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**Halifax Regional Council**  
**March 28, 2006**

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

**SUBMITTED BY:** Sheila Fougere  
Councillor Sheila Fougere, Chair, Bikeways Advisory Committee

**DATE:** March 20, 2006

**SUBJECT:** **Bikeways Advisory Committee 2006/2007 Capital Budget  
Recommendations**

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## **INFORMATION REPORT**

### **ORIGIN**

Discussions at the November 16, 2005 meeting of the Bikeways Advisory Committee (BAC) regarding 2006/2007 capital budget recommendations.

Further discussion and motion made at the January 18, 2006 BAC meeting.

### **BACKGROUND**

The BAC reviewed the following documents (which are included as attachments to this report) in consideration of the 2006/2007 capital budget recommendations:

- Preliminary list of TPW paving renewal and resurfacing projects
- HRM Bicycle Plan Status Report
- Blueprint for a Bicycle Friendly HRM - HRM Bicycle Plan

## **DISCUSSION**

After discussion at the November 16, 2005 and January 18, 2006 BAC meetings (this item was not discussed at the December 2005 meeting as a quorum was not present), a motion was put and passed that Regional Council be advised that the Committee and Staff have reviewed the documents outlined in the Background section of this report. The Committee and Staff are satisfied that construction projects are proceeding as per the priorities identified in the Bicycle Plan and the options for the coming year have been addressed with staff.

Minute extracts of 2006/2007 capital budget discussions from the November 16, 2005 and January 18, 2006 BAC meetings are attached to this report.

## **BUDGET IMPLICATIONS**

There are no budget implications associated with this report.

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

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

## **ALTERNATIVES**

There are no recommended alternatives.

## **ATTACHMENTS**

1. Approved Minutes Extract - Bikeways Advisory Committee - November 16, 2005
2. Draft Minutes Extract - Bikeways Advisory Committee - January 18, 2006
3. Preliminary list of TPW paving renewal and resurfacing projects
4. HRM Bicycle Plan Status Report
5. Blueprint for a Bicycle Friendly HRM - HRM Bicycle Plan

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 :

Jennifer Weagle, Legislative Assistant, 490-6521

**Approved Minutes Extract - Bikeways Advisory Committee - November 16, 2006**

**7. NEW BUSINESS / ADDED ITEMS**

**7.1 New Business**

**7.1.1 2006/2007 Capital Budget Recommendations**

- Mr. Greg Rice, Design Engineer, Design and Construction Services (TPW), distributed a preliminary list of paving renewal and resurfacing projects for the reference of the Committee.
- Councillor Fougere distributed an excerpt of the Blueprint for a Bicycle Friendly HRM including project goals.

Councillor Fougere suggested that the Committee reflect on the short and medium term goals of the Bicycle Plan, along with ongoing activities, when considering the 2006/2007 capital budget recommendations. Councillor Fougere clarified that the capital budget is for physical improvements such as the bridge connection, installation of signals, widening of roads, etc. and the operating budget is for maintenance and other ongoing costs.

The Committee reviewed the near term implementation goals outlined in the Blueprint. The most important near term accomplishments were indicated in the Blueprint to be:

- Make the Bikeway Task Force a permanent, official, advisory committee to Regional Council.  
*This task has been completed in the form of the Bikeways Advisory Committee.*
- Make the position of Regional Bicycle/Pedestrian Coordinator for HRM a full time, permanent position.  
*This position has been filled.*

The Committee continued with review of the near term implementation goals, as follows:

1. Complete Sackville/Bedford connection along Little Sackville River.  
*Rough construction of this projected is underway with a completion goal of spring 2006. No further capital funds are required as this project has already been budgeted for.*
2. Construct ped/bike bridge to connect Burnside to Highfield Park.  
*Capital funds have been allocated and design work is being completed for this project.*
3. Pave shoulders of Bedford Highway (Kearney Lake Rd. to Moirs Pond)  
*Conflicts with the Harbour Solutions project interfered with this project. The project is scheduled to be finished next year. Further sections of the Bedford Highway will also be completed. There are allocated funds remaining for this project.*
4. Improve Macdonald Bridge Access

## **Approved Minutes Extract - Bikeways Advisory Committee - November 16, 2006**

*Design study to be completed in early 2006. Funds for this project have been allocated.*

Construct multi-use trail from Cornwallis to North.

*Design study planned.*

5. Install blue bike lanes as pilot project through Fairview Overpass.  
*This project is not part of the capital budget. There is a design study underway for pedestrian and cyclist use of the overpass.*
6. Complete the Trans Canada Trail and bridge at Lake Banook.  
*There are funds allocated from the capital budget for this project. The project was delayed to work with the Canal Commission to design a signature bridge. Project should move forward in the spring.*
7. Develop and sign secondary route to North St. on Charles/Willow corridor.  
*Charles and Willow Streets are indicated as bicycle routes on the Bike Map, however, signage is not in place. This may change depending on final bridge access design.*
8. Pave shoulders where feasible on St. Margaret's Bay Road, install share the road signage elsewhere.  
*Paving completed; signage will be completed.*
9. Ensure that Dartmouth Waterfront Greenway trail is developed as a primary route.  
*Funds are allocated for this project, which is underway.*
10. Ensure Avery/Penhorn bridge over Hwy 111 accommodates bicycles.  
*Project completed.*
11. Investigate potential improvements to Armdale Rotary to make it bicycle friendly.  
*Design funds have been allocated to this project and options are being considered.*
12. Install 'Share the Road' signs and pavement markings on Quinpool from the Rotary to Robie St.  
*This project is in progress and should be completed in the spring of 2006.*
13. Improve Robie Street  
*This project was dropped.*
14. Re-stripe Portland St., Dartmouth from Prince Albert to Gaston to provide bike lane.  
*This is not a capital budget project. The width of the road was looked at and cannot be changed. 'Share the Road' signs will be installed.*
15. On Main Street, Dartmouth, provide wide curb lane and other improvements as per Mini-study B.  
*A wide curb lane was incorporated last year and will be extended this coming year past Forrest Hills to Montague Road.*
16. Repeat of #9.
17. Install 'Share the Road' signs on Bedford Highway through Bedford.  
*This is not capital budget item.*
18. Improvements on other routes highlighted in red on Network Implementation Map.  
*This item was not discussed.*

It was noted that there are no capital budget recommendations coming from the Support Facilities category.

