



Park and Ride

Bus Rapid and Conventional Transit Planning and Design Services

City of Saskatoon

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Introduction

The purpose of Park and Ride facilities is to intercept commuters in low-occupancy vehicles prior to their destination and allow them to park their vehicles and transfer to a transit service (or to carpool) to continue their journey. Typically, Park and Ride users have access to an automobile but do not necessarily need, nor want, to use their automobile for the entire trip to their destination. Park and Ride serves as another access mode to transit services, in addition to active transportation (walking or cycling) to bus stops. Park and Ride facilities can be an efficient way for people from areas with lower transit coverage and/or frequency to access the transit system, and thus has the potential to increase the transit ridership base by reaching a larger geographic service area. Additionally, Park and Ride may capture “choice riders” who may choose to use higher order rapid transit, but will avoid using conventional bus transit operating in mixed traffic.

Park and Ride facilities may increase transit ridership and reduce automobile use in areas of a city where management of roadway capacity or parking supply is a strategic issue. In Saskatoon, park and ride can play an important role by increasing the market share of the transit services.



Park and Ride Lot in Calgary

Transit in Saskatoon

The introduction of bus rapid transit (BRT) to Saskatoon will generate new demand for transit with increased reliability and shorter transit travel times. With the introduction of BRT, the City is also reviewing the overall transit network with the goal of making the entire system more effective, efficient and attractive to existing and potential customers.

The BRT routes will form the backbone of the new network, with local routes providing convenient connections to the BRT and broad community coverage. The City is planning for intensification of land use around major BRT stations through the establishment of transit villages. The transit villages and upgrading of pedestrian and cycling infrastructure to access BRT stations in other locations will provide access via active transportation modes.

While local transit, walking and cycling will be the preferred methods for accessing the BRT, there will continue to be people in areas within and outside the city that cannot or choose not to access the BRT by transit and active modes. Park and ride offers an alternative that will allow them to drive or be driven to the park and ride, then use transit for the remainder of the trip.

Park and Ride Objectives

Park and ride facilities will complement Saskatoon’s BRT and the overall vision and goals of the Strategic Plan and Growth Plan by providing additional options for transit travel and reducing the use of private automobiles. Provision of park and ride will add to the attractiveness of public

transit as a choice mode of travel, and will increase transit efficiency by focusing users on the BRT spine of the updated transit network.

The following outlines the primary objectives for park and ride in Saskatoon.

- **Support transit ridership.** The BRT routes will provide frequent and direct service to the most significant travel demand generators in the City, supported by a variety of transit priority measures along the routes to provide time and reliability advantages. Park and ride facilities located at or near BRT stations can provide easy access to the BRT and help generate ridership, particularly by customers that cannot reasonably access the BRT by modes other than private automobile.
- **Reduce parking demand in the City Centre, University and other significant demand generators.** Park and ride can shift parking demand away from areas where land is in short supply or better used for other purposes. A reduction in parking demand in key areas such as the city centre will reduce the need for parking expansion (including expensive parking structures), create the opportunity to more aggressively manage city centre parking to support retail businesses with less emphasis on all-day parkers, and could make land currently used for parking available for other, more productive development.
- **Help shape growth and development opportunities.** Park and ride facilities can be implemented strategically and managed flexibly in response to changing service requirements as Saskatoon doubles to a population of half a million people by 2045. Upon initial assessment, it may appear that a park and ride lot will do little to support land use intensity, walkable neighbourhoods and connectivity. However, in areas such as the periphery of the city where development demand cannot yet sustain the desired future intensity of development, a park and ride can reserve the land closest to the BRT station for future development, while supporting BRT ridership and promoting transit use in lower density areas of the city today.
- **Make efficient use of parking facilities.** Park and ride implementation should seek opportunities for shared use of parking facilities. Many land uses require lower parking requirements during typical weekday work hours when park and ride demand is highest. Churches, recreation centres, theatres and shopping centres generally have high parking demands on weekends and/or evenings, and considerably lower demands during the work day.

Park and Ride Overview

Park and ride can serve a variety of functions. The current focus in Saskatoon is on supporting transit, but park and ride can be used as a method to generate multi-modal trips from many different modes as shown in Figure 1. Park and ride lots can be used as a meeting point for carpooling or as a parking space closer to work to allow for a short bike ride. In many ways, a park and ride lot can serve as an intermodal facility.

This creates an opportunity and a challenge. It is an opportunity because the lot can be used by many people for many purposes that can reduce single-occupant vehicle use of the street network. But it is also challenge if the facility is intended primarily as a way to build ridership as those using the lot for non-transit uses may create capacity issues.

This document will focus on park and ride facilities that connect drivers to BRT.

