

3.0 ANCILLARY PROGRAMS AND FACILITIES

3.1 EDUCATION

In the course of the public participation process for this study, it became apparent that education is an important issue for both pathway and bikeway usage. Given the existing user conflicts on both pathways and roads, any expansion of the network should be accompanied by an expanded program of safety awareness and education.

The Calgary Cycle Plan covers education issues and makes several specific recommendations (Recommendations #25-33) regarding the expansion of education programs for bicycle and pathway use. The recommendations in this report are intended to supplement those in the Cycle Plan.

3.1.1 Purpose of education programs

The stakeholder group identified a number of reasons to create new and expand existing education programs. These include:

- to raise awareness of the pathway and bikeway systems;
- to promote safe, responsible and accountable behaviour among pathway/bikeway users;
- to reduce user conflicts;
- to promote the active living and active transportation lifestyle choices;
- to generate greater respect for the non-motorized mode users.

3.1.2 Delivering education programs

The Calgary Cycle Plan notes that historically, Calgary has suffered from the lack of a central organizing agency to find funding for, publicize and host education programs (at p.64). In order to effectively support linear recreation and increased use of the non-motorized modes, the City should establish a stable and centralized office which can coordinate and promote education programs through both City departments and outside agencies.

A great number of ways and means to provide education programs have been identified. The following agencies are providing or could provide education programs – either individually or in partnership with commercial sponsors:

- school boards
- Calgary Safety Council
- youth groups, e.g. scouts and girl guides

- community associations and the Federation of Calgary Communities
- Vandalism Awareness Patrol
- National Skate Patrol
- Elbow Valley Cycle Club
- Calgary Police Service
- Emergency Medical Services
- Calgary Parks & Recreation
- Calgary Transportation
- Calgary Regional Health Authority.

In addition to formal education programs and classes, public education can be delivered through a variety of media. These include:

- radio, television, and print advertising
- posters and brochures
- Pathway/Bicycle Route map
- special events, e.g. the Commuter Challenge, Clean Air Day
- internet websites
- signage.

Signage is discussed later in this report.

RECOMMENDATIONS

2. **A staff person (or persons) should be identified in the Parks Department who, as one of his/her roles, coordinates, supports and encourages public education programs relating to cycling, pathway use, and pedestrian issues through a variety of media.**
3. **The City of Calgary should sponsor an annual campaign to be carried out in spring/early summer, to raise awareness and encourage the use of the pathways and bikeways, and provide information about safety, etiquette and the rules of operation of these facilities. The campaign should be timed to coincide with the Commuter Challenge and/or Environment Week.**

3.2 ENFORCEMENT

Along with public education, enforcement is a critical tool to ensure that pathways and bikeways are used responsibly and safely, and to reduce some user conflicts.

Presently, there are only two Parks By-law officers responsible for providing enforcement of the by-law relating the pathways. The police mountain bike unit also provides support in pathway by-law enforcement; however, they attend to many higher priority issues.

The Parks By-law Enforcement officers fill multiple roles with respect to parks and pathways, and focuses on education and enforcement. The education approach is preferred for pathways, with enforcement powers reserved for obvious or repeat offenders.

Regarding bikeways and streets in general, enforcement measures need to be directed at motorists as well as cyclists.

RECOMMENDATION

4. The parks and pathways enforcement division should be expanded to provide more extensive coverage of the city.

3.3 ENCOURAGEMENT

Some programs can serve a dual purpose, and cover both education and encouragement of non-motorized modes. Examples from here and elsewhere include:

- environmental special events: e.g. Commuter Challenge, Bike to Work Week, Clean Air Day, Environment Week
- sporting/fitness, charity special events: Stampede Run-off, Terry Fox Run, etc.;
- encouraging formation of workplace Bicycle User Groups (BUGS).

These projects can garner media coverage and generally raise the profile of alternative transport. City initiatives can take a leading role in financially supporting programs and events which encourage non-motorized modes and active living and recreation.

Another encouragement tool is infrastructure improvements. Along with the identified routes, end-of-trip facilities are equally important to ensure that cyclists and pedestrians have a convenient place to change, shower, and store equipment at their workplace or other destination. Some discussion of the most important facilities is warranted here.

3.3.1 Bike parking

The Calgary Cycle Plan discusses bike parking specifications in detail. It also recommends (#23) that the Planning and Transportation departments “work toward” the development of bike parking requirements for inclusion in the Land Use By-law.

The Land Use By-law provides extensive detailed requirements for automobile parking associated with every land use and built form. There are no requirements to accommodate bike parking. Other jurisdictions have successfully incorporated bike parking requirements into development codes (e.g. Burnaby and Vancouver, B.C.).

