This List (and addendum update) records work suggestions for safe cycling networks and acknowledges completed projects in Delta. The Delta Cycling Master Plan public engagement and subsequent report (with Urban Systems) is excellent. General dangers

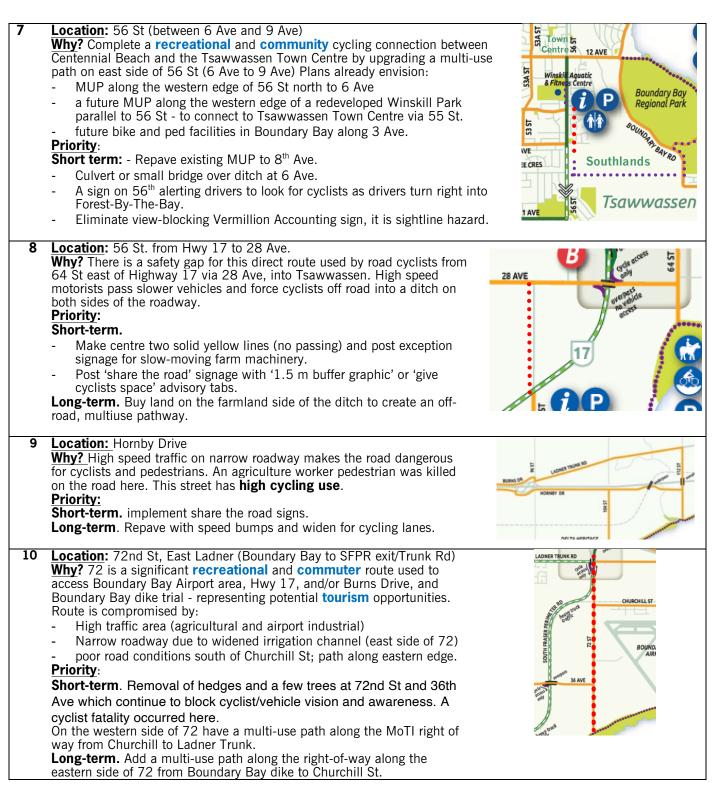
- Sightlines, and lack of awareness by vehicle drivers to watch for cyclists, at intersections. An experienced cyclist was killed in August 2018 at 36 Ave / 72 St. At this location sightlines were improved but growth in vegetation since has put this intersection back to the risk state it was in prior to the fatality. Suggest trees blocking site lines be removed ASAP.
- Vehicles pass cyclists too close on Delta urban and rural roadways. Suggest 'Give Cyclists Space' signs and more
 multi-use paths for family cycling use.
- Upgrade dike surfaces to accommodate a greater range of cycling use.
- Gaps that involve other jurisdictions, such as needing to cross the Deltaport railway between trails along the Salish Sea. A 34 St ditch bridge is an interim solution for cyclists, within the City of Delta.
- Inexperienced cyclists. A comprehensive school education program would assist students and families.

Goal. 'Vison Zero' - work towards zero death and serious injury on Delta roads. Thank you for the public consultation.

TOP NETWORK "GAPS"

1 Location: River Road West, Ladner (46A St to Brunswick Point). we Island recognize that major longer term improvements are being planned by 🗱 P Delta, so overall, our suggestions are to do shorter term fixes in advance of the major larger term improvements. Why? Popular recreational route for community and cycle clubs, as 18 well as **commuters** to workplaces on Westham Island. Significant tourism potential including farm stands, bird watching and travel to the Tsawwassen Ferry Terminal via the Great Blue Heron Way. This route east of Westham Island Bridge has: High mix of local and industrial vehicles between ditches. RIVER RD WES Musaueam Narrow and s-curve road, crumbling edges and blind spots that Brunswick First Nation 1857 _ Point No.4 force all vehicle traffic into centre of roadway. Barriers on dike top path due to private ownership, mix of residential and business uses, and locked gate near 46A St. **Priority:** Short-term. Address safety. - Repair and fix crumbling road edges from 46A St westward. - In consultation with stakeholders add a 2-directional multi-use gravel path in the available north side road right-of-way (pictured), from Ladner Reach properties (where dike top trail ends) to City of Delta's Wellington Point Park. Long-term. - Repave/widen River Road West to accommodate bike lanes from Ladner Village to Westham Island Bridge. - Extend dike top trail from Village to Delta's Wellington Point Park. 2 Location: 12 Ave, Tsawwassen Why? Create an east-west "spine" along 12 Ave for recreational and community cycling (Beach Grove Rd to English Bluff). Help fulfill the 12 Ave "Main Street" vision of the Tsawwassen Area Plan, while supporting South Delta Business Sustainability Strategy. 12 Ave currently has: cycling lanes from Beach Grove Rd to 56 St. and share the road signage from 53A St to English Bluff Rd (sufficient width for bike lanes) narrow roadway in the Town Centre area, between 56 and 53A St. require intersection safety improvements at 12 Ave and 56 St anticipated density changes at Tsawwassen Town Centre Mall (in conjunction 202 with plans being developed by Century Group that include ped/bike facilities). Priority: 53A ST Enhance safety for cyclists on current roadway. Town 56 ST Centre green bike box and bike button on NE corner of 12 Ave/56 St (where **12 AVE** northbound vehicles merge) 53A ST destination signage to indicate Town Centre/Centennial Beach Winskill Aquatic continuous multi-use path or bike lanes Beach Grove to English Bluff. Centre Во 53A St intersection should be a right turn only – due to vehicle/cvclist/ped risk. Vehicles head west at high speed not waiting.

