intersections offer continuous, designated lanes through cross-streets for the comfort and safety of bicyclists and the visibility and awareness of other modes. The City has used both dashed pavement markings and coloured pavement markings to delineate the provision of bicycle lanes through intersections.

Key Design Considerations:

- Dedicated bicycle lanes through the intersection should be provided for all major signalized intersections served by protected, buffered and standard bicycle lanes
- When combined with right-turn lanes for vehicles, bicycle lanes should remain on the left side of the turn lane ❶
- Intersection crossing markings such as dashed lines, shared lane markings, coloured pavement markings or a crossride can be used through the intersection to define space for bicyclists ❷
- Parking spaces should be set back from the intersection to limit conflicts with bicyclists
- Bicycle lanes through the intersection may be slightly narrower than the standard bicycle lane width in recognition of space constrains – a minimum of 1.3m ❸
- At roundabouts, bicycle lanes should be designed for bicyclists to either merge with traffic on the approach or use a separated space around the intersection parallel to the sidewalk area
- Signal timing designs must be considerate of travel speeds by bicyclists in terms of minimum green intervals and clearance times to allow safe passage
- Signal loops and detectors for bicyclists at the intersection should be placed before the crosswalk to prompt the green phase in much the same way as an actuated pedestrian signal. In some cases, mounted activation buttons may be used for bicyclists on the curb lane
- Bicycle signal heads should be separated and positioned for best visibility of bicyclists to protect from conflicting movements

- Protected signal phases may be used to eliminate conflict between turning motorists and people bicycling through the intersection

Street Typology	Primary Application
Freeways & Expressways	
Limited Access Arterials	✓
City Arterials	✓
Community Arterials	✓
Suburban Centre Arterials	✓
Urban Main Streets	✓
Downtown Commercial Streets	✓
Parkways	✓
Neighbourhood Connectors	
Local Streets	
Industrial Streets	✓
Shared Streets	



Figure 60 - Bicycle Lanes at Intersections

BIKE BOXES

Bike boxes at signalized intersections offer dedicated space for bicyclists to wait and make turns in protected areas. Bike boxes can either be placed on the near-side approach to the intersection or far-side. The near-side placement of bike boxes ❶ allows bicyclists to move to the front of traffic at a red light in order to make a left-turn. Far-side bike boxes allow for bicyclists to turn left after the signal on the cross-street turns green in two stages to avoid potential conflicts with through traffic. ❷

Key Design Considerations:

- Near-side bike boxes allow bicyclists to comfortably move ahead of traffic before the signal changes to turn alongside left-turn vehicles with the assistance of a turn signal
- Near-side bike boxes should be designed with sufficient depth for bicyclists to comfortably access a space between the stop bar for vehicles and the crosswalk in order to proceed to the front of traffic when the signal is red
- Far-side bike boxes are designed for a two-stage left-turn movement.
- Bicyclists seeing a green light can proceed through the intersection in the bike lane and then wait in the bike box to await the green signal for the cross-street travel.
- Far-side bike boxes can be used with protected and buffered bike lanes on the cross-street or where there is parking on the cross-street
- This protected area provides space for bicyclists to wait before proceeding to complete the left-turn movement in two stages
- When right-turn lanes for vehicles are provided at an intersection, bike boxes can be used to allow bicyclists to proceed to the front of the queue before vehicles turn right

Street Typology	Primary Application
Freeways & Expressways	
Limited Access Arterials	✓
City Arterials	✓
Community Arterials	✓
Suburban Centre Arterials	✓
Urban Main Streets	✓
Downtown Commercial Streets	✓
Parkways	
Neighbourhood Connectors	
Local Streets	
Industrial Streets	✓
Shared Streets	

