

A G E N D A
BICYCLE AND PEDESTRIAN MOBILITY ADVISORY COMMITTEE
Saanich Municipal Hall, Committee Room No. 2
Thursday, January 19, 2017 from 4:00 pm – 6:00 pm

1. **ADOPTION OF MINUTES**
 - November 17, 2016 (attachment)

2. **CHAIR'S COMMENTS**

3. **SCHEDULE OF REGULAR COMMITTEE MEETINGS**
 - Discussion as per Section 85(a) of Council Procedure Bylaw 2015, No. 9321

4. **BOLLARDS (D. Wick)**
 - Report dated December 16, 2016 from D. Wick (attachment)

5. **LONG RANGE PLANNING**
 - Discussion (Committee Terms of Reference attached)

6. **IDENTIFYING LOCAL CONNECTORS (D. Wick)**
 - Discussion (attachment)

7. **DOUGLAS CORRIDOR (standing item)**

8. **BIKETORIA (standing item)**

* Adjournment *

* * Next Meeting: tbd* *

Please email Tania.Douglas@saanich.ca or call at 475-1775 ext. 3505 if you are not able to attend.

GO GREEN!
MEMBERS ARE ENCOURAGED TO BRING THEIR OWN MUG TO THE MEETING

MINUTES
BICYCLE AND PEDESTRIAN MOBILITY ADVISORY COMMITTEE
Held at Saanich Municipal Hall, Committee Room No. 2
November 17, 2016 at 4:00 p.m.

Present: Councillor Vic Derman (Chair), Dan Casey, Suzan Jennings, Judy Gaylord, James Grayson, Rebecca Mersereau, Alex Nagelbach, Anne Topp, and Darrell Wick

Staff: Catherine Mohoruk, Manager of Transportation & Development; Steve Holroyd, Engineering Planner/Designer; Troy McKay, Senior Transportation Technologist; Tania Douglas, Senior Committee Clerk

Guests: Kate Berniaz, Active Transportation Program Manager, Capital Regional District

Minutes

MOVED by S. Jennings and Seconded by J. Gaylord: "That the Minutes of the Bicycle and Pedestrian Mobility Advisory Committee meetings held October 6, 2016 and October 20, 2016, be adopted as circulated."

CARRIED

CHAIR'S REMARKS

The Chair advised of an upcoming CRD Forum of Councils on Climate Change. He also noted that on November 26th from 1:00 – 3:00 pm he will present his Natural Cities presentation that has been tailored to focus on both the Douglas and Quadra Street corridors. Presentation will be held in the Seniors Wing of the Cedar Hill Recreation Centre.

CRD UPDATE

Kate Berniaz introduced herself as the new Active Transportation Program Manager and provided an update of CRD programs to committee members. The following was noted:

- The People Power program:
 - Will encourage more people to walk, bike and roll to their destinations, and runs in tandem with community led infrastructure investments and data collection programs across the region.
 - A calendar of events will be shared (likely in May 2017) of summer
- The Active and Safe Routes to School program:
 - will help to facilitate school travel planning and create solutions to improve student health, road safety and traffic congestion.
 - seven Saanich schools are participating in this 15 month program. Each school has a travel planning facilitator who will engage a variety of people to share traffic and transportation challenges.
 - neighbourhood walkabouts are planned for the spring
- Fall bicycle counts were completed at 75 locations. There are ongoing traffic counts in 70 locations.
- The CRD received the BiPed recommendations from October 20, 2016 and bollards review is an action item in the Regional Trails Management Plan (RTMP). Signage is also a priority item for both trails in the RTMP. The paving of Lochside trail was removed as a priority item and was replaced with correcting drainage issues.

ITEM 1

Committee members asked questions and provided comments, and the following responses were noted:

- Ms. Berniaz will find out whether the RTMP was approved or endorsed.
- The Pedestrian and Cycling Master Plan (PCMP) guidelines regulate bollards.
- Regarding bicycle counts: they are currently verifying counts and will advise when the data is available.
- Traffic counts will be made available to the public.
- They do consider weather conditions when performing the cycling counts.

It was noted that the CRD Parks report about the decking replacement on the Swan Lake trestle did not have any options noted about different surfaces considered. A more complete report is needed that shows what options were considered.

Motion: MOVED by J. Grayson and Seconded by J. Gaylord, “That the Bicycle and Pedestrian Mobility Advisory Committee is concerned that the Swan Lake trestle is part of a heavily used transportation corridor, and requests that the Capital Regional District provide this committee with all of the options that were considered for trestle resurfacing project, including the costs.”

CARRIED

BC BIKE GRANT ENDORSEMENT

The Engineering Planner/Designer provided information on a grant application they would like to submit for the McKenzie Avenue upgrade from Cedar Hill to Shelbourne Street. A detailed description of the project was given and the following was noted:

- This section will have a separated cycle track in the eastbound direction and bike lanes in the westbound direction.
- A statutory right-of-way was obtained in order to save an established Oak tree on the south side near Shelbourne Street.
- Unfortunately BC Hydro is not able to move the power lines in this area.
- There are six driveways on two parcels on the south side; businesses were asked to consider closing some driveway accesses but they declined this request.
- A \$750,000 budget was approved by Council and they are asking a grant of 50% of the cost.
- Businesses will be encouraged to continue to caretake the boulevard greenery.
- The budget for this project was approved in the spring. Detailed design is half done; they are looking at doing this project next summer.

The following committee comments were noted:

- Green conflict paint is needed at the exits/entrances at University Heights centre on the north side.
- It is good that the bicycle stop line is ahead of the car stop line in the eastbound direction at Shelbourne Street; it could be even a greater distance for better safety. Staff could consider pulling the car stop line to be even with the left turn lane stop line from McKenzie onto Shelbourne Street (heading north).
- Concern was expressed about size of the radius of intersection curbs. Staff advised that a program called “Auto Turn” is used for designing corners; it ensures that larger vehicles such as fire trucks and busses can navigate around corners safely.

- Education should be given regarding conflict paint. A question was asked whether new drivers are educated in such matters.

Consensus was that a letter be sent to the Driver Licensing office (ICBC) inquiring about the type of information given to new drivers about sharing the road with cyclists.

Motion: MOVED by A. Nagelbach and Seconded by A. Topp, “The Bicycle Pedestrian Mobility Advisory Committee supports in principle the proposed McKenzie Avenue upgrade project (Cedar Hill Road to Shelbourne Street), and endorses staff in applying for appropriate provincial grants for the project.”

CARRIED

ACTIVE TRANSPORTATION PLAN

The Senior Transportation Technologist, was in attendance to present an update on the Active Transportation Plan status which has been renamed “#movingsaanichfwd”.