3	 Location: 64th St (George Massey Tunnel Bike Shuttle to Tsawwassen) Why? 64 is a significant recreational and commuter route used to access Tsawwassen from the Massey Tunnel bike shuttle and Deas Island Regional Park where there is a decent parking lot. It has tourism opportunities as the Barns to Beaches route (Four Winds is in Tilbury, Barnside Breweries, Schoolhouse Farm and the Delta Tourism Office on 60 Ave). Route is compromised by: Poor wayfinding signage High traffic area (casino access at Hwy 17A / 60 Ave near bike shuttle) 64St narrow roadway with ditches either side, and vehicles that pass others (with no regard for vulnerable road users (cyclist, runners and pedestrians). Priority: Short-term. More way-finding for tunnel shuttle, community and tourism destinations. Thank you for map sign at Tourism Office on 60 Ave. Cycling space signage. Vehicle speed reduction (suggest more speed bumps). Long-term. Comfortable bike lanes or multi-use path on farmland side of ditch. Thank you for new paving between Delta works yard and Ladner Trunk Rd. 	Benside
4	 Location: 28 Ave, Delta (56 St to 52 St) Why? 28 Ave is a key emerging network connection for recreational, tourist and commuter cyclists traveling between 64 St, the Boundary Bay dike trail and TFN/Tsawwassen Ferry Terminal; it also connects to the new bike lanes along Arthur Drive in Ladner. The route is unsafe from 56 St to 52 St, with: Narrow, pot-holed, roadway with minimal (no) shoulder in places Very busy with vehicle traffic between Tsawwassen and Ladner/Deltaport. Poor lighting (farm road) Priority: Short-term. Widen 28 Ave from 56 to 52 St; add bike lanes in both directions. Priority: Short-term. If metro Vancouver does not put cycling lanes here, implement awareness methods. Suitable for 56 St (28 to Hwy 17) too. Make centre two solid yellow lines (no passing) and post exception signage for slow-moving farm machinery. Post 'share the road' signage with '1.5 m buffer graphic' or 'give cyclists space' advisory tabs. Long-term. Buy land on the farmland side of the ditch to create an off-road, multiuse pathway. 	DELTAPORT WAY
5	 Location: East west routes in North Delta. E.g. 75A Ave Why? North Delta lacks east-west routes on less busy roadways for recreational and community cycling. 75A is currently compromised by: Disrupted regional connection to newly completed bike lanes on 75A in Surrey (which connects to 122 St and the Serpentine Greenway) Delta west-east bike facilities stop at 116 St on 75A (a Gap to Scott Rd) Proposed high-rise development at 75A/Scott Rd (will add major car traffic). Priority: Long-term. Add bike facilities along 75A Ave to connect Delta and Surrey. 	TT AVE TSA AVE TSA AVE TSA AVE TSA AVE TSA AVE TSA AVE TSA AVE TSA AVE SUTTEY ST TSA E
	 Why? North Delta lacks continuous routes to safely connect residential neighbourhoods to natural outdoor areas - parks and trails. Priority: Multi-use paths and bike lanes that are safely separated from parked cars. Create access between Greenway and Watershed Park. (see photo) Upgrade to usable trails by Burns Bog. See below under 'Collaboration' for further Greenway information. Tyler Etheridge report (March 2021) is available. Establish a cycling lane on the north side of 64th In North Delta (which connects with Kittson Parkway). Parking is currently allowed on that side of the road but is seldom used.	