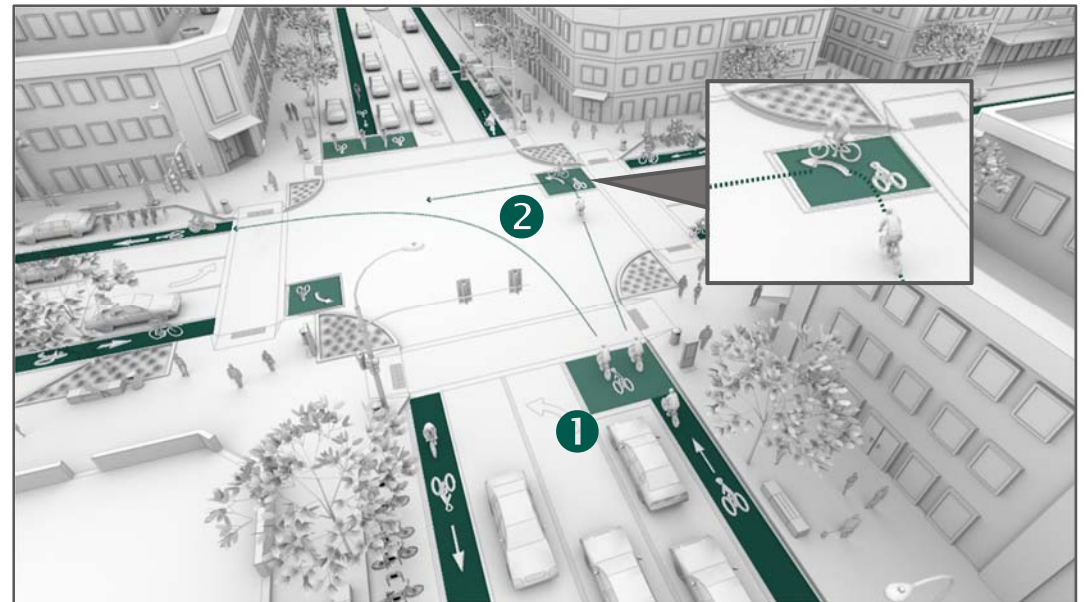


Figure 61 - Bike Boxes

PROTECTED BICYCLE LANES AT INTERSECTIONS

Protected bike lanes provide physical separation from adjacent travel lanes. This can be achieved through a combination of methods including a parking lane, painted medians, flex posts and/or elevated sections. Approaching intersections, bicyclists using protected bicycle lanes must be visible to drivers and other modes. As such, managing the conflicts between bicyclists within protected bike lanes and turning traffic as well as other modes through design is critical to the successful implementation of the **AT Plan**.

Key Design Considerations:

- On the near-side approaching major intersections, the buffered or protected area for bicyclists should continue to the stop bar ❶
- Parking restrictions should be set back from the stop bar to ensure that bicyclists approaching the intersection are visible to drivers ❷
- Pavement markings and coloured asphalt should extend through the intersection to increase visibility and awareness of space for bicyclists, especially for right-turn traffic on cross-streets
- In some cases, narrower width bike lanes may be used to both slow bicyclists through the intersection and to manage available space
- Separate bicycle signal heads should be considered to increase awareness and to manage conflicts with turning vehicles ❸
- Left-turn bicycle movements may be accommodated on the far-side of the intersection with a bike box ❹
- Far-side bus stops should be implemented alongside protected bike lanes without impeding the function of the bike lane behind the bus stop / shelter ❺
- At minor intersections, similar treatments are required to increase visibility, safety, and comfort for bicyclists in protected bicycle lanes

Street Typology	Primary Application
Freeways & Expressways	
Limited Access Arterials	✓
City Arterials	✓
Community Arterials	
Suburban Centre Arterials	
Urban Main Streets	✓
Downtown Commercial Streets	✓
Parkways	
Neighbourhood Connectors	
Local Streets	
Industrial Streets	
Shared Streets	