Types of Park and Ride Facilities

Park and ride facilities can take many forms. The type of facility and its location will depend to a large extent on the transportation options available and the distance to be traveled to reach the park and ride facility. Table 1 provides a brief summary of various park and ride facility types.



Figure 1: Park and Ride Can Serve Many Modes



Secure Bike Storage Lockers. Southland Station Park and Ride Calgary

Table 1: Park and Ride Facility Types

Type	Description	Application
Informal	On-street, open area parking without public investment	Low volume transit stops with excess on-street parking capacity
Joint Use	Shared-use lots through partnerships	In partnership with land uses that have peak parking demand outside of normal weekday working hours
Suburban	Transit collector located on the outer edges of an urban area	Areas with easy vehicle access to support longer-distance trips to the park and ride
Transit Centre	High demand location with multiple transit options	Transit transfer points that allow for direct trips to multiple locations
Satellite Parking	Alternative to on-site parking on the outer edge of an activity centre	Edge of the city centre or entertainment venue where transit acts as a short distance shuttle

Park and Ride Benefits and Challenges

Park and ride facilities provide benefits to customers and the transit system. As previously noted, local transit, walking and cycling are the preferred modes for access to BRT stations, but park and ride provides a means for those that are not well-served by local transit or are unable to walk or cycle. For example, disabled customers without adequate local transit service would benefit from a park and ride facility.



Handicapped Parking Stalls Southland Station Park and Ride, Calgary

A 2004 report produced by the Transportation Research Board describes benefits reported by transit customers¹:

- Provide alternatives to driving alone.
- Concentrate transit rider demand to enable transit service in low-density areas.
- Provide access to rail and commuter bus transit services.
- Provide convenient and safe meeting points for carpool users.
- Reduce vehicle km traveled and thereby reduce vehicle emissions.
- Manage the shift of parking away from the central business districts (CBDs) and other dense activity centers.
- Relieve neighbourhoods of problems caused by informal parking.

There are several other benefits that may also be applicable:

- Providing access to transit to people with mobility or health challenges who have difficulty reaching regular transit service.

¹ Transportation Research Board 2004. Traveler Response to Transportation System Changes Handbook, Third Edition: Chapter 3, Park-and-Ride/Pool

- Facilitating people who may need a vehicle for a portion of their trip (e.g. drop off children to care or school) and wish to continue by transit.
- Providing a level of safe and secure parking for users.
- Attract non-traditional transit customers, particularly in low-density areas.
- Possibly providing a guaranteed parking stall, depending on management strategy.
- Facilitating taxi or school bus connections.

In spite of the apparent benefits of park and ride that is integrated with the transit system, there are detractors that argue park and ride facilities increase total vehicle travel and divert local transit passengers, pedestrians and cyclists to the automobile mode. The Citylab website highlights Dutch research that suggests that park and ride facilities primarily draw customers that would have used another mode²:

- **Abstraction from transit.** People who had once made the entire commute by transit now drove to the transit station.
- **Abstraction from bike.** People who had once made some or all of the commute on their bicycle now drove to the station.
- **Trip generation.** People made more trips in general because the overall cost of transportation was lower.
- **Park and walk.** People parked at the station but walked somewhere nearby and didn't use transit at all — potentially displacing transit riders and disrupting the area parking market.

However, the research indicates that peripheral suburban park and ride facilities do not suffer from the diversion from other modes to the same degree.

Other challenges include:

- Construction and maintenance costs (see Appendix A)
- Operating responsibilities for safety and security
- Overflow parking spilling onto adjacent community streets or business property
- Transit patrons shortcutting through residential areas
- Conflict between vehicles and pedestrians or cyclists who are accessing transit
- Headlight glare or traffic noise intruding onto adjacent residences



Security Review Tuscany Park and Ride Calgary. Source: A Review of Calgary Transit Park and Ride, Calgary Transit

² Citylab 2013. How Park and Ride Encourages Car Use (Eric Jaffe). <https://www.citylab.com/transportation/2013/03/how-park-and-ride-encourages-car-use/5034/>

Park and Ride in the Saskatoon Context

In Saskatoon, the primary benefits are associated with intercepting vehicle trips, and transferring them to transit to reduce parking demand and congestion at key locations. For example, providing park and ride facilities that avoid the need for single occupant vehicle trips across core bridges, or providing the opportunity to use transit instead of private vehicles on congested streets such as 22nd Street, 8th Street and College Drive. The ability to collect customers within low density areas at the periphery of the city also allows frequent transit service to be extended further than would be the case without park and ride, particularly into future suburban centres so that high quality BRT service can be provided before land use density warrants high-frequency service implementation.

