



Paths for People

Towards a better policy for multi-use trails or pathways in Edmonton

June 2, 2017

The City of Edmonton should modernize its policies that govern its multi-use trails in order to reduce conflicts, attract more users and better adhere to its long-term transportation goals. The most efficient way to do this is to adopt a policy that commits to designing and building all new hard-surface, off-road routes that are closed to motor vehicle traffic (multi-use trails) at a higher standard than they currently are, as well as retrofitting existing infrastructure to these standards.

This policy document examines the current situation, provides a draft policy for the City of Edmonton, and includes evidence and research on why this policy shift makes sense.

BACKGROUND

Edmonton has more than 160 kilometres of hard surface, multi-use trails. These trails run from the edges of Edmonton's suburbs to its downtown core and users include walkers, joggers, cyclists, pet owners, wheelchair users and rollerbladers of all ages. The trails link to city roads, sidewalks, parkland and utility rights of way. In total, the network forms the spine for what people refer to as Edmonton's active transportation infrastructure.

These trails form a unified system but vary in quality, design and intended use. Some are paved, marked with directional lanes and are up to three-metres wide; others are narrow and surfaced with gravel; still others are concrete sidewalks not designed for cyclists at all as they are only 1.5-metres wide, yet nonetheless they are classified as 'shared use.'¹ Some of these trails fall outside of Edmonton's classifications altogether, such as those flanking the High Level Bridge. These are currently just 2.8-metres wide on the west side of the bridge and 2.3-metres on the east side, and they are flanked by tall steel barriers on either side. As a result, these multi-use trails feel more dangerous than any other shared use areas in the city as they force users traveling at vastly different speeds into confined spaces.

Similar to its trails, the City of Edmonton's 2015 roadway design guidelines is not unified or as developed as many other Canadian jurisdictions. In Edmonton, the city has four design classes for 'walkways and trails': Concrete walkways that are 1.5-metres wide; concrete walkways wider than 1.5 metres; shared use path that are three-metres wide; and finally, gravelled walkways.² Guidelines for multi-use trails do not yet appear in Edmonton's Complete Streets Guidelines³ or in other city design guidelines. Despite the relative lack of firm design policies, though, Edmonton's current guidelines do note the alignment of multi-use trails should adopt the "most current design concepts," and that a best practice is to ensure cyclist are accommodated through using "a design speed of 30

¹ https://www.edmonton.ca/city_government/documents/Volume_2_-_Roadways.pdf

² Ibid

³ https://www.edmonton.ca/city_government/documents/Edmonton-Complete-Streets-Guidelines_05062013.pdf

km/hr” when considering trail designs.⁴

Where policies on multi-use trail design are lacking, however, Edmonton’s policies pushing for more people to use the trails it has or hopes to build are not. In 2009, Edmonton City Council adopted its Active Transportation policy, which commits the city to being “pedestrian- and bicycle-friendly” and supporting all forms of active transportation with infrastructure.⁵ The policy also commits Edmonton to enhancing accessibility to active transportation infrastructure and building feelings of safety and security within it. The policy defines active transport as “any form of human-powered transportation, the most common modes being walking and cycling.”⁶ The city also committed to supporting active transportation in its 2014 ‘The Way We Move’ strategic vision. This strategy notes user behaviour will be changed most readily by making active transportation the most desirable option. Among many strategic actions the 2014 policy sparked were developing more end-of-trip facilities for cyclists (or in regular terms, bike racks) and “developing and reviewing best practices, adapted to the Edmonton context, to increase the attractiveness and safety of cycling.”⁷

Conflicts between cyclists and walkers, or other users on busy multi-use trails, has become a public discussion in recent years. The multi-use trails flanking the High Level Bridge see up to 4,000 riders and walkers per day sharing less than three metres of space.⁸ The situation was clarified in June 2016, when the city installed so-called ‘suicide barriers’ beside these trails, which removed 20 centimetres of width from both pathways. Very quickly, conflicts and tales of injuries or close calls became more commonplace.⁹ This experience underlined the physical basis for user conflicts, the sheer power that space or lack of it has on user experiences and the growing popularity of active transportation.

