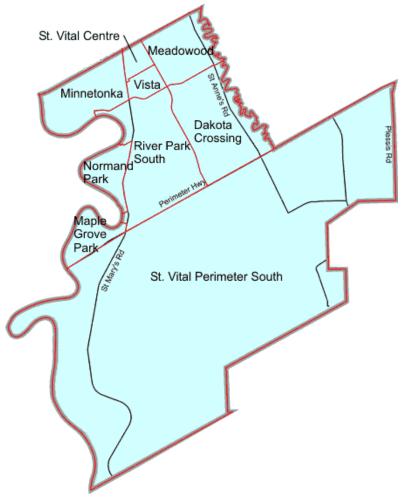
St. Vital/U of M Red River Crossing Backgrounder

The following paper describes the pros and cons of the five crossing locations that have been identified for consideration of a pedestrian/bicycle crossing (or Gondola) of the Red River from St. Vital into Fort Garry near the University of Manitoba Fort Garry Campus. The main benefits of such a crossing would be to shorten distances between South St. Vital and Fort Garry/Fort Richmond. The map shown below gives the locations being considered for the crossing. A physical bridge as well as a gondola are being considered.



Potential Crossing Locations





Map of South St. Vital Census Tracts

Neighbourhood	Population
Minnetonka	4345
Vista	1395
Meadowood	5980
Normand Park	685
River Park South	10815
Dakota Crossing	10265

South St. Vital Census Tract Populations (2006 Census)





Map of Fort Garry South Census Tracts

Neighbourhood	Population	
Waverley Heights	5180	
Montcalm	4610	
Agassiz	450	
Waverley West	0	
Fairfield Park	295	
University	0	
Richmond West	8180	
Fort Richmond	11610	
Richmond Lakes	1795	
Cloutier Drive	210	
Parc LaSalle	2180	
St. Norbert	1300	
Trappistes	0	
Perrault	0	
Turnbull Drive	0	

Fort Garry South Census Tract Populations (2006 Census)



Connectivity within St. Vital

One significant challenge for all crossing zones is a lack of north/south connectivity between the neighbourhoods of Minnetonka and Vista in the north, and the Normand Park and River Park South neighbourhoods in the south. There is no potential route between the Red River and St. Mary's, and nothing between Dakota and the intersection of Nova Vista with Vista (just 175 m east of St. Mary's). The result is that River Road/Nova Vista, a higher traffic/higher speed roadways that will scare off many potential cyclists becomes a necessary connection in cycle routes to the potential crossing zones.

Connectivity with Fort Garry South

Connectivity with Fort Garry South is less of an issue than in St. Vital since King's Drive stays west of all locations being considered for the crossing, and there are a number of access routes through to King's Drive (Allegheny, Chancellor Matheson, Dalhousie, Bison Drive). The implication is that the choice of location does not affect connectivity on the Fort Garry side of the bridge, meaning that the difference in distance saved amongst the various crossing locations really just relates to how much doubling back is required between any two destinations.

Complimentary Facilities

A pathway from the southern end of D'Acy to Sifton then between parking lots K & Q to Princess Royal Walk and Dysart saves about 0.61km (2:02 @ 18km/hr) off the Thatcher/University Crescent route, which should be considered when comparing the pros and cons of the various crossing options..

- Southern end of D'Arcy to Sifton ~ 600m (cost ~ \$240k)
- Sifton to Princess Royal Walk (between parking lots K & Q) ~ 150m (cost ~ \$60k)