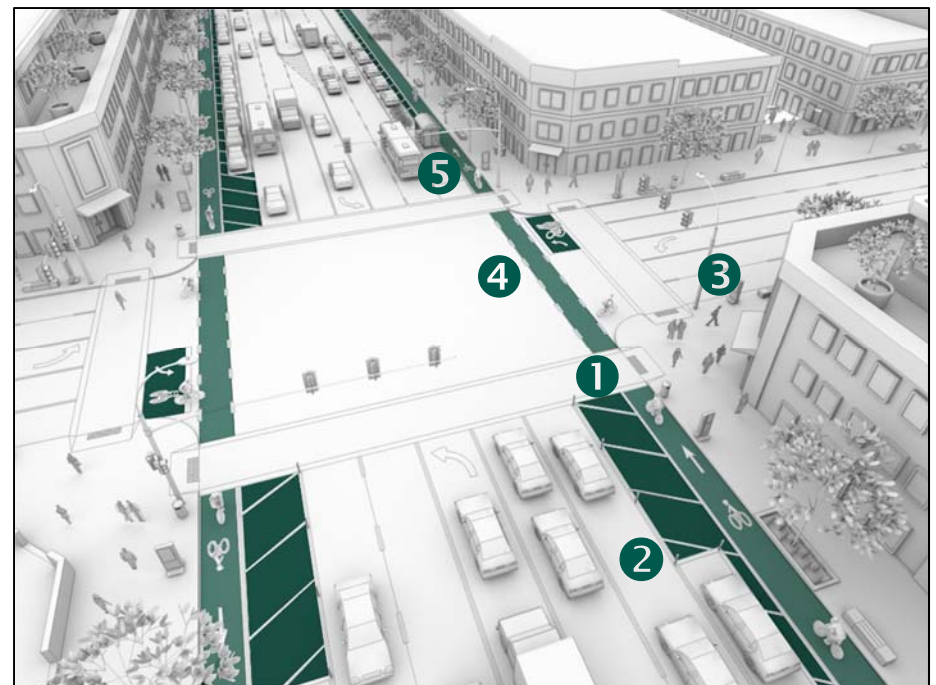


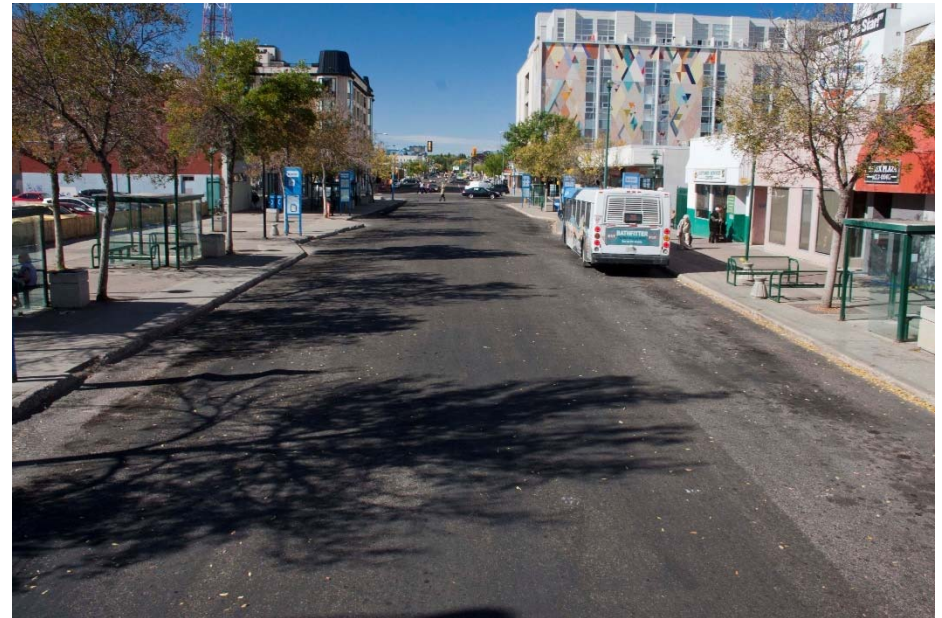
Figure 62 - Protected Bicycle Lanes at Intersections

5.3.3 Transit Accommodation at Intersections

The **Growth Plan** outlines the overall direction for transit in Saskatoon for the next 25 years. Considerable resources will be directed toward providing more frequent, direct, reliable and comfortable transit services for customers by building a Bus Rapid Transit (BRT) network that serves major corridors transforming them into urban ‘main streets.’

Consistent treatments at intersections are vitally important to transit travel time, reliability of transit, and the customer experience. Intersections are where most transit stops occur and interactions with passengers happen, and waiting at signalized intersections and major stops can account for a significant amount of delay experienced by passengers and the transit operator.

This section of **the Guide** addresses key treatments to minimize delays to buses at signalized intersections in terms of locating stops, providing transit priority treatments as well as off-fare collection areas at rapid transit stations that must be integrated with treatments for BRT lanes as described in Section 4.2.3. While transit accommodation is emphasized, it will be important to consider conflicts between transit vehicles and vulnerable travelers such as pedestrians and bicyclists through intersections. Where space at intersections cannot be provided for each mode, safety of the most vulnerable road users must take precedent in the design of intersections.



BUS STOP LOCATIONS

Bus stops are located and designed on a site-by-site basis, and can be used to manage delays to transit customers as well as overall costs of transit operations. Ultimately, their location and design must reflect the needs for transit passengers, minimize operator delays, and the safe operation for other modes. In most cases, bus stops should be located at intersections – preferably the far-side. That way, passengers can easily connect with other transit services using appropriately designed crosswalks.

Key Design Considerations:

- While the number of stops can ensure access to more passengers, their spacing can increase travel times for passengers
- Bus stops should ideally be spaced according to the land uses that surround them and anticipated passenger activity
- In dense urbanized areas of the City, stop spacing may be as little as **400m**, while at least **800m** or more in more suburban areas of the City
- Far-side stops allow buses to utilize signal progression, thus reducing delays at red lights, minimizing conflicts with and delays for right-turn vehicles **1**
- This reduces conflicts with pedestrians that cross behind the bus
- Near-side stops can minimize interference on cross-street traffic when multiple buses arrive at the same time, enabling passengers to board the bus close to intersections and can reduce conflicts to other traffic as pull-outs are available **2**
- Mid-block stops should only be considered in select locations where significant passenger generators are located. When parking restrictions and passenger space is available, mid-block stops can result in fewer conflict points with traffic and other modes at intersections **3**

Street Typology	Primary Application
Freeways & Expressways	
Limited Access Arterials	✓
City Arterials	✓
Community Arterials	✓
Suburban Centre Arterials	✓
Urban Main Streets	✓
Downtown Commercial Streets	✓
Parkways	✓
Neighbourhood Connectors	✓
Local Streets	✓
Industrial Streets	✓
Shared Streets	

