Galloping Goose Trail User Count

User preferences: paved vs. unpaved trail surfaces

User counts were conducted to research behaviour and preferences along a section of the Galloping Goose trail adjacent to the Railyards development, southeast of the south end of the Selkirk trestle. In particular, the counts recorded whether cyclists and pedestrians chose to travel on the paved (asphalt) or unpaved (crushed basalt) sections of the trail along a section which is designed with a 2m wide crushed basalt 'pedestrian' lane abutting a 4m wide paved 'bicycle' lane. *The evidence collected shows an overwhelming preference for the paved surface and raises questions about a design that allocates 33% of the trail cross-section to only 6% of users.*

Key findings

- **Approximately 75% of trail users are cyclists and 25% pedestrians.**
- **94% of total trail users choose to travel on the pavement.**
- **76% of total pedestrian users choose to travel on the pavement.**
- **All users tend to intuitively walk/cycle on the right of the travel lane.**

Research methodology

Trail user counts were conducted over three 2-hour time periods on Thursday, July 21, 2005. These periods were (A) 7:30am–9:30am, (B) 11:30am–1:30pm and (C) 3:30pm–5:30pm. Times were chosen to reflect anticipated heaviest usage by cyclists and pedestrians (morning + evening 'rush hours' & lunch-time), in order to obtain a clear picture of usage patterns.

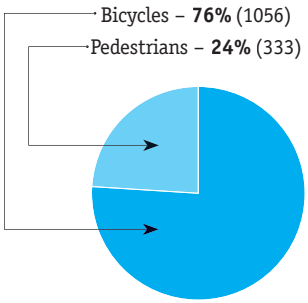
The weather on the observation day was clear, hot and sunny.

Observation was conducted at the Trans-Canada Trail kiosk at the south end of the Selkirk Trestle, a position that provided clear sightlines along an approx. 100m section of the Galloping Goose trail between the kiosk and Central Spur Rd. Although there was an initial concern that cross-over from one type of trail surface to another within the 'test' section would confuse the data, virtually all users made a clear choice of one surface or another.

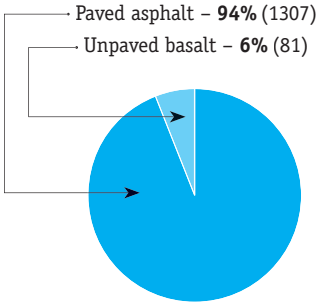
Counts were recorded separately for each time period, for pedestrians and cyclists, and for northbound and southbound travellers. The accompanying charts reflect separate and aggregate totals.

While the great majority of users were either pedestrians or cyclists, a small minority of users (+/- 1%) included wheelchairs, electric scooters, inline skaters and skateboarders. These counts were added to the modes of travel with which they are normally associated (e.g. wheelchairs with pedestrians, inline skaters with road users/cyclists).

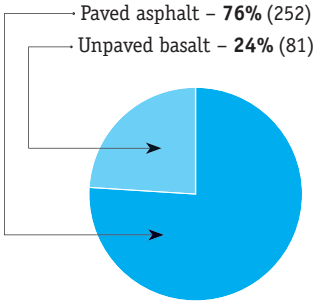
Total bicycles + pedestrians *(n=1388)*



Total All Users
Paved vs. Unpaved *(n=1388)*



Total Pedestrians
Paved vs. Unpaved *(n=333)*



Site description

- The observed section of multi-use trail runs approximately 100m between the Trans-Canada Trail kiosk at the south end of the Selkirk trestle and Central Spur Rd. in the Railyards property.
- Through this section, the trail is bordered by a treed, earthen slope that drops down a short embankment to the water's edge on the east side and is bordered by a fence line and townhouses on the west side.
- The trail cross section consists of 2m of crushed basalt, on the east side of the trail only, which directly abuts a 4m wide paved asphalt section.
- There are no trail markings.

Discussion of Results

Two key learnings that emerged from the recent (Thursday, July 21, 2005) trail counts: users chose to travel on pavement when given the side-by-side option of using paved vs. unpaved surfaces, and users prefer to travel on the right side of the trail in their direction of travel.

This conclusion is solidly supported by the observation that fully 88% of southbound users chose to travel on pavement and, perhaps more tellingly, almost twice as many (64% vs 36%) northbound users chose to travel on the paved section rather than the unpaved section, even though this put them closer to passing cyclists.

The percentage of pedestrians choosing paved or unpaved trail sections remained constant during the count periods despite differences in user volume and type of use. It may have been expected that heavier bicycle traffic in the morning and late afternoon would have encouraged more pedestrians to use the unpaved trail, but this was not the case. Conversely, lighter bicycle traffic during the midday period didn't draw more pedestrians, as a percentage, onto the paved section. Clearly, people are simply making a choice based on their surface preference.