Saskatoon will gain the most benefit from park and ride by focusing on facilities that:

- Take advantage of shared use opportunities where existing parking is underutilized during weekday work hours;
- Develop new lots on the periphery of the city to collect potential customers in low density and/or future development nodes.

Site Analysis

Potential sites for park and ride facilities should support Saskatoon’s park and ride objectives. Therefore, the site analysis should consider the following:

- **Support BRT ridership** – Focus on sites that provide direct access to a BRT station.
- **Reduce parking demand in the City Centre, University and other significant demand generators** – Sites that intercept people that currently park in these locations will be a priority.
- **Help shape growth and development opportunities** – Peripheral park and ride facilities will focus on generating ridership in locations that will ultimately become suburban centres.
- **Make efficient use of parking facilities** – Opportunities for shared use will be prioritized.

Potential Demand

Many cities use park and ride with public transit as a means of relieving traffic congestion and parking demand in their downtown core or other areas of travel concentration. It is also common practice to focus on intercepting longer trips to reduce vehicle travel and emissions. As an example, Figure 2 shows the distribution of park and ride trip origins on Edmonton’s Light Rail Transit (LRT) system and demonstrates its achievement in intercepting suburban trips to downtown. Edmonton’s experience is similar to other municipalities where the highest proportions of transit customers using park and ride are in the periphery.

Park & Ride users by Postal code (FSA)

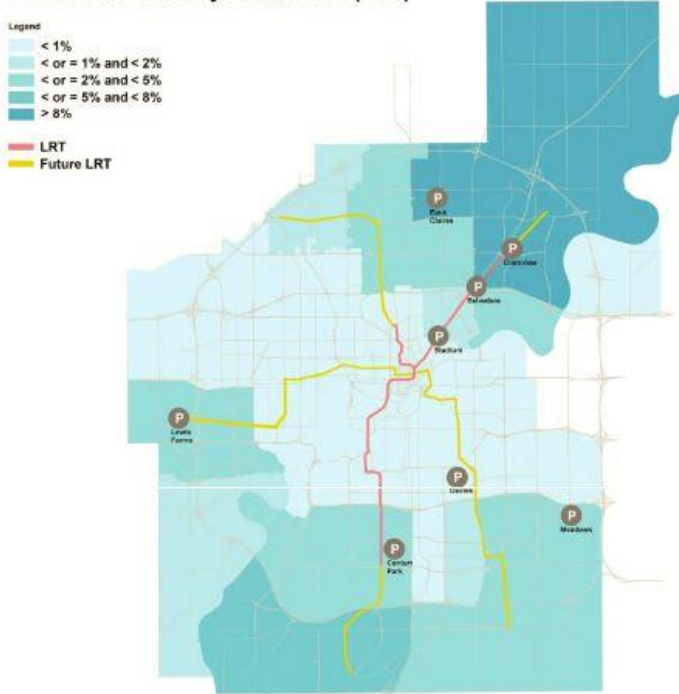


Figure 2: Park and Ride Origins on Edmonton Transit System - Fall 2016

Saskatoon and Edmonton share many physical similarities and distribution of key generators. Bridges are critical congestion points in both cities. Peripheral park and ride facilities are expected to contribute the greatest proportion of new ridership.

Peripheral Park and Ride facilities could be located along the outer reaches of these BRT corridors. Modest facilities could initially be developed and expanded as demand increases. Similarly, the number of park and ride facilities could be increased over time. As the city grows and intensification in the peripheral areas begins to occur, there will be opportunity to redevelop the park and ride lots and potentially reduce the overall size and replace the ridership

generated by the park and ride with new transit oriented development. New peripheral park and ride facilities can then be developed beyond the new development area.

Transit and Park and Ride will also play an important role in the supply of parking for city centre development. A Downtown Parking Strategy prepared for the City in 2016 identified that the increase in transit mode share for travel to the city centre, from the current 10%, to 25% is an important factor in managing parking in the city centre. Based on growth scenarios developed for the Downtown Parking Strategy, the increased transit mode share for city centre trips can potentially reduce the future demand for office-related parking demand by 1,450 to 1,800 stalls, resulting in an estimated capital cost saving for new parking in the city centre of \$72M to \$95M. Provision of park and ride facilities on the BRT corridors serving downtown will be an important contribution to the Downtown Parking Strategy.

No definitive target for the number of park and ride stalls has been established. Rather than developing new large park and ride lots, a strategy that focuses on opportunities to share parking and develop smaller lots in locations where land is readily available will allow the City to monitor success in diverting trips to transit, and the proportion of those trip that use park and ride. Supply can be adjusted as necessary in the future to match demand. Further, by not over-supplying park and ride stalls, the risk of diverting transit access to park and ride from local transit and active modes will be reduced.

