



**REPORT TO PLANNING, TRANSPORTATION AND PROTECTIVE SERVICES COMMITTEE  
MEETING OF WEDNESDAY, NOVEMBER 28, 2012**

---

**SUBJECT     2012 REGIONAL BICYCLE COUNTS**

**PURPOSE**

The purpose of this report is to inform the Committee about the bicycle count program and to provide preliminary results from the recently completed counts.

**BACKGROUND**

Building on last year's bicycle count, improvements have been made to facilitate a four-season count program that will provide valuable data required to monitor the success of transportation objectives identified in various Capital Regional District (CRD) planning documents.

Last year (October 4-6, 2011) and this year (October 2-4 2012) the CRD undertook region-wide cycling counts with the help of trained volunteers in 32 locations (2011) and 60 locations (2012). The methodology for the counts was based on the National Bicycle and Pedestrian Documentation Project (NBPD) which was a key recommendation in the "Evaluation" section of the PCMP. In keeping with best practices, the CRD bike count program will begin a four-season count beginning in January 2013. Year round, seasonal data collection enable analysis to determine the effects of contributing factors such as land use, population, topography, infrastructure and weather on cyclist volumes. Greater detail regarding the methodology can be found in Attachment 1.

Two comparable bike counts have been completed (October 2011 and 2012) and the data summarized for those count stations in common over both years. Overall, cyclist volumes were up significantly when compared to the matching locations counted in 2011, with a median increase of 31 percent. Attachment 2 contains graphic presentations comparing results from the two years.

Reasons for the increase may include prevailing weather conditions (2012 was warmer and drier), improvements in cycling facilities and increased employment opportunities in proximity to count locations. A more accurate assessment of the influences on cycling volumes can be determined from consistent records over time.

The highest overall percentage rise was at Mills Road and West Saanich Road in North Saanich. The increase at this location (226% over 2011) may be attributable to the network effects of the construction of additional separated trails on the Victoria Airport Authority land and new employers, such as the Thrifty Food distribution centre. The intersection of Admirals Road and Craigflower Road on the View Royal and Esquimalt border showed an increase in cyclists (82% over 2011). This increase may be a reflection of the bicycle lanes installed on Craigflower Road in early 2012, as well as an increase in employment at the Dockyard.

**PLANNING IMPLICATIONS**

The cycling count stands alongside other data collection efforts, including the annual motor vehicle counts and the five-year Origin & Destination survey undertaken by Regional Planning as well as the automated counts undertaken by CRD Parks on the Galloping Goose and Lochside Regional Trails. Regional Planning data is used in conjunction with non-CRD sources, such as the Journey to Work data from the Census. The count data will be factored into the

Transportation Model in an effort to predict the effects of cycling infrastructure improvements on ridership. Data and modeling will inform the implementation of the Regional Transportation Plan in assessing and prioritising regional transportation projects and funding.

The 2011 results from the CRD Bicycle Count have been posted on the CRD website's transportation page <http://www.crd.bc.ca/transportation/analysis/bike-counts.htm>; the 2012 results along with comparison charts between the two years will be posted in the coming weeks.

### **FINANCIAL IMPLICATIONS**

The bike count program is funded within the Regional Information Services (RIS) data budget for a total of \$15,000 annually. Costs are kept low by the use of trained volunteer counters. RIS staff time is used to coordinate and manage the count and collate, analyse and post the data.

### **SUMMARY**

Regional Planning, with the assistance of trained volunteers, is integrating bicycle counts into its data collection program, utilising the best practices established by the National Bicycle Document Project. Data collected from the 2011 and 2012 bicycle counts provides a baseline on which future count data can be used to derive trends over the long-term. The bike count program will provide valuable time-series information for municipal transportation planners and engineers to assess needs for and efficacy of cycling infrastructure investment.

### **RECOMMENDATION**

That the Planning, Transportation and Protective Services Committee receive this report for information.

