



PO Box 1749  
Halifax, Nova Scotia  
B3J 3A5, Canada

**Item No. 10.1.1 (i)**  
**Halifax Regional Council**  
**July 6, 2010**

**TO:** Mayor Kelly and Members of Halifax Regional Council

**SUBMITTED BY:**

*for*   
Councillor Linda Mosher, Chair, Active Transportation Advisory  
Committee

**DATE:** June 24, 2010

**SUBJECT:** Proposed Bicycle Lanes on Herring Cove Road

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**ORIGIN**

May 20 & June 17, 2010 meetings of the Active Transportation Advisory Committee.

**RECOMMENDATION**

The Active Transportation Advisory Committee recommends that Halifax Regional Council award the tender for the resurfacing of Herring Cove Road from Old Sambro Road to Hartlen Avenue with the proposed pavement marking scheme which includes a change in vehicle lanes from four through lanes to two through lanes, plus two bicycle lanes, as well a centre turn lane alternating with planted median islands.

**BACKGROUND**

At the May 20, 2010 meeting of the Active Transportation Advisory Committee, a presentation on the proposed Herring Cove Road Bike Lanes Project was provided. As a result of that presentation and subsequent discussion the following motion was passed:

**MOVED BY Councillor Watts, seconded by Ms. Thomas, that the Active Transportation Advisory Committee request a staff report outlining the following issues: width of the bike lane and the issues of congestion raised by the Spryfield Business Commission that might be negatively impacted. MOTION PUT AND PASSED.**

At the June 8, 2010 meeting of Halifax Regional Council the following motion was passed:

**MOVED by Councillor Watts, seconded by Councillor Hendsbee that Halifax Regional Council defer this matter pending comment from the Active Transportation Advisory Committee in regard to maintaining the four (4) existing lanes on Herring Cove Road rather than staff's proposal to reduce the existing four (4) lanes on Herring Cove Road, from Arthur Street to Old Sambro Road, down to two lanes and add bike lanes as part of the Herring Cove Road Resurfacing project. MOTION PUT AND PASSED.**

As a result, a draft extract of the Halifax Regional Council minutes dated June 8, 2010 was submitted to the Active Transportation Advisory Committee at their June 17, 2010 meeting along with a staff report dated June 9, 2010 (Attachment A). Based on the submitted information, the following motion was passed:

**MOVED BY Mr. Brauer, seconded by Ms. Thomas, that the Active Transportation Advisory Committee:**

- 1. Recommend that Regional Council award the tender for the resurfacing of Herring Cove Road from Old Sambro Road to Hartlen Avenue with the proposed pavement marking scheme which includes a change in vehicle lanes from four through lanes to two through lanes, plus two bicycle lanes, as well a centre turn lane alternating with planted median islands; and**
- 2. That the Active Transportation Advisory Committee's recommendation to Regional Council be amended to include a summary of the Committee's discussions; and**
- 3. That the Active Transportation Advisory Committee's recommendation to Regional Council be amended to include a detailed analysis of the population growth projections and the impact on the capacity of the proposed changes.**

**MOTION PUT AND PASSED.**

## **DISCUSSION**

At their June 17, 2010 meeting, the Active Transportation Advisory Committee approved the staff recommendation regarding Proposed Bicycle Lanes on Herring Cove Road as outlined in Attachment A as well as the Recommendation section of this report.

Along with the main motion, the Committee also wished to include a summary of their June 17, 2010 discussions regarding their endorsement of the Proposed Bicycle Lanes on Herring Cove Road (included as Attachment B) as well as a detailed staff analysis of the population growth projections and the impact on the capacity of the proposed changes (included as Attachments C & D) for Council's information.

## **BUDGET IMPLICATIONS**

None associated with this report.

## **FINANCIAL MANAGEMENT POLICIES/BUSINESS PLAN**

This report complies with the Municipality's Multi-Year Financial Strategy, the approved Operating, Project and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Project and Operating reserves, as well as any relevant legislation.

## **COMMUNITY ENGAGEMENT**

Active Transportation Advisory Committee meetings are open to the public.

Resident correspondence has been received by the Municipal Clerk's Office regarding this matter and has been forwarded to Regional Council.

Further Community Engagement has been outlined in the staff report dated June 9, 2010 (Attachment A).

## **ALTERNATIVES**

Council could choose not to award the tender for the resurfacing of Herring Cove Road from Old Sambro Road to Hartlen Avenue with the proposed pavement marking scheme which includes a change in vehicle lanes from four through lanes to two through lanes, plus two bicycle lanes, as well as a centre turn lane alternating with planted median islands.

**ATTACHMENTS**

- Attachment A: Proposed Bicycle Lanes on Herring Cove Road - Staff Report Dated June 9, 2010
- Attachment B: Extract of the Draft Active Transportation Advisory Committee Minutes Dated June 17, 2010
- Attachment C: Traffic Requirements - Herring Cove Road Corridor - Memo from Mr. David McCusker, Manager, Strategic Transportation Planning
- Attachment D: Benefits of 'Road Diets' and 3 vs 4 Lane Roadways - Memo from Ms. Hanita Koblents, TDM Co-ordinator
- Attachment E: Extract of the Draft Active Transportation Advisory Committee Minutes Dated May 20, 2010

A copy of this report can be obtained online at <http://www.halifax.ca/council/agendasc/cagenda.html> then choose the appropriate meeting date, or by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.


Report Prepared by: Shawnee Gregory, Legislative Assistant, 490-6521



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**Active Transportation Advisory Committee  
June 17, 2010**

**TO:** Chair and Members of Active Transportation Advisory Committee

**SUBMITTED BY:**   
Ken Reashor, P.Eng., A/Director, Transportation and Public Works

**DATE:** June 9, 2010

**SUBJECT:** Proposed Bicycle Lanes on Herring Cove Road

**ORIGIN**

Motion of the May 20, 2010 meeting of the Active Transportation Advisory Committee requesting a staff report outlining issues raised with regard to the proposed Herring Cove bike lane including the width of the bike lane and the issues of congestion raised by the Spryfield Business Commission.

**RECOMMENDATION**

It is recommended that the Active Transportation Advisory Committee recommend that Regional Council:

1. Award the tender for the resurfacing of Herring Cove Road from Old Sambro Road to Hartlen Avenue with the proposed pavement marking scheme which includes a change in vehicle lanes from four through lanes to two through lanes, plus two bicycle lanes, as well a centre turn lane alternating with planted median islands.

## BACKGROUND

Approximately 900 metres of Herring Cove Road, between Old Sambro Road and Hartlen Avenue, is scheduled for pavement resurfacing in 2010. Herring Cove Road is identified in HRM's Active Transportation (AT) Plan as an "on-road candidate route". Roads identified as such are considered for the development of on-road AT infrastructure (sidewalks and bicycle lanes) when any form of reconstruction is planned. This road already has sidewalks, but specific infrastructure for bicycles is lacking. Traffic modeling of the corridor revealed that dropping a vehicle travel lane in each direction had no significant impact on current traffic and still maintained reserve capacity to handle traffic growth, resulting in an opportunity to stripe bicycle lanes. In addition to bike lanes, a centre turn lane and planted median islands are proposed.