Park and Ride Locations

The most important consideration in selecting a Park and Ride site is easy access to BRT and other mainline transit services. The locations must allow universal design principles to be easily applied for movements between the park and ride and transit services. Close proximity of the site to a transit route should help to provide good visibility of the park and ride option to prospective customers. Potential for users to shortcut through adjacent residential areas to access the park and ride site, and locations that have the potential for spill-over parking on residential street should be avoided.

Cost is also a factor in determining the suitability of a site and there are several variables that contribute to this, with availability of land being a prime consideration. Locations where City of Saskatoon owns land along the BRT corridors should be initial considerations. Locations where existing or proposed shared parking might be feasible should also be considered.



Shared Parking at Sunridge Mall, Calgary

The general areas that are candidate locations for park and ride facilities are shown in Figure 3.

Site Identification and Analysis

The following provides an assessment of potential opportunities for park and ride sites in the general areas identified in Figure 3. In addition, two other locations have been added: one at the Shaw Centre as a collection point for vehicles from the north; and another in the vicinity of

Circle Drive and Preston Avenue that is easily accessible from various areas of the city because of the easy access to Preston Drive.

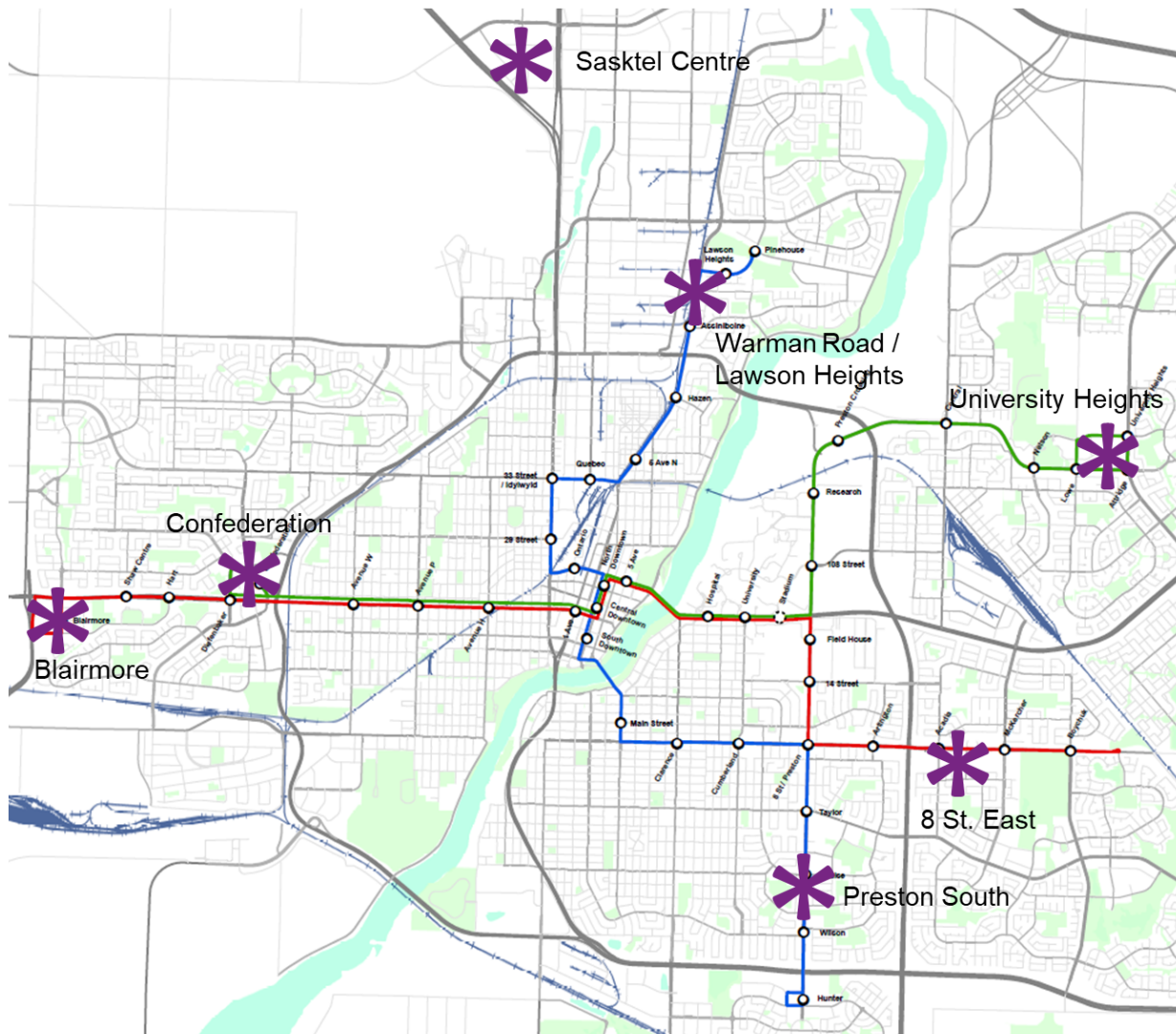


Figure 3: Park and Ride Investigation Locations

Blairmore

There is little or no land available around the Blairmore station to develop a new lot. There are several retail sites in close proximity to the Blairmore station on Betts Avenue. The largest parking lots are associated with Lowe’s and Walmart on the east side of Betts Avenue. Although the large format stores are set back from Betts Avenue, there other retail businesses closer to or fronting on Betts Avenue, meaning the parking stalls closest to Betts Avenue are well-used for retail parking. As this is a relatively new retail development, it is likely that the property owners will be hesitant to give up stalls to park and ride. However, given the location, there is a high risk that the existing retail lots will be used as informal park and ride lots, creating enforcement issues for the site owner. Thus, there may be an opportunity to work with the property owner/manager to designate some street park and ride stalls and assist with enforcement. A

potential joint use park and ride site is shown on Figure 4, but a specific site location would need to be identified in conjunction with the property owner/manager.



Figure 4: Potential Blairmore Station Park and Ride Site

If a joint use site on the retail property cannot be negotiated, a second option may be to develop a new lot on the north side of the Shaw Centre. Joint use of the primary Shaw Centre parking lot is not practical as is often at capacity during peak program times at Shaw Centre in the late afternoon. However, new park and ride stalls on the north side of the building could also be used as Shaw Centre overflow parking during events. Figure 5 shows a potential park and ride site adjacent to the Shaw Centre. Additional stalls could be added on-street. Although this location has potential as a park and ride site, the Blairmore station location is preferable if a joint use agreement can be arranged with the shopping centre property owner/manager because of the better access from Highway 7 and 22nd Street.



