

AGENDA ITEM NO: 7-B-3

MEETING DATE: May 16, 2017

**STAFF REPORT – COVER SHEET**

SUBJECT: Final Draft Cycle Vision Plan DATE: May 5, 2017

DEPARTMENT: Engineering PREPARED BY: R.E.G Sanderson

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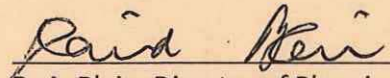
**1. SUMMARY OF ISSUE:**

The Final Draft Cycle Vision Plan May 2017 that includes additions and changes based on feedback from the community and the Transportation Advisory Committee has been provided in Appendix 'D' for information.

A decision to accept the Final Draft Cycle Vision Plan May 2017 and authorize staff to proceed implementing Quick Wins outlined in the plan utilizing available 2017 capital funds is requested of Council.

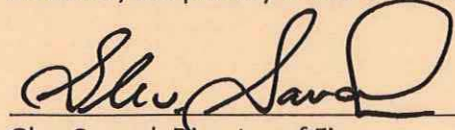
**2. RECOMMENDATION:**

Recommendation that Council accept the Final Draft Cycle Vision Plan May 2017 and authorize staff to proceed implementing Quick Wins as outlined in the plan, utilizing available 2017 capital funds.

  
D. A. Blain, Director of Planning & Engineering

**3. FINANCE COMMENTS:**

The Financial Plan provides annual funding towards cycling related projects and is available to implement Quick Wins as outlined within the report. However, the priority items identified within the report will take a number of years to complete.

  
Glen Savard, Director of Finance

**4. CHIEF ADMINISTRATIVE OFFICER'S RECOMMENDATION/COMMENTS:**

Supports recommendation.

  
Peter Monteith, CAO

**STAFF REPORT ON**  
**FINAL DRAFT CYCLE VISION PLAN**

PREPARED BY: Kevin Pollard                      DATE: May 5, 2017  
POSITION: Supervisor of Roads & Transportation                      DEPARTMENT: Engineering

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**1. DEFINITION OF ISSUE:**

At the meeting of the Transportation Advisory Committee (TAC) held April 27, 2017, the Committee passed a resolution regarding the "Final Draft Cycle Vision Plan". TAC Minutes attached in Appendix 'A'

The Final Draft Cycle Vision Plan May 2017 has been provided in Appendix 'D' for information that includes additions and changes based on feedback from the community and the Transportation Advisory Committee.

A decision to accept the Final Draft Cycle Vision Plan May 2017 and authorize staff to proceed implementing Quick Wins outlined in the plan utilizing available 2017 capital funds is requested of Council.

**2. BACKGROUND:**

2.1 The Cycle Vision Draft Plan was presented to Council March 21, 2017 where the decision was made to forward it to the Transportation Advisory Committee (TAC) and proceed with the "Cycle Vision Chilliwack" event on April 1<sup>st</sup> at City Hall to receive feedback from the community.

2.2 The Cycle Vision Draft Plan was presented by Richard Drdul at the Transportation Advisory Committee on March 23<sup>rd</sup>.

2.3 The second Cycle Vision Chilliwack event presented the Cycle Vision Draft Report at a public event held on April 1<sup>st</sup> from 10am-12noon at City Hall.

2.4 Recommended additions and changes received from the community summarized in the Technical Memorandum dated April 13, 2017 (attached in Appendix 'B') were presented by Drdul Community Transportation Planning for discussion at the Transportation Advisory Committee (TAC) meeting April 27<sup>th</sup>. The discussion resulted in the following committee resolution:

*"Moved / ) That the Transportation Advisory Committee recommend City Council give  
Seconded ( consideration to the "Final Draft Cycle Vision Plan" dated May 2017, and  
further ask Council to review funding to accelerate the realization of the plan.  
Carried Unanimously"*



2.5 Drdul Community Transportation Planning summarized the additions and changes to the Cycle Plan from TAC in the Technical Memorandum dated May 2, 2017 (attached in Appendix 'C') and now completed the Final Draft Cycle Vision Plan May 2017. A copy of the final draft document is attached in Appendix 'D'.

