

March 2, 2022

RE: Cycling Infrastructure Deficiencies at Murray Creek Ravine on 40 Avenue

In the Township of Langley 2015 Cycling Plan, it states that there has been a noticeable increase in residents of the Township using bicycles to travel in, around, and through the municipality over the last decade. Since the COVID-19 pandemic, cycling as a means of transportation and recreation has only further increased.

Despite this acknowledgement and expressed interest by the Township to ensure cycling is a safe and viable transportation option for residents and visitors, there remains significant safety concerns: in particular, cycling infrastructure deficiencies at 40 Avenue. Moreover, the Township was made aware of these deficiencies at 40 Avenue in 2018. Since then, no action has been taken by the Township. HUB Cycling's Langley Local Committee is herewith submitting a plan of action that we believe will make this section of highway safer for all users.

Observed infrastructure deficiencies

The safety of people who walk (pedestrians) and people who ride (cyclists) is put at risk when they attempt to negotiate their way along a dangerous section of 40 Avenue between 216 Street and 212 Street. 40 Avenue is a busy east-west corridor for passenger vehicles, dump trucks and commercial vehicles. A heat map feature on the STRAVA app, which is used by many recreational and commuter cyclists, shows that 40 Avenue is also a major east-west cycle route in the Township between Brookwood and the Fraser Highway. The nearest alternative east-west connectors for cyclists would be 16 Avenue or 48 Avenue. These routes would be major detours for cyclists.

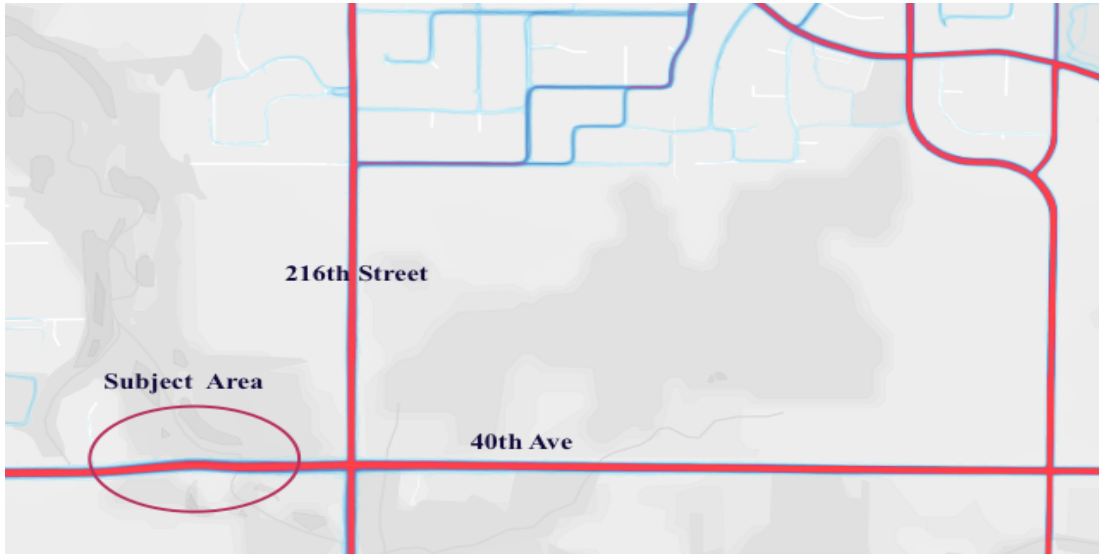


Figure 1.1 The subject area is on 40 Avenue just east of 216 Street.

The speed limit on the portion of 40 Avenue being discussed is 60 km/h although many of the people who drive (motorists) exceed this speed limit on the downhill grade toward Murray Creek. The present condition of this section of 40 Avenue places the safety of pedestrians and cyclists in serious danger. The existing shared sidewalks are substandard and have not been maintained by the Township. We believe Township must consider the liability of not taking action to address this area of conflict.



Figure 1.2 Narrowest section of sidewalk.



Figure 1.3 Exposed concrete base is a tripping hazard.



Figure 1.4 Eastbound cyclists avoiding use of the narrow sidewalk.

40 Avenue at Murray Creek is bordered on both sides by a raised asphalt sidewalk that ranges in width from 82 to 135 cm. There is a painted white line, the fog line, on each side of the street that ranges in distance from 26 to 58 cm from the sidewalk curb. There is signage near 216 Street and 213A Street that indicates cyclists to share the sidewalk with pedestrians. At the same location, there is little that remains of cyclist/pedestrian images on the asphalt sidewalk.

Closer inspection of the sidewalk reveals numerous locations where tree roots have heaved and broken the asphalt surface, thereby creating tripping hazards for pedestrians and crash zones for cyclists. This type of hazard can easily cause pedestrians and cyclists to fall into the path of passing vehicles. Few if any bike commuters will attempt to negotiate the hazards on the unsafe sidewalk. Instead, cyclists choose to ride on the smooth surface of the roadway. Unfortunately, there is no space for a cyclist to commute safely on the east/westbound lanes and motorists must move into the oncoming lane when passing cyclists.



Figure 1.5 Sidewalk on southside of 40 Avenue.