The plan was provided to Councillor Adams who brought it to a meeting of the Spryfield and District Business Commission on April 15, 2010. Because of concerns expressed by some abutting business owners, staff attended another meeting of the Spryfield and District Business Commission Executive on April 22, 2010 to address questions stemming from the proposed changes. Many present at the second meeting expressed concerns related to the loss of a vehicle travel lane and questioned the validity of installing bicycle lanes. A member of the Spryfield and District Business Commission expressed these concerns at the May 20, 2010 meeting of the Active Transportation Advisory Committee (ATAC).

The project has gone out for tender and is anticipated to go to Council for award in the near future. Because of the issues raised, this report is intended to provide more details to the ATAC so they can provide guidance to Regional Council on the matter when it comes time for Council to award the project for construction.

## DISCUSSION

- This paving project creates an opportunity to create bicycle infrastructure and expand the bicycle network at no additional cost by simply adjusting pavement markings and reallocating existing road space. If this opportunity is not taken, the next opportunity will not arise until this section of road requires additional resurfacing work which would be in the range of 10 - 15 years.
- Traffic modeling for the vehicle lane reduction revealed no significant impact on capacity or delay through the project area while still maintaining reserve capacity to accommodate traffic growth. Capacity of this corridor is governed by the two-lane width closer to the Armdale Roundabout where volumes are highest. The capacity of the existing four-lane section will never be fully utilized until the width of the corridor is expanded all the way to the Roundabout.
- The four lane section of Herring Cove Road was built in phases about 30 years ago as part of larger vision of arterial roadway expansion. The four lane section was left sandwiched between two other sections which are currently two/three lane cross-sections. The ultimate capacity of the current four lane section is limited by the narrower cross-section between Old

Sambro Road and the Armdale Roundabout where volumes are higher.

- The HRM Regional Plan identified the future need for four lanes of capacity on Herring Cove Road between the Armdale Roundabout and the old Halifax City Limits. At this point, project timelines see the widening of the section between the Armdale Roundabout and Purcell's Cove Road to begin in five years (2015), with the remaining 2.2 km to Old Sambro Road to be completed in subsequent phases. It is expected that by the time widening of the corridor reaches the existing four-lane section (+/- 2025) resurfacing would again be required, providing the opportunity to reinstate the four lane cross-section if, as projected, traffic volume required it.
- HRM roadway design standards require inclusion of bike lanes on a road of this type and so any expansion of Herring Cove Road would include accommodation of bicycles.
- Bus stops and right turning vehicles will not affect traffic any differently than they do now. Buses will still use existing lay-bys which are not being changed, and right turning vehicles will still have space to move to the right, into the bike lane, when making a turn leaving room for other vehicles to pass.
- A centre left-turn lane will be added and any exclusive left-turn lanes will be maintained. This means there will be no change in the effect of left turning vehicles on through traffic and actually represents an improvement to current conditions.
- There is virtually no cost difference between the two options since the only change is where the lines are painted.
- As shown in Attachment "A", the proposed project does not involve any modification at all to the overall roadway width. The existing space is simply being reallocated meaning that conversion back to a four lane cross-section, if necessary, could be achieved by carrying out an asphalt resurfacing and restriping, i.e., no actual road width is being taken away. The width of the cross section is 17 metres and it is currently allocated to four vehicle lanes with left turn lanes at intersections. The proposed cross section would have a 2m wide bicycle lane and a 4m wide vehicle lane in each direction. The remaining width (5m) would be for the centre turn lane which will alternate with the planted median islands.
- The current road cross section is not bicycle friendly because there is not adequate space for cyclists in the current configuration and the excessive road width encourages higher vehicle speeds, which are intimidating to cyclists.
- This is a good place to install bicycle lanes because this section of road contains and connects many origins and destinations, and active transportation infrastructure is most successful when it makes connections. Origins include all the residential feeder streets connecting to this section of Herring Cove Road, and destinations include Shopping Centres (Sobey's, South Centre Mall, many smaller retailers); schools (Central School and J.L. Ilsley); and recreation facilities (Captain William Spry Centre).

- Bike lanes on Herring Cove Road would connect with Williams Lake Road, which is already partially striped for bicycle lanes, with more planned, and would result in a continuous connection with the existing bicycle lanes on Purcell's Cove Road. There is also a section of Old Sambro Road (McIntosh Run to Sussex Street) that currently has bike lanes. It is critical to make these connections in order to achieve the goals for a bicycle network as set out in the Active Transportation Plan and to make the network a real alternative for people in terms of travel. Spryfield has a great opportunity to become a very bicycle friendly community if all these connections can be made.
- If this project is approved with the recommended cross section there are plans to coordinate with planned future paving projects in the area to extend these bicycle lanes to McIntosh Run, further increasing the utility of the route from an AT perspective.
- The Herring Cove Road Community Development and Streetscape Planning Project (Ekistics, 2005) recommended that the five lane section of Herring Cove Road between Old Sambro Road and Greystone Drive could be converted to three lanes without limiting road capacity, while providing room for tree planting in the median as well as bicycle travel in the curb lane. The community's main objectives for this section of the road, as stated in the Ekistics report, was to "slow traffic along the road and improve the appearance of the street". The proposed cross-section will achieve this.
- Council recently approved the Spryfield Vision and Action Plan which calls for many strategic actions, including to:
  - 1/ Implement the vision embodied in the Herring Cove Road Streetscape Study;
  - 2/ Extend existing and create new bikeways;
  - 3/ Connect Spryfield to neighbouring communities and greater Halifax using alternative modes of transportation.

This project would help to achieve these goals.

### **BUDGET IMPLICATIONS**

There are no budget implications.

### **FINANCIAL MANAGEMENT POLICIES / BUSINESS PLAN**

This report complies with the Municipality's Multi-Year Financial Strategy, the approved Operating, Project and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Project and Operating reserves, as well as any relevant legislation.

### **COMMUNITY ENGAGEMENT**

Extensive community engagement was carried out through the development of the Herring Cove Road Community Development and Streetscape Planning Project (2005); the Active Transportation Plan (2006), and most recently the Spryfield Vision and Action Plan (2010). All of these plans support the proposed road cross section which is the subject of this report.



### ALTERNATIVES

Council may choose to award the tender for the resurfacing of the Herring Cove Road from Old Sambro Road to Hartlen Avenue with the existing pavement markings and four lane configuration reinstated. This alternative is not recommended as staff is satisfied that the project as tendered, satisfies the policies and intent of the Regional Municipal Planning Strategy, the Active Transportation Plan, and helps achieve the goals of the Spryfield Vision and Action Plan.