ROADWAY ENHANCEMENTS

→ Caution Paint and Signage

Priority:

Add more locations (green) caution paint to raise awareness at key conflict points where cyclists are most vulnerable. Drivers are now more familiar with it.

- Implementation is recommended at locations such as:
 - \rightarrow 12 Ave west bound at 56 St.
 - → Southeast corner of 52 St and Hwy 17, ahead of merge lane where eastbound vehicles turn right onto Hwy 17 towards Ladner/Massey Tunnel. Could add bollards eg. In Richmond, Westminster at Garden City, top photo)

Use a direction arrow with bike symbol in a bike lane.

Use bike symbol and wrong way on red, where a dangerous mistake could be made.

Thank you for green paint locations now existing!





A

↑ Destination I

Contraction II

Ladner

Harbour Park

47A AVE

adner

44 AVE

Destination III ->

→ Wayfinding (Signage)

Priority: Incorporate new destination signage at strategic Delta locations to raise awareness about the bike network and alternatives, including:

- Intersection of Arthur Drive and 44 Ave (*pictured, below right*)
 - \rightarrow To Ladner Village shops and services (northbound via Arthur Drive)
 - \rightarrow To Trenant Park Square shops (eastbound via Maple Lane, 53 St)
 - \rightarrow To Westham Island and Brunswick Point (westbound via 45 Ave)
 - Terminus of Boundary Bay dike trail at 17A Ave in Tsawwassen
 - \rightarrow To Tsawwassen Town Centre (south/west via Beach Grove Rd/12 Ave)
 - \rightarrow from the bike shuttle to the ferry via 64th street and 28th
 - \rightarrow To Tsawwassen Ferry Terminal (west via 17/18 Ave)
 - → To Centennial Beach (south via Beach Grove Rd)
 - \rightarrow To Ladner (north/east via Boundary Bay dike/64 St/34B Ave)
- Intersection of River Rd East and Centre St, North Delta
 - \rightarrow To 72 St (south via North Delta greenway)
 - \rightarrow To Boundary Bay Dike trail (south via Surrey/North Delta greenway)
 - → To Centennial Beach (south via Beach Grove Rd)
- Raise awareness for Barns to Beaches route sites, and direction for safe travel.

Thank you for bus stop bike maps.

\rightarrow Awareness (Signage)

Priority: Install 'share the road' signs that advertise the passing distance:

- Important on rural roads with ditches as well as urban roads with wide business vehicles.

Thank you for the 'Code of Conduct' signs on Boundary Bay Dike.



COLLABORATION – City of Delta with other jurisdictions

→ Westham Island Bridge (*TransLink project)

- > HUB Cycling has requested a fix from TransLink here for the past 6 years.
 Existing condition of bridge is dangerous for cyclists because of cracks, slippery conditions; and Wooden 'patches' have been used to cover cracks or gaps between planks. Serious cycling accidents have happened as a result.
- Non-slip paint was tried but failed.
- Test grip strips along edges of bridge have been implemented. They have performed adequately.

Status: 2021. TransLink is hesitant to implement the grip strips due to TransLink stating there is a lack of funds.

→ Regional Trail Connection (Boundary Bay Dike to BC Ferries)

Priority: To establish a shared trail system for **tourism** and **recreational** cycling. (**City of Delta with Metro Vancouver, Trans Canada Trail, MoTl, DFl*).

- Most trail connections are existing, needs improvement by Tsawwassen Rec. Centre.
- Trail requires destination signage and coordination to ensure that the range of users understand where to go, and to respect farm vehicles.
- Trail improvements including AAA surfacing or more compacted gravel could expand its utility as a travel corridor

Status Thank you for dike gravel surface improvement 64 St to 17A Ave.

→ Cyclists/Pedestrian Overpasses (and interim safer crossing)

Priority: To promote **tourism** and **recreational** cycling, we firmly support the City of Delta work with local/regional stakeholders and governments to effect safe and efficient cyclist/ pedestrian overpasses at:

The Deltaport railway between the Brunswick Point Trail and the TFN Breakwater Path named the Great Blue Heron Way (GBHW) along the Salish Sea. This connects the Tsawwassen BC Ferries terminal via an off-road and rural road network to the George Massey Tunnel Bike Shuttle.

(*with Port of Vancouver, MoTI, BC Rail, TFN, TrailsBC, City of Delta) A detailed report (A GBHW team business case sent to MoTI and shared with stakeholders) details ideas to re-establish the Deltaport rail crossing. The Retail Wholesale Union and Global Container Terminals have given written support to the GBHW Team.