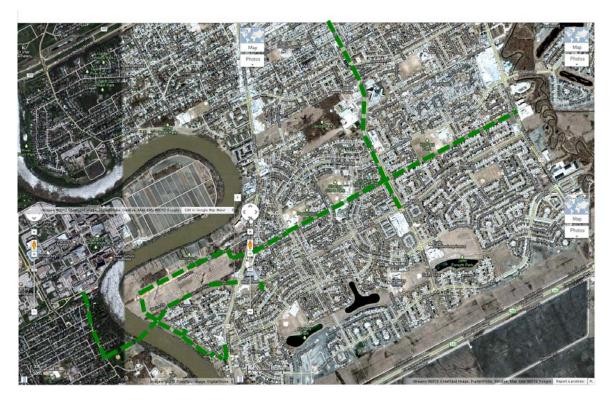


Point to Point Distance Summary

Point to Point Distance Summary Starting Crossing												
Point	Point											
		South. St. Vital Parkway & Charing Cross	Distance Saved	Paddington & Burland Park Trail	Distance Saved	Greendell & St. Mary's	Distance Saved	BGG & Mercy Tunnel	Distance Saved			
University & Dysart	A - King's Park	4.11	1.70	4.12	2.68	4.38	0.02					
University & Dysart	B - Henteleff Park	3.81	2.00	4.29	2.51	5.90	-1.50					
University & Dysart	C - Minnetonka	4.10	1.71	5.09	1.71	2.81	1.59	3.70	0.43			
University & Dysart	D - St. Amant Centre	4.41	1.40	5.40	1.40	3.11	1.29	3.89	0.24			
University & Dysart	E - Southwood Lands	4.62	1.19	5.60	1.20	3.18	1.22	3.95	0.18			
University & Dysart	F - Fort Garry Bridge	5.81	0.00	6.80	0.00	4.40	0.00	4.13	0.00			
Freedman & Kings Drive	A - King's Park	3.10	3.69	3.14	4.64							
Freedman & Kings Drive	B - Henteleff Park	2.75	4.04	3.23	4.55	4.84	0.54					
Freedman & Kings Drive	C - Minnetonka	4.14	2.65	5.13	2.65	2.83	2.55	3.75	1.45			
Freedman & Kings Drive	D - St. Amant Centre	4.49	2.30	5.48	2.30	3.19	2.19	3.90	1.30			
Freedman & Kings Drive	E - Southwood Lands	5.64	1.15	6.61	1.17	4.20	1.18	4.38	0.82			
Freedman & Kings Drive	F - Fort Garry Bridge	6.79	0.00	7.78	0.00	5.38	0.00	5.20	0.00			



Zone A - King's Park



Directness

For the Minnetonka and Vista neighbourhoods, this option provides no benefit in terms of directness. South of Nova Vista, this route will cut off 1.7 km off trips from/to the northwest end of the Fort Garry campus (University & Dysart), and about 2.7km from trips to/from the southern end of the campus (Freedman and King's). In terms of time, that represents a 5:40 and 9:00 minute time savings, respectively.

Comfort

Any routes along Warde or Burland would detract somewhat from rider comfort levels. Any need to travel on St. Mary's would have a substantial negative affect. In all likelihood, that would force routing cyclists north of Van Hull Estates towards the South St. Vital trail.

Connectivity

East of Red River

On the St. Vital side of the river, cyclists would likely connect to Van Hull Way/Warde (higher volume/higher speed) or more likely, via a connection that would need to be built through the southern boundary of Henteleff Park to the South St. Vital Trail (either just south of/through Van Hull Estates or along the river). Some land acquisition may be required to facilitate a connection from Henteleff Park to the South St. Vital trail. Direct access to Burland and Burland Park does not exist, meaning cyclists would have to connect via St. Mary's, or a pathway would need to be built along the west side of St. Mary's from Redview to Burland to improve access.



West of Red River

There is an existing trail between King's Drive and the Red River that could easily be utilized. King's Drive is well connected to destinations on the Fort Garry side of the Red River.

Crossings

St. Mary's would likely need to be crossed at Burland, Warde, or at a newly installed half signal on the South St. Vital Trail right of way.

Year Round Access

On the west side of the Red River, the King's Park trail is sheltered and would provide excellent year-round access. On the east side of the river, the Normand Park trail provides a short access route into sheltered streets.

Social Safety

Social safety concerns should be moderate to good on the Fort Garry side and good on the St. Vital side.

Park & Peddle Potential

King's Park, Dakota Community Club on weekdays or schools along the South St. Vital Trail on weekends.

Transit Connectivity

Poor. Transit users will have to walk a considerable distance to get to either the eastern or western ends of any King's Park crossing.



Zone B – Henteleff Park



VAN HULL ESTATES



Directness

From the intersection of the South St. Vital Trail and Charing Cross, this route will shave 4 km (13:20 @ a no sweat pace of 18km/hr) off trips to/from the south end of the Fort Garry campus (Freedman & King's), and 2km (6:40) off trips to/from the north end of the campus (University & Dysart). The intersection of St. Anne's Road with the South St. Vital Trail would be within a 15 minute ride of the Fort Garry campus via a route along the South St. Vital Trail. North of Nova Vista, this option provides no advantage to destination at the northern end of the campus, and little advantage for destinations at the south end of the campus, saving only 0.5km (1:40).



Connectivity

East of Red River

Connectivity east of the Red River is excellent south of Nova Vista via the South St. Vital Trail, with the Dakota Trail adding good connectivity to the Meadowood neighbourhood east of Dakota. For those in the Vista neighbourhood, Dakota and Sandrington would provide the connection, which may not save much distance/time. For residents in the Minnetonka neighbourhood, the Fort Garry Bridge would remain the most likely route.