## **Approved Minutes Extract - Bikeways Advisory Committee - November 16, 2006**

The Committee discussed the ongoing project of bike parking. It was indicated that the Capital District is installing several bike racks, however, there are issues surrounding finding locations. A tender has gone out to purchase more racks for installation.

Mr. Rice discussed the paving renewal and resurfacing list provided to Committee members. He indicated that he has not reviewed the list with the bike plan yet to identify overlapping projects. Councillor Fougere suggested that Committee members mark off bike map areas identified on Mr. Rice's list to "piggy-back" projects where possible. Mr. Rice indicated that this is still a preliminary list and is subject to change after the projects are brought before Council.

The Committee further discussed gas tax funds available from the Federal government for 'green' projects. Councillor Fougere requested that the Legislative Assistant obtain a copy of this report for the review of the Committee.

It was also noted that projects should be coordinated with Regional Trails and the Active Transportation Plan. Mr. Euloth advised he would provide his list of priorities for trails.

Councillor Fougere advised that Capital Budget Recommendations would be added to the December meeting agenda to formalize the recommendations to Council, depending on quorum.

Mr. Reashor indicated that bikeways projects have been identified as a high priority.

## Attachment 2

### Draft Minutes Extract - Bikeways Advisory Committee - January 18, 2006

#### 5. CONSIDERATION OF DEFERRED BUSINESS

##### 5.1 2006 Capital Budget Recommendations

- A package including an extract from the Blueprint for a Bicycle Friendly HRM (Bicycle Plan), HRM Bike Plan Status Report, and list of preliminary TPW paving renewal and resurfacing projects, was before the Committee.

This item is a continuation of discussions at the November 16, 2005 meeting.

Mr. Greg Rice, Design Engineer, Design and Construction Services, indicated that at the November 16, 2005 meeting, he had requested that Committee members review the preliminary list of Transportation and Public Works paving renewal and resurfacing projects with the Bicycle Plan and identify overlapping projects. Mr. Rice advised that he and the Traffic Authority work closely, which facilitates identifying opportunities to "piggy-back" bikeways and traffic projects. Mr. Rice further cautioned that the list is preliminary and subject to change.

Mr. Smith advised that he had compared Mr. Rice's preliminary list with the HRM Bicycle Map and provided Mr. Rice with a highlighted list of which streets on the list have bicycle routes. Mr. Smith further advised that he met with Mr. Rice and Mr. MacIntyre to discuss which roads should be considered for cycling infrastructure improvements.

Councillor Fougere joined the meeting at 12:23 p.m. The meeting resumed with Councillor Fougere taking the position of Chair.

Councillor Fougere suggested that an Information Report be prepared for Regional Council indicating that the Committee and Staff have reviewed upcoming Transportation and Public Works projects with the Bicycle Plan and that the Committee and Staff are satisfied that construction projects are proceeding as per the priorities identified in the Bicycle Plan and the options for the coming year have been addressed with staff. It was further suggested that the lists be provided with the report for the information of Council.

**MOVED BY Mr. John Smith, seconded by Councillor Murphy, that the Committee request that staff prepare an Information Report to Regional Council indicating that the Committee and Staff have reviewed the list of preliminary TPW paving renewal and resurfacing projects, the priorities in the Bicycle Plan and the HRM Bicycle Plan Status Report. The Committee and Staff are satisfied that construction projects are proceeding as per the priorities identified in the Bicycle Plan and the options for the coming year have been addressed with staff. MOTION PUT AND PASSED UNANIMOUSLY.**

## Attachment 3

## HALIFAX REGIONAL MUNICIPALITY - 2006

Project Name/Description	District	Project Type
Basinview Drive (Oakridge to Horizon)	21	new sidewalk
Beaverbank Road (Stokil to Windsor Jct. Crossroad) E	19	new sidewalk
Cole Harbour Road (Smith to Morash)	4	new sidewalk
Hillside Avenue (Hillcrest to Skyridge)	20	new sidewalk
Purcells Cove Road (Fleming to Burns) E	17	new sidewalk
Shore Drive (Fort Sackville to Hatchery)	21	new sidewalk
Smokey Drive (Civic 59 to Civic 185)	19	new sidewalk
St. Margaret's Bay Road (James to Civic 2382)	22	new sidewalk
St. Margaret's Bay Road (Keating to Douglas)	17	new sidewalk
White Glove Terrace (Milsom to Peace)	17	new sidewalk
Alton Drive (Quarry to Kelly)	17	paving renewal
Cranston Avenue (Benview Drive to end)	5	paving renewal
Hillside Avenue (Hillcrest to Skyridge)	20	paving renewal
Merkel Street (Agricola to Isleville)	11	paving renewal
Norwood Street (Oxford to Connaught)	13	paving renewal
Old Oakes Road (Palmer to end of pavement)	2	paving renewal
Palmer Road (Rocky Lake to end)	2	paving renewal
Poplar Drive (Civic 123/125 to Circassion)	7	paving renewal
Ralston Avenue (McCurdy to Windmill)	9	paving renewal
Regent Drive (Centre to end)	5	paving renewal
Shore Drive (Fort Sackville to Hatchery)	21	paving renewal
Skeena Street (Louisburg to Skeena Lane)	6	paving renewal
Smokey Drive (Civic 59 to Civic 185)	19	paving renewal
Summit Street (Gladstone to Oxford)	14	paving renewal
Wedgewood Avenue (Edward Laurie to Beechwood)	16	paving renewal
Fox Hollow Drive (Civic 120 to Ashberry)	2	new paving
Lindforest Court (Old Sackville to end)	2	new paving
Old Oakes Road (cul-de-sac)	2	new paving
Old Sackville Road (Melham to Lindforest)	19	new paving
Park Court (Fiddle Parkway to cul-de-sac)	22	new paving
Ardwell Avenue (Rockingstone to Tartan)	18	resurfacing
Birchwood Terrace (Lorraine to Lawnsdale)	5	resurfacing
Caldwell Road (Hines to Horne's)	8	resurfacing
Claremont Street (Connolly to Oxford)		resurfacing
Cleary Road		resurfacing