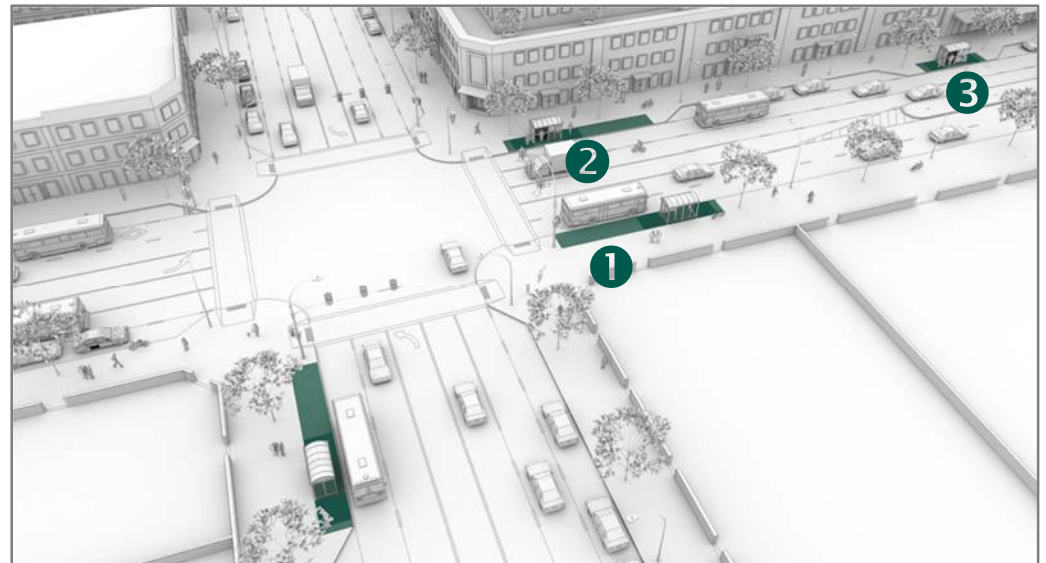


Figure 63 - Bus Stop Locations

TRANSIT PRIORITY AT INTERSECTIONS

In an effort to make transit more reliable and minimize travel times for customers, the City may wish to consider transit priority treatments at all intersections that experience recurring delays, on routes supporting frequent transit services, and on planned Bus Rapid Transit (BRT) corridors. Transit priority treatments may include, but are not be limited to, signal coordination, queue jumpers at intersections, and bus only lanes. In some areas, the City will want to implement bus only lanes in the most congested areas along the Red BRT Line. In other locations with frequent transit services, other transit priority treatments should be considered.

Key Design Considerations:

- Signal timing and coordination that prioritizes frequent and rapid transit corridors should be considered for all signalized intersections on both the Red and Blue BRT Lines
- As a minimum, priority can be given to minimize delays in the direction of the rapid transit corridors. Additionally, green times can be extended for buses as they approach a signal or shortened when buses are waiting at the intersection.
- Bus queue jump lanes at signalized intersections can be used to not only bring transit to the front of the queue past traffic, they can also take advantage of the signal priority treatments noted above
- In urban areas of Saskatoon, right-turn lanes can also be used as a bus queue jump lane with priority through the intersection when the light turns green. ①
- Bus queue jump lanes can be used at intersections with or without a bus stop on the near- or far-side
- Overhead signage is required to support right-turn vehicles only, with the exception of buses ②
- Transit operators must be trained on the different forms of transit priority at intersections and how best to manage interactions with other modes

Street Typology	Primary Application
Freeways & Expressways	
Limited Access Arterials	✓
City Arterials	✓
Community Arterials	✓
Suburban Centre Arterials	✓
Urban Main Streets	✓
Downtown Commercial Streets	✓
Parkways	
Neighbourhood Connectors	
Local Streets	
Industrial Streets	
Shared Streets	

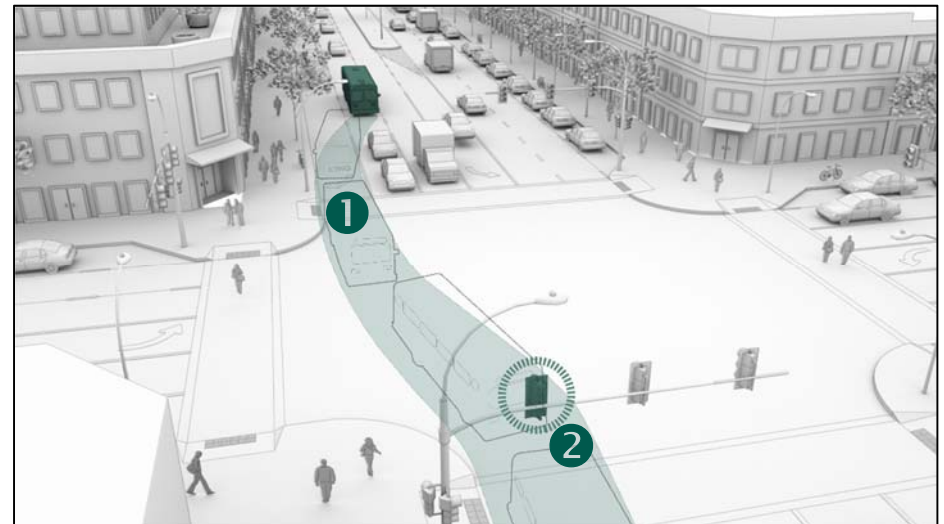


Figure 64 - Transit Priority at Intersections

BUS BULBS

To reduce the time for buses to pull out of and back into traffic, bus bulbs have been used in Saskatoon to keep transit in the curbside travel lane. This reduces delays to transit and can also serve to enhance stop areas and amenities for passengers.

Bus bulbs are similar to curb extensions found at many intersections. In addition to protecting the parking lane and reducing crossing distance for pedestrians, the extension is much longer allowing for more passenger space and other bus stop functions.