**3. ANALYSIS:**

3.1 The second Cycle Vision event was held at City Hall on April 1<sup>st</sup>. Approximately 50 people attended, and 25 responses were received from the community, including written comments submitted at the Cycle Vision event as well as emails sent to the City after the event. Key feedback includes:

- a) All comments were positive and supportive of the draft Cycle Plan. Several people thanked the City for developing the plan and hosting the Cycle Vision events;
- b) The Sardis Rail Trail and protected bicycle facilities were the routes most frequently mentioned and desired by respondents;
- c) There were many comments regarding maintenance of bicycle facilities, particularly snow removal and sweeping. These comments were likely prompted by the recent harsh winter;
- d) There were several requests for a means of notifying interested persons of important events related to the Cycle Plan. Several persons also indicated a willingness to participate and volunteer in bicycle-related initiatives; and
- e) A small number of specific suggestions regarding routes, facilities and supporting actions are included in the additions and changes to the Cycle Plan.

3.2 In Section 5 – Guidelines in the Plan the following table 5.3 describing the road conditions in which various types of bicycle facilities are appropriate on urban roads. Note that these guidelines are not “cast in stone” and that other factors can affect the choice of facility, including, for example, road width, intersection and driveway spacing, truck traffic and transit service.

**Table 5.3 – Bicycle facility applicability to road conditions**

|                       | Protected Facilities | Buffered Bicycle Lanes | Conventional Bicycle Lanes | Wide Traffic Lanes | Bicycle Boulevard |
|-----------------------|----------------------|------------------------|----------------------------|--------------------|-------------------|
| Classification        |                      |                        |                            |                    |                   |
| • Major arterial      | ✓                    | ✓                      | ✓                          |                    |                   |
| • Minor arterial      | ✓                    | ✓                      | ✓                          |                    |                   |
| • Major collector     | ✓                    | ✓                      | ✓                          | ✓                  |                   |
| • Minor collector     |                      |                        |                            | ✓                  | ✓                 |
| • Local               |                      |                        |                            |                    | ✓                 |
| Average daily traffic |                      |                        |                            |                    |                   |
| • > 6,000 vpd         | ✓                    | ✓                      | ✓                          |                    |                   |
| • 1,500–6,000 vpd     | ✓                    | ✓                      | ✓                          | ✓                  |                   |
| • < 1,500 vpd         |                      |                        |                            | ✓                  | ✓                 |
| Parking               | ✓                    | ✓                      | ✓                          |                    | ✓                 |

3.3 Proposed changes and additions to the three maps included in the Cycle Plan are described and highlighted below. Updated versions of the maps attached in Appendix 'D'.

Future Bicycle Network map:

- a) Add a neighbourhood route through MidTown Chilliwack development and on Meadowbrook Drive to connect to route on McIntosh Drive at Hocking Avenue;
- b) A neighbourhood route was added on Young Road through Five Corners, between sections of protected bicycle routes, recognizing that more experience cyclists may choose to continue on Young Road rather than divert to parallel streets to follow the protected bicycle network;
- c) Chilliwack Lake Road was changed to a recreational route (green line on the map) consistent with its primary use and attraction to recreational cyclists;
- d) Extend the protected facilities on Airport Road to Yale Road, to connect to north end of Sardis Rail Trail;
- e) Provide connection to neighbourhood route through MidTown Chilliwack development;
- f) Add a neighbourhood route on Yale Road between Evans and Lickman;
- g) Add a dashed dark green line indicating the possible long-term extension of the Sardis Rail Trail north;
- h) Hocking Avenue to Salish Pond Park;
- i) Add recreational route south from end of Sardis Rail Trail to foot of Vedder Mountain for access to the trail system; and
- j) Include “scenic” recreational routes on Camp River Road and Old Orchard Road. These routes would be identified differently on the published bicycle map from trails and dikes, so that cyclists would be aware in advance that they are rural roads with no shoulders but generally low traffic volumes, best suited to experienced cyclists.

Trail Connections map:

- a) Add a neighbourhood route through MidTown Chilliwack development and on Meadowbrook Drive;
- b) A neighbourhood route was added on Young Road through Five Corners, between sections of protected bicycle routes, as an additional connection between the Sardis Rail Trail and Experience The Fraser;
- c) Extend the protected facilities on Airport Road to Yale Road; and
- d) Add a dashed dark green line indicating the possible long-term extension of the Sardis Rail Trail north from Hocking Avenue to Salish Pond Park.