In response to a backlash from the active transportation community, Edmonton Mayor Don Iveson told a news media outlet that, “If it becomes necessary, because of accidents and input from users, that we have to turn the east side into a proper sidewalk and keep the west side as the shared use pathway that you can continue to ride — that’s something that will be evaluated and a decision will be made.”¹⁰ Iveson’s comment illustrates how user conflict can have an overall detrimental effect on the active transportation goal, when bad design artificially pits users against each other and forces decision makers to make compromised decisions to keep the peace. The situation also illustrates how costs can be driven up by poor design. Indeed, the City of Edmonton is now seeking design advice from consultants on the possibility of widening the multi-use

⁴ https://www.edmonton.ca/city_government/documents/Volume_2_-_Roadways.pdf

⁵ <https://www.edmonton.ca/transportation/PoliciesDirectives/C544.pdf>

⁶ Ibid

⁷ https://www.edmonton.ca/city_government/documents/land_sales/TransportationMasterPlan.pdf

⁸ <http://edmontonbikes.ca/high-level-bridge-options/>

⁹ Ibid

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<http://www.cbc.ca/news/canada/edmonton/tired-of-getting-lectured-edmonton-mayor-suggests-partial-bike-ban-may-be-needed-for-high-level-bridge-1.3675851>

pathways flanking the motor-vehicle deck or the LRT deck on the High Level Bridge to 4.2 metres. While this is clearly a step in the right direction it is expensive and could have been avoided through better design.¹¹

The decision is also ad hoc. The better design considerations being applied to the High Level Bridge are not currently being applied to all other parts of Edmonton's multi-use trail system, where conflicts are nonetheless still occurring. These conflicts are less documented or discussed in public but include where trails run through areas with other uses, such as off-leash dog parks.¹²

Edmonton's Active Transportation and The Way We Move policies are but two of several factors driving user demand on multi-use trails. The city's population has grown by nearly 14 per cent since 2011. As a result of these increased demands, user conflicts are growing, too. Anecdotally, these conflicts are often based on a perception of 'unsafe' speed differences between walkers, who travel the slowest on the trails, and cyclists, who travel the fastest. It should be noted here that differing speeds are why we separate users on public streets, where sidewalks are for pedestrians and roads are for motor vehicles and cyclists. As one Netherlands blogger notes, "Cyclists are neither car drivers nor pedestrians and should not be treated as if they were identical to either of these two groups."

BETTER DESIGN IS THE BETTER OPTION

Discussing multi-use trails requires the 'multiple' part of the equation to be deeply considered. Several modes of travel can exist safely and comfortably, while research shows that other modes cannot. As a Toronto design guideline for its extensive and increasingly popular multi-use trails notes, transportation modes are becoming incredibly diverse, "with inline skating, scooters, pedal-bikes, recumbent bicycles, skateboards, longboards and many other non-motorized ways of moving around" appearing on its trail network.¹³ The Toronto report also notes the 'purpose' that people use the trails for is also becoming more diverse, including jogging, cycle-courier deliveries, recreating with baby carriages, school groups moving about, people hiking, wheelchair and scooter users moving around, as well as people commuting, touring and recreating on bicycles, on foot or on another type of active transport.¹⁴

Conflict is the nearly inevitable result of this diversity of uses — if current designs are perpetuated. Research shows conflict on pathways where different users are forced to

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<http://globalnews.ca/news/3335890/wider-sidewalks-lrt-tracks-and-shared-use-paths-on-edmontons-high-level-bridge-to-be-studied/>

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<http://www.metronews.ca/views/2015/03/23/we-need-more-to-protect-edmontons-trail-users-from-aggressive-off-leash-dogs.html>

¹³

https://www1.toronto.ca/City%20of%20Toronto/Transportation%20Services/Cycling/Files/pdf/TORONTO%20MULTI-USE%20TRAIL%20DESIGN%20GUIDELINES-December%202014_Fina_4.pdf

¹⁴ Ibid

share space is largely baked into the ‘shared use’ design ethos, due to the differing speeds, directions, maneuverability and feelings of comfort that different user groups experience. Designers play a central role in creating or reducing conflicts.¹⁵ As studies have shown, a typical cyclist — and this is an adult, not a child — needs far more space than a pedestrian to manoeuvre because of their increased travel speed. Some estimate the amount of space a cyclist requires includes about 450 centimetres on either side of them, as well as a reasonable width around them, making their minimum space requirement between 1.2-1.5 metres — or, in effect, an entire sidewalk’s width at current Edmonton specifications.¹⁶ Again, this applies to an adult cyclist. As parents report, children cycling require more space because of their unpredictability.

In the real world, what users traveling at different speeds, directions and intentions experience on this type of infrastructure is an inability to use it as they would like, be that walking or cycling two-abreast, listening to their music as a way to escape the hustle and bustle of the city or to take their children or pets onto the trails without worry they will be run down by a fast-moving cyclist who did not see them.