Figure 5: Potential Shaw Centre Station Park and Ride Site

Confederation

The Confederation location provides easy access from Circle Drive. However, the development of a transit village at this location presents challenges as a large park and ride lot is inconsistent with the transit village vision. There may be opportunities to incorporate a parking structure into the transit village, or to provide limited parking in some other manner. Regardless, given the focus on creating high density development with strong pedestrian connections to transit, any park and ride at this location would be a lower priority than other locations. Figure 6 shows the existing area around the proposed Confederation station. Any park and ride plans should be developed in conjunction with the transit village planning and the mall management.



Figure 6: Confederation Station Area

Sasktel Centre

The Sasktel Centre is not on a BRT route, but presents an opportunity for a park and ride associated with a local or express route. In the proposed network, there is a route (15) with service between the Sasktel Centre and city centre.

The site includes an expansive parking area that is mostly empty except when there is an event at the Sasktel Centre. As owners of the site, the City of Saskatoon could arrange to have a portion of the parking lot designated for Park and Ride use. The intent would be to serve the site with peak period express service to the city centre and a connection to the BRT for service to the University of Saskatchewan. The park and ride would allow the local express service to intercept traffic from beyond the City of Saskatoon, originating primarily from Martensville and Warman. The stalls designated for park and ride should be easily accessible from Idylwyld Drive and Highway 16, close to the terminus of the transit route. Figure 7 shows a potential site for park and ride at the Sasktel Centre.



Figure 7: Potential Park and Ride Site, Sasktel Centre

Warman Road / Lawson Heights

The Lawson Heights Mall presents an opportunity for a joint use site near the northern terminus of the Blue Line. With easy access from Warman Road, it is potentially an opportunity to collect traffic from the north, as well as from the River Heights neighbourhood. A joint use agreement would need to be arranged with the shopping centre. Like Blairmore, there is a high potential that the shopping centre parking lot will become an informal park and ride lot. There has been recent redevelopment of the Lawson Mall site to introduce new retail units along Primrose Drive in the previously underutilized parking areas. As a result, those areas that would have been ideally suited for park and ride are no longer available. Figure 8 shows a potential site for a park and ride at the mall, but the background photo is out of date and does not show all of the new retail units.

Figure 8 also shows a potential opportunity for a new, small site integrated with the recycling centre and Rusty MacDonald Branch Library. No property acquisition would be required, but the site would need new construction. Access would be via Primrose Drive, and is somewhat removed from Warman Road.