Short-term. On City of Delta jurisdiction for trail-using cyclists.

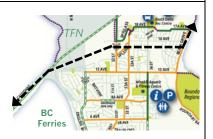
- Build a culvert or small bridge ditch crossing at dike/34 St. This creates a route that leaves dike further north from railway (at 34 St), to safely cross rail lines using existing road infrastructure (41B St and the 41B St overpass). During the Covid pandemic and since, this crossing is constantly attempted by Delta residents, who are forced to carry their bikes across a steep sided ditch.

- Repair 33 A Ave and install low speed bumps on this already well-used bike route.

On Highway 17 to service residents and workers between Tsawwassen and Tsawwassen Mills / Tsawwassen Commons shopping, housing and recreation. (*with TFN, BC Ministry of Transportation and Infrastructure, TrailsBC)

Short-term. For crossing Highway 17. Establish awareness and speed reduction techniques to manage potential dangers for pedestrians and cyclists navigating Highway 17. It is understood high visibility painted crosswalks can be used if a provincial highway has a posted limit 60 km/hr or less. New residential housing, school children, and workers/shoppers accessing bus stops, supports the need for a speed reduction to 50 km/hr between 52 St. and the ferry causeway. **Long-term.** Ped /cycling bridge to protect children and all vulnerable users.











→ Regional Trail Upgrade (Surrey Delta Greenway)

Priority: To establish a shared trail system for **tourism** and **recreational** cycling from The Fraser River to the Boundary Bay dike trail. *Underway with Metro Vancouver*.

(*City of Delta with Metro Vancouver, Trans Canada Trail, MoTI, DFI).

- Maintained trail sections are usable and in good shape.
- The planned sections are used but in terrible condition. They require flood mitigation and upgrade. This pertains to the north half heading towards Alex Fraser bridge, alongside the Delta Nature Reserve.
- Trail has very poor destination signage and coordination.
- Trail connections in rough shape include rocky path to 72 overpass (photo left), such short distance fixes could make for a usable long distance trail.
- Trail east of the railway tracks is in good shape and is utilized when Surrey Delta Greenway is flooded. This is the route that mostly pertains to the report from Tyler Etheridge, March 2021.

→ Regional Trail Gap (Mud Bay to Crescent Beach)

Priority: To establish a continuous trail system for **tourism** and **recreational** cycling all along the shore of Boundary Bay and Mud Bay.

- Surrey's Nicomekl Riverfront Park design, phase 1 of 3, is underway. Suggest Delta coordinate on dike top use for walking and biking now federal funds are in place to raise the dikes for flood protection.





Del

- Possibly coordinate with the rail owner for use of right-of-way along the shoreline instead of having to use Colebrook Rd and King George Hwy.
- This benefits tourism in Delta, and safe off-road travel for Delta citizens.

CITIZEN ENGAGEMENT

→ Establish an "Active Transportation Advisory Committee" and dedicated Staff Role (City of Delta)

Priority: Committee and staff allocation. Other municipalities have similar committees for citizen input.

 Committee would provide advice and feedback to Mayor, Council, and municipal staff on infrastructure, programs and planning relating to cycling, walking, transit, scooters, and other forms of non-vehicular transportation such as E-bikes and scooters.

- Delta-wide education, in schools and at events. Thus far funding has been from TransLink and Fraser Health.

Thank you for the 2021/2022 public consultation and 2023 release of the City's first Cycling Master Plan.

Thank you for your support for the Active Travel initiatives with Delta schools (e.g. Gibson Elementary).