Therefore ATAC has two alternatives to the staff recommendation:

1. ATAC could recommend against awarding the tender with the bike lanes and instead endorse a version that reinstates the existing lane markings. This alternative is not recommended.
2. ATAC could choose to be silent on the matter and not recommend either version.

### ATTACHMENTS

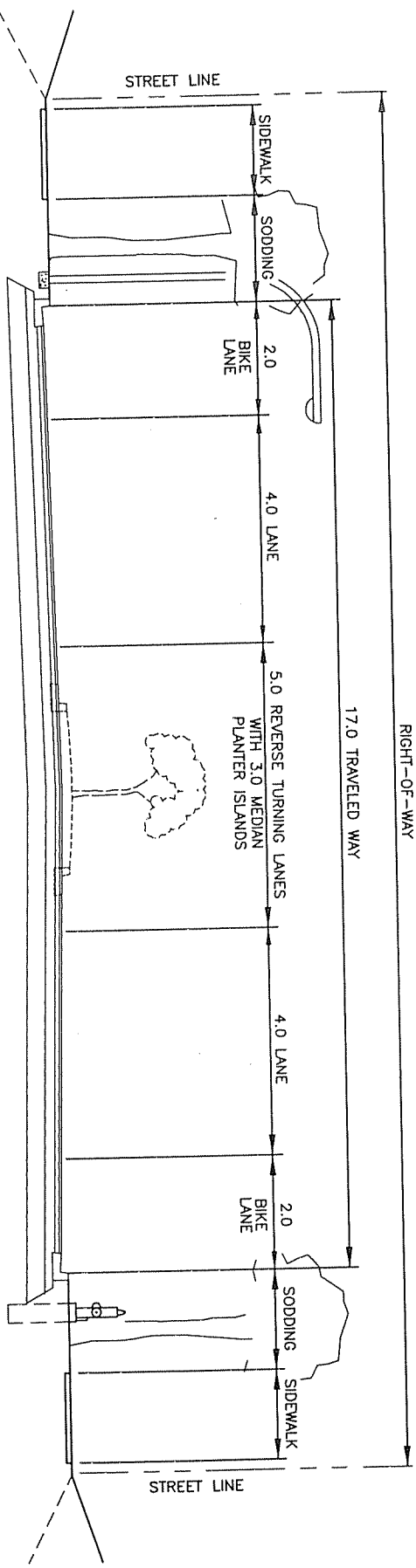
Attachment "A"	Herring Cove Road - Proposed Lane Changes to Include Bike Lanes
Attachment "B"	Herring Cove Road - Traffic Volumes
Attachment "C"	Existing / Proposed Bicycle Lanes

A copy of this report can be obtained online at <http://www.halifax.ca/commcoun/cc.html> then choose the appropriate Community Council and meeting date, or by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

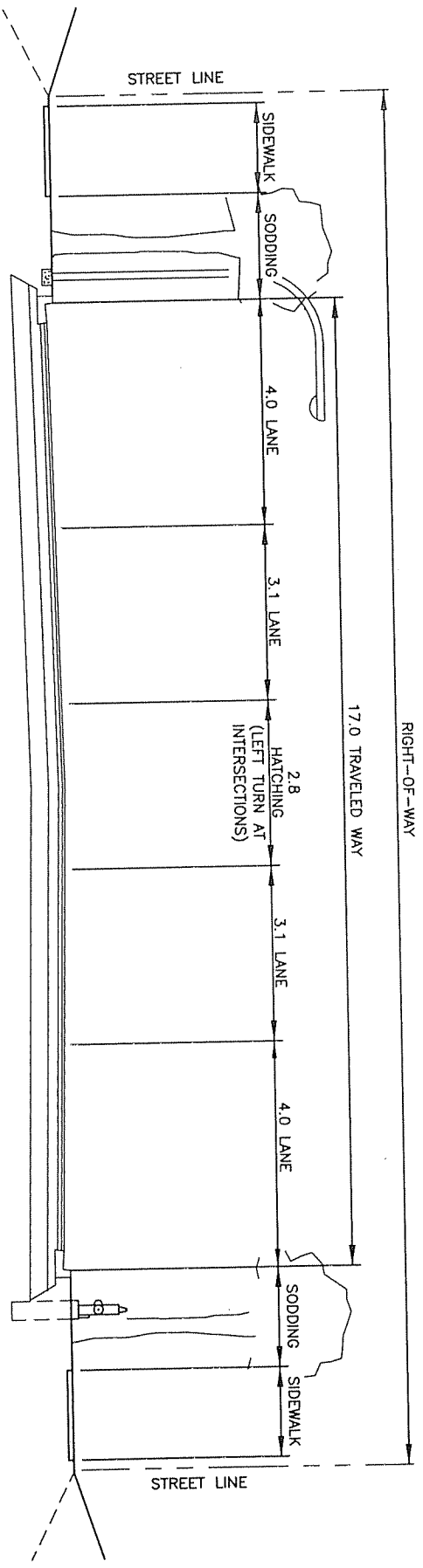
Report Prepared by: Hanita Koblents, TDM Co-ordinator, 490-8474

Report Approved by: Taso Koutroulakis, Acting Manager, Traffic and Right of Way, 490-4816