**\*\*ORIGINAL SIGNED\*\***

---

Corey Burger  
Cycling Count Coordinator

---

Sue Hallatt, MCIP  
Research Planner  
Concurrence

---

Marg Misek-Evans, MCIP  
Senior Manager  
Regional and Strategic Planning  
Concurrence

---

Robert Lapham, MCIP  
General Manager  
Planning and Protective Services  
Concurrence

Attachments: 2  
Attachment 1 –Methodology of the CRD Bicycle Count Program  
Attachment 2 – Graphic Presentation comparing results from 2 years

## **Methodology of the CRD Bicycle Count Program**

The creation of a CRD Bicycle Count program, based on the methodology endorsed by the National Bicycle and Pedestrian Documentation (NBPD) project, was a key recommendation in the Pedestrian and Cycling Master Plan (PCMP - March 2011).

Collection of data that is consistent with the NBPD data base allows the CRD to compare cycling trends with other communities where identical methodologies are used, and provides important feedback to local practitioners to assist with assessing infrastructure investments.

The bicycle counts were completed using an intersection-movement method, where volunteer counters recorded the full intersection movements of cyclists at each of the locations. This method differs from typical annual automobile counts, which use a screen line and automated pneumatic tubes. The intersection-movement method allows detailed analysis of how cyclists move through an intersection, and provides increased traffic movement/dispersal detail (particularly at intersections) that cannot be derived from a screen line-only count.

The 2011 and 2012 counts have illustrated that trained volunteers are adept at accurately counting complex movements such as the six-way intersection where the E&N Railway crosses Veterans Memorial Parkway and Goldstream Avenue in Langford.

Volunteer counters were encouraged to observe and report on qualitative data about the intersection (unusual behaviours such as sidewalk movements, jay-riding, collisions or near-misses, etc.) to supplement the quantitative data collected.

### **Forms**

Count volunteers were provided with locally-customized versions of the NBPD standard intersection forms, as well as a count tabulation form. Each intersection is separated by entry point, with each possible movement from each entry point counted separately, every 15 minutes over a period of 2 hours.

### **Count Timing**

Counts were conducted twice at each location, once in the morning between 7 and 9 am, and once in the afternoon, between 3 and 6pm. The afternoon count was expanded by one hour from 2011, when it ran from 4 to 6 pm. The change was made to better capture the afternoon peak of travel including commuting cyclists from work and school (as shown in the CRD's Origin and Destination study).

### **Volunteers**

Volunteers were drawn from a data base of cyclists collected from the engagement sessions held during the PCMP process, as well as the Greater Victoria Cycling Coalition (GVCC) membership. Training and management of volunteers was provided by CRD staff.

### **Count Locations**

Locations for the counts were chosen based on:

- Regional representation
- Sites where travel decision points are made to join or leave a major cycling corridor
- Sites where infrastructure had been added or improved
- Sites where infrastructure projects are planned to provide pre and post counts

In 2011, 32 locations were counted; in 2012, the number of locations was increased to 60. All 32 locations counted in 2011 were recounted in 2012. The 28 new count locations met the primary criterion to provide coverage for as much of the region as possible. The following table describes the 2012 count locations.