Key Design Considerations:

- Most appropriate at far-side stops with higher passenger activity
- Bus bulbs at near-side stops are not preferred as they can interfere with right-turn traffic and impact visibility of pedestrians and bicyclists
- The impacts of bus bulbs on traffic operations and safety at the intersection should be considered based on experience elsewhere in the City
- Bus bulbs should be considered on multi-lane roadways to minimize impacts on other traffic ①
- Bus bulbs are only appropriate where on-street parking is present ②
- Consideration must be given toward conflicts with bicyclists through the intersection as well as pedestrian areas
- Bus bulbs will be most effective for reducing transit travel times as well as driver awareness when used in many locations across a corridor

Street Typology	Primary Application
Freeways & Expressways	
Limited Access Arterials	
City Arterials	
Community Arterials	✓
Suburban Centre Arterials	✓
Urban Main Streets	✓
Downtown Commercial Streets	✓
Parkways	
Neighbourhood Connectors	
Local Streets	
Industrial Streets	
Shared Streets	

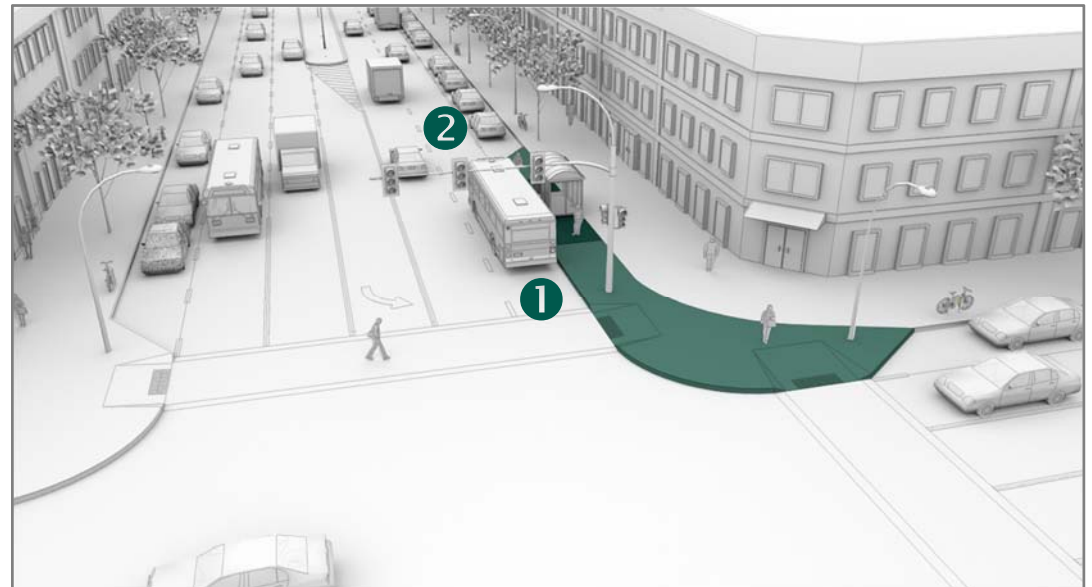


Figure 65 - Bus Bulbs

FARE PAID ZONES (BRT STOPS)

The boarding and payment process for passengers can add considerable time to the journey, and at some of the busiest stops, it can take more than two minutes of dwell time for every 20 passengers boarding the bus. Fare paid zones are designed to reduce the dwell times for buses on planned rapid transit routes. Rather than making a payment or swiping transit passes while entering the bus, passengers can make their payment before entering the fare paid zone at a BRT bus stop and are permitted to enter all doors. This will significantly reduce travel times for passengers and improve effectiveness of increased service levels on rapid transit corridors.

Key Design Considerations:

- Fare paid zones should be concentrated at those stops/stations that are located on the BRT corridors where passenger activity is highest ①
- Sufficient space is required in the design of BRT stations/stops to support entry, fare payment as well as a fare paid zone with passenger seating/waiting and loading/off-loading areas
- In high demand stops, separate fare payment kiosks serving those passengers with and without smart transit cards may be required
- Proof of payment on buses needs to be monitored and enforced to reduce misuse of the prepayment boarding system

Street Typology	Primary Application
Freeways & Expressways	
Limited Access Arterials	✓
City Arterials	✓
Community Arterials	✓
Suburban Centre Arterials	✓
Urban Main Streets	✓
Downtown Commercial Streets	✓
Parkways	
Neighbourhood Connectors	
Local Streets	
Industrial Streets	
Shared Streets	