# HALIFAX REGIONAL MUNICIPALITY - 2006

Project Name/Description	District	Project Type
First Lake Drive (Quaker to Cavendish)	20	resurfacing
Inglis Street (Robie to Tower)	13	resurfacing
Kearney Lake Road (Belle to Halifax City Limits)	21	resurfacing
Lawson Avenue (Kelly to Penhorn)	6	resurfacing
Nightingale Drive (Flamingo - civic 29) Phase 1	16	resurfacing
Portland Street (Dundas to Prince Albert)	5	resurfacing
Purcells Cove Road (Fleming to Burns)	17	resurfacing
Rocky Lake Drive - Ph. 1 (Municipal quarry to Waverly Legion)	2	resurfacing
Rodney Terrace (Rodney to end)	8	resurfacing
South Park Street (South to University)	12	resurfacing
Topsail Boulevard (Mt. Edward to Digby South)	7	resurfacing
Tower Road (Inglis to Southwood)	13	resurfacing
Trunk 7 (Forest Hills to Montague)	4	resurfacing
Windmill Road (Dawson to Jamieson)	9	resurfacing
Windsor Street (Cunard to Quinpool)	14	resurfacing
Agricola Street (Russell to Macara) E	11	sidewalk renewal
Berwick Street (Sinclair to Canterbury) E	5	sidewalk renewal
Claremont Street (Connolly to Oxford) S		sidewalk renewal
Connolly Street (Chebucto to Summit) W	14	sidewalk renewal
Glendale Road (Edgewood to Roslyn) E	11	sidewalk renewal
Henry Street (Jubilee to Cedar) W	13	sidewalk renewal
Lloyd Fox Avenue (Edward Arab to end bad section) E	14	sidewalk renewal
Lucknow Street (Victoria to Inglis) E	13	sidewalk renewal
McLean Street (Inglis to Atlantic) E	13	sidewalk renewal
Mott Street (Fairbanks to Windmill)	5	sidewalk renewal
Mumford Road - north bound (Halifax Shopping Ctr. to Romans) E	14	sidewalk renewal
Norwood Street (Beech to Cambridge) S	13	sidewalk renewal
Norwood Street (Rosebank to Beech) N	13	sidewalk renewal
Norwood Street (Rosebank to Beech) S	13	sidewalk renewal
Prince Albert Road (Hawthorne to Bolton) N	5	sidewalk renewal
Prince Albert Road (Nolton to Nowlan)	5	sidewalk renewal
Prince Arthur Street (Tupper Grove to Armview) W	13	sidewalk renewal
Queen Street (Artillery Park to Doyle) E	12	sidewalk renewal
Rhuland Street (Lucknow to South Park) S	13	sidewalk renewal
Robie Street (Cabot to Sebastian) E	11	sidewalk renewal
Summit Street (Dublin to Windsor) S	14	sidewalk renewal



# HALIFAX REGIONAL MUNICIPALITY - 2006

Project Name/Description	District	Project Type
Summit Street (Oxford to Dublin) N	14	sidewalk renewal
Tower Road (Inglis to Gorsebrook) W	13	sidewalk renewal
Vernon Street (Coburg to Watt) W	13	sidewalk renewal
Vernon Street (Quinpool to Pepperell) E	13	sidewalk renewal
Walnut Street (Jubilee to Watt) W	13	sidewalk renewal
Windmill Road (Dawson to Pelzant) E	9	sidewalk renewal
Windmill Road (Jamieson to Dock Yard Annex) W	9	sidewalk renewal
Windmill Road (Pelzant to Brookside) E	9	sidewalk renewal
Young Avenue (Ogilvie to Harbourview) E	13	sidewalk renewal
Alderney / Ochterloney		traffic imprvt.
Bayers / Oxford - Traffic Signals		traffic imprvt.
Beaverbank Rd. / Windsor Junction Cross Rd. - left turn lane		traffic imprvt.
Dentith / Old Sambro		traffic imprvt.
Dunbrack / Donaldson / Kearney Lake		traffic imprvt.
Portland / Prince Arthur		traffic imprvt.
Robie Street Improvement (Cherry to Jubilee)		traffic imprvt.
Summer @ Bell - widen Summer (south side)		traffic imprvt.
Trunk 7 / Montague - Main Street Widening		traffic imprvt.
Wright @ Joseph Zatzman / Raddall - traffic signals		traffic imprvt.
732 Kearney Lake Road - wall replacement		retaining wall
Beaverbank Rd. - Windsor Junction Cross Rd. - wall + guiderail	19	
Chebucto Road @ Mumford		
Kearney Lake Road - Guiderail	21	guiderail
Lady Hammond Road - Bridge Structure HRM 209		
Novalea Drive (Leeds to Duffus)		
<b>SHOPPING LIST</b>		
Boland Road (Cairn to Wyse)	9	sidewalk renewal
Eileen Stubbs / Commodore		traffic imprvt.
Forest Hills / Flying Cloud / Chameau		traffic imprvt.
Glendale Dr. / Beaver Bank Road	20	traffic imprvt.
Hollis Street (Barrington to VIA station)		new sidewalk
Mount Hope Auxiliary Lane		
Park Avenue - Parking Lot		
Willow Tree		traffic imprvt.