**Table 1**

<b>Stn ID</b>	<b>Municipality</b>	<b>Intersection</b>	<b>Discussion</b>
1	Central Saanich	Mt Newton Cross Rd.at Lochside Trail	Low volume, but important due to possible changes in infrastructure on the Tsawout lands directly south
2	Central Saanich	Wallace Drive at West Saanich Rd	Low volume, but just south of a major commercial hub in the region
3	Esquimalt	Admirals Rd.at Colville at E&N Rail Trail	Major infrastructure work being done on both Admirals and the un-opened E&N Rail Trail
4	City of Victoria	Bay at Government	Data available prior to 2011, counted in 2006 pilot
5	City of Victoria	Bay at Douglas	Data available prior to 2011, counted in 2006 pilot
6	City of Victoria	Bay at Blanshard	Data available prior to 2011, counted in 2006 pilot
7	City of Victoria	Pandora/Johnson at Blanshard	Data available prior to 2011, counted in 2006 pilot
8	City of Victoria	Fort/Yates at Blanshard	Data available prior to 2011, counted in 2006 pilot
9	City of Victoria	Government at Belleville	Data available prior to 2011, counted in 2006 pilot
10	City of Victoria	Johnson Street Bridge	Counted many different ways over many years, counted by GVCC monthly as well
11	City of Victoria	Vancouver at Richardson	Low volume for its location
12	City of Victoria	Haultain at Shelbourne	High volume, on PIC but not on City of Victoria bicycle route
13	Colwood	Wale Rd.at Island Hwy	On the Galloping Goose (GG), challenging due to cyclists shortcutting the intersection
14	Colwood	GG at Sooke Rd	On GG
15	Oak Bay	Henderson Rd.at Cedar Hill X Rd	At University of Victoria (UVic) gate, very high volume. UVic also does counts just north of this location
16	Langford	GG at Glen Lake Rd.at Sooke Rd	Very low volume, cyclists often shortcut route
17	Langford	VMP at Goldstream Ave at E&N Rail Trail	High motor vehicle volume, near regional trail
18	Metchosin	Happy Valley Rd.at Metchosin Rd	Very low volume location, however central to Metchosin
19	North Saanich	Mills Rd.at West Saanich Rd	On several new trails, new employers nearby
20	Oak Bay	Oak Bay Avenue at Foul Bay Rd	Municipal border, moderate volumes
21	Saanich	Wallace Dr. at West Saanich Rd.at Interurban Rail Trail	On a Saanich trail, low volume
22	Saanich	Lochside Dr./Trail at Cordova Bay Rd	Higher volume, on regional trail, data available prior to 2011