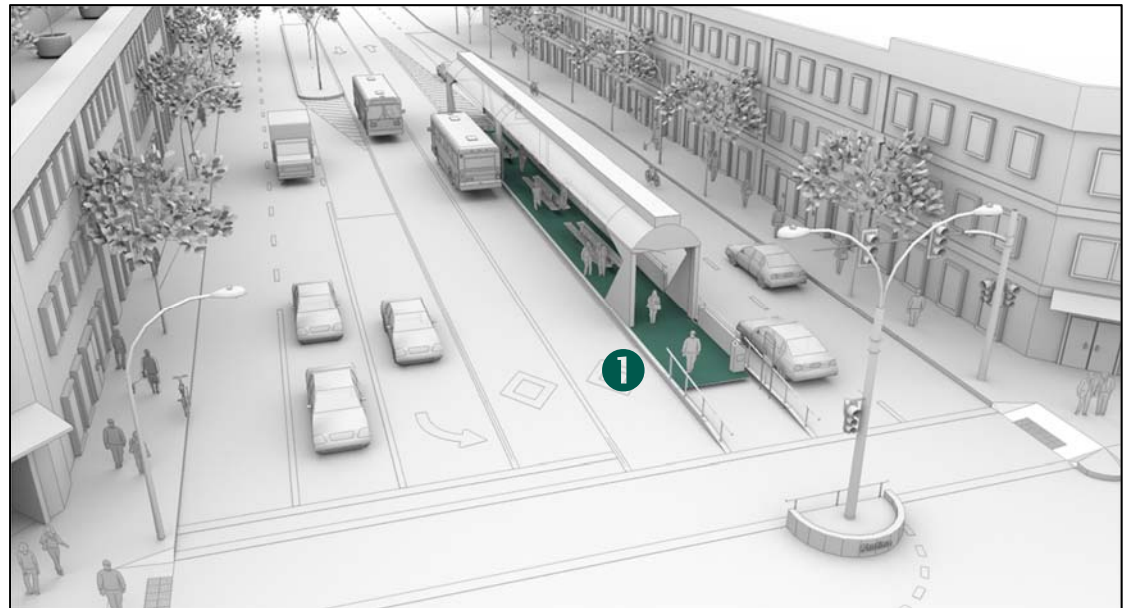
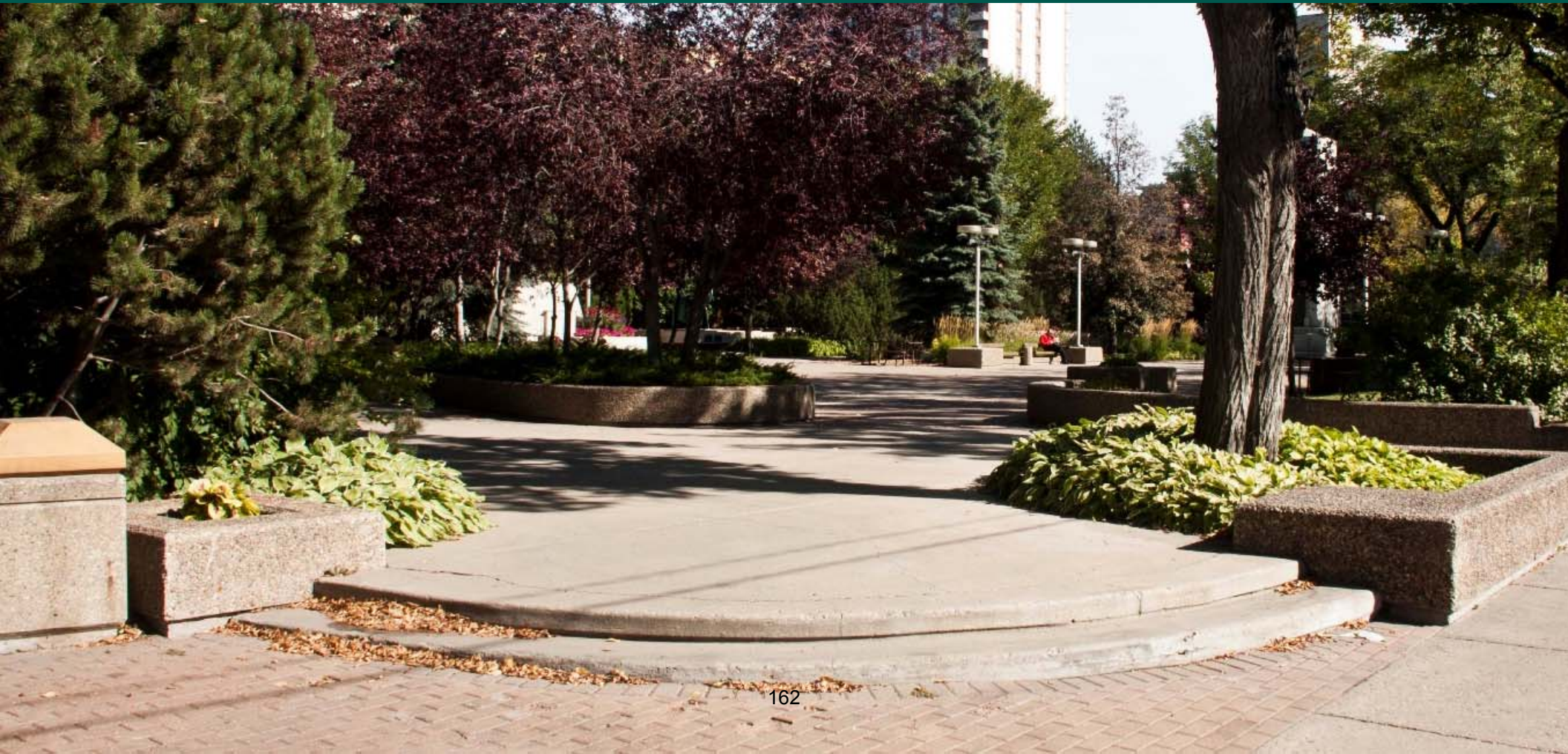


Figure 66 - Fare Paid Zones

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PART 6: Opportunities for Implementation