West of Red River

The Henteleff crossing option will land cyclists directly into the Fort Garry Campus on a 30km.hr roadway near the student residences and in close proximity to University Centre. This should provide reasonable connectivity to King's Drive, the University walkways, and the pathway along the southern boundary of the campus. A counter flow bicycle lane on Maclean might be required to add connectivity to Dafoe.

Crossings

Ideally, St. Mary's would be crossed via a newly installed half signal either at the existing Henteleff Park trailhead (460m north of Warde) where a cut through connects to Alburg, a local street with access to the St. Vital Trail, or at the western terminus of the South St. Vital Trail (250m north of Warde). Any future extension of Warde across the Seine River should also look to improve connections to the South St. Vital Trail.

Year Round Access

The established forest on the east side of this crossing should provide a fairly sheltered environment for pedestrians and cyclists.

Route Comfort

North of Nova Vista

For cyclists coming from the east side of Dakota, there are several low stress options (Dakota, Hawkins/Polydore/Dakota Park/Charing Cross). West of Dakota, cyclists would have to travel along Nova Vista and Sandrington, which might put some potential cyclists off. It is assumed that most residents of Minnetonka would continue to use the Fort Garry Bridge.

South of Nova Vista

With the main access on the east being an existing separated trail, this option provides the highest comfort level for cyclists. Aesthetics on this route would be superb.

Social Safety

This route does necessitate travel along about 1.2km of trail west of St. Mary's to reach the bridge landing, however, three existing cut throughs into Van Hull Estates provide frequent escape routes, and the bridge itself would he highly visible from the student residences on the Fort Garry side of the river.

Park & Peddle Potential

Dakota Community Centre would be roughly 3.5 km (11:40 @ 18km/hr) away from University Centre by bike, and could provide an excellent weekday park & peddle option. The many schools along the South St. Vital Trail could provide weekend park & pedal options within a 10-15 minute ride of the Bomber Stadium. A multi-seated bicycle (such as a Surrey or the Heart & Stroke Big Bike in the pictures below) might also be



a fun option, especially transporting transit riders or park & peddle patrons to the stadium, and it might provide a sponsorship option as well.





Transit Connectivity

While there is excellent transit connectivity off St. Mary's at this site, the 20+ minute walk from St. Mary's to the campus would likely limit users to cyclists. A bicycle share system could prove popular to improve access to the campus.



Trails in Natural Settings

Bridges



Asphalt Trails







Concrete Trails within a Natural Setting











Zone C - Minnetonka



Directness

The Minnetonka option will save cyclists about 1.6-1.7km (5:20-5:40 @ 18 km/hr) on trips to the north end of the Fort Garry Campus (Dysart & University), and about 2.6 km (8:40) on trips to the south end of the Fort Garry Campus (Freedman (King's). Trips originating both north and south of Nova Vista achieve comparable savings in distance. Trips to central areas on the campus would save additional travel time.

This option also provides some benefit to users of the Bishop Grandin Greenway who connect under Bishop Grandin via the Mercy tunnel (on the Glen Meadows right of way), cutting off 0.43 km (1:26) on trips to the North end of the campus (University & Dysart) and 1.45km (4:50) on trips to the south end of the campus (Freedman & King's).

Connectivity

East of Red River

On the St. Vital side of the river, there is good connectivity into the Minnetonka neighbourhood, but the St. Mary's crossing would be problematic. Nova Vista.River/Road would likely be the best crossing option, with most cyclists approaching from Vista or Sandrington.

West of Red River

A pathway connection (~620 m) would have to be built from the bridge landing to Saunderson and Dysart, but this should be fairly easy to build. Dysart and Saunderson, which sit on top of the protective dike, will need to be used as the cycling route beyond that point. As they have 30km/hr speed limits, this should be ok.

Crossings

St. Mary's would likely have to be crossed at Nova Vista/River Road or Meadowood. There is potential to add a half signal at Greenwood/Greendell, which is located roughly 200m from existing traffic lights at Meadowood and Nova Vista/River Road, but it might be difficult to convince the city to install at half signal at that location.



Year Round Access

Unless River Road is cleared curb to curb in winter, its effective width is quite narrow in winter. Parking on River Road adds to this. On the Fort Garry side of the river, pedestrians and cyclists should be sheltered somewhat by the trees along the dike, although the open fields could be an issue.