# HALIFAX REGIONAL MUNICIPALITY BICYCLE PLAN

## STATUS REPORT

December-05

### Near Term Implementation Goals (2003 to 2008)

#### Bicycle Network

Number	Section	Recommendation	Progress to Date
Page 49			
DONE		Make the Bikeway Task Force a permanent, official advisory committee to Council	The Bikeways Advisory Committee acts in this capacity
DONE		Make the TDM (Transportation Demand Management) co-coordinator for HRM a full time permanent position	As of December 2005 the position is filled. Prior to this HRM staff were available. There are now two positions in HRM: one for policy and for implementation.
1	6.6	Complete Sackville/Bedford connection along Little Sackville River	This will be done in 2006. The study has been called for but not awarded
2	6.6	Construct ped/bike bridge to connect Burnside to Highfield Park. Solution is bridge over highway	Money is allocated, design work being done. Should be built in 2006/07
3	6.6	Pave shoulders of Bedford Hwy (Kearney Lake to Moirs Pond)	First stage of paving from Southgate to Larry Uteck Blvd. is done. Second stage will extend this to Kearney Lake.
4	6.5/6.6	Improve access to MacDonald Bridge	The study is almost done and design will be picked in early 2006. Money is allocated. Completion likely in 2008/09
4a	6.5/6.6	Construct multi use trail from North St to Cornwallis	A \$30,000 study has been applied for, for a route along Barrington from North St. to downtown.
5	6.6	Install blue bike lanes as pilot project through Fairview interchange	There is a design study underway for the whole interchange that will take cyclists and pedestrians into account.
6	6.1	Complete the Trans Canada Trail and bridge at Lake Banook	The money is allocated and the design almost finalized. Scheduled completion in 2006/07

7	6.5	Develop and sign a secondary route to North St on Charles/Willow corridor	The bike map shows Charles and Willow as bicycle routes, however signage is not done. This may change depending on final access design to bridge.
8	6.6	Pave shoulders where feasible on St. Margaret's Bay Rd. and install share the road signs.	Some new curbs and widening & signage has been done. The next phase is in the planning stage.
9	6.2	Construct Dartmouth Waterfront Greenway Trail	\$800,000 is allocated to this and it is being built in phases over the next two to three years (07/08).
10	6.8	Bridge over Hwy 111 for Penhorn/ Avery to accommodate bicycles	Cyclists can use the overpass but it is narrow and designed for pedestrians. It is being reviewed to see if it can be made more bicycle-friendly.
11	6.6	Improve Armdale Rotary to make it bike friendly	Design money has been allocated to this project. Possible designs should be ready for review in the spring of 2006.
12	6.6	Install share the road signs on Quinpool from the rotary to Robie St Develop Parallel secondary route	This is still under review to see if this is a good idea. Many feel Quinpool is a difficult route for bicycles. The bike map does show alternate routes where feasible. More planning for this is required.
12a		The intersection of Vernon and Quinpool is a major pinch point. It should link naturally to Windsor.	There will be a pilot project in the spring of 2006 to see if "bikes accepted" will work. There is planning underway to see how to connect Vernon on the north side of Quinpool to Windsor.
13	6.6	Improve Robie St	Most believe Robie St is not a good bicycle route and that this point should be removed.
14	6.6	Re stripe Portland St. Dartmouth from Prince Albert to Gaston to provide a bike lane	HRM staff has looked at this and believe that re stripping is not a good idea. The problem is that cars park on Portland.
15	6.6	On Main St. Dartmouth provide wide curb lane and other improvements as suggested in mini- study B	Phase 1 is done from Forest Hills Pky to Ridgcrest Dr. outbound. The longer term plan is to extend it to Montague Rd.

16	6.6	Install share the road signs on Bedford Hwy through Bedford	This is under review. The Active Transportation plan is also looking at it. Alternate routes are also being planned.
		<b>Support Facilities</b>	
1	7.7.1	Publish a bike map for HRM DONE	Done in spring 2005. A second version is now required Probably should incorporate the trail system
2	7.7.2	Increase the supply of public bicycle parking	Six bicycle racks were installed at HRM libraries. Thirteen racks have been installed at recreation centers. More is being planned.
3	7.7.3	Initiate "Green Commute" at HRM and provide support facilities for HRM staff	For 2006 HRM (internal) is to get involved in the "Trip Reduction" program
4	7.7.5	Supply proper signage at Metro Park garage to indicate sheltered bicycle parking inside	There is a sign but it is not highly visible. This is being investigated.
5	7.7.6	Continue sewer grate replacement program	A lot has been done in this regard. Staff is looking for ways to identify grates that still need fixing. Perhaps this can be on the put on the HRM web page.
6	7.7.8	Ensure good bike parking at terminals and Park and Ride	All of the terminals are being equipped with racks and in some cases lockers.
7	7.8.9	Promote shared "end of trip" facilities between groups of employers	This is difficult to do. To date nothing has happened.
		Install bike racks on some buses	All new buses, including the BRT buses) will be equipped with racks.
		<b>Safety Promotion Education</b>	
1	8.3.1	Work with community partners to implement safety/education programs	HRM Bike week put on safety demonstrations. Bike Week assisted the Optimist C to put on their safety program. Plans are underway to introduce Can Bike in HRM Bike Week plans to discuss safety courses with the police. HRM Traffic & Right of is planning a public safety campaign.

2	8.3.2	Increase support for Bike to Work program	Bike Week in 2006 will be timed to support program
3	8.3.3	Close all or part of a street as a special event.	Bike Nova Scotia does close a street for an event. Bike Week is also looking at t
4	8.3.4	Work with school board to disseminate grade 6 bicycle curriculum	This seems to be outside our mandate. This point should perhaps be eliminated.
5	8.3.5	Continue and expand Safe Routes to schools program	This is done through EAC/TRAX.
6	8.3.6	Host annual Bicycle Symposium	Staff has indicated that this is being investigated. It is possible this will be tied int Bike Week.
7	8.3.8	Review collision statistics to help plan improvements	There are few accidents involving cyclists and the ones that have occurred do not point to a preventable issue. Is this point required.
8	8.3.9	Conduct bicycle counts	This is done at the MacDonald bridge but no where else. There are plans to conduct some bicycle counts as part of annual traffic count.
9	8.3.10	"Commute Home Safe" media campaign	This is part of the overall safety program "traffic safety education program"
10	8.3.19	Cyclist of the Year award	This was looked at by Bike Week bit but so far not done. This point should be taken off.
11	8.3.11	Improve HRM cycling website	The site is not too bad. The TDM co-coordinator will review the site.
12	8.3.25	Work with TRAX to get share the road information inserted in the NS Driver's Handbook DONE	The NS Driver's Handbook was revised in 2003
<b>Institutional Framework</b>			
1	9.4.6	Update HRM red book with principles and standards for bicycle friendly designs	Criteria has been introduced for the installation of bicycle lanes in HRM. The Red Book has been updated to include bike parking and facilities.