Figure 1.6 Sidewalk on north side of 40 Avenue.

The most serious safety issue is where the eastbound sidewalk is on an incline from Murray Creek. There is an approximately 60 foot chain link fence that borders the immediate edge of the asphalt. At its narrowest point the usable portion of the sidewalk is 82 cm wide. Bicycle handlebars range in width from 46 - 71 cm. As a person slowly pedals along the incline of this sidewalk, they become less stable and can catch the right handle in the chain link fence causing them to crash and or the bicycle veers off the raised sidewalk into eastbound traffic. At the eastern end of the chain link fence, a concrete fence post base reveals itself as a tripping hazard and a large tree root has heaved and cracked the asphalt surface. This root crack runs along the length of the sidewalk for about 10 meters.



Figure 1.7 Minimum distance to edge of traffic lane for speed of 60 km/h speed is .5 meters (TAC).



Figure 1.8 Dangerous conditions for cyclists and pedestrians.

Suggested improvements

Improvements can be made long before major road upgrades at Murray Creek ravine are undertaken. HUB Cycling Langley strongly recommends the removal of the graded sidewalk and the creation of an at road level multi-user path on the north and south side of the highway. Elimination of the 1.35 meter raised sidewalk creates a 1.75 meter wide path from the edge of the fog line. An asphalt curb should be added to the outside of the fog line so that motor vehicles cannot stray onto the MUP. The south sidewalk comes to an end a short distance east of the chain link fence by a driveway entrance. Beyond this point the eastbound sidewalk is at road level with a 163 cm wide shoulder until the intersection at 216 Street. This portion of the shoulder has sufficient room for pedestrians/cyclists and would only require the addition of a protective asphalt curb.

In the interim, an action that can immediately improve safety for users is to designate this section of 40 Avenue as a shared roadway. This can be done by adding sharrows and "May Use Full Lane" signage (Fig 1.9). Additionally, a speed reduction to 50 km/h will advise motorists to expect cyclists in their travel lane. A speed reader board should also be installed for east and westbound motorists. It should be noted that TAC standards state the minimum distance to the edge of a traffic lane for a specific speed of 60 km/h is 50 cm. The distances on 40 Avenue do not meet this standard. Measurements reveal a maximum variance of 28 cm between the curb and the edge of the white line.



Figure 1.9

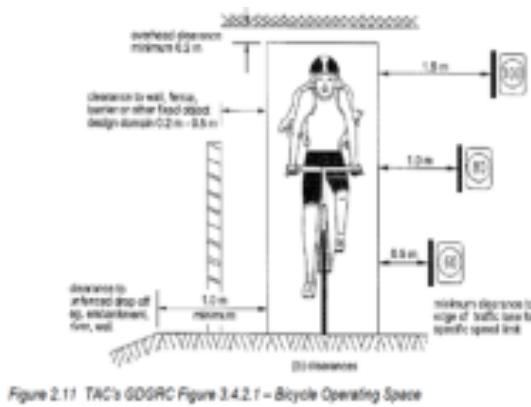


Figure 1.10 The chainlink fence in Fig 1.11 is in contravention of TAC standards.



Figure 1.11 This sidewalk does not meet TAC standards.

Safe routes, sustainable transportation

Six years ago the Township published the comprehensive 2015 Langley Cycling Plan. This document demonstrates that Langley Township understands what needs to be done to encourage cycling as an alternative to driving. The Executive Summary alludes to the Township vision for promoting cycling as a safe and viable transportation option for residents and visitors. More recently, the Township developed the 2019 Climate Action Strategy to serve as a guide for the future where transportation choices are healthy and clean. Actions in the Transportation and Mobility Priority Area support opportunities for active mobility such as cycling. Township needs to demonstrate its commitment to this vision for the future by creating safe infrastructure for active mobility today.

Municipalities have a statutory duty to maintain highways. This includes the entire municipal road allowance of which sidewalks and bike paths are a part. The discussed section of 40 Avenue must be kept in such a reasonable state of affairs that those requiring to use it may, exercising ordinary care, travel upon it with safety. Non-repair of the shared cycling pedestrian sidewalk in the discussed area is evidence that maintenance has not been done for some time. We should not be waiting for a serious accident to happen before action is taken. HUB Cycling's Langley Local Committee strongly recommends that the Township take these recommendations into consideration.



Figure 1.12 From the east end of the south side fence to 216 Street the bike/pedestrian pathway is at travel lane level and 163 cm wide.

Thank you for your immediate attention to this matter. Please do not hesitate to contact HUB Cycling's Langley Local Committee if you have any questions or require additional information.

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About HUB Cycling

HUB Cycling is a charitable not for profit organization that has spent over 22 years removing barriers to cycling in Metro Vancouver, while cultivating the health, environmental, and economic benefits that active transportation can bring. HUB has educated thousands of people, motivated thousands more, and championed improvements that [#UnGapTheMap](#) to create a connected cycling network. HUB Cycling's mission is to get more people cycling more often. HUB Cycling has close to 3,000 members and more than 45,000 direct supporters. HUB Cycling has 10 volunteer committees across Metro Vancouver that encourage cycling for all ages and abilities (AAA) in municipalities across Metro Vancouver. For more information, visit bikehub.ca.