**PROPOSED TYPICAL CROSS SECTION**

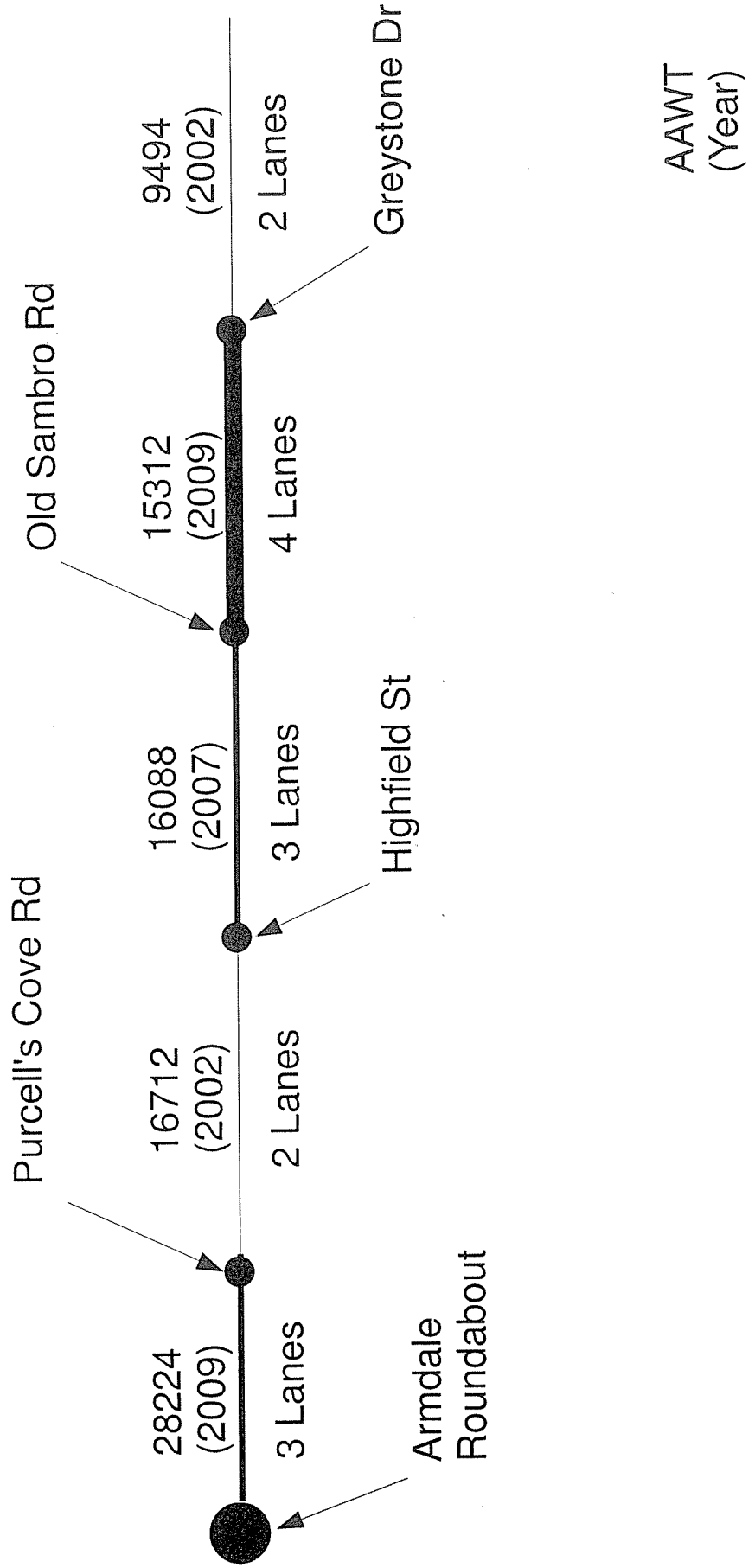


**EXISTING TYPICAL CROSS SECTION**



HERRING COVE ROAD  
(OLD SAMBRO RD TO HARTLEN AVE)  
PROPOSED LANE CHANGES  
TO INCLUDE BIKE LANES

# Herring Cove Road Traffic Volumes



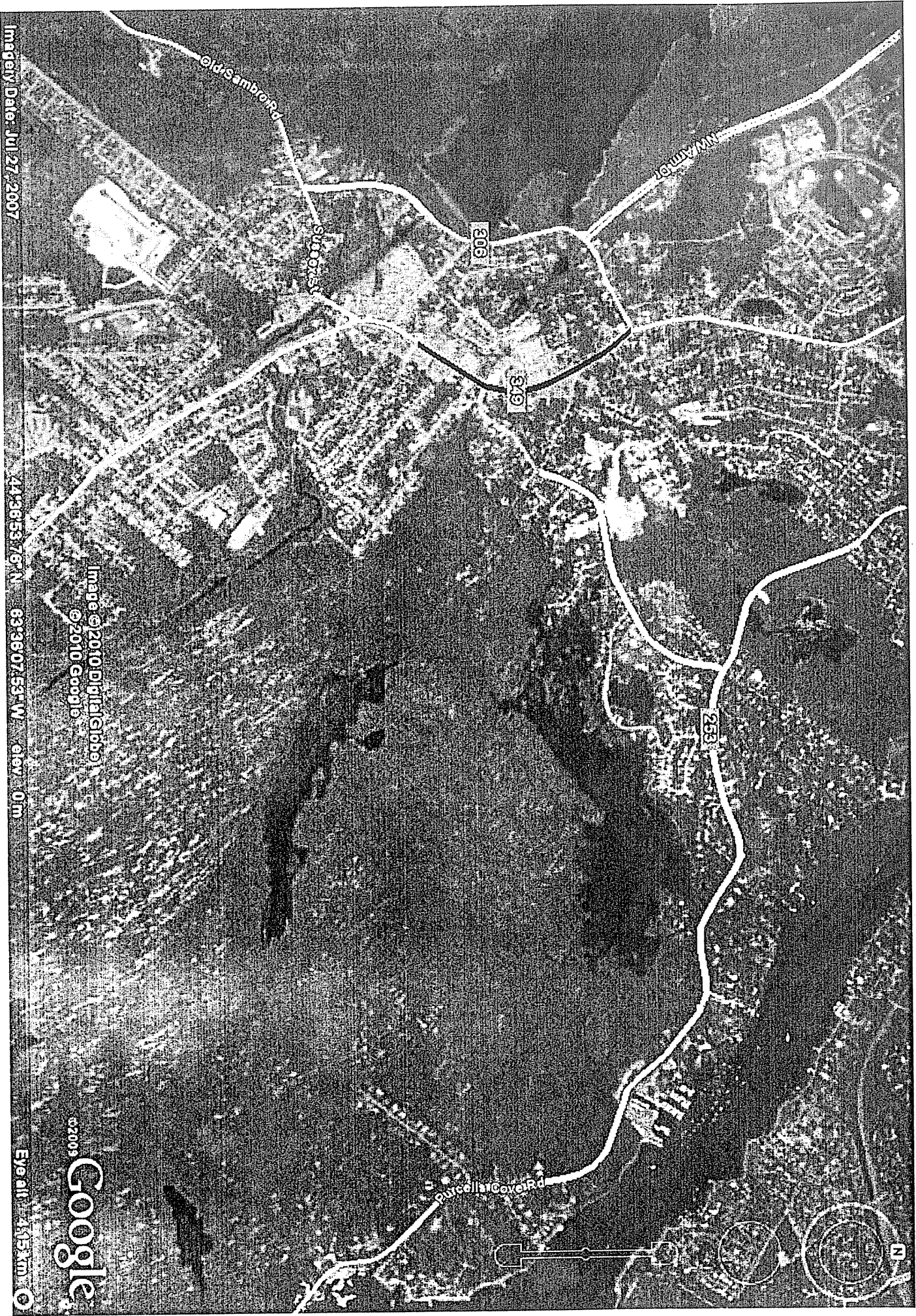
Imagery Date: Jul 27, 2007

44°38'53.76" N 83°36'07.53" W elev 0m

Image ©2010 DigitalGlobe  
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Eye alt 4.15km



## Extract of the Active Transportation Advisory Committee Draft Minutes - June 17, 2010

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### 5.2 Proposed Bike Lanes - Herring Cove Road

- An Extract of the Draft Regional Council Minutes Dated June 8, 2010 was before the Committee.
- A report dated June 9, 2010 was before the Committee.