Priority Bicycle Projects map:

- a) Extend protected facilities on Airport Road to Yale Road; and
- b) The neighbourhood route through the MidTown Chilliwack development and the section of the neighbourhood route on Hocking Avenue between Yale and Young Roads are identified as priority facilities.

- 3.4 Implementation - “Quick win” projects that can be undertaken immediately and other priority bicycle projects that offer the greatest benefits for cyclists and the community are summarized in Table 4.1 below.



**Table 4.1 – “Quick win” projects**

| Rural Roads              | Urban Roads                                |                        | Spot Improvements                 | Off-Road Facilities                       |
|--------------------------|--|------------------------|-----------------------------------|---|
|                          | Arterials and Collectors                   | Local Streets          |                                   |   |
| Key shoulder bikeways    | Demonstration protected bicycle facilities | Crossing treatments    | Pushbuttons and detector markings | Sardis Rail Trail extension to Airport Rd |
| 90-degree rail crossings | Bicycle lanes through parking removal      | Bicycle route signage  | Crossing treatments               | Sardis Rail Trail enhancement             |
| Bicycle route signage    | Bicycle route signage                      | Sharrow paint markings | Bicycle racks                     |   |
|                          |  |                        | Flexi-posts                       |   |

3.5 Table 4.2 summarizes estimated order-of-magnitude costs of the “quick win” projects identified above (except the Sardis Rail Trail), which total an estimated \$3.5 million.

**Table 4.2 – Estimated costs of “quick win” projects**

| Project               | Description              | Quantity        | Unit Cost | Total Cost         |
|-----------------------|--------------------------|-----------------|-----------|--------------------|
| Protected facilities  |                          |                 |           |                    |
| Mary-College-Young    | Hodgins–Hope Slough      | 3.8 lane km     | \$150,000 | \$570,000          |
| Princess-Young        | Mary–3 <sup>rd</sup> Ave | 1.4 lane km     | \$150,000 | \$210,000          |
| Airport-Broadway      | Young–Yale               | 7.0 lane km     | \$50,000  | \$530,000          |
| Bicycle lanes         |                          |                 |           |                    |
| Spadina Ave           | Ashwell–Yale             | 2.1 lane km     | \$15,000  | \$32,000           |
| Bernard Ave           | Ashwell–Yale             | 2.6 lane km     | \$15,000  | \$39,000           |
| Chilliwack Central Rd | Yale–Broadway            | 2.5 lane km     | \$15,000  | \$38,000           |
| Knight Rd             | Evans–Topaz              | 1.4 lane km     | \$15,000  | \$21,000           |
| Stevenson Rd          | Evans–Vedder             | 2.6 lane km     | \$15,000  | \$39,000           |
| Shoulder bikeways     |                          |                 |           |                    |
| Chilliwack River Rd   | Knight–McGuire           | 2.8 lane km     | \$400,000 | \$1,120,000        |
| Crossings             |                          |                 |           |                    |
|                       | Bicycle boulevards       | 5 crossings     | \$50,000  | \$250,000          |
|                       | 90° railway crossings    | 4 crossings     | \$50,000  | \$200,000          |
|                       | Pushbuttons/markings     | 5 intersections | \$10,000  | \$50,000           |
|                       | Hook turns               | 9 hook turns    | \$15,000  | \$135,000          |
| Signage               |                          | 50+ km          | \$5,000   | \$250,000          |
| Spot improvements     |                          | 5+ locations    | \$2,000   | \$10,000           |
| <b>Total</b>          |                          |                 |           | <b>\$3,494,000</b> |

3.6 Priority Projects involve bicycle lanes, pathways, crossings and other facilities to be undertaken after the “quick win” projects described above. In general, these projects are more costly or complex than the “quick win” projects. These other priority projects have been identified based on five criteria:

- a) Provide protection from traffic, such as off-road pathways, protected on-road facilities.
- b) Is part of the core route network.
- c) Facilitate travel on neighbourhood routes where they intersect with major roads.
- d) Eliminate gaps in the network, such as bicycle lanes that do not continue through signalized intersections, facilities that are missing on one side of a road.

Table 4.3 summarizes the estimated order of magnitude cost of priority projects, which total an estimated \$30.2 million.