2	6.8.6	Include all roads designated bicycle routes in HRM's electronic infrastructure management database	The ATM mapping is being formatted to include bicycle lanes. This will be done by 2007/08.
3	9.4.9	Include provisions for bicycling into the land use bylaws or develop bicycle parking by laws	This by law now incorporates bicycle racks as requirements for developers
4	9.4.13	Promote Bike Plan internally DONE	A lot of work has gone into the bike plan over the last three years with a lot more going into Active Transportation. The plan is very much "alive".
5	9.4.14	Host bicycle-friendly design workshop	This was done with Velo Quebec in 2004. Is this point still required.
6	9.4.16	Lobby provincial government for adequate road widths for cycling on provincial roads	This is being done on a continuous basis. BNS is also doing this. Progress is being made.

### Selected Long Term Implementation Goals

#### Bicycle Network Support Facilities

1		In year 10 review and update Bicycle Plan	This should likely be done sooner and perhaps taking into account the Active Transportation Plan
3	8.3.20	Police Directive to carry out enforcement campaign DONE	The police have formed a special police group and their mandate includes cyclists The focus is on high traffic areas such as Quinpool and Spring Garden
10	7.7.14	Install orientation info on both ends of MacDonald Br.	There is a bulletin board at the Dartmouth end

**Ongoing Activities**

1	6.8.1	Implement bike route network with primary/ secondary routes	The bike map has looked at this and the routes are marked. This is an on going issue but a lot of progress has been made.
13	7.7.7	Promote street repair dispatch line for cyclists	This is being looked at in conjunction with a review of the web page.
15	8.3.7	Promote the health benefits of cycling and active transportation	Bike Week had some events specifically on this issue. It is also highlighted in the Active Transportation Plan.
17	8.3.12	Increase publicity of police bicycle registry	There will be discussions with the police in connection with Bike Week.
18	8.3.13	Support bike rodeos and other initiatives aimed at youth	The police are doing some of this. Safety issues are discussed in a couple of places. Perhaps this point could be removed.

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## CRITERIA FOR DECISION MAKING

- **Connectivity** — Does the facility connect routes, lanes, or trails? Does the facility extend a primary route through an area of new development or provide service to previously neglected areas? Major gaps and barriers, including narrow bridges, roads, and other bottlenecks should be targeted as high priority items. (10 points)
- **Convenience** — Does the facility provide reasonably direct routes from residential areas to major destinations such as schools, parks, community centers, employment centers, and commercial centers with routes logically laid out and attractive to bicyclists (lower traffic volumes, slower speeds, or wide streets)? (10 points)
- **Safety** — Does the facility or program serve an immediate safety need? Improvement of cycling conditions should be more of a priority on roads with traffic speeds exceeding 50 km/hr as high speeds lead to more serious accidents. (10 points)
- **Planned Roadway, Trail, or Park Improvement Projects** — Does the facility take advantage of planned roadway, trail, or park improvements that may accommodate bicycle facilities with relatively little additional cost? (10 points)
- **Projected Reduction in Vehicle Trips** — will the facility or program result in a modal shift from motor vehicles to bicycles? (5 points)
- **Multi-Modal Coordination** — Does the facility take advantage of multi-modal connections, including bus transfer stations and transit terminals, and shuttles to major destinations? (5 points)
- **Aesthetics** — Is the route visually attractive? Both recreational and commuting users prefer to ride along streets and through areas that are shaded, have visual relief, or offer other visual amenities. (3 points)
- **Community and Political Support** — Will the proposed improvement be widely supported? (5 points)
- **Cost Effectiveness** — Does the facility provide a lot of “bang for the buck”? (5 points)
- **Usage** — Does the facility serve the greatest number of utilitarian and recreational users possible, especially to major destinations? In the absence of concrete statistics, anecdotal evidence (field observation, surveys, and feedback from staff and public) may need to be used. (3 points)
- **Environmental Concerns** — Will the facility address environmental concerns such as reducing impact on natural habitats along trails? (3 points)
- **Spin – Off Benefits**: Does the facility have any side effects that benefit other user groups such as pedestrians or tourists? (3 points)
- **Ease of Development** — Is a suitable right of way currently available? (3 points)

**10.3 Implementation Program**

The following tables list the projects in priority order recommended within each time frame. Some projects should be considered ongoing once they are initiated (e.g., continue to install bike racks, implement education programs). These tables should be used in conjunction with the Network Implementation Map (Map 3) which graphically describes additional priorities for route improvements. The plan is very ambitious and will require the dedication of significant resources, both financial and human, especially in the near term as programs are initiated and key projects are undertaken. In the later stages of the plan, once the programs are running, labour requirements will decrease and financial commitments will shift from capital projects to operational budgets.



