CITY OF HAMILTON

KEDDY ACCESS TRAIL

SUSTAINABLE MOBILITY AWARD

INNOVATION

The Keddy Access Trail is by all accounts unique. It's not a traditional bike lane, nor a trail, nor a multi-use path in the traditional sense. It's an all-purpose active transportation facility built on a 7% grade, and there are few such examples in Canada to compare to. As a result, designers had to apply a high degree of innovation, in particular to mitigate risks.

Managing the Mixing of Cyclists and Pedestrians

From the outset it was recognized that regardless of intent, the Keddy Access Trail would be used by both pedestrians and cyclists. Managing conflicts between these users was therefore a key consideration, particularly considering the potential for cyclists to gain speed on descent.

This risk was managed by firstly providing a generous width trail of >3 m and providing signage to emphasise the multi-use nature of the facility. Consideration was given to providing a centre line to keep pedestrians to right and cyclists to left, but this convention is problematic in that higher speed downbound cyclists to left would conflict with upbound pedestrians. As a result, a "keep right except to pass" convention was adopted.

Leveraging a Routine Resurfacing Project

It is fairly common for a road resurfacing project to be used as an opportunity to create a new bike lane, but not so common for a routing road resurfacing project to be a catalyst for a signature active transportation corridor. In the case of the Claremont Access, the road resurfacing project and AT projects started out on two parallel tracks. Originally, the trail construction was to proceed ahead and separate from the road project bringing in a contractor to mill the lane to be converted, erect the barrier and pave the trail. A year or two later, resurfacing the other two lanes would follow.

During the early tender preparation a decision was made to combine the projects and have one contractor deliver. Under the combined tender, the cycling component was $4.3 million out of a total project budget of $6.3 million. Without the efficiency afforded by combining into a single project, it is doubtful if the active transportation corridor could have been funded. The project was completed on time and on budget by the contractor Dufferin Construction.

A further advantage of combining the projects was that the access could be closed completely, and only once.

It is noteworthy that the entire upbound access was closed for construction from July 2020 through to December 2020, an upside of reduced commuting due to COVID-19. But nonetheless a bold gamble by the construction team who took advantage and delivered the project far more efficiently than if a partial closure for traffic (and a lower public reputational risk approach) was adopted.

An All-Season Facility

Many municipalities choose to close off-road active transportation facilities in winter months given the difficulty in clearing snow and ice. For the Keddy Access Trail, various options were considered including a full closure from November to April, part time closures and full maintenance throughout all periods. In recognition of the trails importance as a commuter connector, a decision was made to strive to keep the facility open as much as possible throughout the winter. This is a non-trivial task, given the slope of the facility and the need for specialised equipment that can fit within the confined space. During major winter events, it takes about 4 hrs to clear the facility from end to end.

In order to manage closures and to ensure safety, gates were installed at each of the trail entrances. As of early 2021, staff were still gathering experience on when to implement closures and how to balance these with public expectations for continual operation.