Research also suggests that design rather than ‘bad’ behaviour is at the heart of these conflicts. Conflicts occur because the trail’s designer has failed to adequately plan, design, build and maintain it to “fully account for the diversity of users,” as well as the behaviour of users.¹⁷ Further, research has noted creating one piece of infrastructure that fulfills the needs of all potential users is difficult “without unnecessary or unsafe hindrance to their movement.”¹⁸ Further, studies also show that the negative outcome of conflicts on multi-use trails, driven by bad design, can be increased risk of injuries, escalating frustration among users to the point that the overall use of infrastructure decreases, the risk of violence among users experiencing conflict and a pressure to ban cycling in particular areas.¹⁹ □

A case to illustrate these points are the conflicts and resulting actions in other Canadian cities that have similar multi-use trail systems. Ottawa, for example, has more than 600 kilometres of multi-use trails²⁰, and the municipal government is currently examining changes to policies after a noted increase in user conflicts.²¹ Proposed changes include widening the multi-use trails or creating more separate spaces for cyclists and foot-based users.²² Sadly, in Kingston, rather than create better or more appropriate infrastructure, cyclists have been banned from some multi-use pathways, as Mayor Iveson proposed in Edmonton, because of user conflicts.²³ Similarly, the local council in Los Alto Hills,

¹⁵ <http://www.ciwem.org/wp-content/uploads/2016/02/Active-Transport.pdf>

¹⁶

https://www.burlington.ca/en/your-city/resources/Citizen_Committees_and_Boards/Cycling_Committee/Newsletters/Book_18_Cycling_Comm_2014.pdf

¹⁷ <http://docplayer.net/28278260-Reducing-conflict-between-bicycle-riders-and-pedestrians.html>

¹⁸ Ibid

¹⁹ Ibid

²⁰ <http://www.ncc-ccn.gc.ca/places-to-visit/parks-paths/capital-pathway-multi-use-paths-capital>

²¹ <http://ottawacitizen.com/news/local-news/conflicts-push-city-to-look-at-new-multi-use-pathway-designs>

²² Ibid

²³

California, banned mountain biking from some shared-use trails based on speeds these users were believed to be traveling.²⁴

Many consider user behaviour to be least expensive way to ensure all users of multi-use trails enjoy their experience and feel safe. One study notes that trail managers in Canada often follow the principle of “least intervention necessary” to enforce regulations. Edmonton’s current policy to reduce user conflicts is contained in its bylaws. Bylaw 5590 requires cyclists using multi-use trails to yield the right-of-way to people walking, give an audible signal before passing someone and travel at a reasonable rate of speed.²⁵ Other bylaws restrict uses for sidewalks that are not deemed ‘shared use’ trails. These bylaws exists but in reality are often poorly understood by users, rarely enforced by the city and dependent on users to make compromises on how they use infrastructure. While this approach may have worked in the past when trails were less popular, less prevalent and less relied upon by active transportation users, this approach is likely ineffective for the future and one that relies on conflict to signal there are problems. Indeed, the future seems to point to design as the better, cheaper and most effective way to ensure positive outcomes on trail infrastructure.

Fittingly, other jurisdictions are viewing design as the answer. Toronto, for example, is considering what a trail connects users to in order to better design it for its likely uses and volumes. If a trail connects residential areas with employment areas, there are no alternative connections, connects schools, playgrounds, parks, seniors’ residences or tourist areas, its design guidelines recognize the trail is likely to be far busier or feature more diverse use than a trail that does not. Toronto has also created several new categories of multi-use trails as a result, and these latest versions skew to the fastest and slowest users. That city’s newest high-capacity trail designs propose segregated trails for pedestrians and cyclists, allowing both user groups to move about side by side, as users often do, without worry of being hit or blocking another user traveling at a different speed or in a different direction. Some of these trail proposals are well more than four metres wide, segregated by use and highly detailed in their design features.²⁶

www.cityofkingston.ca/documents/10180/27835/Cycling+%26+Pathways+Study/11a460ec-bcea-4b4c-b97a-e31eb2b745a9

²⁴ <http://www.bicycling.com/culture/news/your-strava-data-could-be-used-to-ban-cyclists-from-trails>

²⁵ https://www.edmonton.ca/transportation/Fact_Sheet_Cycling_on_SidewalkApr2015.pdf

²⁶

https://www1.toronto.ca/City%20of%20Toronto/Transportation%20Services/Cycling/Files/pdf/TORONTO%20MULTI-USE%20TRAIL%20DESIGN%20GUIDELINES-December%202014_Fina_4.pdf