Ms. Hanita Koblents, Transportation Demand Management Coordinator, provided a brief overview of the Proposed Bike Lanes - Herring Cove Road report and added that it originated from a request by the Committee during the May 20, 2010 meeting. Ms. Koblents explained that traffic modelling demonstrated that the proposed pavement marking scheme would have leftover capacity for current and future growth. She noted that it enabled an opportunity to explore active transportation infrastructure along Herring Cove Road in a more complete sense, including sidewalks and bike lanes, and added that it would be possible to revert back to the current system should the need arise.

Ms. Koblents explained that the report highlighted the benefits of the proposed changes; adding that Herring Cove Road was a main commercial corridor for the area which provided many destinations which conformed to the definition of Active Transportation as destination-based and distinct from recreation. Ms. Koblents noted that arterial roads are designated for bike lanes according to the Active Transportation (AT) Plan and added that the proposed bike lanes provided a link to McIntosh Run Community Trail.

**MOVED BY Mr. Brauer, seconded by Ms. Thomas, that the Active Transportation Advisory Committee recommend that Regional Council award the tender for the resurfacing of Herring Cove Road from Old Sambro Road to Hartlen Avenue with the proposed pavement marking scheme which includes a change in vehicle lanes from four through lanes to two through lanes, plus two bicycle lanes, as well a centre turn lane alternating with planted median islands.**

Mr. Brauer noted that the proposed change had a number of concrete advantages. He stated that the initiative was supported by the AT Plan and would connect residents with destinations. He added that left turns would be improved and that speeding would be reduced with only one lane. He reported that the changes were also in step with the goals of the Spryfield Vision and Action Plan which was approved by Council. Mr. Brauer highlighted that the proposed bike lanes were a very important step towards achieving a bicycling network in HRM and the lane reductions would maintain current traffic flow with reserve capacity. He noted that the criticism from businesses seemed vague and explained that streets with more connections and less traffic would be more conducive to businesses.

**Extract of the Active Transportation Advisory Committee Draft Minutes -  
June 17, 2010**

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Mr. Scrutton raised the issue of youth input into the development of the AT Plan. He noted the JL Isley High School students wanted to be on the road and visible rather than hidden behind buildings in a corridor.

Mr. Scrutton noted that there were studies that demonstrated how traffic calming initiatives actually increase business activity.

Ms. Roxane MacInnis, Transportation Demand Manager Planner, noted that Victoria and Vancouver had reduced lanes in favour of bike lanes and suggested that there may be available information there.

There was a lengthy discussion regarding the appropriate means of communicating the Committee's rationale for its support of the staff recommendation.

**MOVED BY Councillor Watts, seconded by Mr. Regan, that the Active Transportation Advisory Committee's recommendation to Regional Council be amended to include a summary of the Committee's discussions.**

A discussion ensued regarding the rate of growth anticipated in the AT Plan. The Chair indicated that relevant data was available and referred to the provincially-led Imagine Our Schools project which was exploring efficiencies in schools and had requested population data from municipalities. Mr. Dave McCusker, Manager of Strategic Transportation Planning, reported that the traffic modelling was based on projected growth in the Regional Plan.

**MOVED BY Councillor Watts, seconded by Mr. Regan, that the Active Transportation Advisory Committee's recommendation to Regional Council be amended to include a detailed analysis of the population growth projection and the impact on the capacity of the proposed changes.**

The Chair called for the question on the first amendment.

**MOTION PUT AND PASSED.**

The Chair called for the question on the second amendment.

**MOTION PUT AND PASSED.**

The main motion now reads:

**MOVED BY Mr. Brauer, seconded by Ms. Thomas, that the Active Transportation Advisory Committee:**



**Extract of the Active Transportation Advisory Committee Draft Minutes -  
June 17, 2010**

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- 1. Recommend that Regional Council award the tender for the resurfacing of Herring Cove Road from Old Sambro Road to Hartlen Avenue with the proposed pavement marking scheme which includes a change in vehicle lanes from four through lanes to two through lanes, plus two bicycle lanes, as well a centre turn lane alternating with planted median islands; and**
- 2. That the Active Transportation Advisory Committee's recommendation to Regional Council be amended to include a summary of the Committee's discussions; and**
- 3. That the Active Transportation Advisory Committee's recommendation to Regional Council be amended to include a detailed analysis of the population growth projection and the impact on the capacity of the proposed changes.**

Ms. Sim indicated she had information that related to the impacts on businesses as a result of similar initiatives and volunteered to distribute this information to staff for circulation to the Committee. Ms. Sim added that cyclists have commented that the current configuration of Herring Cove Road was not very safe. She suggested that the bike lanes may encourage more cyclists to shop in the area as opposed to travelling in cars to other locations.

There was a discussion regarding the planned use of planted medians. Councillor Hendsbee noted they would impact negatively on maintenance and snow removal and added that they would have to be removed if it were required to revert back to the current system. Councillor Hendsbee stated that Cole Harbour Road was functional without medians whereas Main Street was a mess with them.

Mr. McCusker noted that the rationale for medians was purely aesthetic.

Mr. Brauer noted that the issue of medians was a technical detail and did not impact AT.

The Chair reported that she had advised Regional Council that in the Mainland South Secondary Planning Strategy under Objections and Policies it was noted that: the City shall pursue completion of the widening and realignment of the Herring Cove Road between the Armdale Rotary and the City Limits to improve traffic flow. She added that this was a policy that could not be changed without an amendment from Council. The Chair reported that in the Herring Cove Road Streetscape Study, it was found that the residents and merchants who participated in the study process felt that, in general, the street should not be changed to reduce traffic capacity. She indicated that this was in conflict with a report that suggested wide curbs and not dedicated bike lanes. She noted that both studies were included in the report which creates confusion. The Chair

**Extract of the Active Transportation Advisory Committee Draft Minutes -  
June 17, 2010**

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added that she would be asking for a legal opinion on the specified section in the Mainland South Secondary Planning Strategy. In closing, the Chair advised that residents had been very clear that they wanted bike lanes on Herring Cove Road.

A vote was taken on the main motion.

**MOTION PUT AND PASSED.**





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## MEMORANDUM

TO: Chair and Members, Active Transportation Advisory Committee

FROM: David McCusker, Manager, Strategic Transportation Planning

DATE: 2010-06-24

SUBJECT: Traffic Requirements - Herring Cove Road Corridor

At the June 17, 2010 meeting of the Active Transportation Advisory Committee, a request was made for additional information on traffic projections for Herring Cove Road and the need for future road corridor capacity.

Computer modeling conducted for the 2006 Regional Plan determined that, by the latter stages of the Plan, four lanes of road capacity will be needed on the Herring Cove Road. This capacity requirement, however, is needed first at the Armdale Roundabout end of Herring Cove Road where the volumes are the highest. Although eventual widening of the full corridor outward to Sylvia Avenue is expected to be required by 2026, that need may be avoided if shifting of trips to transit and active transportation trips is higher than anticipated.

Figure 1 (attached) shows the existing number of lanes on Herring Cove Road.