- The previously completed Pedestrian Priorities Implementation (PIIP) plan only looks at major and collector roads, it does not look at local roads. The Active Transportation Plan will consider all types of roadways and integrate the results of the PIIP.
- In response to the question whether the Shelbourne Valley Action Plan would be a priority versus this plan, it was noted that this plan looks at the next five years and considers ongoing work in Saanich. Final adoption of the Active Transportation Plan will be in 2018. Work will potentially be underway on the Shelbourne Valley Action Plan by that time.
- This is a policy-based document; it won't be specific to each roadway but it will set priorities for implementation.
- A survey will be made available where the public can place pins on certain areas of the map to identify problem areas.

Committee members asked questions/provided comments. The following was noted:

- Missing in the plan are objectives on how to make non-major streets more shared-use. The Chair will bring forward a report in January on how to make non-collector streets friendlier.
- The mode share identified in the Official Community Plan for cycling should be bigger; the Chair will bring forward a suggestion to increase the 2036 target number.
- Concern was expressed about Church Street being more heavily used due to the Shelbourne Valley Action Plan and a suggestion about installing traffic calming in the area was made.
- A suggestion was made to have a survey question asking how comfortable people are walking/cycling on residential streets.
- A question was asked whether there is any difference between neighbourhoods where streets are curbed (eg. Gordon Head area) versus ditches and no curbs (eg. Carey Road area).

CHANGES TO BLANSHARD STREET

The Chair circulated a report that had been submitted to Council in February 2016 regarding proposed changes to Blanshard Street, and noted his report at that time was not supported by a 5-4 vote. The Chair's comments were noted as follows:

- Concern was expressed that Blanshard Street past Uptown is not an appropriate street; being wide and aggressive and treated like a continuation of the highway.
- Chair has examined how to make this street softer for this urban area and circulated a concept drawing that narrows the street, improves landscaping, bicycle lanes and pedestrian facilities.
- Though not confirmed, it is possible that Saanich Centre could eventually be sold. This would provide opportunity for improvements if the area is re-developed.
- The province is looking at re-developing Vernon Avenue north in the Nigel Valley area, and it is believed that they will close one lane on Vernon Avenue and also install a mid-block cross walk (near the Garth Homer centre).
- The plan is to request that Blanshard Street (in this same block) be treated the same as what the province is planning for Vernon Avenue.
- The Planning, Transportation and Economic Development Advisory Committee has endorsed the idea of reducing one lane on Blanshard Street; it is hoped this will go to Council in January 2017.

A comment was made that it would be beneficial to include supporting evidence for a lane reduction. It was also noted that aligning the crosswalks on both Blanshard Street and Vernon Avenue would be beneficial.

Motion: MOVED by A. Nagelbach and Seconded by J. Grayson, “That the Bicycle and Pedestrian Mobility Advisory Committee recommends that Council instruct staff to work with the Ministry of Transportation and Infrastructure to design a lane reduction to close a lane and install a crosswalk on Blanshard Street between Ravine Way and Saanich Road.”

CARRIED

BUSINESS ARISING

Mount Douglas Access Study

It was noted that this item is not coming back to this committee. Concern was expressed that five parking spots have been recommended to be installed on Glendenning. This is a narrow road with a lot of bicycle traffic, and these changes will more than double the parking on the road.

Motion: MOVED by D. Wick and Seconded by A. Nagelbach, “That the Bicycle and Pedestrian Mobility Advisory Committee is concerned about the proposed parking spaces on Glendenning Road, and requests that Council consider that Glendenning Road is a major bicycle connector route, and any design created such as adding additional parking spots, should not detrimentally affect cyclists.”

CARRIED

The Manager of Transportation and Development noted that staff were asked for a cost estimate for five parking spaces, which is included in the report. Included in the estimate are costs for trail relocation and split rail fencing should the spaces be approved by Council.

BIKETORIA

A brief update of improvements was given: The first block of Pandora Avenue is to be done this month (from Store Street to Government Street). The City Hall block is to be done by Christmas. Fort Street consultation is done and the project will go to tender. Pandora Avenue will be completed before Fort Street. Then Cook Street will be done, followed by Wharf Street.

OTHER

Committee member Dan Casey will be leaving the committee and was thanked for his service. The Chair hopes to be reappointed to this committee as Chair for 2017, but has not yet heard about the assignment of Advisory Committees.

ADJOURNMENT

The meeting adjourned at 6:00 p.m. The next meeting is scheduled for Thursday, January 29, 2017

Councillor Derman, Chair

I hereby certify these Minutes are accurate.

Committee Secretary

Tania Douglas - RE: Report on Bollards

From: Kate Berniaz <kberniaz@crd.bc.ca>
To: Tania Douglas <Tania.Douglas@saanich.ca>
Date: 12/16/2016 2:25 PM
Subject: RE: Report on Bollards

Thank you Tania,

I have forwarded this email to my colleagues.

Kate

From: Tania Douglas [Tania.Douglas@saanich.ca]
Sent: Friday, December 16, 2016 10:59 AM
To: Kate Berniaz <kberniaz@crd.bc.ca>
Subject: Report on Bollards

Good morning,

At a recent meeting of Bicycle and Pedestrian Mobility Advisory Committee, the issue of bollards was discussed. Committee member Darrell Wick was asked to provide a report to share with Saanich departmental liaisons as well as the CRD. This report is attached.

This will likely be placed on the January agenda for discussion.

Kind regards,

Tania Douglas

Senior Committee Clerk and Clerk to the Board of Variance
Legislative Services Division
District of Saanich
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ITEM 4

Bollards - A Danger to Cyclists

Through her role on the CRD Parks Committee, Saanich Councilor Judy Brownoff received a couple of emails expressing concerns about bollards on trails at road interfaces and the danger they posed to cyclists. She was told that cyclists were colliding with them with resulting serious injuries. Evidently no agency compiles any statistics on such accidents; generally there is no police report and no ICBC claim. To obtain more information she asked for reports of accidents on a local talk show and also by sending out an email request for reports to several local cycling club email lists.

Twenty-five reports quickly followed detailing serious injuries (broken legs, hips, pelvis, arms, collar bones) resulting from bollard collisions on the CRD Galloping Goose, Lochside trails and a couple more on trails such as the airport circle trail or the cycling approach to Schwartz Bay Ferry Terminal. Interestingly, speed was not a factor in these accidents. The most common reason was that the bollard was not visible until the last moment because of walkers or another cyclist in front blocking the view. A couple other accidents resulted from the rider being distracted by others in the vicinity of the bollard area or automobiles.

Some have suggested replacing the fixed bollards with flexible ones, but some accidents were caused by handlebars hitting the bollard. Hitting even a flexible bollard with one's handlebar can quickly cause the cyclist to lose control and fall.

There appears to be two reasons for bollards; to warn trail users that they are approaching a road crossing and also to block automobiles from entering the trail.

And internet search of how to address the trail - road interface indicates many jurisdictions acknowledge the bollard danger and view them as a very last resort. Their policies state the first approach is to do nothing unless there is a clearly established problem, then to implement a sequence of solutions with bollards being the very last and least recommended solution.

Appendix A is a compilation of the accident reports received by Councilor Brownoff.