Figure 8: Potential Park and Ride Site in the Vicinity of Lawson Heights Mall

A series of potential locations would use the city-owned land between Warman Road and the railway in the vicinity of the Assiniboine, Hazen and 5th Avenue Blue Line stations. These sites would be long and narrow with some topographic challenges, but have very good access from Warman Road, allowing park and ride connections to the Blue Line BRT for travel to the city centre. These sites could potentially accommodate approximately 25-50 vehicles each. Figure 9 shows the potential site locations.

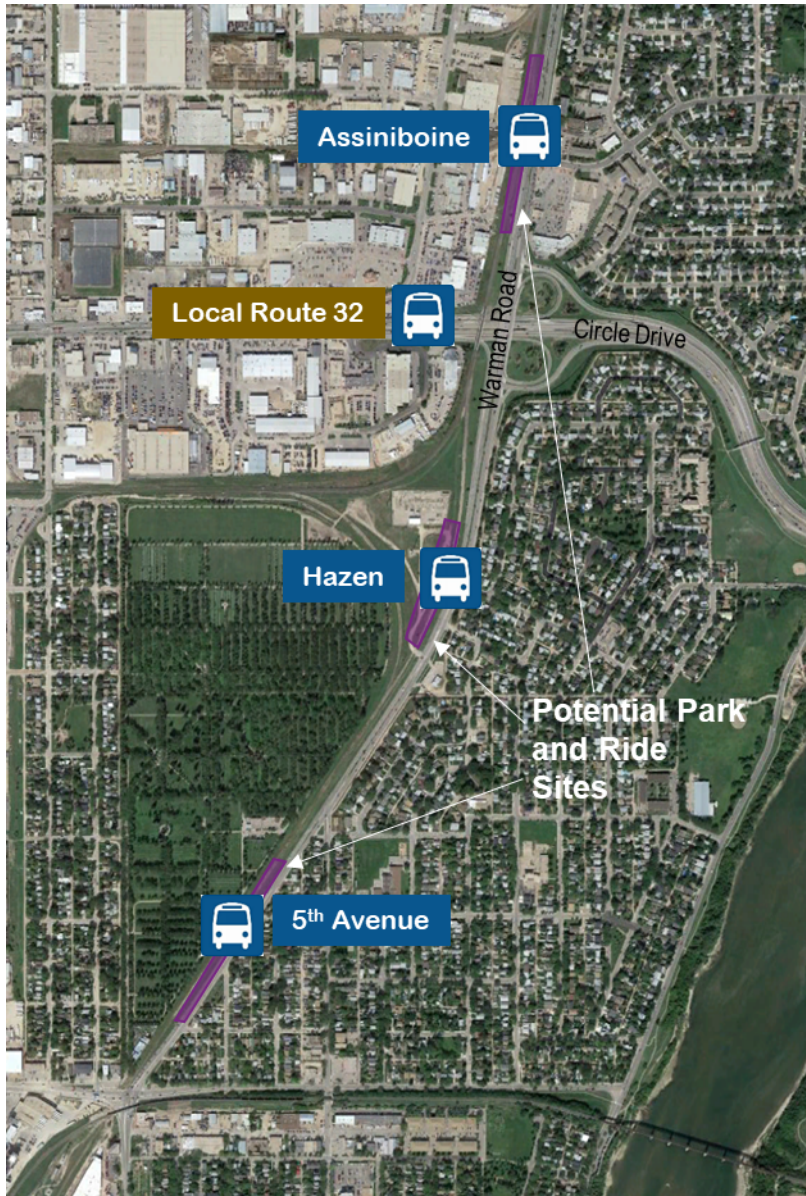


Figure 9: Warman Road / Lawson Heights Potential Park and Ride Sites

8th Street East

The proximity of the Centre Mall to 8th Street and Circle Drive provides easy access from many areas of the City and in particular offers an intercept location for customers from the Holmwood suburban centre area. A park and ride facility at this location would require a shared parking agreement with the Centre Mall owner/manager to designate a portion of the existing parking for transit users. A potential park and ride location on the Mall property could be adjacent to 8th Street, east of St. Acadia Drive. This location is close to the Red Line Acadia BRT station, with easy access from Circle Drive via 8 Street, as shown on Figure 10. There is an existing transit loop at the rear of the Mall that will no longer be required that could form part of the agreement with the mall for sharing the on-site parking.



Figure 10: Potential Park and Ride Site, Centre Mall

An alternate joint use site may also be available at the College Park Mall, in the northwest quadrant of the 8 Street / McKercher Drive intersection. This mall is considerably smaller than Centre Mall, and therefore there is less parking available. A potential joint use park and ride site could be located behind the building closest to the 8 Street / McKercher Drive intersection as shown in Figure 11. This location is not highly used by mall customers and is close to the McKercher BRT station. Like other potential joint use sites, an agreement with the property owner/manager will be required, including identification of an acceptable location on the site. This location would serve customers from the Holmwood and Brighton suburban area well.