This does not address the retrofit situation, however. Most of the city is already built-up and essentially devoid of bike parking, except that which is provided by private corporations or building owners for the exclusive use of their own employees; these bicycle parking facilities are usually located inside commercial buildings. While this provides added security for all-day users, there is no provision for short-term users.

There are a variety of bike parking options, which are set out in Appendix C of the Calgary Cycle Plan. It should be noted that there are simple and cost-effective ways to provide bike parking without going to the most expensive locker option.

Secure bike parking should be provided in City parking lots, whether for staff or for the public (municipal "P" lots). One car park space can accommodate 10 to 20 bicycles.

To ensure that the built-up area is also provided with bicycle parking, a funded program for municipally installed bike racks should be established. Funding could be obtained from a portion of the transportation budget, or from existing departmental budgets (e.g. Parks and Calgary Transit already provide bike racks at certain facilities).

The Transportation department should establish an annual budget amount for bike racks or lockers to be installed in key locations in the built-up area in public rights-of-way. Bike parking should be provided both for short term and long-term (all day) use. Short-term parking should be in an easily accessible and visible location such as the sidewalk.

Alternatively, the city administration could consider partnering with private sector firms to provide bike parking. For example a supplier could install bike racks at no cost to the city, and sell advertising space on the racks.

RECOMMENDATIONS

- 5. The Calgary Parking Authority should continue to expand its bicycle parking program.**
- 6. The Land Use By-law should be amended to require bicycle parking as a condition precedent to the granting of a development permit. Guidelines for the amount, location and design of bicycle parking required should be established.**
- 7. Partnerships with private sector bike rack suppliers should be pursued.**

3.3.2 Amenities

Other amenities can make the urban environment more conducive to linear recreation and non-motorized transportation. In addition to secure bike parking, additional amenities should be provided throughout the city where appropriate.

3.4 SIGNAGE

Signage was identified as an area in need of significant improvement in Calgary. The Calgary Cycle Plan has covered some of this ground already, and should be used as a first reference: see Appendix B, Bicycle Sign Policy.

Presently, the pathways provide some informational signage about destinations and activities in major parks and recreation facilities. They generally do not provide information about non-City activities and facilities (e.g. shopping areas). Some, but not all, of the major pathway systems have names (e.g. Bow River Pathway, Nose Creek Pathway). A consistent system of regulatory, warning and directional signage is lacking.

Bikeway signs do not provide any information about potential destinations. The bikeway routes do not have names.

The public and stakeholders expressed interest in improving the level of information provided by signs for pathways and bikeways.

3.4.1 Policy direction

A number of signage issues arose in the course of the study which are not covered in Appendix B of the Calgary Cycle Plan. The stakeholder group indicated interest in improving the signage program to address and include the following components:

- **barrier-free design:** signs and tactile cues that are accessible to the visually impaired
- **warning signs:** pavement ends, stairs ahead, steep hill, sharp curve, etc.
- **destinations:** indicating the way to transit stations, schools, shopping areas, pools, arenas, etc.
- **facilities:** indicating washrooms, fountains, telephones, etc.
- **distance:** markers, distance to next important point
- **reference:** where a pathway crosses or passes over/ under a street or bridge the name of the street or bridge should be visible to pathway users. Community identification signs may also be helpful
- **location:** location markers to facilitate booking the pathway for special events, orientation for emergency services, and identifying the location of pathway closures

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- **trail names:** major pathways and bikeways could be identified by a trail name which appears on the signs and on the map
 - **user groups:** twinned pathways which separate certain users need to be clearly and frequently marked
 - **roadways:** signs should emphasize sharing the road between motorized and non-motorized users
 - **rules of operation:** periodically posting the pathway rules (keep right, audible warning when passing, yield half the pathway, speed limit) could improve safety awareness and reduce user conflicts
 - **inaccessibility:** where sidewalks or pathways become inaccessible to wheelchair users, such as where a curb cut is absent or stairs are the only option, warning should be given well in advance so that users aren't forced to backtrack extensively.

With respect to the latter point, if an inventory of inaccessible locations is generated, it would be a preferable policy to improve or upgrade the locations to make them accessible, rather than to simply put up a sign and leave the problem in place.

The proposed signage plan set out below is intended to address these issues.

3.4.2 Proposed signage plan

The sign program should include the following elements.