Appendix B is the bollard policy from California, CALTrans.

Appendix C is the current CRD Regional Parks policy regard road/trail intersections and an email from Mike Walton, senior Manager, CRD Regional Parks.

Appendix D: Examples of existing problematic bollards installations

Appendix A

Summary of injuries:

- Bent front fork, chped shoulber bone, lots of pain
- Hit post with handle bar, bruised hand, broken geat shifter
- Wrecked bike, ambulance to hospital
- 8 years of rides trails almost daily, never seen motorcycle on trail (surmise motorcyclists no more law abiding than car drivers.)
- \$7000 bike destroyed, 4th degree AC separation, dropped shoulder.
- Two crashes with bollards, serioulsly hit head on pavement
- Three people injured with one accident, permanently injured thumb, another to hospital, another cyclists injured
- Solo crash, no longer rides
- 7 year old hit bollard with triangle flanges
- tore bone off of top of thumb.
- Centre Bollard removed, leaving 6" collar
- Hit handlebars, fellheavily breaking arm
- Badly broken leg
- Front wheel damaged beyond repair
- Broke pelvis in 3 places, 4.5 hours surgery, 12 days in hospital
- Concussion, separated shoulder broken rib, road rash.
- Broken wrist
- Dislocated finger, laceration of finder, dental fracture, mild concussion
- Multiple fractures and moderate concussion
- Shattered head of my ulnar requiring surgical reconstruction with plate and five pins.
- Aluminum frame dented, bruised knee
- Bike frame ruined, sent to hospital, serious sprained ankle
- Report of four different bollard accidents no further details
- Broken left femur
- a level 2/3 separation of my right shoulder, which resulted in lost work, medical expenses and lots of pain

Judy

What follows is information on my accident in October 2012 (description from emails written at the time) and images from Google Earth/Street View of the site of the accident. I have also included comments about a few other bollards that have caused concern for me over the years. Basically the fixed solid ones are extremely dangerous to cyclists (and runners) riding solo and even more so when riding in a group. This has taken a few hours to put together so please take this seriously. Thank you.

1) Bike accident Oct 4, 2012 at about 6:35-6:40 AM Lockside Trail north Hunt road intersection at end of car ride able section going North. Here are the contents of two emails related to the incident and an image of the site.

On October 4, 2012 at 6:16PM, I in part wrote:

"I've been doing the annual CRD cycle survey this week so have spend a fair amount of time at intersections. I've seen a few old friends and newer ones like (name removed). Over 400 cycles in 3 hours downtown and 300 at Lockside and Royal Oak. I'm impressed.

Well, going out to Central Saanich this morning to do an intersection there, I hit one of those road barriers (added in 16-bollard), you know the ones that took out cyclists on the STP bike trails, Hit hard, bent front fork of folder bike and have chipped shoulder bone and have lots of pain. Doc says again I was lucky but maybe should give up cycling (are you kidding). He said with rehab I could have most function back in month. The last crash took three months so I'm realistic.(note added in 16-three months earlier coming off east side Swan lake trestle my front forks on a bike collapsed and I hit the ground hard-shoulder bruised but other wise ok. This was not related to bollards but more poor rough cycling surface of the bridge and age of the bike forks)"

The bike repairs cost me \$250 to repair and another \$60 for a new front tire-\$300 total. The doctor costs were about \$80 for prescription pain killers, \$90 for shoulder slings and wrist guard and about 2 years for most of my shoulder function to return. I still have residual aches. I did not do the bike survey that day and did not volunteer again for the survey until this year.

2) Image of site (1) and description along with other bollard hazards: (note I have used the terms bolons and posts to refer to bollards).

3) bollards are inconsistently placed, (for example -sometimes one in centre and sometimes 3) painted-(for example- white, red, yellow or chipped) and often the same colour as trail separator lines so they disappear when approached straight on.

I hope this information is useful and will indicate to the CRD committee that accidents with bollards are real and have long lasting consequences. I am lucky to be alive after hitting the bollard. I had a helmet on and my pack absorbed some of the impact. Trail users were quick to my assistance and it was not a very cold day.

Best of luck with your cycle trail work.

Jim

Hi Judy,

I would like to comment with my feed back around Bollards and their use on the local bike trails.

I do see a need to restrict vehicle traffic on the bike trails and I also endorse the use of bollards for the purpose of traffic calming at intersections. As a cyclist I believe that bollards help keep cyclists more engaged and aware of surroundings, especially when entering an intersection, and therefore preventing potential accidents.

Wendy

Victoria Cycling Adventures

Tyee at Kimsit, the old trail from the Johnson Street Bridge, [click for street view picture](#).

2012, Summer evening. My batteries were low so my front light was a bit dim, which I suppose makes it my fault!

Hit the post on the right with my right handle bar. Bruised hand, broken gear shifter.

Also, riding North on the Galloping Goose to the Switch Bridge and observed a cyclist with a wrecked bike being loaded in to an ambulance. Spoke to his friend. They had been travelling South and the other one had hit one of these bollards, [click for street view picture](#).

Comment: The purpose of bollards is to prevent cars from driving on the trails. I have been riding on them for 8 years almost daily and have never seen a motorcycle on the trails. Unless there are figures that prove that motorcyclists are more law abiding than motorists, then cars driving on the trails is just not an issue. Bollards are far more of a hazard to cyclists than the rare car that might accidentally drive on them in their absence. Bendable plastic markers and signage would prevent even these rare occurrences.

Are there any studies done anywhere that show that motorists will drive on trails in the absence of solid metal bollards? That they are automatically stuck everywhere on our trails where the only consequence of their presence is to injure cyclists is bordering on criminal negligence.

Thanks for doing this!

Simon
(Founder and ride organizer: [Victoria Cycling Adventures Meetup group](#).)

Dear Ms Brownoff;

I was asked by my cycling club to provide information in regards to an accident involving one of the bollards on the Galloping Goose trail.

It occurred May 31st, 2015 near the end of a group ride. I was in a closely connected paceline of about 6 riders and approaching the intersection - looked off to the side of the trail at a police cruiser that was unusually positioned next to the trail and before I could look back I was hitting the bollard that the person in front of me swerved around. He might have signaled with his arm that it was there but I didn't catch it. I hit the bollard with such force that my frame was broken in half and forks broken on a \$7000.00 bike. :-)

I went over the handlebars, landing on my shoulder and got an 4th degree AC separation (this dropped shoulder still looks bad). The policeman called the ambulance and they took me and my broken bike to RGH. I would love it if we could find some alternative way to manage the intersections that didn't involve bollards that don't move no matter how hard you hit 'em! I included a jpeg of the bike post crash...

Thanks;

Alan

Bollard caused bike accidents on the goose

Hi Judy

In the past I've hit them and crashed twice. It was kind of my fault, I guess, but they are still pretty stupidly designed and placed. It must suck trying to get past them in a wheel chair. I crashed hard enough to break a cycling mirror once and both times hit my already brain-injured head on the pavement. It was years ago, so I'm not sure where, but

they happened on the Goose between Recyclistas and the Blue Bridge. Oh wait, one was around Quadra and Mackenzie, and the other was near Recyclistas.