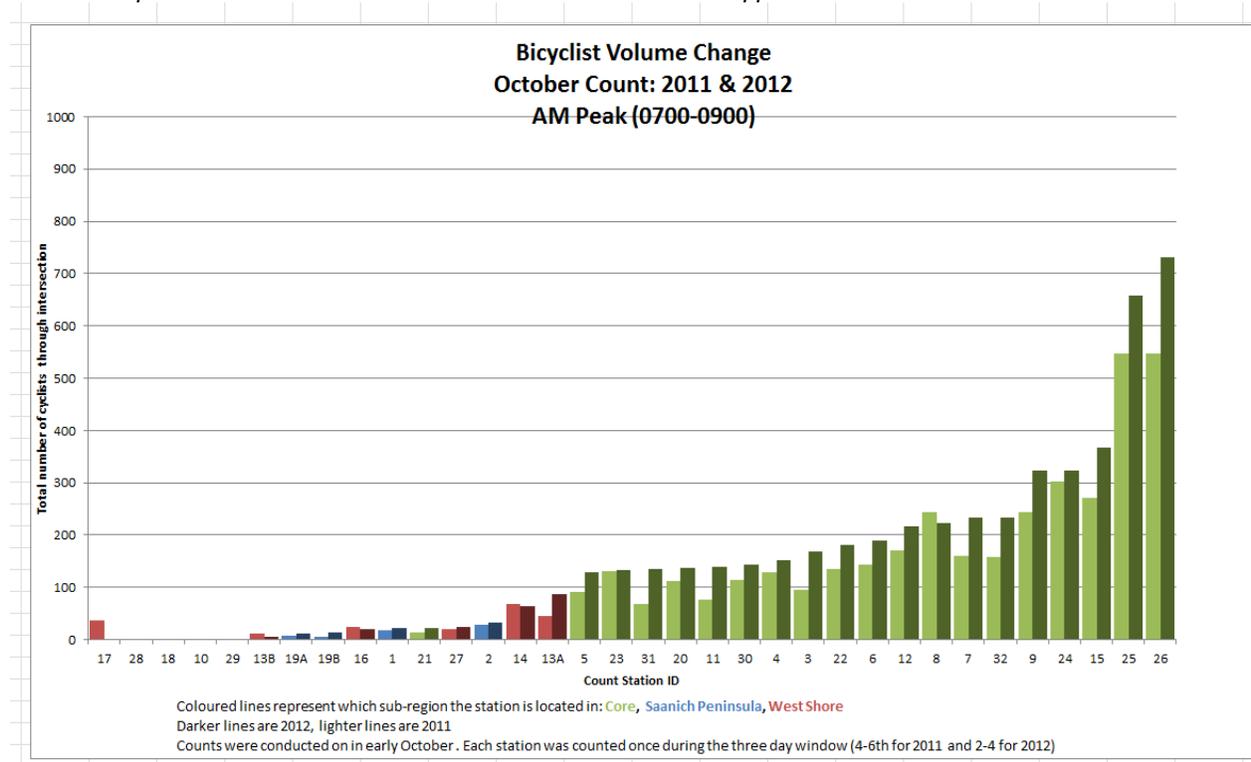
23	Saanich	McKenzie at Shelbourne	In the Shelbourne Corridor study region - major new infrastructure planned on McKenzie
24	Saanich	McKenzie Ave at Borden at Lochside Trail	On regional trail
25	Saanich	Galloping Goose at Lochside Trail	Regional trail junction, some data prior to 2011 (although in 2006 it was counted 12-2pm)
26	Victoria	Galloping Goose north of Selkirk Trestle	On GG, major decision point for cyclists (almost 1/3 of the total intersection volume join/leave the trail at this point)
27	Sidney	Ocean Ave at 5 <sup>th</sup> Street where Lochside Trail turns	Decision point for cyclists continuing on Lochside vs turning to Sidney
28	Sooke	GG at Sooke Rd	Very low volume, may need to re-consider counting at this location in future
29	Sooke	Otter Point Rd.at Sooke Rd	As above
30	View Royal	Watkiss at Burnside Rd. W at GG Trail	Some non-GG to GG traffic here, likely school or Victoria General Hospital related
31	Esquimalt	Admirals at Island Hwy	Major new infrastructure on Craigflower; some data from 2006
32	Saanich	Gordon Head Rd.at McKenzie Rd	UVic entrance, major infrastructure planned here on McKenzie Ave
33	Highlands	Millstream at Millstream Lake Rd	Very low volume due to low density and distance from any destination
34	Oak Bay	Cadboro Bay Rd.at Bowker	New bike lanes added in 2011, near two schools
35	Saanich	Interurban at West Saanich Rd	Near Interurban Rail Trail, low volume
36	Saanich	Cordova Bay Rd.at Mattick's Farm and Lochside Trail	Complicated intersection where cyclists can choose two different paths
37	Saanich	Mann Ave at Wilkinson Rd	Near major trail to Camosun Interurban and Victoria Information Technology Park
38	Saanich	Shelbourne at San Juan Greenway	Surprisingly low volume, near major newer infrastructure on Shelbourne, not in Shelbourne Corridor Study Area
39	Saanich	Lochside Trail at Blenkinsop Connector	Nearly half the cyclists through this intersection left or joined the Lochside trail at this location
40	City of Victoria	Vancouver at Caledonia	On a very busy municipal and Primary Inter-Community (PIC) bicycle route, major changes possibly coming to Vancouver north of this intersection, fills in the screenline to the NE of downtown
41	Esquimalt	Admirals at Esquimalt Rd	Major infrastructure planned for this location in 2012
42	View Royal	Helmcken at Old Island Hwy	One of only a few routes from the West Shore to the Core, on the route to Dockyards and CFB Esquimalt
43	Saanich	Burnside Rd. W at Interurban	Major trail to GG, did not count GG traffic at this location
44	North Saanich	East Saanich Rd.at Willingdon Rd	Major new infrastructure added in 2011
45	Central Saanich	East Saanich at Mount Newton Cross	Volunteer not available; not counted
46	Colwood	Lagoon at Metchosin Rd	Low volume, but acts as screenline for Metchosin cyclists