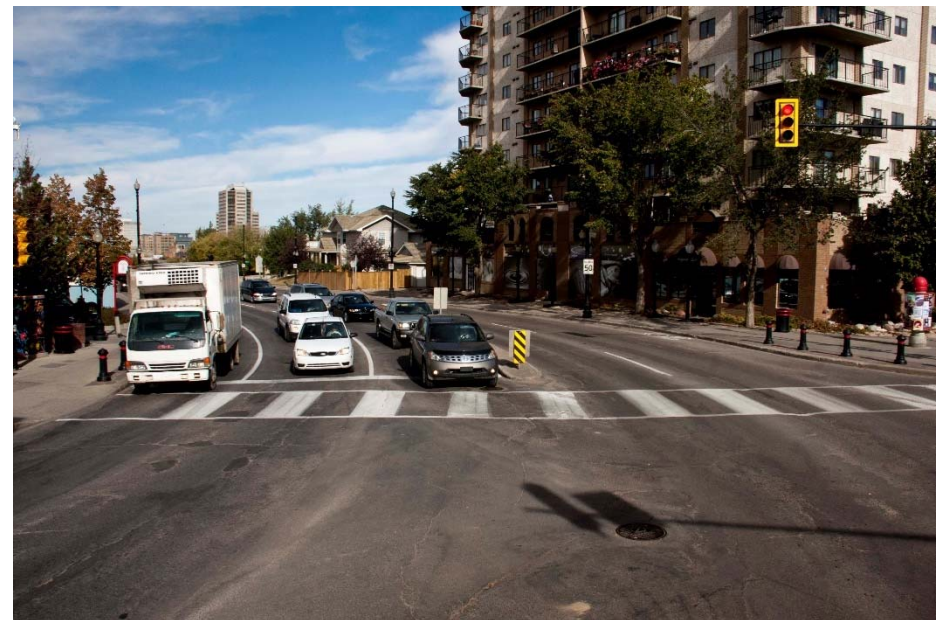


The Complete Streets Policy and Design Guide provides a new way of planning and designing street space. It is as much a process to consider changes to the street environment as it is an outcome to improve balance between travel modes and to ensure that streets are supportive of the communities that surround them. **The Guide** ensures that the area and street contexts today and in the long-term are used to inform any changes to the street space.

The Guide is the starting point to shape conversations about changes to the design of existing and new streets in the City. For example, City staff may use **the Guide** to support ongoing initiatives and discussions with Council. Similarly, Council may use **the Guide** to discuss capital investments with residents and the significance of the changes that will be required to improve choices for travel, making better communities. In the end, **the Guide** must be accessible to the public to broadly understand how city streets in Saskatoon may change in coming years.

Although it will take time to make material changes to city streets, successful implementation of **the Guide** dictates early changes to ‘how’ streets are being planned, designed, constructed, operated, and maintained. It requires interdisciplinary considerations of the context and aspirations for the surrounding areas and for the corridor itself, based on current day conditions and planned changes.

This section of **the Guide** presents actions to begin the implementation of a new process for advancing complete streets. Rather than creating new initiatives centred specifically on complete streets, this section outlines strategies for building complete streets into the activities already undertaken by the City. More importantly, many of the existing processes for planning, designing, operating, and maintaining streets should involve perspectives from different departments. Through the **Growth Plan** process and other City initiatives, much of the ground work toward engaging interdisciplinary thinking has already begun throughout the organization.



AMEND THE DESIGN & DEVELOPMENT STANDARDS MANUAL (<2 YEARS)

The City's **Design & Development Standards Manual (the manual)** provides guidance on typical standards for new streets and treatments for existing streets to support all modes of travel. **The Guide** outlines new treatments that are critical ingredients to realize complete streets across the city.

Beyond the design considerations referred to in **the Guide**, the City should amend **the manual** based on the specific treatments outlined in this document. **The manual** should speak to alternative standards that may be suitable for a specific treatment in various circumstances (i.e. on two lane versus multi-lane roadways if different). **The manual** should be designed for application in both retrofit situations as well as new neighbourhood development. Updates to **the manual** should promote flexibility in dealing with constraints such as right-of-way limitations or potential integration of street uses.

As part of this review process, the City will want to understand the financial implications of incorporating complete street designs in new neighbourhood development areas and should update the levy structure as required to accommodate these new standards.

UPDATES OF STREET TYPOLOGIES (ONGOING)

Complete street treatments will play a vital role in transforming many major roadways in the City into active streets that promote greater integration between land uses and the right-of-way that surround and serve them.

Street typologies referred to in **the Guide** reflect the integrated aspirations for many major corridors in the city. A map of the complete street typologies was created based on the context for area, corridor conditions and aspirations as presented in the **Growth Plan** and other relevant plans developed by the City. The context of a street may change as new plans are developed over time. As such,

the City may wish to refine the typology maps presented in **the Guide** to ensure the process of setting context incorporates the most current planning information that is available, possibly through a living document.

LOCAL AREA PLANS OR TRAFFIC REVIEW PROGRAMS FOR ESTABLISHED NEIGHBOURHOODS (ONGOING)

The City has Local Area Plans (LAP's) for many of the existing neighbourhoods. It will be important to ensure context forms the basis of discussions when neighbourhood residents are considering land use, neighbourhood safety, transportation, and how development can contribute to the evolution of their neighbourhoods.