Danna

Hi Judy

The Cuthbert Holmes one is at the eastern end, so away from the new construction. Maybe it was from something to do with the campers in the park? Anyways, it's quite dangerous. Thanks for getting someone to look at it.

As an aside, Saanich Parks (and anyone) can create an account with BikeMaps.org and then define a "riding area". Parks could create areas around each of their parks (that have biking). When something gets reported in those parks, they would receive an alert from BikeMaps.org. It's a free way to keep on top of their infrastructure. Public works could do the same for the entire municipality.

Karen

Hi Judy,

I wanted to comment on the use of bollards on the bike paths.

I find them to be very dangerous and have witnessed several crashes. I was also in

One while going between the bollards on the correct side. A runner stepped in front of us and I was trapped by the bollards with nowhere to go. Three people were injured. I have a permanently injured thumb as a result of this crash. The runner required an ambulance. The other cyclist also was injured. The only one who did not get hurt was

Far enough back to avoid the bollards.

My usual training partner also had a solo crash. My neighbour also has crashed and no Longer rides.

I run and ride on the bike paths several times per week. I hate the bollards for the risks they pose. Solid steel with no give whatsoever. Surely there is a better safer option.

One idea would be to at least remove the middle one. That's the most often hit in my

Experience.

Thanks for hearing me on this. I hope some changes are made to improve safety.

Kim

Dear Judy Brownoff:

I, and my fellow cyclists from the Wednesday Morning Coffee Ride (WMCR) cycling group, are pleased that the CRD is looking at the use of bollards from a cycling safety point of view.

As a large informal group of mature and experienced cyclists, we are concerned about the safety of all our community's citizens and we welcome the opportunity to advise the CRD with regard to the safe use of bollards and potential safe alternatives.

One of the WMCR cyclists ended up in the hospital as a result of an encounter with a bollard and he has sent you a note about this incident.

Below is a note from another WMCR cycling couple, which includes an interesting review of the use of bollards, mainly in the Netherlands.

If, as the bollard review process progresses, you would like further input from members of the WMCR cycling group, please let me know. I have about 70 members of the WMCR group on my private distribution list.

Keep moving as long as you can Ken

Hi Ken,

There is quite a lot on the internet about bollards and cycling safety.

Here is one from Europe - mostly Dutch experience I think.

What about rumble strips before and after the bollards?

<http://www.aviewfromthecyclepath.com/2013/08/the-fifty-bollard-game-how-bollards-on.html>

David O.

Hi Judy,

2 years ago my 7 year old grandson ran into a bollard in beacon Hill park. These are the ones with the triangular flanges on both sides. My handlebars are high enough to go over the flanges but a 7 year old's bike is too short and the widest part of the protruding flange catches the handlebar and down goes the child. A very stupid design.

I spend a lot of time out on our trails every week. Thanks for doing such a good job, for such a long time, on connecting our neighbourhoods.

Chris

Hello Judy,

It was recommended I reach out to you regarding my experience hitting one of the poles. I was on a bike ride with my cycling team about seven years ago when I hit one head on because the cyclist in front of me was blocking my view so that I couldn't see it.

The only injury was to my thumb, the top of which including some bone was torn off. Fortunately, I have doctors and nurses on my team, but this is an injury I will always be reminded of, as the doctor was unable to reattach it. I consider myself a very skilled cyclist. But my momentary glance away, and not being able to see ahead at this precise moment was all that was required. The location was on the lochside trail next to the Pat Bay Highway just about 2km passed Michell's Farm at the border of the first nations reserve on the right as you drive towards Sidney.

When we are on our bike rides, we always signal them because they can be dangerous!

Best regards,

Eileen

Joe & Guest

There are bollards and delineators available to users that are designed to withstand impact and protect people from injury.

Take a look at the link and related study.

Please feel free to contact me for further information.

http://www.trafficsignsolutions.com/shop.php?store_cat_id=4&id=1

(Chris)

Hi Judy,

Noon, Sunday, October 30th, the bollard from [the centre of the Interurban Rail-Trail, south side of Prospect Lake Road](#), had been removed, thereby leaving a potentially dangerous bollard-collar, in the middle of the trail, for an attention-diverted cyclists to encounter.

Perhaps, either Saanich Engineering or Saanich Parks could take appropriate action to re-mount the bollard without unnecessary delay.

Jim

Hi - You have asked for reports from people who have had a bollard accident. Mine happened some years ago. I was with my regular Friday biking group and we were travelling south on the Lochside trail having started at Blue Heron Park. We were approaching the Sidney intersection of the Pat Bay Hwy with Beacon Ave. We were travelling in single file and I was following a biker fairly closely and did not realise there was a bollard ahead as I could not see it and it was in the shade. I hit it with the left side of my handlebars and fell heavily on my right side breaking my right arm. The usual six weeks before it healed.

I have wondered out loud many times why they have to be such dangerous barriers placed very close together. I hope this helps future designs.

Brenda

Hi Judy,

I understand that you are collecting information on the above. I know of two incidents, one involving me and another a former colleague at the Ministry of Environment. I'm travelling in Europe at the moment and don't have access to the exact dates and other specific details of these events. If you need more information I could obtain it in mid November.

Incident 1

Where the accident occurred

At the south end of the Switch Bridge. Bob L was commuting to work (at the Ministry of Environment near the Selkirk Trestle) and was travelling south on the Switch Bridge.

When the accident occurred (date/time of day)

Approximately 7 to 8 years ago, in the morning around 7 to 8 am.

A brief description of any injuries and/or bike damage

Badly broken leg. Unknown damage to bicycle.

Any other comments about the accident or about bollards

It took several years and surgery for the broken leg to heal. Bob sustained a serious injury and was affected for a number of years.

Incident 2

Where the accident occurred

On the Galloping Goose trail, on the west side where it crosses Atkins Road, west of Six Mile Road. I was riding and was distracted by a truck approaching the crosswalk.

When the accident occurred (date/time of day)

About 8 years ago, in the early afternoon.

A brief description of any injuries and/or bike damage

Front wheel was bent so badly it had to be replaced.

Any other comments about the accident or about bollards

About a year after this incident the bollards were set back further from Atkins Road at his location.

I hope this helps. Please let me know if you would like any further information.

John

On July 8/16 about 12:30 pm I collided with the bollards on the Lochside trail behind the Saanich Municipality Complex. I was turning right exiting the municipal parking lot when the collision occurred. I was checking for trail traffic to the left and then found myself too close to the bollards to avoid a collision.

The bike was not damaged but I broke my pelvis in 3 places requiring a 4.5hr. operation and 12 days in the hospital.

I am a very experience cycling and many of my fellow cyclists have either had a mishap with the bollards or near misses.