47	Oak Bay	Foul Bay Rd.at Haultain Rd	On two major cycling routes, one to UVic and one to Downtown. Possible location of additional infrastructure
48	Esquimalt	Craigflower at Tillicum	Major new infrastructure added to Craigflower in 2012
49	Colwood	Kelly Rd.at Sooke Rd	Very low volume, no infrastructure improvements planned
50	Langford	Jacklin at Kelly Rd/Jenkins Rd	Near Belmont Secondary, intersection of PIC route with local bike route
51	Saanich	Vernon at Hwy 17	Low volume, especially relative to nearby Station 25
52	Saanich	Sinclair Rd.at Cadboro Bay Rd	Near UVic, major infrastructure improvements planned by Saanich
53	Saanich	Tattersall at Quadra St.	Major new infrastructure recently added
54	City of Victoria	Moss St. at May St.	Intersection of PIC and local bicycle route
55	City of Victoria	Blanshard at View Street	Last major east-west street not covered in 2011, light volume
56	North Saanich	McDonald Park Rd.at Swartz Bay Rd	On the Lochside Trail, potential decision point for cyclists heading into western North Saanich
57	Sidney	Resthaven Dr. at Beacon Ave	Sidney is undertaking a major transportation study of that area, on intersection of two PIC routes
58	City of Victoria	E&N Rail Trail (unopened) at Esquimalt Rd	Establishes baseline numbers before E&N Rail Trail opens, major infrastructure built there in the last few years
59	City of Victoria	Blanshard at Finlayson	Intersection of two PIC routes

Attachment 2

**Figure 1(a)**

For a description of the locations for each count ID – see Table 1 in Appendix A



**Figure 1(b)**

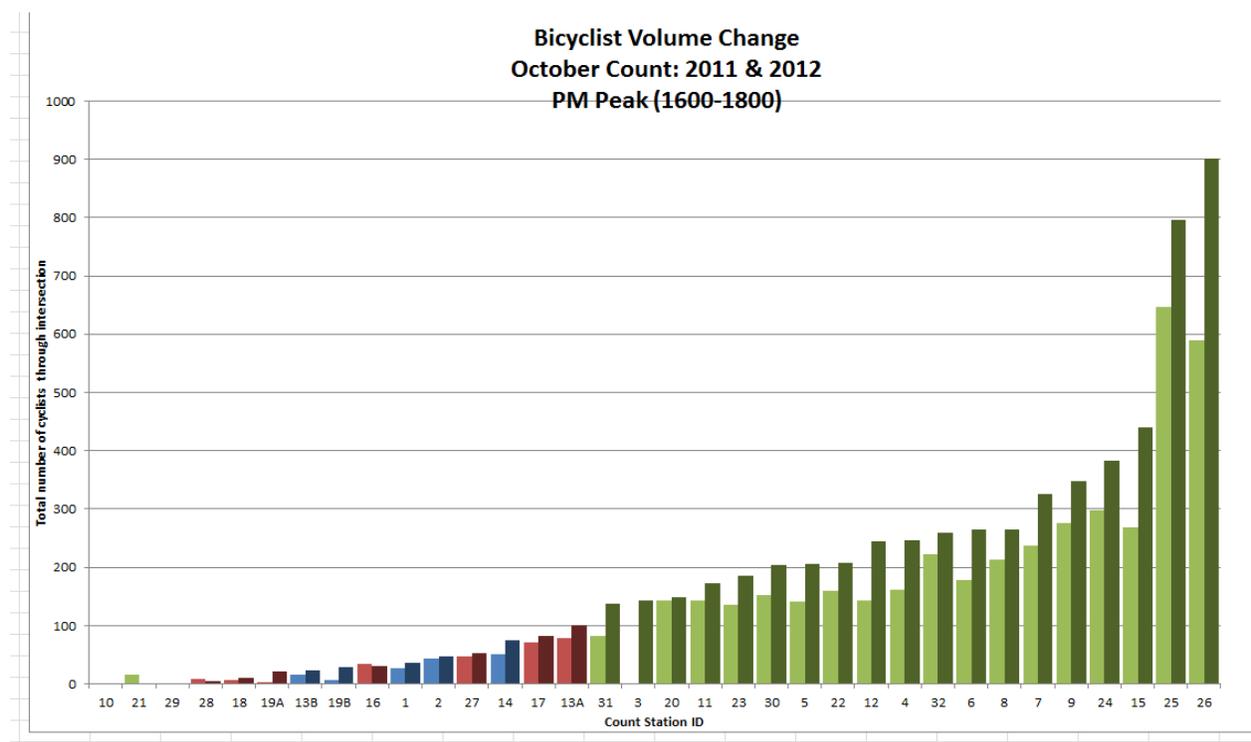


Figure 2