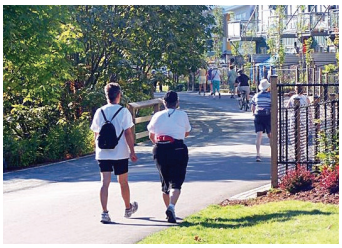
Conclusion and Recommendations

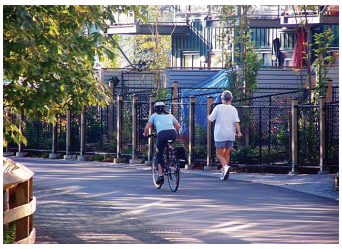
The current trail design, as a model for use along urban sections of the Galloping Goose, is not being used as intended and should be modified to reflect actual user preferences and safer options. The following should be taken into consideration:

- Having two 2-way trails directly abutting each other creates confusion and should be avoided in favour of pedestrian space incorporated into single southbound and northbound travel lanes.

- The choice of trail surface should reflect actual usage. As such, this research suggests that approximately 8–10% of trail cross-section should be left unpaved. In practical terms, this may be implemented as a trail section that is 100% paved or that includes no more than a 1m unpaved 'shoulder' in each direction of travel. As observed, unpaved shoulders are going to tend to force more users into the paved travel lanes thereby increasing congestion and reducing safety.

- Overall, the objective of trail design should be to provide adequate operating space that allows pedestrians, cyclists and other users to share the path comfortably and safely. A trail design that responds to the intuitive behaviour of users and, ultimately, adopts the Greenways corridor width of 7m and is enhanced with pathway markings and etiquette signage will result in a facility safely enjoyed by all.





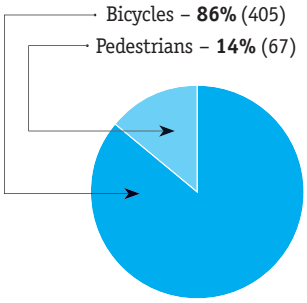
Most users prefer to travel on the right. Consequently, fully 88% of southbound pedestrians travelled on the paved section of the trail.

Only 19% of southbound pedestrians chose to travel on the unpaved section even though this is designed for 2-way use. Virtually all (99%) of cyclists use the paved section for travel.

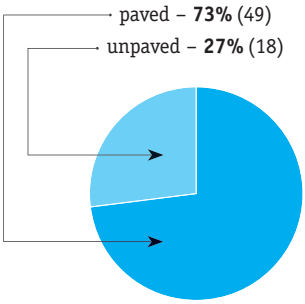
Although few in number during the trail count periods (+/– 1%), all wheelchairs and electric scooters chose to use the paved section of the trail.

Appendix

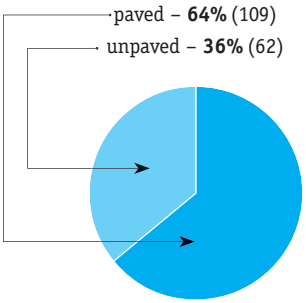
Time period A (7am–9am)
Total bicycles + pedestrians *(n=472)*



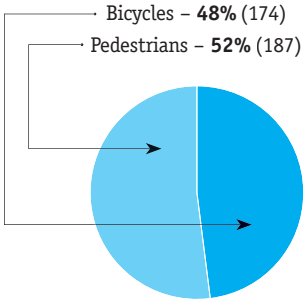
Time period A (7am–9am)
Pedestrians: paved vs unpaved *(n=67)*



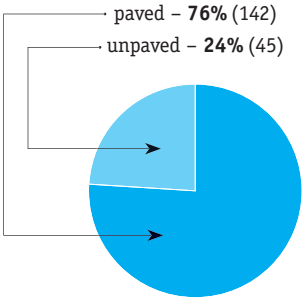
Total Pedestrians Northbound
Paved vs unpaved *(n=171)*



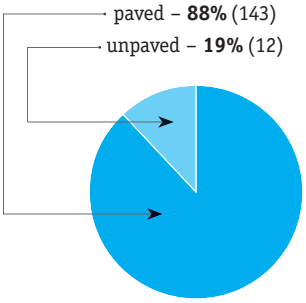
Time period B (11:30am–1:00pm)
Total bicycles + pedestrians *(n=360)*



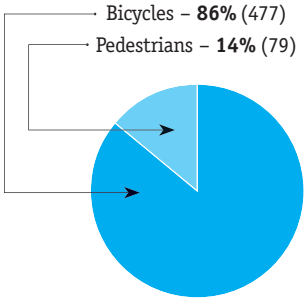
Time period B (11:30am–1:00pm)
Pedestrians: paved vs unpaved *(n=187)*



Total Pedestrians Southbound
Paved vs unpaved *(n=162)*



Time period C (3:30 – 5:30pm)
Total bicycles + pedestrians *(n=556)*



Time period C (3:30 – 5:30pm)
Pedestrians: paved vs unpaved *(n=79)*