- **trailhead markers or kiosks:** on major pathway routes and at pathway intersections, use a context map to indicate “You are here” and the important routes, destinations and services in the vicinity, including shopping districts, educational facilities, and rest stops (washrooms/ fountains/ telephones);
- **traffic control:** pathway signage should be consistent with roadway signage, e.g. yield, stop, etc.;
- **education signs:** the pathway rules of operation should be posted periodically along the route;
- **warning signs:** with respect to grades or hazards;
- **barrier-free design:** signs should be high-contrast, and kept clear of vegetation. Tactile cues should be used on pathways to indicate upcoming intersections, and changes in grade or direction;
- **location information:** street names, bridge names, and community names should be provided periodically and be easily visible on pathways and bikeways. Distance/location markers should be provided on pathways.

It should be noted that providing more information through signs need not create unnecessary visual clutter. Signs can be clear and informative, yet subtle. A more informative signage program should be aimed at reducing user conflicts and enhancing the functional qualities of the system.

RECOMMENDATIONS

- 8. The Parks and Transportation departments should cooperate to create a pathway and bikeway signage program that is consistent between the two systems, and to the greatest extent possible consistent with the Highway Traffic Act and City of Calgary Traffic Operations Policy Manual. Bikeways should be signed in accordance with the Transportation Association of Canada's "Bikeway Traffic Control Guidelines for Canada (1999)" with respect to signage and pavement marking.**
- 9. A comprehensive sign program should be implemented to address the issues set out in sections 3.4.1 and 3.4.2 of this report.**

4.0 LIFECYCLE MANAGEMENT

4.1 INTRODUCTION

The pathway and bikeway network is an extensive and complex system. In order for it to function effectively, it should be planned and managed as an integrated system. The departmental responsibilities in this regard are discussed in more detail in section 8, Implementation. In this section of the report, a strategy to allocate funding for new and replacement elements of the system is set out.

4.2 PATHWAYS LIFE CYCLE STRATEGY

The life cycle strategy is comprised of the following components:

1. Inspection schedule;
2. Repair schedule;
3. Relationship between inventory database, inspection and repairs;
4. Basis of the cost estimate for the top priority pathway projects.

The current pathway inventory is used as a tool to record pathway additions, pathway deficiencies as well as repair status. As the database is expanded to be linked with a City-wide GIS mapping and information system, the inventory data may be used to prioritize repairs or to establish long term priorities for pathway improvements. The following sections set out a methodology for extending the use of the database into these areas.

4.2.1 Inspection Schedule

The factors which influence the inspection schedule are as follows, in order of importance:

1. Public safety;
2. Risk of further pathway deterioration;
3. Public inconvenience.

A summary of proposed inspection frequencies is set out in Exhibit 4.1.

In general the entire system should be inspected annually (this is the current practice). Inspection should occur at a time of year when the pathways are sufficiently free of snow and ice to enable full observation of pathway conditions. If photographs are taken of problem spots they may be added to the database as an input.

	PATHWAY/ INFRASTRUCTURE TYPE	INSPECTION FREQUENCY
1	Pathways subject to flooding	following each flood
2	Pathways on slopes	spring and fall
3	Pathways with noted root/vegetation problems	moderate – semi-annually mild – annually
4	Subject to complaints	In response to complaints
5	Pathways with noted ponding problems	moderate – semi-annually mild – annually
6	High-use pathways, e.g. Memorial Drive corridor	semi-annually
6	All other pathways	Every 3 years
7	Handrails	incidental to pathway type 2 inspection
8	Lane markings	incidental to pathway inspection
9	Bike racks, lockers	incidental to pathway inspection
10	Pathway lighting	in response to complaints
11	Bikeway signage	annually

The annual inspection and inventory of the system should also be timed to enable necessary repairs and work projects to be included in the upcoming year's budget submission.

Inspection and inventory of the system will be managed by the Pathway Coordinator.

4.2.2 Recommended Prioritization of Repairs

It is recommended that repairs or pathway modifications be prioritized on the basis of a combination of the severity of the problem and the level of pathway use. Problems that could pose a safety concern would take priority over problems that inconvenience users, e.g. pathway buckling due to tree roots would take precedence over puddles. An abbreviated example of how such a system would work is presented in Exhibit 4.2. The time frames shown for repair schedule are for illustrative purposes only.

4.2.3 Relationship Between Inventory Database, Inspection and Repairs

Currently, the City tracks a variety of attributes associated with the pathway system but does not track the bikeway system as such. It is proposed that a bikeway system database be created and linked to the existing pathway database.