Volumes expected on the corridor in 2026 and intermediate horizons are determined using regional growth projections. The Regional Plan anticipates approximately 1000 new dwelling units to be added to the Herring Cove Road collectorshed (south of Dentith Road). Although this number may be less than the number of proposed or approved building lots within the same area, development of lots is dictated by market forces and not by availability of lots. HRM staff remain confident of the development projections made in the Regional Plan, but recognize that infrastructure timelines may need to adjust if growth in a particular area is faster or slower than anticipated.

Even with the development of 1000 new dwelling units, volumes are not anticipated to increase significantly on Herring Cove Road. The reason for this is that road capacity through the length of the corridor is limited by the capacity of the approach to the Armdale Roundabout. The Regional Plan anticipates additional capacity to be added to the Bayers Road corridor which, in turn, improves travel times for the North West Arm Drive corridor. This will result in more of the additional traffic demand going to North West Arm Drive and not Herring Cove Road. Furthermore, the Regional Plan anticipates

shifts from vehicle trips to transit and active transportation once bike infrastructure and express transit services are introduced.



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## MEMORANDUM

TO: Chair and Members, Active Transportation Advisory Committee

FROM: Hanita Koblents, TDM Co-ordinator

DATE: June 23, 2010

**SUBJECT: Benefits of 'Road Diets' and 3 vs 4 lane Roadways**

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To encourage HRM residents to use bicycles for utilitarian trips, it is essential to accelerate the implementation of bike lanes on major streets, as this is where most of the places people want to go are located (e.g. work, school, shopping, leisure). This can be difficult to do because widening existing roadways can be very costly, and reallocation of road space is often met with opposition from adjacent businesses. This opposition is typically encountered when bike lanes are proposed to replace on-street parking. In the case of the proposed project for 900 metres of Herring Cove Road this summer, businesses are objecting to the reduction of travel lanes from four to two (plus centre turn lane). They are concerned that the lane reduction will lead to issues with traffic congestion and access to their business.

In order to address the concerns of these business owners, the Active Transportation Advisory Committee (ATAC) requested on June 17, 2010 that staff provide additional information about the benefits of traffic calming and other similar 'road diet' projects.

A number of case studies have been reviewed, and their findings summarized below. In general, there are numerous benefits to lane reduction, primarily in the area of safety. Also, in addition to these case studies from other parts of the continent, some local information is provided on a section of the Bedford Highway that has a similar cross section to what is being proposed for the Herring Cove Road.

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### TRANSPORTATION & PUBLIC WORKS, Traffic & Right of Way

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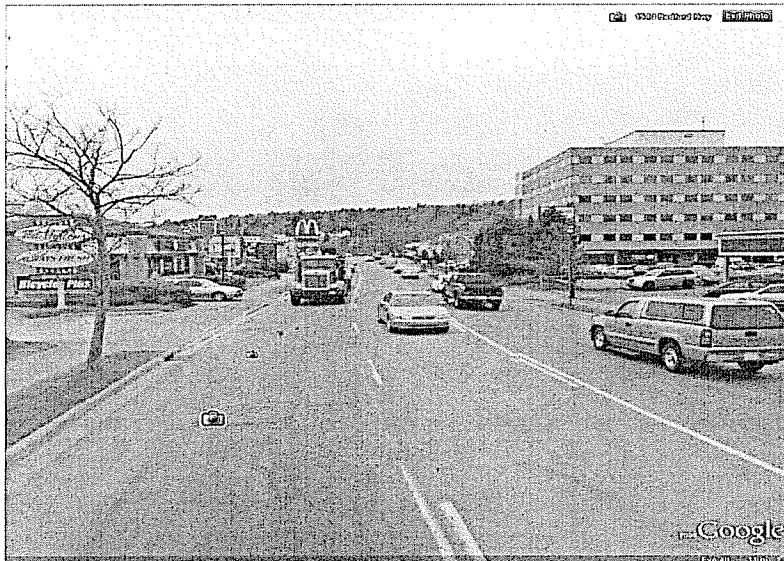
*Bedford Highway between Union Street and Dartmouth Road*

This is a local example of a two lane roadway with centre turn lane, carrying more traffic than the section of Herring Cove Road currently under question (22,134 versus 15,312 in 2009). The point of this example is that there is a very healthy business and retail environment along this section of the Bedford Highway, with a good variety and number of businesses, many of which have been located here for a long time. This example is **not** intended to suggest traffic volume along the Herring Cove Road will be the same as on the Bedford Highway. Rather, the example is given primarily to alleviate fears of retail collapse along Herring Cove Road after the lane reduction, since these sections of Bedford Highway only have two vehicle travel lanes, and a seemingly healthy, stable, business environment.

Road Cross Section: two travel lanes with centre turn lane

Average Annual Weekday Traffic: 22,134 (2009)

Retailers: Canada Trust Court with Cora's, Subway, May Garden and at least 10 other shops; Vetcetera; Closet Design; Bedford Tower (a six storey office building); Esso; Hakim Optical; Wendy's, Tim Hortons, Bicycles Plus, Cellar, Canadian Tire Gas; Bicycles Plus, and ChickenBurger.



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## Case Studies

On Valencia Street in San Francisco which carries 22,000 vehicles per day, a road diet from four lanes to three plus bike lanes resulted in a drop in total collisions by 20 percent and a drop in daily vehicle volume by about 10 percent. Bicycle ridership increased by 140 %, but bicycle collisions only increased by 50%. Collisions involving pedestrians dropped by 36 percent. With lower speeds and fewer lanes, motorists are able to avoid collisions with pedestrians more easily. Anecdotal accounts suggest pedestrian volumes have increased and the street has thrived commercially. The merchants association originally opposed the plan, but has since shown support for the road diet as it has made the street seem like more of a destination rather than a thoroughfare. Although some traffic has spilled over to adjacent streets, researchers suggested that much of that traffic was through traffic with no intention of stopping along the street anyway. Thus, merchants' fears that less traffic meant less business were not substantiated.<sup>1</sup>

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A survey of merchants and shoppers in Bloor West Village in Toronto found that re-allocating road space from on-street parking to bike lane or widened sidewalk would be unlikely to be detrimental to commercial activity.<sup>2</sup> Among other conclusions, the survey found that businesses overestimated the numbers of people driving to the area and that people who arrived by transit, foot and bicycle reported spending more money than those who drove.

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The Federal Highway Administration (FHWA) report *Safety Effects of Marked vs. Unmarked Crosswalks at Uncontrolled Locations* found that pedestrian crash risk was reduced when pedestrians crossed two- and three-lane roads, compared to roads with four or more lanes.<sup>3</sup>

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Another FHWA study found that a significantly lower proportion of crashes occurred at road diets in the after period than at comparison sites in the after period.<sup>4</sup>

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Reducing speed on roadways reduces the risk and severity of collisions with pedestrians. A pedestrian hit at 64 km/h has an 85 percent chance of being killed; at 48 km/h, the likelihood goes down to 45 percent, while at 32 km/h (20 mi/h), the fatality rate is only 5 percent.<sup>5</sup> With a three lane cross section, opportunities for excessive speeding are largely eliminated, because of lost opportunities for meandering and passing.