**Table 4.3 – Estimated costs of priority projects**

| Project                     | Description              | Quantity       | Unit Cost   | Total Cost          |
|-----------------------------|--------------------------|----------------|-------------|---------------------|
| <b>Protected facilities</b> |                          |                |             |                     |
| Sardis Rail Trail south     |                          | 8.0 km         | \$1,000,000 | \$8,000,000         |
| SRT to Hocking              |                          | 0.5 km         | \$1,000,000 | \$500,000           |
| Teskey Way pathway          |                          | 0.7 km         | \$150,000   | \$105,000           |
| <b>Bicycle lanes</b>        |                          |                |             |                     |
| Ashwell Rd                  | Spadina–Amadis           | 0.5 lane km    | \$500,000   | \$250,000           |
| First Ave                   | Spadina–Broadway         | 3.0 lane km    | \$150,000   | \$450,000           |
| Stevenson Rd                | Vedder–Higginson         | 0.3 lane km    | \$300,000   | \$90,000            |
| Tyson Rd                    | Insley–Evans             | 0.4 lane km    | \$50,000    | \$20,000            |
| Watson-Promontory           | Tyson–Chilliwack R Rd    | 4.8 lane km    | \$150,000   | \$720,000           |
| Yarrow Central Rd           | Community–Eckert         | 0.9 lane km    | \$50,000    | \$45,000            |
| <b>Shoulder bikeways</b>    |                          |                |             |                     |
| Chilliwack Central Rd       | Broadway–Ford            | 18.2 lane km   | \$400,000   | \$7,280,000         |
| Ford & McGrath Rds          | Chilliwack Cent.–CNR     | 4.6 lane km    | \$300,000   | \$1,380,000         |
| Sumas Prairie Rd            | Keith Wilson–Yale        | 6.4 lane km    | \$150,000   | \$960,000           |
| Keith Wilson Rd             | Lickman–Vedder R         | 10.1 lane km   | \$500,000   | \$5,050,000         |
| Boundary Rd                 | No. 3 Rd–Vedder R        | 3.1 lane km    | \$300,000   | \$930,000           |
| Vedder Mountain Rd          | Spot widening            | 2 spots        | \$100,000   | \$200,000           |
| <b>Crossings</b>            |                          |                |             |                     |
|                             | Bicycle boulevards       | 10+ crossings  | \$50,000    | \$500,000           |
|                             | Pushbuttons/markings     | 10+ intersects | \$10,000    | \$100,000           |
| <b>Bridges</b>              |                          |                |             |                     |
|                             | Keith Wilson at Vedder R | 1 improved     |             | \$2,000,000         |
|                             | Young at Hope R          | 1 improved     |             | \$500,000           |
|                             | Williams at Hope R       | 1 new bridge   |             | \$850,000           |
| <b>Signage</b>              |                          |                |             |                     |
|                             |                          | 50+ km         | \$5,000     | \$250,000           |
| <b>Total</b>                |                          |                |             | <b>\$30,180,000</b> |

3.7 The 10 year financial plan contains funding in each year for bicycle projects, the 10 year sum is \$16.85 million dedicated to bicycle projects. The proposed final draft of the Cycle Vision Plan proposes more “Quick Win” and “Priority Project” than the 10 years of funding can support. The funding table below illustrates the details of the estimated values of the projects and the available projects.

|   |                     |
|---|---------------------|
| Cycle Vision Quick Win Projects                     | \$3,494,000         |
| Cycle Vision Priority Projects                      | \$30,180,000        |
| <b>Total Cycle Vision Projects</b>                  | <b>\$33,674,000</b> |
| Existing Financial Plan Funding 2017-2026           | \$16,850,000        |
| Cycle Vision Projects Funded outside 10 year period | \$16,824,000        |

The current 2017 Bicycle funding of \$1,682,000 is sufficient to advance the Quick Win projects. Funding options including potential grant opportunities will be presented at Council budget review.

- 3.8 The proposed Cycle Vision Plan contains a numbers of quick win projects that when complete will aide cyclists travel in Chilliwack. Many of the Quick Win projects proposed require design work, or implementation planning prior to construction. Engineering Department staff will work with plan author Mr. Richard Drdl to prioritize the Quick Win projects and complete the implementation design work necessary for tendering and neighbourhood communication.

**4. RECOMMENDATION & SUBSTANTIATION:**

Recommendation:

Recommendation that Council accept the Final Draft Cycle Vision Plan May 2017 and authorize staff to proceed implementing Quick Wins as outlined in the plan, utilizing available 2017 capital funds.

**APPENDIX 'A'**