I suggest as a temporary solution removing the side bollards and leaving the centre bollard installed. Then cyclists would know if they keep right they will not collide with a bollard, as many times these bollards are obscured by cyclists and pedestrians ahead.

Norm

Hi Judy

I not sure if this information will be useful to you or not given it occurred on the airport path and not one of CRD's trails but it does involve bollards.

In May of 2015, a Saturday about 2:30, I was riding with my wife on the airport path, I decided I would do three laps and she would do two. We went in opposite directions, not really relevant except for the direction I was going. I was heading west on the path and at the bottom of Cresswell Rd. where it meets the path there are two sets of three bollards about 10 metres apart. I have no memory of the actual crash due to the fact I was concussed but I will reconstruct as best I can. The path at this point has a curve in it to the left as well as sloping to the right, wrong way for gravitational forces, there was also small bits of gravel and dust from the Cresswell rd intersection. I believe as I approached the first set of bollards, I was likely going about 20-25 kph, my rear wheel skidded out and I bumped the first bollard putting me down leaning to the left and onto the path where I slid into the next set of bollards hitting them full on with the side of my head, yes I was wearing a helmet but I hit just below it close to the temple. There was no damage to the bike apart from a mis-aligned brake lever. I was fortunate that two young girls, around 12-13 where coming by and found me laying on the ground moaning, they had a cell phone and the presence of mind to call 911. A police car arrived shortly and when I came to the officer was looking down at me and telling to stay where I was an ambulance was on it's way. I wanted to get back on the bike but the officer said "I don't think that is a good idea sir". In the hospital I was diagnosed with a concussion, separated shoulder, broken rib, bruised kidney,(blood in urine), a small tear in my right MCL, the other injuries where all on my left side, and a lot of road rash. Like I mentioned I don't have a memory past coming up to the bollards and being found on the ground. This would be consistent with the injuries and where I was found, I had to have been down when I hit the second bollard because of the location of the injuries and the height of the bollards. I dislike the use of the bollards, they don;t really seem to prevent what they are meant to, easy to drive around if one is so inclined, at the very least they could be made of hard rubber or other material that has some give to it.

This past summer I was in hospital for an unrelated problem but was waiting to go in for an x-ray and there was a woman in full bike kit also waiting, I asked her what happened and she said she hit a bollard just past McDonalds by Mt. Newton on the Lockside trail. She said she was riding with a group and didn;t see it and the next thing she was

on the ground, suspected broken wrist. Her group was visiting from Toronto and was just at the end of their holiday. Bummer.

I hope this helps and if you have any questions please ask away.

Regards

Terry

This is general info plus wording in Trails Mgmt Plan on Bollards

GG 2015 close to 2,000,000 users

Lochside 1,200,000

Regional trail mgmt plan

Bollards

. Bollards will be used in advance of trail-road intersections to preclude motor vehicles from accessing the trail and to alert trail users that they are approaching an intersection.

. Generally, bollards will be located approximately 5 m back from the edge of road or edge of sidewalk. Depending on the terrain, in some cases bollards may be located differently or chicanes may be used in place of bollards to slow trail users.

. Bollard placement will be such that they allow for wheelchair and mobility scooter access and standard child bike trailer (1.3 m maximum width) access.

. Reflective tape will be used on bollards to increase visibility.

. Bollards will be silver or white in colour.

Thank you for the opportunity to comment on the use of bollards on our cycling trails. I have first hand knowledge of the dangers of these posts. I broke my wrist (twist fracture) about five years ago. I was following my cycling friends and the person ahead, swerved to miss the post, and I did not have time to swerve. The post hit my handlebar and hand, causing a severe twist in my wrist. (left wrist). It was very painful, and upon examination and x-ray at the hospital, it was determined to be a fracture. It required a cast. The time of day was about 10 am. We were cycling a normal, safe speed. The accident occurred close to the Saanich Historical Society, close to the road entering the Tsawout First Nations. (Jus Kun Road)

I would be pleased to provide additional information if you wish.

Ken

Dear Judy,

I am told that: The CRD Parks committee, through their Regional Trails Management Plan for the Lochside, Galloping Goose and E&N, has included a priority action to review the use of bollards and trail / road interfaces with respect to user (cyclist) safety. Currently the installation of bollards is the default treatment for these interfaces, but there are other jurisdictions that utilize other approaches to block or discourage motor vehicles from entering trails.

They have heard unsubstantiated reports about cyclists hitting these bollards. If you know of someone who can provide a first-hand report, it would be very helpful. We would like to know:

--where the accident occurred. LOCHSIDE TRAIL AT HERITAGE PARK

--when the accident occurred (date/time of day) JULY 28, 2016

--a brief description of any injuries and/or bike damage. DISLOCATED FINGER, LACERATION OF FINGER, DENTAL FRACTURE, MILD CONCUSSION

--any other comments about the accident or about bollards.

ADDITIONAL HAZARD:

I witnessed a crash on the Lochside Trail just North of the pedestrian overpass at MacDonald Park Road. The cyclist fell as a result of hitting a section of the path that has been pushed up by a tree root or something similar. It a daytime accident on Wednesday, August 16, I believe. The gentleman had multiple fractures and a moderated concussion. He was admitted to ICU and was in hospital about 3 weeks. He is a very experienced cyclist. The Trail needs maintenance in that area.

Thanks,

Ron

Good afternoon Judy,

I am a female cyclist aged 72

October 2014 when aged 70

Heading south on do

Loch side trail on a dark rainy day heading south just past Royal Oak drive just past the school the trail abruptly changes from paced to hard pack where there are unmarked bollards.

I was not paying close attention just rushing home did not see the bollard fortunately my handle bars hit the bollards and turned me to my right.

On impact I shattered the head of my ulnar requiring surgical reconstruction with plate and five pins.

I had full recovery was back riding in less than two months.

Bollards are a hazard

Jean

Hi Judy, I hear you are looking for information about cyclists colliding with bollards on trails. I have passed this request to a couple of my friends who have also collided with bollards on the trails so I will let them tell you there details.

--where the accident occurred: Entering the BC ferries Swartz bay terminal on the bike path off Dolphin Road

--when the accident occurred: summer of 2015 in the morning

--a brief description of any injuries and/or bike damage: The aluminum frame was dented when I hit the bollard and luckily I only had a bruised knee

--any other comments about the accident or about bollards: This accident occurred entering the ferries paying area where there were a lot of cars driving up to the tellers. I was watching the cars to make sure I didn't ride out in front of any of them and didn't see the bollard because it was lower than where I was looking.

Cheers

Dewain

Hi Judy,

A friend said you were collecting info on bicycle-bollard collisions.

I hit a bollard on the E&N trail at Intervale on 6 January of this year. I was distracted by a pedestrian, and directly hit the bollard in the middle of the entrance to the E&N trail. The bike frame was bent (and ruined) and I went to the Victoria General Hospital ER where it was determined I had a serious sprained ankle.