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A study by the City of Seattle Department of Transportation of the restriping of Stone Way North, before and after conversion from a four lane cross section to a three lane cross section for approximately 2 km concluded that:

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### TRANSPORTATION & PUBLIC WORKS, Traffic & Right of Way

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1. Speed has declined and motor vehicles were travelling closer to the posted speed limit of 30 mph and top speeders (those travelling over 40 mph) declined more than 80% while 85<sup>th</sup> percentile speed declined approximately 3 mph.
2. Collisions have declined - Total collisions declined 14% in the two year period since the conversion. The most traumatic types (injury and pedestrian) have sustained the steepest declines. The bicycle collision rate was also down. Injury collisions are down 33%.
3. Pedestrian crossings are safer. Pedestrian collisions have been reduced 80%.
4. Bicycle volume has increased. The volume of cyclists increased 35% from 2007-2010.
5. Motor vehicle traffic has not diverted to neighbourhood streets.
6. Peak hour capacity has been maintained - the corridor has sustained its capacity to carry the same number of motor vehicles (about 13,000 vpd).<sup>6</sup>

On Edgewater Drive in Florida, with average daily traffic counts between 18,681 to 27,684 through its length, a four to three lane conversion resulted in a 34% decrease in the crash rate and a 68% decrease in the injury rate - partially attributed to lower, more uniform speeds made possible by the new road configuration. The percentage of vehicles travelling at speeds greater than 36 mph was reduced from 15.7% to 7.5%. Traffic volumes decreased 9%, while traffic volumes through neighborhood roads also decreased. Pedestrian and bicycle use increased more than 20% each (23% for pedestrians, 30% for bikes). The total increase in travel time for those in cars was 50 seconds.

A number of case studies of four to three lane conversions in the US are included in a report by the director of the Office of Transportation Safety for the Iowa Department of Transportation.<sup>7</sup> In fact, the Iowa DOT Office of Transportation Safety has recently begun to actively promote the conversion of other four-lane undivided urban roadways to three-lane two way left-turn lane facilities when a concern about safety along an existing highway is expressed. This report cites the following advantages: improved safety with regard to motor vehicle collisions; improved pedestrian safety due to fewer conflict points and improved visibility; taming of aggressive motorists who can not travel along three-lane corridors at excessive speeds making multiple lane changes. The report includes the following extract from a local paper in Duluth, the News-Tribune, regarding the conversion of 21<sup>st</sup> Avenue with 17,000 vehicles per day:

**TRANSPORTATION & PUBLIC WORKS, Traffic & Right of Way**

<i>Real Property</i>	<i>Metro Transit</i>	<i>Traffic &amp; Right of Way</i>	<i>Municipal Operations</i>	<i>Fleet Services</i>	<i>Service Delivery &amp; Quality Improvement</i>	<i>Solid Waste Resources</i>
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*Admit it, 21st East Works*

When Duluth officials announced they would convert busy 21st Avenue East between London Road and Woodland Avenue from four lanes to two, with a turn lane in the middle, some armchair analysts predicted it wouldn't work. The News-Tribune Opinion page was among them. Well, it works. About everyone agrees—from city traffic officials to neighbors—that the change has eased congestion and reduced drivers' speed making it safer for pedestrians, and it hasn't caused problems in winter. Traffic moves steadily up and down the hill even though the volume is up. Cutting available traffic lanes by 50 percent on the already heavily used stretch carrying vehicles between the I-35 exit at 21st Avenue East at London Road and the Hunters Park and Woodland neighborhoods did not seem like a good prospect when it was done last May. Initiated at the end of the academic year, many believed that, when the University of Minnesota—Duluth and St. Scholastica resumed classes in the fall, the thoroughfare wouldn't be able to handle the traffic. And winter . . . well, it would be a disaster, we doomsayers predicted. None of it happened. Now the city is planning to repaint the lanes and keep the pattern on 21st indefinitely—as well it should.

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In the *Road Diet Handbook: Setting Trends for Livable Streets*, the author evaluates the livability benefits of converting four-lane undivided roadways to a three-lane cross section<sup>8</sup>. On-line and door-to-door surveys were completed to determine the opinions of those living and working along roadways in Washington, Iowa, Georgia, and also in Toronto and Dunedin, New Zealand. Many survey respondents noticed improvements in the roadway environment and agreed with the changes. Overall, one or more of the following livability benefits were found along each of the case study roadways:

- Improved walkability, easier street crossing, and increased pedestrian and bicycle use,
- Slower vehicle speeds,
- Users feeling “safer” and more “comfortable” along the roadway,
- Economic growth in adjacent and nearby businesses,
- Increased new home and business improvement projects,

1. M. Sallaberry, *Valencia Street Road Diet — Creating Space for Cyclists* San Francisco Department of Parking and Traffic. Accessed on June 15, 2010 at: [www.bicyclinginfo.org/bikesafe/case\\_studies/casestudy.cfm?CS\\_NUM=103](http://www.bicyclinginfo.org/bikesafe/case_studies/casestudy.cfm?CS_NUM=103)

2. Forkes, J. *Bike Lanes, On-Street Parking and Business*. Clean Air Partnership, Toronto, ON 2010.

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TRANSPORTATION & PUBLIC WORKS, Traffic & Right of Way

*Real  
Property*

*Metro  
Transit*

*Traffic &  
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*Municipal  
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*Fleet  
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3. Zegeer, C.V., J.R. Stewart, H.F. Huang, and P. Lagerwey. *Safety Effects of Marked vs. Unmarked Crosswalks at Uncontrolled Locations: Executive Summary and Recommended Guidelines*. Federal Highway Administration, U.S. Department of Transportation, McLean, VA, 2001.
4. Huang, H.F., J.R. Stewart, and C.V. Zegeer. *Summary Report: Evaluation of Lane Reduction "Road Diet" Measures and Their Effects on Crashes and Injuries*. Federal Highway Administration, U.S. Department of Transportation, McLean, VA
5. U.K. Department of Transportation, *Killing Speed and Saving Lives*, London, 1987
6. City of Seattle, Department of Transportation. *Stone Way N Rechannelization: Before and After Study N 34th Street to N 50th Street*. May, 2010
7. T.M. Welch. *The Conversion of Four-Lane Undivided Urban Roadways to Three-Lane Facilities*. Office of Transportation Safety, Engineering Division, Iowa Department of Transportation. Ames, IA
8. J.A. Rosales. *Road Diet Handbook: Setting Trends for Livable Streets*. Parsons Brinckerhoff, 2006.