STATUS: PAST PRIORITIES	
 COMPLETED Location: 53 A St at 16 Ave, Tsawwassen Intersection unsafe for vulnerable users HUB Delta submitted a support letter to City of Delta for improvements (January 201) To include median and green painted bike box. 	9). THANK YOU
 COMPLETED Location: Elliott Street, Ladner Village (between River Rd and Chisholm St) Dangerous, re-occurring bulge in road on Elliott Street between River Rd and Chisholr Street. Long term fix has been made. 	^π ΤΗΑΝΚ ΥΟυ
COMPLETED <u>Location</u> : 53 St (Arthur Drive) from Deltaport Way overpass to 28 Ave. <u>Status</u> : City of Delta is widening shoulder (and continuing the bike lanes) in conjunction with ongoing Neighbourhood Road Improvements Program and Metro Vancouver water m works along Arthur Drive/53 St. Underway in 2019-2021.	ain THANK YOU
COMPLETED <u>Location</u> : Pedestrian bridge over Hwy 17A (behind Ladner Leisure Centre) - Relocate metal track to allow cyclists to push their bikes over steep stairs. NEW cycle track has been built.	THANK YOU
Partially complete Location: Hwy 10 – Ladner Trunk Road (John Oliver Park and 104 St) Road surface repairs on this frequently used corridor for cycling clubs and commuter cyclists. Permission impeding vegetation still peeds addressing	THANK YOU
Requirement Vision-impeding vegetation still needs addressing.	
COMPLETED <u>Location</u> : Imperial Village Right-of-Way Trail, Tsawwassen <u>Why</u> ? Formalize and enhance access to this flat trail connection (18 Ave & 52 St) to fill a recreation and tourism route gap.	THANK YOU
COMPLETED Location: River Rd from Deas Island (Millennium Trail) to Hopcott Rd Network connection Gap for recreational and commuter cycling between the Millennium Trail and Hopcott Rd/Tilbury Rd that connects Ladner to North Delta is filled.	THANK YOU
COMPLETED Location: MUP through Southlands to Boundary Bay Road	THANK YOU
COMPLETED Bike facilities on 12th Avenue from Beach Grove Road to 56 th Street	THANK YOU

Addendum: July 2023 Update notes More projects under discussion with Delta Staff.

Cycling facilities on 44 Avenue, Ladner. Please see attached report on same.

More effective debris clearing at the new River Road separated cycling lane, near Four Winds.

Installation of a bike button on the west and east side of the intersection of 16th Ave and 56th St - and also at the southwest side of the intersection of Hornby Road and Ladner Trunk Road.

Installation of Bollards (in part of the green paint section on 52nd st and Highway 17). This will decrease risk of a vehicle hitting cyclists - when vehicles prepare to turn east on Highway 17.

Work with Delta Chamber of Commerce and HUB on a request for a new trailer and ramp to allow E bike usage of the Massey Tunnel bike shuttle. And, also request that the contractor place a sign on their Van to better promote shuttle bus usage.

Request MOTI remove two small trees in the Hwy 99 right-of-way near the 64 St 'cow tunnel' which continually cause damage to Delta's multiuse path. MOTI has verbally agreed to remove trees if requested.

During the design phase of potential cycling improvements on 12th Ave., suggest engineering illuminate the current risk on 53A st and 12th Ave - regarding a severe pinch point for cyclists and cars.

Suggest 'Bylaws' increase enforcement of cars parking in the cycling lane on English Bluff Road, particularly on weekends.

Further discuss ideas that came from our ride last summer in **North Delta** with city staff. For example:

- Improve East/West connections in North Delta to better align with cycling lanes in Surrey.

- Improve North /South connections in North Delta.

- In order to make meaningful, timely and cost affective connections in North Delta, suggest cycling lanes instead of Multi Use Paths (in most cases).

- Together with Metro Vancouver and Surrey, install badly needed wayfinding directional signage in the watershed area, which can direct cyclists to an existing good cycling and hiking connection (that is difficult to navigate without signage) through the entire watershed. This would preclude the need to spend a significant amount of funds to mitigate flooding that occurs in on the lower path in winter. HUB has provided a detailed report on same to staff.

HUB Cycling TFN Delta supports the request by Delta to install an additional exit into Ladner with facilities for road and trail cyclists, from the new Massey Tunnel. It is also essential to continue the Millennium Trail link to Deas Island Park from Ladner during construction. Thank you for your support on this.

Establish funding of cycling education courses in grade 4/5 across all Delta schools. Thus far, most funding has been received from TransLink.

Regarding Multi Use Paths, consider increased use of simpler and cost affective cement barriers in areas with little or no pedestrian usage.

Areas involving other jurisdictions:

The cycling lane side of the BC Ferries causeway heading east, is narrow, full of debris and is badly in need redesign. There is more than adequate space for a simple barrier-separated cycling lane.

After many years of lobbying by HUB and the BC trial lawyers association, the BC government finally established a rule that vehicles must give a certain degree of room to cyclists when passing. Unfortunately, all that was obtained was one metre. This distance is totally inadequate. A minimum passing of 1.5 metres is needed and at high speeds, two metres.