Sprocket marks left on the bollard from my bike

Since that accident, I have heard about several other people who have either hit, or had near misses with bollards. While visiting Ucluelet this summer, I noticed that they had stiff nylon bollards which can bend. Something I think would be an improvement for Victoria.

It is unfortunate that a device which is supposed to make cycling safer actually causes serious accidents. If you need any additional information, please let me know.

thank you,

Craig...

I live in Broadmead and cycle approx 5000k a year with maybe 25-45 % on lock side/galloping goose. Over the last years I personally know of many cyclist being seriously hurt by hitting those tank stopping cast iron posts on the

entrance to the trail. My brother hit one at 18 km/hour as the cyclist he was following temporarily blocked his view. I clipped one and needed medical attention. Two other cyclist broke their arms/wrists on a ride I was one. There has to be a better way.

The second issue is the muddy trail portion just north of the soccer field. I agree with the multiple use of the trail but it becomes very muddy for about 4 months of the year. It becomes very dangerous and slippery as I have witnessed cyclist falling hard on the loose gravel by the soccer field and on the poorly drained muddy trail. If this could be better drained and crushed stone similar to the trail just south of Royal Oak, the fuss would blow over.

I may even consider holding off running on "Make CRD trails great again" slogan campaign and starting a mud fight with the horsy set for a few more weeks if action is taken.

Thank u Mrs. Clinton-North.

Dr. Michael

I wish you would get rid of these metal bollards that are situated on the Galloping Goose. I was forced into the one located on the Galloping Goose at Saanich Road. The accident happen on September 7th, 2016 at approximately 0:9:15. As a result of hitting the pole I fell off my bike and broke my Left femur. If the bollard wasn't there I would have been able to get off my bike without incident.

Ken

It has been brought to my attention that you are gathering information concerning cyclist vs bollard incidents. My initial accident was a collision that took place in 1998 on the Lockside trail adjacent to the skate board park in Sidney. It was at 5:00 pm on a partly overcast day with good visibility during my commute from work. My attention was drawn to the park for a moment where my son was skateboarding and in that moment of inattention I drifted slightly to the centre of the path and hooked my handle bar on the bollard. The result of the accident was a level 2/3 separation of my right shoulder, which resulted in lost work, medical expenses and lots of pain. The bollard at that time was not brightly painted or adorned with reflective tape and was rather randomly placed as there was no access from a road to the path anywhere near it. I have since had a few occasions where I clipped a bollard at various locations on the trails in the CRD region but other than some minor scrapes and bruises have not sustained further injury due to these hazardous contraptions. The use of bollards to control automobile access to cycling trails is a ludicrous idea as it creates a constant hazard for cyclists due to several factors; low visibility, the bollards are short and hard to see if there are other trail users, they are located to create choke points at intersections so when you are looking up and ahead for automobiles, cyclists and pedestrians one must also look down to make certain you don't collide with one of these trail hazards.

If a driver should take a car onto a trail it is the same as if they are driving on a sidewalk, which is an extremely rare occurrence and can be dealt with under the motor vehicle act or criminal code. In short, my opinion is to remove bollards from all cycling trails to increase the safety and decrease the hazard to cyclists. I also have fellow cycling club members who have suffered injury due to bollards who I will encourage to contact you with their story's.

I am a year round cyclist who regularly cycles 7-10,000 km per year in the CRD.

Yours Sincerely

Craig

Appendix B

CHAPTER 1000 BICYCLE TRANSPORTATION DESIGN

CalTrans Highway Design Manual

December 30, 2015

<http://www.dot.ca.gov/hq/oppd/hdm/pdf/english/chp1000.pdf>

(3) **Clearance to Obstructions.** A minimum 2-foot horizontal clearance from the paved edge of a bike path to obstructions shall be provided. See Figure 1003.1A. 3 feet should be provided. Adequate clearance from fixed objects is needed regardless of the paved width. If a path is paved contiguous with a continuous fixed object (e.g., fence, wall, and building), a 4-inch white edge line, 2 feet from the fixed object, is recommended to minimize the likelihood of a bicyclist hitting it. The clear width of a bicycle path on structures between railings shall be not less than 10 feet. It is desirable that the clear width of structures be equal to the minimum clear width of the path plus shoulders (i.e., 14 feet).

(17) **Entry Control for Bicycle Paths.** Obstacle posts and gates are fixed objects and placement within the bicycle path traveled way can cause them to be an obstruction to bicyclists. **Obstacles such as posts or gates may be considered only when other measures have failed to stop unauthorized motor vehicle entry.** Also, these obstacles may be considered only where safety and other issues posed by actual unauthorized vehicle entry are more serious than the safety and access issues posed to bicyclists, pedestrians and other authorized path users by the obstacles.

The 3-step approach to prevent unauthorized vehicle entry is:

(a) Post signs identifying the entry as a bicycle path with regulatory signs prohibiting motor vehicle entry where roads and bicycle paths cross and at other path entry points.

(b) Design the path entry so it does not look like a vehicle access and makes intentional access by unauthorized users more difficult. Dividing a path into two one-way paths prior to the intersection, separated by low plantings or other features not conducive to motor vehicle use, can discourage motorists from entering and reduce driver error.

(c) Assess whether signing and path entry design prevents or minimizes unauthorized entry to tolerable levels. **If there are documented issues caused by unauthorized motor vehicle entry, and other methods have proven ineffective, assess whether the issues posed by unauthorized vehicle entry exceed the crash risks and access issues posed by obstacles.**

If the decision is made to add bollards, plantings or similar obstacles, they should be:

- Yielding to minimize injury to bicyclists and pedestrians who may strike them.
- Removable or moveable (such as gates) for emergency and maintenance access must leave a flush surface when removed.
- Reflectorized for nighttime visibility and painted, coated, or manufactured of material in a bright color to enhanced daytime visibility.
- Illuminated when necessary.
- Spaced to leave a minimum of 5 feet of clearance of paved area between obstacles (measured from face of obstacle to face of adjacent obstacle). Symmetrically about the center line of the path.

- Positioned so an even number of bicycle travel lanes are created, with a minimum of two paths of travel. An odd number of openings increase the risk of head-on collisions if traffic in both directions tries to use the same opening.
- Placed so additional, non-centerline/lane line posts are located a minimum of 2 feet from the edge of pavement.
- Delineated as shown in California MUTCD Figure 9C-2.
- Provide special advance warning signs or painted pavement markings if sight distance is limited.
- Placed 10 to 30 feet back from an intersection, and 5 to 10 feet from a bridge, so bicyclists approach the obstacle straight on and maintenance vehicles can pull off the road.
- Placed beyond the clear zone on the crossing highway, otherwise breakaway.

When physical obstacles are needed to control unauthorized vehicle access, a single non removable, flexible, post on the path centerline with a separate gate for emergency/maintenance vehicle access next to the path, is preferred. The gate should swing away from the path,

Fold-down obstacle posts or bollards shall not be used within the paved area of bicycle paths. They are often left in the folded down position, which presents a crash hazard to bicyclists and pedestrians. When vehicles drive across fold-down obstacles, they can be broken from their hinges, leaving twisted and jagged obstructions that project a few inches from the path surface.