## Near Term Implementation Goals (0-5 years)

The most important near term accomplishments will be to:

- Make the Bikeway Task Force a *permanent, official, advisory committee to Regional Council* with a clear mandate to implement the 'Blueprint for a Bicycle-Friendly HRM';
- *Make the position of Regional Bicycle/Pedestrian Coordinator for HRM a full time, permanent position.*

Bicycle Route Network		Report Section
1	Complete Sackville/Bedford connection along Little Sackville River	6.6/ Mini-study E
2	Construct ped/ bike bridge to connect Burnside to Highfield Park Also sign the route from the Macdonald Bridge to Burnside.	6.6
3	Pave shoulders of Bedford Hwy (Kearney Lake Rd.-Moirs Pond). Do detailed study to improve linkage from Bayview to Kearney Lake Rd.	6.6/ Mini-study D
4	Begin improving Macdonald Bridge Access. Construct multi-use trail from Cornwallis to North. Make improvements to Dartmouth side access as well.	6.5, 6.6 & Mini-study C
5	Install blue bike lanes as pilot project through Fairview Overpass. Monitor.	6.6/ Mini-study A.
6	Complete the Trans Canada Trail and bridge at Lake Banook	6.1
7	Develop and sign secondary route to North St on Charles/ Willow corridor.	6.5
8	Pave shoulders where feasible on St. Margaret's Bay Road, install share the road signage elsewhere.	6.6
9	Ensure that Dartmouth Waterfront Greenway trail is developed as a primary route – 3m wide min, preferably paved.	6.2
10	Ensure Avery/ Penhorn bridge over Hwy 111 accommodates bicycles.	6.8.13
11	Investigate potential improvements to Armdale Rotary and surrounding access roads to make area more bicycle friendly	6.6
12	Install 'share the road' signs and pavement markings on Quinpool Road, from the Rotary to Robie Street. Permit bikes through intersection at Vernon.	6.6
13	Improve Robie Street	6.6/ Mini-study B
14	Re-stripe Portland Street, Dartmouth from Prince Albert to Gaston to provide bike lane (as a minimum on uphill side)	6.6
15	On Main Street, Dartmouth provide wide curb lanes and other improvements as suggested in Mini-study B	6.6/ Mini-study B
16	Ensure that Dartmouth Waterfront Greenway trail is developed as a primary route – 3m wide min, preferably paved.	6.2
17	Install Share the Road' signs on Bedford Highway through Bedford	6.6
18	Improvements on other routes highlighted in RED on Network Implementation Map	Map 3

<b>Support Facilities</b>		<b>Report Section</b>
1	Immediately complete / publish bicycle route map.	7.7.1
2	Continue to increase the supply of public bicycle parking.	7.7.2
3	Initiate 'Green Commute' at HRM program and provide good support facilities for HRM staff	7.7.3
4	Supply signage at new Metro Park	7.7.5
5	Continue sewer grate replacement program.	7.7.6
6	Ensure good bike parking available at terminals and park-and-rides.	7.7.8
7	Provide sign for sheltered bicycle parking at new Metro Park garage	7.8.7
8	Promote shared 'end-of-trip' facilities between groups of employers	7.8.9

<b>Safety, Promotion, Education, Enforcement</b>		<b>Report Section</b>
1	Work with community partners (TRAX, Bicycle NS) to support and implement education programs such as Can-Bike	8.3.1
2	Increase support for Bike-to-Work week	8.3.2
3	Close all or part of a street as a special event to promote active transport	8.3.3
4	Work with School Board to disseminate grade 6 bicycle curriculum	8.3.4
5	Continue and expand Safe Routes to Schools Program	8.3.5
6	Host Annual Bicycle Symposium	8.3.6
7	Review collision statistics to help plan improvements	8.3.8
8	Conduct bicycle counts	8.3.9
9	'Commute Home Safe' Media Campaign	8.3.10
10	Cyclist of the Year award	8.3.19
11	Improve HRM cycling website	8.3.11
12	Work with TRAX to get Share the Road information inserted into the NS Drivers' Handbook	8.3.25

<b>Institutional Framework</b>		<b>Report Section</b>
1	Adopt this Blueprint as the 'official', Council approved, HRM Bike Plan	9.4.1
2	Adopt this Blueprint as a chapter of the Regional Plan	9.4.2
3	<i>Make the position of Regional Bicycle/Pedestrian Coordinator a full time, permanent position</i>	9.4.3
4	<i>Make the Bikeway Task Force a permanent, official advisory committee to Regional Council with a clear mandate to implement the Bicycle Plan.</i>	9.4.4
5	Update HRM 'red book' with principles and standards for bicycle friendly design	9.4.6
6	Include all on-road designated bicycle routes in HRM's electronic infrastructure management database.	6.8.6
7	Include provisions for bicycle parking into the Land Use Bylaws, or develop bicycle parking bylaw.	9.4.9
8	Promote Bike Plan internally	9.4.13
9	Host bicycle-friendly design workshop	9.4.14
10	Lobby provincial government for adequate road widths for cycling on provincially maintained and rural roads	9.4.16
11	Designate certain, specific sidewalks as multi-use trails	9.4.18
12	Review school board design requirements for bicycle parking	9.4.19

## Medium Term Implementation Goals (5-10 years)

<b>Bicycle Network</b>		<b>Report Section</b>
1	Conduct feasibility study to develop a secondary route connecting the peninsula to Mainland North that bypasses Fairview Overpass. Use of CNR lands and possible "rail with trail" should be explored	6.6
2	Bedford to Dartmouth Link	6.6
3	Ped/ bike bridge to connect St. Andrews Rd. to Bayers Rd Shopping Centre	6.5
4	Pave shoulders : Cole Harbour Rd. (# 207) east of John Stewart Dr. / Ross Rd.	6.6
5	Queue jumping for cyclists on Bell Road	6.5
6	Install signs and pavement markings to raise awareness of the presence of bicycles along Spring Garden Road	6.5
7	Investigate bike/ ped friendly opportunities for Windmill Road	6.5
8	Pavement markings, signage on Wyse Rd from Alderney to Macdonald Bridge	6.5
9	Work with HRM and CNR to negotiate passage for cyclists through parking lots on Dartmouth Waterfront	6.5
10	Shore Rd. Dartmouth – Contra-flow bike lane or two-way traffic	6.5
11	Develop multi-use trail from Shore Dr. to Moirs pond area, Bedford	Map 3
12	Pave shoulders on rural portions of Waverley Rd./Portobello Rd. Install 'share the road' signs on curbed portion.	6.6
13	Work with HRM Parks Dept. to advance Urban Connections Project to connect Macdonald Bridge to Ferry Terminal with a shared use path.	6.2
14	Improvements to other routes highlighted GREEN on Network Implementation Map	Map 3
15	Carry on with projects identified but not completed in years 0-5	-