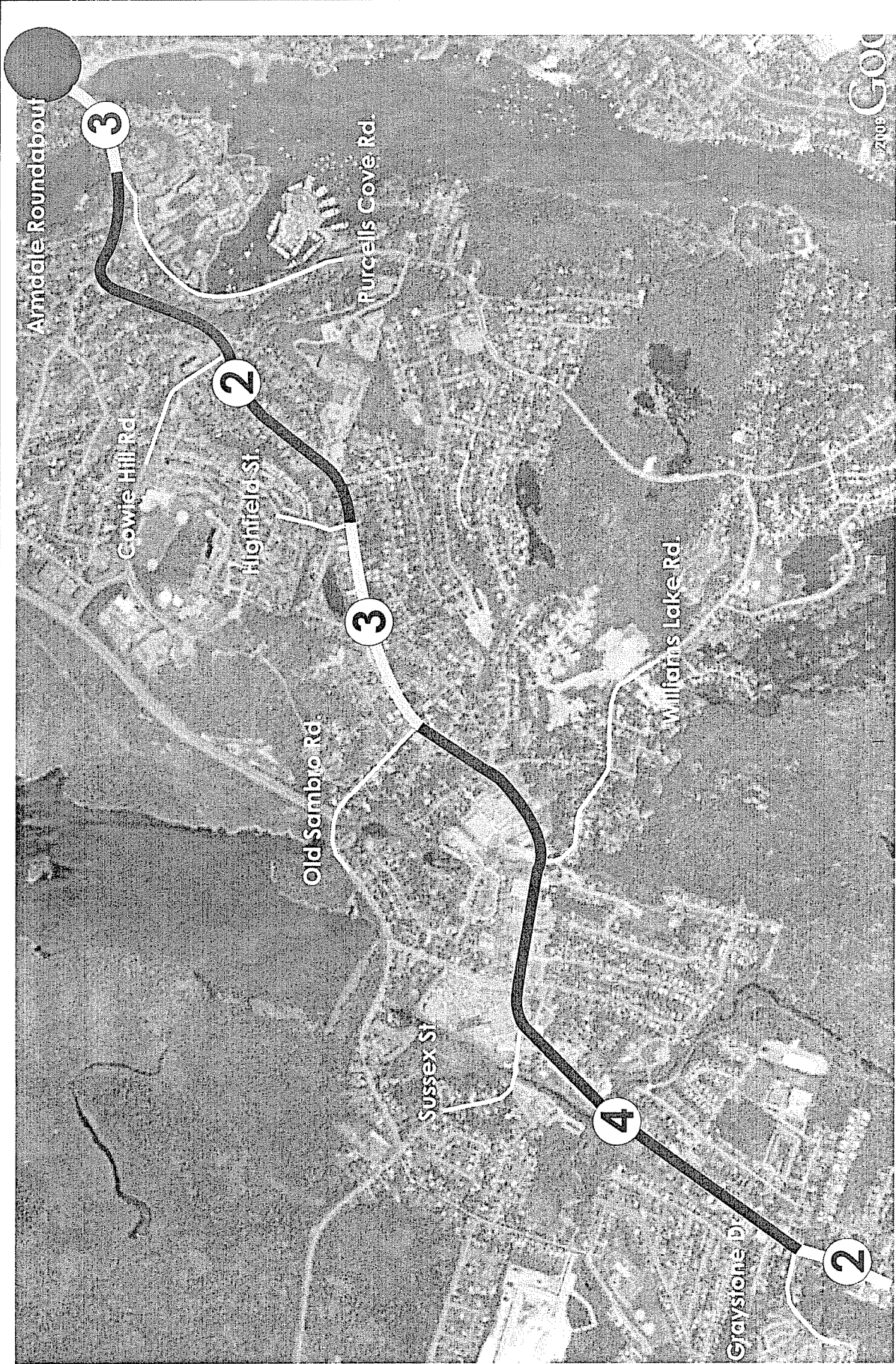
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**TRANSPORTATION & PUBLIC WORKS, Traffic & Right of Way**

<i>Real Property</i>	<i>Metro Transit</i>	<i>Traffic &amp; Right of Way</i>	<i>Municipal Operations</i>	<i>Fleet Services</i>	<i>Service Delivery &amp; Quality Improvement</i>	<i>Solid Waste Resources</i>
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Project Title

June 2010

Date

ATTACHMENT

Figure 1 - Herring Cove Road Lanes

4 # of Lanes



**Extract of the Active Transportation Advisory Committee Minutes - May 20, 2010****7.3.1 Herring Cove Road Bike Lanes Project - Mr. Roddy MacIntyre,  
Transportation Engineer**

Mr. MacIntyre presented to the Committee regarding the Herring Cove Road Bike Lanes Project. He explained that staff had been approached by Real Property Planning concerning putting islands along Herring Cove Road, from Old Sambro to the Captain William Spry Library, and added that Design and Construction were also doing some repaving. He related that he had done some graphic modelling of the traffic patterns with the inclusion of bike lanes, since the area had been identified in the Active Transportation Plan, and noted that there was little change. He described the traffic delays as being, at worst, the same as the lane system currently in place.

Mr. MacIntyre explained that the current cross section is six lanes across and added that the current traffic volumes do not necessitate that many, resulting in leftover capacity. He presented a cross section that removed one lane of traffic in each direction which transformed the central area into two-way left turn lanes to provide access to businesses. Mr. MacIntyre reported that with the proposed system there was still reserved capacity.

Mr. MacIntyre indicated that it was relatively simple to revert to the current model, with no bike lanes, as it was simply a matter of repainting the lanes.

Mr. MacIntyre reported that most of the public response has been negative and that the most frequent criticisms were regarding the road's ability to handle the traffic and that customers would not be able to access businesses. He explained that staff brought the issue forward to the Committee in order to advise Council.

Mr. Cecil Kane, Spryfield Business owner, presented the concerns of the Spryfield Business Commission. He explained that the vast majority of business owners in the area were against the proposal. He described the concerns of property owners and the negative affect the proposed changes would have on new development in the area.

A discussion ensued surrounding the actual amount of reserve capacity and how long it would last. Mr. MacIntyre explained that it depended on the rate of development of growth in the area.

The Chair indicated that more information was needed and requested available data regarding the concerns brought forth by the Spryfield Business Commission. She added that the Committee cannot make changes to the AT Plan approved by Council and noted that the area is designated in the AT Plan as to include bike lanes.

Mr. MacIntyre clarified that when conducting the graphic modelling, he made no reductions for bicycles. He explained he took all the existing traffic and projected it onto the new design.

**MOVED BY Councillor Watts, seconded by Ms. Thomas, that the Active Transportation Advisory Committee request a staff report outlining the following issues: width of the bike lane and the issues of congestion raised by the Spryfield Business Commission that might be negatively impacted. MOTION PUT AND PASSED.**

Mr. Scrutton noted that the focus of the Committee was on Active Transportation and that issues from other industries such as business need not necessarily be considered in their discussions. He added that the Terms of Reference limited the Committee to the implementation of the AT Plan as approved by council.