Figure 11: Potential Joint Use Park and Ride Site, College Park Mall

Preston South

There are two church sites that are potential joint use park and ride sites in the vicinity of the Preston Avenue interchange on Circle Drive. Church sites are often good candidates for joint use park and ride sites as they usually have high parking demands Sunday when park and ride demand is almost non-existent.

The Faith Lutheran Church site, shown in Figure 12, is located at the intersection of Preston Avenue and Arlington Avenue, near the Wilson Blue Line BRT station. It is located approximately 400m north of Circle Drive, but because of the residential nature of Preston Avenue in this area, careful signage will be required to guide customers to the site.



Figure 12: Faith Lutheran Church Potential Park and Ride Site

Immediately south of Circle Drive, the Circle Drive Alliance Church has a large parking lot that could potentially be a joint use park and ride site. It is close to Circle Drive and can serve as an intercept point for the south east area of the city. It is close to Circle Drive and visible from both Circle Drive and Preston Avenue providing easy guidance to the site. The potential site is shown in Figure 13.



Figure 13: Circle Drive First Alliance Church Potential Park and Ride Site

University Heights

The Erindale Alliance Church is located in the southwest quadrant of the McOrmond Drive / Attridge Drive intersection. This location can intercept potential customers from the northeast portion of the city with easy access from McOrmond Drive. The site is close to the Blue Line Attridge BRT station. Like the other church locations, this site has a lot that is generally unutilized during the periods of highest park and ride demand. A joint use agreement will be required with the church. The site is shown in Figure 14.

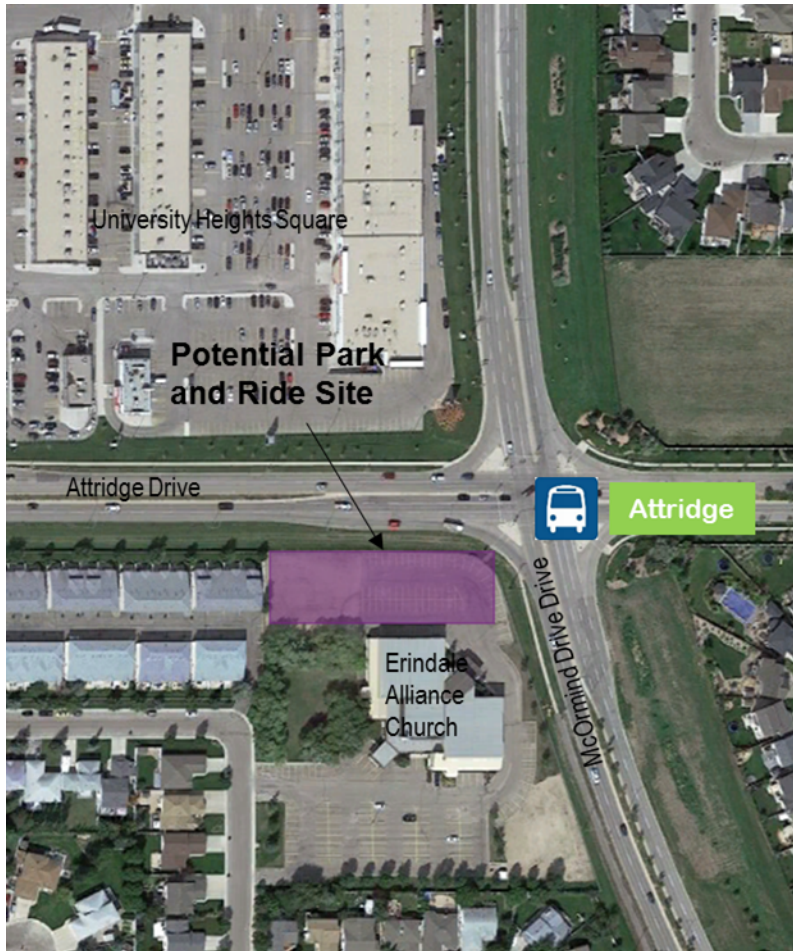


Figure 14: Erindale Alliance Church Potential Park and Ride Site

Recommendations

Park and ride can be effectively integrated into Saskatoon’s Transit Service Strategy to help achieve the Vision of the Strategic Plan and Goal for Transit. Park and ride will enhance the attractiveness of transit service, especially for people with mobility issues who need a vehicle to access transit. Joint use sites provide an opportunity to make efficient use of existing parking and reduce overall capital and maintenance costs for the City. Joint use negotiations will need to create a “win-win” situation for both partners. In some cases, use of underutilized parking are retail sites may attract new customers as park and ride transit customers may be inclined to shop at the park and ride location rather than making another stop elsewhere. The City may also provide support for lot maintenance and security in return for use of the site. The arrangement will be specific to the circumstances of each site.