<b>Support Facilities &amp; Safety, Promotion, Education, Enforcement</b>		<b>Report Section</b>
1	Establish bicycle rack pilot program on metro buses	7.7.10
2	Install covered bicycle parking in shopping districts	7.7.12
3	Supply secure parking at special events	7.7.13
4	Media Campaign "twelve steps to a bike-friendly HRM"	8.3.14
5	Carry out a Bicycle Tourism Development Study	8.3.15
6	Promote cycle tourism	8.3.16
7	Alternative Transportation Traffic Report	8.3.17
8	'Sharing the Road' publications	8.3.18

<b>Institutional Framework</b>		<b>Report Section</b>
1	Reduce parking requirements/ Cash-in-lieu .	9.4.10
2	Update Municipal Planning Strategies to provide support for primary and secondary bicycle route development	9.4.11
3	Work with DTPW to clarify cyclists legal rights under Motor Vehicle Act	9.4.17

## Long Term Implementation Goals (10 + years)

<b>Bicycle Network, Support Facilities, Programs, Institutional Framework</b>		<b>Report Section</b>
1	In year 10: review and update Official Bicycle Plan	9.4.20
2	Carry on with projects identified but not completed in years 0-10	-
3	Police directive to carry out enforcement campaign	8.3.20
4	Provide paved shoulder along Hammonds Plains Rd.	6.6
5	Education program/ campaign for driving professionals	8.3.21
6	Consider bikes if Mackay Bridge to undergo major renovation	
7	In redesign of the area, eliminate on and off ramps in Cogswell Interchange and ensure that bicycles are considered as a design vehicle	6.6
8	Ensure bicyclists accommodated in re-design of the Armdale Rotary	6.6
9	Multi-Use Trail around Harbour and Bedford Basin (B.A.T.H.)	6.2
10	Install orientation info on both ends of the Macdonald Bridge	7.7.14
11	Improvements to routes highlighted BLUE on Network Implementation Map	Map 3
12	Continue with projects not completed in years 0-10	-

## Ongoing Activities

<b>Bicycle Network, Support Facilities, Safety, Promotion, Education, Enforcement, Institutional Framework</b>		<b>Report Section</b>
1	Implement Bike Route Network with Primary and Secondary Routes	6.8.1/ 6.8.5
2	Eliminate pinch points interrupting connections within communities.	6.8.2
3	Eliminate strategic barriers interrupting connections between communities	6.8.3
4	Where challenging conditions exist on primary routes, identify and develop secondary routes for less experienced cyclists.	6.8.4
5	Link facilities	6.8.8
6	Use a 'mixed bag of tools' to implement the bike route network	6.8.10
7	Consider prohibiting parking on one or both sides of select streets	6.8.11
8	Construct and maintain adequate trail standards for cycling	6.8.12
9	Work with community partners to advance plan recommendations	6.8.13
10	Continuously improve existing collector & arterial roads with urban profile	6.6/ Mini-study B
11	Continuously improve existing collectors & arterials with rural profile	6.6/ Mini-study B
12	Adopt and implement consistent way-finding system for cyclists	7.7.4
13	Promote street repair dispatch line to cyclists	7.7.7
14	Integrated bicycle facilities with urban streetscape design	7.7.11
15	Promote the health benefits of cycling as active transportation	8.3.7
16	Review bicycle collision statistics annually	8.3.8
17	Increase publicity of police bicycle registry	8.3.12
18	Continue to support bike rodeos and other initiatives aimed at youth	8.3.13
19	Continue to improve the image of utilitarian cycling	8.3.22
20	Use 'Naturally Green' to communicate cycling info with HRM residents	8.3.23
21	Promote all achievements and efforts carried out to support cycling	8.3.24
22	Allocate annual funding for plan implementation	9.4.5
23	All projects, applications, plans, land disposals reviewed by Coordinator	9.4.8
24	Provisions for bikes integrated with other planning, transportation and recreation projects and policies.	9.4.12
25	Planning policies should support a compact urban form	9.4.15
26	Maximize Partnerships: Work with other organizations to leverage funds and to advance plan recommendations	1.4

#### **10.4 Liability/ Risk Management Issues**

Facilities are generally built to accepted standards, but unfortunately in retrofit situations, the standards cannot always be achieved. A local example of this exists on Robie St. at North St., where the centre travel lane is only 2.7m (8'-9") wide clearly below the HRM standard of 3.7m (12'-2"), and the Transportation Association of Canada (TAC) standard of 3.5m (11'-6"). Obviously, the situation has been examined and the need to provide another lane was determined to be important enough to accept a substandard lane width.

Different standards provide different guidelines. While this plan recommends using the AASHTO's Guide for the Development of Bicycle Facilities (1999), it also references the TAC's Bikeway Traffic Control Guidelines for Canada (1998) and states that in retrofit situations, it may be worthwhile to examine comparable European standards. Therefore, while it is important to have decisions backed as much as possible by the desired standard, the standard need not be only the AASHTO guideline.

There also is a debate about whether bike lanes provide any additional safety as compared to wide curb lanes. While some advocates are opposed to providing bike lanes, there are studies that support both sides. However, bike lanes may be provided for a number of reasons other than safety, including acting as a visible manifestation of HRM's commitment to providing cycling facilities and providing a facility that will serve to encourage less confident cyclists to use their bikes for utilitarian purposes.

When determining an appropriate facility to provide, it is important to return to the principle of using a 'mixed bag of tools.' The fact that a particular standard cannot be achieved should not serve to preclude action. Best professional judgement combined with due diligence should determine the appropriate type of facility in each situation. It is also important to ensure that education campaigns and appropriate signs accompany the installation of any new facility. These are especially important in situations where the required facility may need to be sub-standard because of the constraints present in dealing with the retrofit of existing conditions in an already built up urban area.