Obstacle posts or gates must not be used to force bicyclists to slow down, stop or dismount. Treatments used to reduce vehicle speeds may be used where it is desirable to reduce bicycle speeds.

For obstacle post visibility marking, and pavement markings, see the California MUTCD, Section 9C.101(CA).

Appendix C

Regional Trails Management Plan Capital Regional District / October 2016 Appendix 3: Trail Development Guidelines

Bollards

- Bollards will be used in advance of trail-road intersections to preclude motor vehicles from accessing the trail and to alert trail users that they are approaching an intersection.
- Generally, bollards will be located approximately 5 m back from the edge of road or edge of sidewalk. Depending on the terrain, in some cases bollards may be located differently or chicanes may be used in place of bollards to slow trail users.
- Bollard placement will be such that they allow for wheelchair and mobility scooter access and standard child bike trailer (1.3 m maximum width) access.
- Reflective tape will be used on bollards to increase visibility.
- Bollards will be silver or white in colour.

Communication from Mike Walton, Senior Manager, CRD Regional Parks:

When and why CRD Regional Parks uses bollards at road/trail intersections

CRD Regional Parks' operational practice over the past 29 years has been to install bollards at road-trail crossings along the regional trails to prevent vehicles (cars/ATVs) from driving on the trails and to alert trail users that they are approaching a road crossing. Given that the road-trail intersections could be mistaken for laneways, that the trails have high use, and that there are potentially very high consequences if vehicles were to travel down the trails unchecked, bollards are considered necessary to mitigate this risk.

In most cases along the 90+ km of regional trail, motor vehicles on roads have priority over trail users crossing the roads (trail users are to yield to road users) so the bollards also provide a visual cue, in addition to trail signage, to alert users that they are approaching an intersection. The fact that bollards are at all road-trail crossings provides consistency for trail users.

Design and specifications

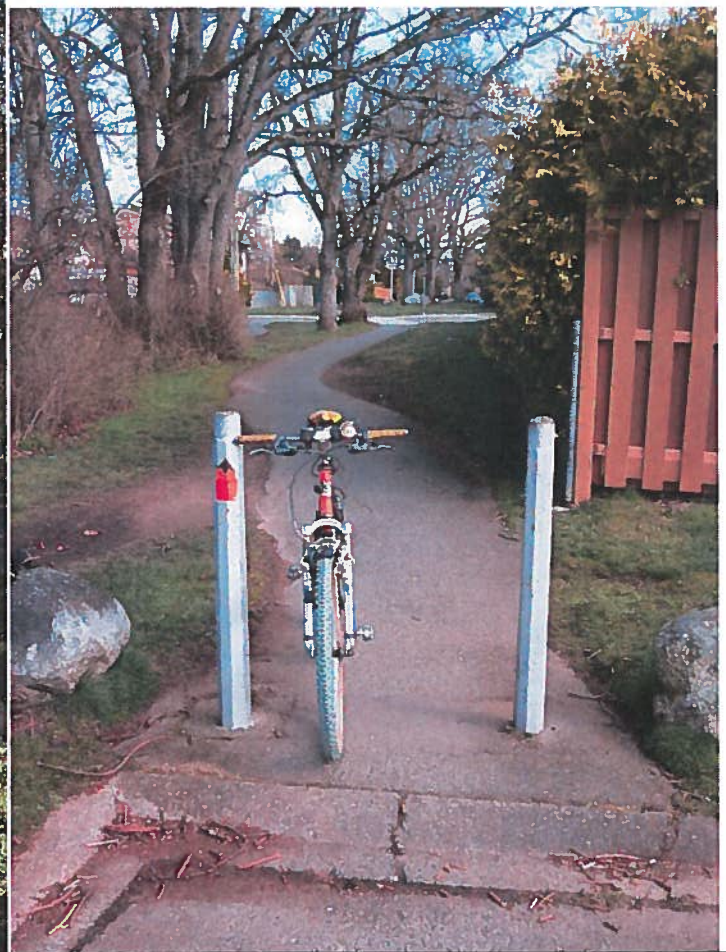
The CRD (Regional Planning) developed Design Guidelines in 2011 as part of the Pedestrian and Cycling Master Plan (PCMP) project. These design guidelines were developed based on best management practices gathered from various government agencies in Canada and the US. The guidelines relating to bollards state that where bollards are installed, odd numbers of bollards should be used to reduce conflicts among users. The number of bollards on a trail and the space between them is dependent on the trail width (e.g., a 2 m wide trail may be managed with 1 bollard, a 3 m wide (or greater) trail width requires at least 3 bollards to preclude vehicles). In most of the urban areas of the regional trails system, the trail width is at least 3 m, so in these locations, 3 bollards are used. The bollards are installed with a minimum of 1.5 m and a maximum of 2.2 m between the posts to have enough space to allow the passage of recumbent bicycles, standard bicycle trailers for children, and wheelchairs, as well as standard bicycles.

Bollards on the regional trails have a reflective band at the top of the post to improve visibility for cyclists during conditions of poor visibility. Further, the bollard guidelines includes a paint design to be used on paved trails with bollards to make them more visible (a solid yellow line in advance of the bollard to indicate no passing and a diamond around the center bollard). This design has been required on the more recently constructed sections of the E&N Rail Trail and is being implemented along the Goose and the Lochside as line re-painting is conducted.

The Regional Trails Management Plan, in the Trail Planning and Development section (2.4.3), indicates that the trail development guidelines provided in Appendix 3 will be used to guide regional trail development. The guidance regarding bollards indicates they will be used in advance of trail-road intersections to preclude motor vehicles and to alert trail users of the upcoming intersection. It does not specify the number of bollards to be used because, as noted above, that varies depending on the width of the trail surface.

I hope this information assists in your discussions with trail users about why CRD Regional Parks uses bollards on the regional trails system.

Appendix D



Lochside at Saanich Rd.
Bollards block travel path

Gordon Head Local Connector
Connection between San Juan Ave and Columbia Dr



Lochside at Blenkinsop Rd.
No bollards on far side but bollards at every road and driveway along Mt Douglas X Rd despite the fact cars could easily cross gravel boulevard between road and trail.

Why are outer bollards placed within path. Silver bollards are not very visible compared to white bollards.



Lochside at McKenzie and Borden.
Why have any bollards here?

An interesting approach to warn of approaching road interface

Bicycle and Pedestrian Mobility Advisory Committee

Terms of Reference

The purpose of the Bicycle and Pedestrian Mobility Advisory Committee is to advise Council and recommend policies on cycling and pedestrian mobility, and road, sidewalk, and trail designs to promote safe, efficient, and valued alternate modes of transportation.