Note: There have been no discussions with owners of the sites discussed above. These sites have been identified for illustrative purposes only.

Table 2 summarizes the recommendations for each location, in order of priority.

Table 2: Park and Ride Site Recommendations

Location	Recommendations
SaskTel Centre	<ul style="list-style-type: none"> Designate 100 stalls on the SaskTel site as park and ride. Implement a peak hour express route between the SaskTel and the city centre.
Preston Avenue South	<ul style="list-style-type: none"> Initiate discussions with the Circle Drive Alliance Church for a joint use park and ride agreement on their property in Stonebridge. Initiate discussions with the Faith Lutheran Church for a joint use park and ride agreement on their property at Preston and Arlington Avenue.
8 Street East	<ul style="list-style-type: none"> Initiate discussions the Centre Mall property owner/manager to establish a joint use park and ride site at the mall. Approximately 20-40 stalls adjacent to 8 Street and Acadia would be appropriate. Conversion of the existing transit terminal to mall parking should be included as part of the negotiation. Work with the developer of the Holmwood suburban centre to develop a future park and ride in the vicinity of 8 Street and McOrmond Drive.
Warman Road / Lawson Heights	<ul style="list-style-type: none"> Investigate development of park and ride sites adjacent to the future Warman Road BRT stations at Assiniboine Drive, Hazen Street and 5 Avenue. Twenty-five to fifty stalls could be developed between Warman Road and the rail right-of-way at each location. Initiate discussions with the Lawson Mall owner to formalize the current park and ride use at the mall.
22 Street East / Blairmore / Confederation Mall	<ul style="list-style-type: none"> Initiate discussions with the Walmart / Lowes property owner to establish a joint use park and ride facility at this location. Initially consider establishing 20-40 park and ride stalls. Protect for a new park and ride site within the future Blairmore suburban centre. If an agreement cannot be secured at the Walmart/Lowes site, investigate establishing at small park and ride lot on the north side of the Shaw Centre. Initiate discussions with the Confederation Mall property owner to formalize the current park and ride use at the mall.
University Heights	<ul style="list-style-type: none"> Initiate discussions with the Erindale Alliance Church to establish a joint use park and ride facility on their property.

Appendix A: Park and Ride Cost

Cost is also a key factor in determining the suitability of a site and there are several variables that contribute to this. Availability of land is a prime consideration. If the City of Saskatoon already owns land along the BRT corridors these sites could be examined for their potential. Also, if there area locations where existing or proposed shared parking might be feasible these should be considered.

The number of stalls proposed will influence the desirable amount of land and this could be influenced by the shape and topography of the site and the efficiency of potential parking layouts. Estimation of the initial desirable number of parking stalls is more a matter of judgment than computation since this is a new initiative in Saskatoon.

Primary costs are land acquisition, site preparation and paving of the parking stalls and access roads.

Examples of other cost variables include landscaping and drainage where 'green' design may be incorporated, also, lighting and security considering 'crime prevention through environmental design' (CPTED) principles.

Table A1 shows a range of costs experienced in Calgary for a variety of park-and ride-sites. For a five hundred stall site the land and construction costs range from \$15,000 to \$25,000 per stall and operating costs are estimated at \$825 annually.

Table A1: Estimated Land, Construction and Operating Costs of Parking

	Surface Parking	Structured Parking
Land Costs		
500 Stalls	5 Acres \$5 million*	1 Acre \$1 million*
Per Stall	\$10,000	\$2,000
Construction Costs		
500 Stalls	\$2.5 to \$7.5 million	\$25 to \$40 million
Per Stall	\$5,000 to \$15,000	\$50,000 to \$80,000
Operating Costs		
500 Stalls	\$412,000	\$1,037,500
Annual Per Stall	\$825	\$2,075
Per Weekday - Per Stall	\$3.30	\$8.30

* Price for land may vary by location, size, highest and best use and market conditions. Recently land for a new park and ride lot for the Green Line in Auburn Bay was purchased at \$1.05 million/acre

A breakdown of the operating costs is shown in Table A2. Note that Calgary provides electrical power outlets for vehicle block heaters during winter.

Table A2: Average Annual Operating Costs

Item	Surface Parking Stall	Structured Parking Stall
Maintenance	\$500	\$825
Gas + Electric	\$75	\$250
Administration	\$25	\$25
Miscellaneous	\$75	\$150
Depreciation	\$150	\$825
Annual Totals	\$825	\$2,075
Daily Equivalent	\$3.30/day	\$8.30/day