Route Comfort

The main issue with comfort at this site is that it necessitates travel on Nova Vista and River Road, which many cyclists will avoid as too high volume and too high speed. A potential Greenwood/Greendell routing could be made more bicycle friendly by adding a half signal at St. Mary's (and potentially Dakota), and would eliminate the need for travel on Nova Vista and River Road.

Social Safety

On the St. Vital side, this option provides excellent social safety properties, but on the Fort Garry side, the 620m connection between the bridges landing and Saunderson is quite isolated.

Park & Peddle Potential

Minnetonka School and St. Amant Centre could provide potential park & peddle or park & walk locations.

Transit Connectivity

Transit could be routed down River Road; however that still leaves a 1km (15 minute) walk to the nearest building on the campus.



Zone D - St. Amant



Directness

The St. Amant option saves cyclists 1.3-1.4 km (4:20-4:40) on trips to the north end of the campus (University & Dysart), and 2.2-2.3km (7:20-7:40) on trips to the south end of the campus (Freedman & King's). Trips to central areas on the campus would save additional travel time.

This option also provides some minor benefit to users of the Bishop Grandin Greenway who could connect under Bishop Grandin via the Mercy tunnel (on the Glen Meadows right of way), cutting off 0.24 km (0:48) on trips to the North end of the campus (University & Dysart) and 1.3km (4:20) on trips to the south end of the campus (Freedman & King's)

Connectivity

East of Red River

On the St. Vital side of the river, connections to a St. Amant Centre crossing site would be via River Road or Woodlawn. River Road has fairly high traffic volumes and speed, which might put off some potential riders.

West of Red River

A bridge built in this are would likely land near the intersection of Dysart and Saunderson (which sit on top of the protective dike) which will need to be used as the cycling route beyond that point. As they have 30km/hr speed limits, this should be ok.

Crossings

St. Mary's would likely have to be crossed at Nova Vista/River Road or Meadowood. There is potential to add a half signal at Greenwood/Greendell, which is located roughly 200m from existing traffic lights at Meadowood and Nova Vista/River Road, but it might be difficult to convince the city to install at half signal at that location.



Year Round Access

Unless River Road is cleared curb to curb in winter, its effective width is quite narrow in winter. Parking on River Road adds to this. On the Fort Garry side of the river, pedestrians and cyclists should be sheltered somewhat by the trees along the dike, although the open fields could be an issue.

Route Comfort

The main issue with comfort at this site is that it necessitates travel on Nova Vista and River Road. Some cyclists might find traffic volumes and speeds on this section too high for their desired comfort level. A potential Greenwood/Greendell routing could be made more bicycle friendly by adding a half signal at St. Mary's (and potentially Dakota), and would eliminate the need for travel on Nova Vista and River Road.

Social Safety

Visibility would be excellent on both sides of the river, which would offering a very safe route for users.

Park & Peddle Potential

St. Amant Centre and Minnetonka school would provide the best park & peddle/park & walk options.

Transit Connectivity

1100m (15 minute) walk from St. Amant Centre to University Centre,



Zone E - Southwood Lands



Directness

This option offers the least benefit in terms of distance saved, cutting off just 1.2km on trips to the north end of the campus (University & Dysart), with a similar savings in distance for trips to the south end of the campus (Freedman & King's).

Connectivity

East of Red River

On the St. Vital side of the river, cyclists would connect via Settlers Road and River Haven, or potentially on a pathway to be built from St. Vital Park to St. Amant along the flood dike. Without improvements to the Greendell/Greenwood crossing, this option requires a substantial amount of travel on River, which would act as a deterrent for many potential cyclists because of its higher speed and traffic volumes.

West of Red River

Development of the Southwood lands should include excellent access into the campus and then on into Chancellor Matheson and King's Drive.

Crossings

An improved crossing of St. Mary's at Greenwood/Greendell that included a half signal would seem to be an essential requirement for this option to eliminate the need for travel on River Road.

Year Round Access

Unless River Road is cleared curb to curb in winter, its effective width is quite narrow in winter. Parking on River Road adds to this.



Route Comfort

The need to travel on River Road would be the main drawback for to cyclists comfort. High speeds and traffic volumes on this roadway will turn many potential cyclists off.

Social Safety

The St. Vital side for a Southwood lands bridge would provide fairly decent visibility, as would the Fort Garry side once the surrounding lands are developed.

Park & Peddle Potential

St. Amant Centre and Minnetonka school would provide some potential for Park & Peddle/Park & Walk sites, but the Minnetonka and St. Amant sites would provide better access to those locations.

Transit Connectivity

Poor. The nearest bus stop would require a substantial 1.5 km (20+ minute) walk to reach the campus. The new stadium would be further away.