Regarding speeding drivers, HUB Cycling TFN Delta fully supports and commends Delta for its usage of low-cost flashing speed signs. In terms of any meaningful improvement to dealing with speeding drivers, we at HUB see no other option other than some degree of electronic monitoring, red light cameras and traffic slowing measures such as speed bumps. We also suggest using 'Roundabouts' rather than traffic light intersections in some cases. All of this is very much aligned with " Vision Zero" which we thank Delta for adopting.

neil.pope@cibc.ca 5 July, 2023

44 Avenue cycling lane project, Delta.

Report by Neil Pope, co-chair, HUB Cycling TFN Delta Local Committee

We congratulate Delta staff and Mayor and Council for both the design of the proposed cycling facilities and for the very comprehensive public consultation.

This project on 44 Avenue, from Arthur Drive to Dugald Morrison Park, is **an essential network link** between:

- Ladner Elementary / Crombie Park and
 City services, museum discovery centre and recreation centre, and health facilities
- Delta resident commuters in neighbourhoods west and north (via 53 St bike route) and the Ladner Transit Exchange
- Arthur Drive (south) bike lanes from Tsawwassen and the Millennium Trail via 57A St and Crescent Drive to Deas Island Park and beyond to North Delta via River Road
- Tsawwassen, Ladner and East Ladner via ped/bike overpass bridges across Highway 17A at Ladner Trunk Road

We at HUB Cycling fully recognise Council's need to consider public opinion before proceeding with projects such as what was proposed on 44 Ave. The initial 'in person' public consultation was well attended by public and staff. Letters were also subsequently sent to all residents who live on the affected area on 44 Ave. Understandably, some of the affected residents did not want to lose any street parking. Delta subsequently offered to consider 'pull outs' which would have maintained a portion of parking on the south side of 44 Ave.

We would not characterise the opposition from the affected residents as 'significant.' We stand to be corrected but we were at the initial public consultation from its beginning to its completion. We believe the far majority of those in attendance were in favor of this project. One would think that if there was significant local resident concern, more residents would have made the short trip to city hall to voice their opinion.

Residents on 44 Ave then had further time to comment directly to staff or council. In addition, after the public consultation, eighty households on the parking affected area of 44 Ave were mailed a survey letter. It asked, "if they were in favored (or not) of this project". Only thirty-two of the eighty households responded. Twenty-seven were 'against' and five were for 'in favor.' Thus, the majority of affected residents did not return the survey letter they received. And just one third of the affected residents indicated their concern. Personally, we would have assumed more opposition, than occurred.

To frame this another way, imagine if Council did extensive public opinion gathering on whether streets such as 8A or English Bluff should lose existing cycling lanes, in favor of street parking.

We believe the negative public response would be significantly more than what Delta received by the affected residents on 44 Ave.

This past Sunday, I cycled down 44 Ave at 11AM. There were just six cars parked on the side of the street that would lose parking. All but one household had lots of space in their driveway to park the single vehicle that was parked in front of each of those six houses. And as always is the case on 44 Ave, there was significant parking space on the other side of the street. If need be, there are also side roads that vehicles can park on.

I have heard the argument posed by some residents on 44 Ave that it is "too dangerous to park on the other side of the street as they will need to "walk across the road". I would counter that 'danger' to cyclists riding down 44 Ave is significantly greater.

As streets in general (as we all know) are Delta - and not resident property - we encourage Council to consider this very worthy and well-designed project. This portion of 44 Ave was an excellent portion of road to consider for cycling facilities, given the proximity to schools, parks, transit and numerous public buildings. It has the road width to safely accommodate cycling and pedestrian needs.

Here is one last thought. There will of course always be some opposition to cycling facilities by residents who will lose a portion of street parking. But to proceed as fast as possible towards improving active, accessible, and safe cycling conditions, adding cycling lanes in the manner that staff has proposed is we feel the best way to proceed in most cases - from both an impact and cost standpoint. Multi Use Paths, while beneficial and applicable on certain streets, are not always the best way to proceed due to their high cost and due to closer cyclist proximity to driveways and cross streets. Instead, simply removing a bit of street parking on busier actively used roads is not only greatly beneficial but is also very cost effective. Should council proceed down this path, we believe that within as little as five years, we would see a material increase in both cyclists' usage and cyclist safety.

Examples from cities all over the world clearly indicate "build it and they come." I would add that we at HUB have seen a huge increase in cycling over the past few years in Delta. We credit Council for the cycling improvements done thus far, which has contributed to this increase in cycling.

We at HUB appreciate Council's willingness to discuss our thoughts on this project.

Thank you.

Neil Pope

Co-chair, HUB Cycling TFN Delta Local Committee