As part of the LAP or NTR process, stakeholders are given the opportunity to review and analyze key attributes that form a healthy and inclusive community. As part of the Neighbourhood Traffic Review (NTR) process, the community is involved in reviewing the transportation network and identifying traffic concerns and issues. By leveraging the residents' familiarity of community behaviours, land use concerns, and opportunities, the City can then use this information to ensure the appropriate street typologies are applied through the development of neighbourhood plans. These concept plans can then be taken back to the community for review and feedback through the LAP or NTR engagement process that is included as part of the overall community plan with neighbourhood stakeholders.

MAJOR AND MINOR CAPITAL PROJECTS (ONGOING)

Each year, the City implements both major and minor improvements to streets across Saskatoon. Streets in new neighbourhoods are typically designed and implemented by the development community in accordance with the City's **Design and Development Standards Manual**. In existing areas, minor and major capital improvements are planned and implemented to support all modes of

travel. For example, dedicated funds are set in place for annual improvements to sidewalk and bicycling infrastructure. The City should consider incorporating complete streets in the design of major and minor capital projects.

The process would begin with reaffirming the primary needs of the project, considering the broader context, local area needs, and aspirations for a corridor as presented in **the Guide**. The typology of the street presented in **the Guide** may be used to confirm this context and to provide insights on the types of treatments that may be most relevant to the street.

The process would involve expanded participation from other departments in City Hall, but may also involve the community in a broader discussion about the vision and goals for the street including possible treatments that are being considered to achieve these goals. Following completion of these capital projects, the City may consider monitoring how the process went both internally and externally with community stakeholders.

INFRASTRUCTURE REHABILITATION INITIATIVES (<2 YEARS)

The City's annual infrastructure rehabilitation projects include changes to surface conditions and underground utilities. To leverage financial resources, the City may incorporate complete street treatments in the rehabilitation process (e.g. Victoria Avenue Corridor Review project, 8th Street to 11th Street).

This process should determine not only the additional costs to alter the street form to reflect the broader context of the street, but also the incremental cost of incorporating complete street treatments within an existing rehabilitation project. The process may involve the community in a broader discussion about the vision and goals for the street and possible treatments that are being considered to achieve these goals. The City may consider monitoring how the process went both internally and externally with community stakeholders.

The outcomes from these initiatives should be considered in the context of finding economic ways of enhancing streets within Saskatoon at the same time as undertaking necessary rehabilitation projects.

DEVELOPMENT REVIEW PROCESS (ONGOING)

The Development Review process is a natural opportunity for the City to ensure that proposed developments align with **the Guide**. As development proposals are received, Administration could add an additional level of analysis that includes compliance with approved street typologies and design treatments. This could be achieved by evolving the City's current review process (Posse system) to include considerations of **the Guide**.

As developer proposals are received, the Neighbourhood Concept Plan review process must ensure that proposed developments are supportive of the typology and design treatments that have been identified for the respective street. The desired treatments or typologies could be reaffirmed through the Local Area Plan, Corridor Plan or land development process. Further mechanisms to embed the street typology as a consideration within the land development process and/or zoning, should be explored.

The draft and final design submissions put forth by the Developer should include and support the treatments that are included in **the Guide**.

COMMUNITY OUTREACH (ONGOING)

Awareness and understanding of the **Complete Streets Policy and Design Guide** within the community is essential. Investments in outreach will serve to increase awareness of the growing need to balance the allocation of street space to support land use and transportation priorities. With greater knowledge and understanding, staff, residents, and City Councillors will be equipped to provide more meaningful guidance and feedback on community street designs as they are being developed and implemented. **The Guide** and associated street treatments should be visible throughout the community using various forms of digital and direct communications and engagement.

MONITORING COMPLETE STREET APPLICATION (EVERY 2-3 YEARS)

Monitoring of both performance and progress is critical to the implementation of any successful policy. The City may consider monitoring the application of the **Complete Streets Design and Policy Guide** both internally and externally with community stakeholders. Monitoring should assess the strengths and weaknesses of **the Guide**, and whether there has been measurable change by incorporating complete streets into various City departments. This effort could also examine strategies for further enhancing and broadening application of **the Guide**.

OPERATING POLICIES REVIEW (ONGOING)

The Guide outlines elements that will change the form and function of the streets in Saskatoon. Some streets will change quite a bit while others not as much. This will be a gradual shift as scheduled capital projects are combined with street improvements across the City. Policies that the City has in place for operating and maintaining these streets need to be updated to reflect the principles outlined in **the Guide**. This process will have to evolve as the streets in Saskatoon are modified. Snow removal, lane closures, pavement markings, and new construction procedures are just a few of the policies that will need to be reviewed and revised.

SUMMARY OF WHO'S INVOLVED

The change that is required to implement **the Guide** is not simply in how streets are considered and designed. It will require a fundamental shift in terms of who is involved in the process at the City, and when. The successful application of **the Guide** will be reliant on broadening the perspectives and involvement in how streets are planned, designed, operated, and maintained.

Incorporating complete street treatments in existing and new streets will require support from the public and City Council. Applying **the Guide** to different circumstances will require increasing community awareness of complete streets and involvement with the options being considered.

In short, it will require interdisciplinary thinking to incorporate different perspectives and to ensure that the street designs ultimately reflect City plans. There needs to be an organized effort to involve the appropriate departments within the City administration to ensure **the Guide** is successfully implemented.



Saskatoon's Transportation Strategy – Supporting Plans and Policies