TRANSFERABILITY

Using a "Signature Project" to Influence Travel Behaviour

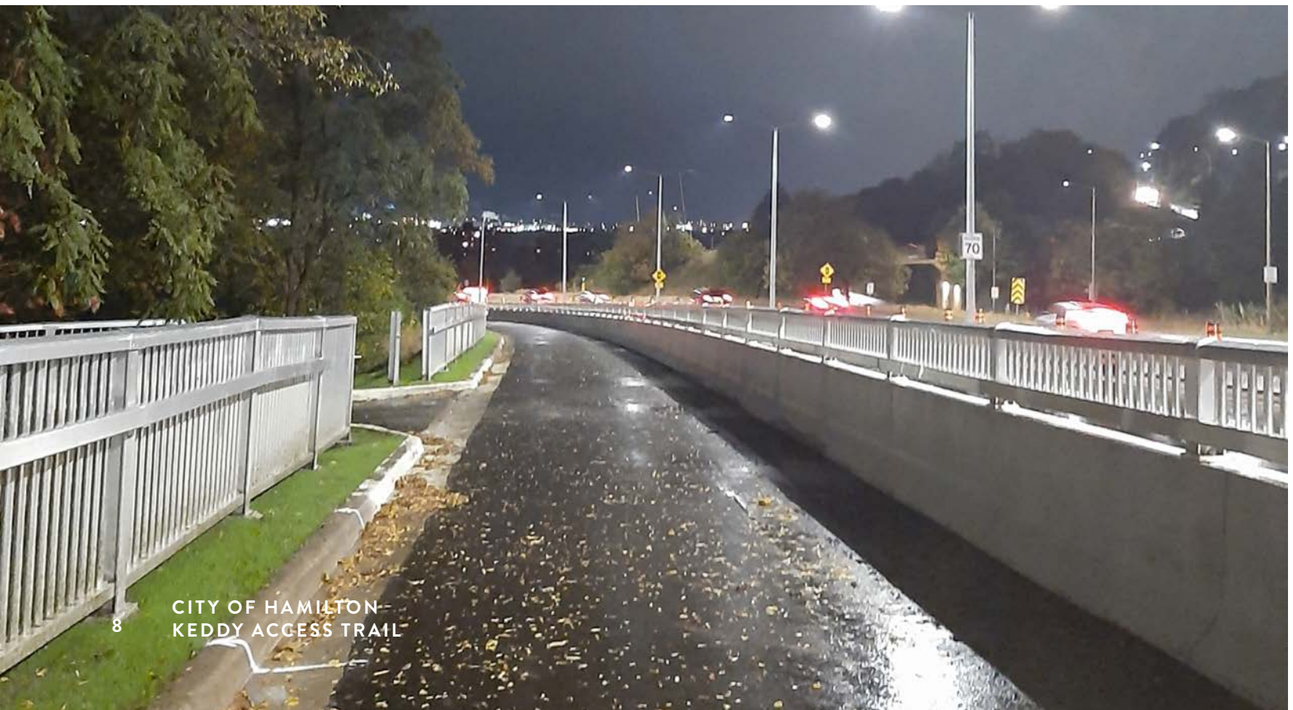
TAC's Report on Active Transportation – Making it Work in Canadian Communities talks about the value of a "backbone" facility – that is, "a corridor or node that is well-used in practice but also symbolic to elected officials and the general public.

The Keddy Access Trail is, by all accounts, a backbone and "signature facility." The idea of using a highly visible and impactful signature project to accelerate progress on active transportation is one that a few communities in Canada have been successful at, and this example will serve to add to the research on the impacts of these types of projects. This project also serves as a backbone to the City's minimum cycling grid, connecting key pieces of cycling and pedestrian infrastructure together to establish continuous and safe pathways.

The project also serves as a reference for other communities facing similar geographical constraints.

Applying a Multi-Modal Level of Service Lens

As noted previously, the Keddy Access Trail was facilitated by the repurposing of one of three existing lanes of traffic. The decision to do so was informed firstly by a traditional traffic capacity analysis, but also a Multi-modal Level of Service Analysis and Complete Streets approach. Under existing conditions, auto LOS was A-B whereas cycling, transit and pedestrian level of service were all at a much lower level of service. Of particular significance was the fact that traffic volumes were also very peaked and planning for an average peak period vs. peak hour completely changed prevailing perceptions about traffic level of service.



Quality Matters

A final aspect of the Keddy Access Trail is the quality of design. From the continuous concrete poured barrier to the visually attractive aluminum barriers, the entire project has the appearance of a high quality design.

While not every project can, or needs to, pursue design excellence, active transportation projects in general are often achieved through limited resources and a "make do" approach. Indeed, for the Keddy Trail the original approach was to utilize temporary jersey barriers to create the separator and not resurface the cycling portion of the roadway. However, through various funding sources from different levels of government, a much higher level of design was achieved. It seems to be paying off as the first reaction from many people that use the trail is "this is really awesome." We hope that translates into more users and a more connected city over time.

[1] Hamilton Mountain Climber Program
https://www.hamilton.ca/streets-transportation/biking-cyclists/integration-transit

[2] Media Article on Keddy Access Trail:
https://www.cbc.ca/news/canada/hamilton/keddy-access-trail-1.5832907

[3] Road Safety Report:
https://pub-hamilton.escribemeetings.com/filestream.ashx?DocumentId=224768

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