#### **10.5 Funding Sources/ Strategies**

To successfully implement the HRM Bike Plan, the municipality must make a commitment to annual ongoing funding for development and maintenance of bicycle facilities and programs. The costs to implement the plan may appear to be significant, however the benefits of investing in healthy, active transportation may outweigh the costs in the long run. Every dollar spent to support bicycle transportation represents deferred costs for expensive road infrastructure and an investment in the "healthy growth" of HRM.

Having said that, HRM will not have to "go it alone" and should actively seek funding partners. Possible strategies and sources of funds include:

##### *Local Resources*

- Consideration should be given to the reduction of motor vehicle parking requirements for new development, with acceptance of cash-in-lieu that is then targeted to improve bicycle, pedestrian, and transit facilities.

- Corporate Sponsorship: businesses could be approached to fund a specific facility that could then bear their name and logo. This has worked well for several pedestrian and bicycle trails in British Columbia.
- Bicycle retailers and manufacturers will directly benefit from all efforts to support and promote cycling. They should be approached to sponsor initiatives and facilities.
- In many communities, deeds and donations have been used to allow local residents to sponsor a facility. People purchase "deeds" to portions of a trail or a bridge, or buy bricks that will be embossed with their names. If the deeds and donations are administered by a not-for-profit organization, they may be tax deductible. In any case, the facility must be in a prominent location to encourage people to donate.
- Service clubs such as the Lions, Kiwanis or Rotary International should be approached to sponsor a facility. The Kamloops Bicycle Plan mentions that Rotary has sponsored construction of bike lanes in Kelowna and Port Coquitlam. Identifying projects that are in an area of particular need or in locations that will assist large numbers of people will make them more attractive to these types of organizations.
- Many improvements for cycling can be made as small additions to regularly ongoing infrastructure improvements including sewer and water projects (and perhaps gas, in the future). The key is advance knowledge that there is a cycling issue on a road that is scheduled for construction. Incorporation of cycling upgrades into the overall project is more cost effective than dealing with the cycling issue separately.
- The Community Development funds for HRM's sewage treatment plant (STP) may hold potential for contribution to some of the projects identified in this plan. For example, the Barrington Street Multi-use trail travels adjacent to north end Halifax STP site.

#### *Health Funding*

- Tapping into the Active Kids, Healthy Kids funding recently announced by the provincial government. This funding specifically targets cycling along with walking and jogging as a means to improve the health of Nova Scotia youth.
- Sport and Recreation Nova Scotia may have \$150,000 to spend over three years to promote Active Transportation in the province. They may willing to support events such as street closures that give people opportunities to try active transportation.
- The IWK has funding for education available under the Child Safety and Accident Prevention Program. This is a critical item, as children do not know how roads work. It may be possible to access these funds to disseminate the Grade Six bicycle curricula prepared by Bicycle Nova Scotia.
- The Atlantic Health Promotion Research Centre, the Dalhousie Schools of Law, Resource and Environmental Studies, Architecture, and Urban and Regional Planning often have students looking for interesting projects. Student efforts could be used to accomplish projects such as preliminary feasibility studies, surveys, and counts that need to be done. The Bicycle/ Pedestrian Coordinator should establish contacts in each of these departments.
- Other health funding related to active transportation and preventative medicine should be targeted as a strategy to support Bike Plan implementation. A recent study by GPI Atlantic (quoted 24 October, 2002, Chronicle Herald) states that lack of exercise and obesity are partly to blame for high rates of chronic illness in Nova Scotia and these diseases cost taxpayers more than \$3 billion annually.

#### *Federal Sources*

- Transport Canada launched the Moving on Sustainable Transportation (MOST) program in 1999, to provide funding for sustainable transportation initiatives in Canada. To date,

twelve projects have received an approximate total of some \$400,000, including an Active and Safe Routes to School program. Transport Canada is committed to extending the MOST program by two additional years to 2003/2004.

- In 2000, the department also launched a Green Commute program to change the commuting habits of its own employees. Though the project is targeted to federal government offices, the municipality might consider using it as a model.
- Transport Canada is providing technical and financial assistance to Electric Bike 2000, a project that will allow 400 employees from 13 organizations to trade in their cars and ride an electric bike to work for two weeks.
- In September 2000, the federal government committed approximately \$3 million to 19 cost-shared projects under Transport Canada's Intelligent Transportation Systems (ITS) Deployment and Integration Plan. For example, \$250,000 was given to the City of Peterborough to plan and pilot an integrated traffic signal control and bus priority system.
- Through *Environment Canada*, the federal Government is providing \$25 million to create the Green Municipal Enabling Fund and \$100 million to create the Green Municipal Investment Fund. Both these funds will provide grants, loans and loan guarantees for projects that increase the environmental efficiency and cost-effectiveness of existing municipal water, wastewater, waste, energy and public transportation facilities.
- The Government of Canada will also invest \$2.65 billion over six years in a new infrastructure program. Investment in Green Infrastructure projects focusing on clean air, clean water and wastewater will be the first priority in the new program. The promotion of bicycling, as an alternative to motor vehicle transport, is an important component of improving local air quality.
- The Kyoto Protocol, if ratified by the federal government this year, may mean additional federal monies to support efforts to reduce carbon dioxide emissions. Bicycling facilities would be logical candidates for such funds.

#### **10.6 Cost Assumptions**

An initial task for the Bicycle/ Pedestrian Coordinator will be to review each recommended capital project and prepare order of magnitude cost estimates for budget purposes. These estimates could be matched against the list of suggested ongoing, near, medium and long-term implementation goals to create annual budget requirements for capital projects. An allowance of 10% of the capital budget could be added to allow for maintenance costs until a body of experience has been developed to allow for more accurate estimates. The Coordinator should also consider the costs associated with the more detailed design and planning work that will need to be done.

The table below provides estimated unit costs for the construction of various facilities. It is based on information from the Kamloops Bicycle Plan (2000), the Toronto Bike Plan (2001) and has been reviewed by local engineers. These estimates should be suitable for creating order of magnitude budget estimates. More accurate estimates can be developed once designs have been finalized for specific projects.