Mandate

The Bicycle and Pedestrian Mobility Advisory committee will, consistent with the purpose described above, undertake the following:

- Develop and recommend policies and programs to Council and respond to Council requests for advice and information with a focus on:
 - Raising awareness of the use of alternate modes of transportation as healthy and environmentally sound activities.
 - Creating safe cycling and pedestrian environments on dedicated routes, including roads, sidewalks, and trail networks.
 - Facilitating commuter cycling, walking, and other alternate modes of transportation as personal transportation choices.
 - Encouraging recreational cycling, walking, and other alternate modes of transportation among residents and as desirable forms of tourism.
 - Integrating Saanich bicycle and pedestrian mobility policies with those adopted in adjacent Municipalities.
 - Promoting land use patterns that encourage alternate modes of transportation.
- Review and provide feedback on the strategic plan.

The Committee will consider the attached guidelines when developing recommendations.

Meetings

The Committee will meet a minimum of four times per year in accordance with its regular schedule of meetings established annually at the first meeting of the year. No meetings are held during the summer and winter breaks (July, August and December). Special meetings may be held at the call of the Chair. The meeting rules and procedures will be in accordance with the Council Procedure Bylaw.

Membership

The Committee will consist of nine (9) members including:

- One member of Council to serve as Chair, appointed by the Mayor; and,
- Eight community representatives appointed by the Council.

Staff Support

The Engineering Department is the primary contact and together with the Parks and Recreation, Planning, and Police Departments will provide the required professional support. The Legislative Division will provide secretarial and administrative support.

Bicycle and Pedestrian Mobility Advisory Committee Guidelines

- a. Planning for the increased use of bicycles and pedestrians, considering:
 - User groups
 - Routes
 - Infrastructure
 - Integration with the transportation system, including regional features
 - Compatibility with park and trail systems
 - Liaison with other Municipalities, the Capital Regional District, the Ministry of Transportation, and cycling and pedestrian stakeholders within the region
 - Transportation choices that both support and encourage land use patterns that are consistent with the goals and objectives of the Regional Growth Strategy

- b. Engineering standards that reflect an increase in cycling, walking, and other alternate modes of transportation, including:
 - Facility standards
 - Classification system
 - Hazard rating
 - Traffic control devices
 - Priority improvements
 - Coordination with major road and sidewalk programs

- c. Education and Safety Programs that build rider/pedestrian/driver awareness and encourage a sense of personal responsibility, including:
 - Common rules
 - Road and sidewalk etiquette
 - Bicycle equipment and maintenance
 - Rider training
 - Safe routes to school

- d. Legislation governs the use of all vehicles, including bicycles, and amendments may be desirable in certain areas:
 - *Motor Vehicle Act*
 - Traffic Bylaw
 - *Highway Act*
 - Licensing Procedure

- e. Funding sources for priority projects, including:
 - Capital budget
 - Safe routes to school
 - Provincial cost sharing

1420-30 BLPED

From D. Wick
Jan 2017 BLPED
meeting.



LOCAL CONNECTORS

January 2, 2017

Vancouver's cycling-friendly side streets seen as a key step forward for North American cities

By MIKE HAGER

Urban-planning and transportation experts have long feted Vancouver's extensive system of bike-friendly side streets

Things That Work: The Globe and Mail looks at businesses, services and other projects in British Columbia that aren't often talked about because they actually work.

For the past decade, Vancouver's separated bike lanes have continued to generate headlines and heaps of public scorn from conservative Vancouver residents who see them as the most overt example of Big Government's ongoing "war on the car."

Their most ardent critic, CKNW radio shock jock Bruce Allen, has spent numerous segments railing against the "big ugly cement barriers that turned our streets into eyesores."

Things that work: Vancouver's live-work studio program helps artists in a city short on space¹

Things that work: B.C. non-profit Access to Media helps marginalized youth tell their stories²

Things that work: UBC program aims to increase number of indigenous doctors³

And yet, he is a fan of the more understated network of traffic-calmed residential streets that allow cyclists to traverse the city in relative safety and peace.

"Sixty per cent of the 280 kilometres of Vancouver bike lanes are on side streets and that's good," he said in an early 2016 editorial. "And some of those side streets also have traffic calmers or speed bumps to slow down vehicular traffic."

Urban-planning and transportation experts have long feted Vancouver's extensive system of bike-friendly side streets as a cheap and uncontroversial way for bike-resistant North American cities to create the infrastructure that gets people out of their cars and onto two wheels.

"It's very simple," says Gordon Price, a six-term former city councillor and former director of Simon Fraser University's City Program. "All you have to do is put in traffic signals where these side streets cross another arterial."

Mr. Price says Vancouver's place at the forefront of North American cycling infrastructure stems from activists in the early 1970s successfully stopping a freeway from carving through its downtown core. After that, he says, Vancouver's politicians declared that the car would not be the dominant mode of transportation, which paved

ITEM 6

the way for the city's first dedicated bike lanes to be created in the early 1990s, with little backlash.

These lanes – which force cars to obey lower speed limits in order to give cyclists preferential treatment on an open residential street – soon began to reshape the "mental map" residents use for getting around the city, he said.

Mr. Price was a councillor from 1986 to 2002, after which he says his Non-Partisan Association party committed to fomenting a "bikelash" among Vancouver's more conservative residents to oppose any expansion to the city's cycling infrastructure. This movement began to reach a fever pitch in the run-up to council reallocating a car lane of the Burrard Street Bridge in 2009 to create a separated path for cyclists riding in and out of downtown.

"It's territorial, it is tribal – it doesn't matter what the data says," Mr. Price says of the resistance toward such separated bike lanes. "People just feel like 'you're taking space; the congestion's bad already; you're deliberately making my life worse. For who? A bunch of jerks who aren't obeying the law. Why don't you licence them and make them pay their way? Anyway, we don't have room and blah blah blah.' And guess what happens [after a new bike lane is built]? Nothing."

Networks of traffic-calmed streets can be an important – and politically feasible – middle step for a city to make cycling safer and easier for many, but, ultimately, separated lanes on busy streets are the key to getting more commuters peddling to work, according to Brent Toderian, Vancouver's former director of planning.

Roughly 10 per cent of Vancouver commutes are now on bikes thanks to these separated lanes, making it one of North America's top-three cycling cities, he says.


Still, the vast network of bike-friendly side streets have helped make Vancouver the safest city for cyclists by far on the continent, according to a recent study of nine major hubs by John Pucher, a professor emeritus at Rutgers University and an expert on urban transportation.

"By far the biggest safety benefits are in terms of huge declines in traffic injuries of children," Mr. Pucher says of the side streets calmed for cyclists. "What resident of a neighbourhood is going to oppose this?"

References

1. www.theglobeandmail.com/news/british-columbia/live-work-studio-program-helps-vancouver-artists-in-a-city-short-on-space/article33419363
2. www.theglobeandmail.com/news/british-columbia/bc-non-profit-access-to-media-helps-marginalized-youth-tell-their-stories/article33427464
3. www.theglobeandmail.com/news/british-columbia/ubc-program-aims-to-increase-number-of-indigenous-doctors/article33453011

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