Pathway attributes currently tracked include repairs related to pathway deterioration, recommended alterations for improved safety, amenities and signage. In addition, it is recommended that the following attributes be added to the database:

1. Date of pathway construction – will assist in determining whether spot repairs or complete pathway rehabilitation is appropriate for given circumstances.
2. Date of pathway repair – can help determine the effectiveness of previous repairs and appropriate action. For instance, a recurring erosion problem might be better dealt with through pathway re-routing rather than repeated repair attempts.
3. Location of recommended repairs.
4. Cost of repair - tracking the cost of repairs will assist in budgeting for typical repair items.
5. Cause of pathway or amenity damage – tracking the cause of damages serves two purposes. Recurrent vandalism at a location can be reported to the police. Typical rates of a damage type per kilometre of pathway can be established to determine long term budgeting.
6. Level of pathway use - to aid in establishing repair priority.

More discussion about the database and its inputs is set out in the Technical Report.

RANK	DESCRIPTION	LEVEL OF PATHWAY USE	SCHEDULE REPAIR WITHIN:
1	Imminent safety concern	all	1 week
2	Severe root buckling	high use	2 weeks
3	Severe erosion	high use	2 weeks
4	Severe washout onto path	high use	2 weeks
5	Severe root buckling	moderate use	4 weeks
6	Severe erosion	moderate use	4 weeks
7	Severe washout onto path	moderate use	4 weeks
8	Moderate root buckling	high use	3 months
9	Moderate erosion	high use	3 months
10	Moderate washout onto path	high use	3 months

Replacement of pathways in the lifecycle process will require compliance with the current construction standards. The costs assumed for pathway replacement are set out in Exhibit 4.3.

4.3 BIKEWAY OPERATION AND MAINTENANCE

The City of Calgary operates a Pothole Patrol program. The program encourages motorists to call in and report the location of potholes. Potholes close to the curb are usually not a problem for motorists but are a major hazard for cyclists. A program for cyclists to report potholes and other hazards on bikeways is recommended. The program could consist of simply a hotline connected to a voice mail system, or an e-mail address to which hazards could be reported.

The hotline/ e-mail would be checked regularly and problems forwarded to the appropriate City department for action. Some of the hazards which might be reported include:

- damaged asphalt or potholes
- raised or damaged sewer grates
- sand or gravel deposits
- snow blocking a bikeway
- auto parts or debris
- confusing, missing or damaged bikeway signs
- faded pavement markings
- burnt out street lights.

RECOMMENDATIONS

10. The Lifecycle Replacement Strategy set out in section 4 of this report should be employed to determine the budget amount annually required for repair and rehabilitation of pathways indicating a high priority need for such work.

11. A bikeway hotline or e-mail response system should be established to allow members of the public to report hazards or the need for repairs.

PROPOSED ITEM	COST PER LINEAL METRE	SOURCE
Bikeway signage (proposed system)	\$1.00	City of Calgary Transportation Department
Pedestrian bridges	\$3,300	City of Calgary Structures Department
Pathway through varied terrain	\$110	Calgary Parks & Recreation estimate

5.0 ANALYSIS OF PROPOSED ROUTES

5.1 INTRODUCTION

The study area for this project is comprised of southeast and southwest Calgary. The City steering committee provided an inventory of planned and proposed pathways and bikeways, taken from approved and proposed community plans, and an internal review of potential routes generated as part of the Calgary Cycle Plan implementation process. The City wishes to identify more on-street bikeways, and to determine the feasibility of adding new pathways, in order to improve the continuity and city coverage of the system.

Planned and proposed pathway and bikeway routes were analysed using a “ground truthing method”. The routes were inspected by members of the study team. Pathway routes were evaluated using the criteria set out in Exhibit 2.2; bikeway routes were evaluated against the functional and general criteria set out in Exhibit 2.3 of this report. More detailed analysis of the roadway criteria set out in Exhibit 2.3 may be required for some bikeway routes, particularly for routes which may require changes to the road layout. Field notes and photographs were taken to create a record of the inspection process.

Consultations were held with representatives of Alberta TrailNet, the organization planning the Trans-Canada Trail routing for Calgary. Alberta TrailNet commissioned its own route selection study in 1999 to choose the western entrance point into Calgary, and selected the Highway 8/Glenmore Trail corridor as the preferred route to connect to Bragg Creek and points west.

In this study, the pros and cons of the Highway 8 route were examined at one of the stakeholder workshops. It is recommended that the City of Calgary support the preferred westerly access route to Calgary. As Alberta TrailNet continues to deliberate on the preferred Trans Canada Trail routes through the City, it is recommended that Parks continue to consult with TrailNet regarding the final route selection. Note: the by-laws of the City will apply when routing the Trans Canada Trail throughout.

Recommendations for the potential routes were made on the basis of route suitability and feasibility of implementation. The findings of the route analysis are set out in a Technical Report. The recommended routes, including the preferred Trans Canada Trail route, are shown on Map A, Pathway and Bikeway Plan, found in the Technical Report.

The City’s Pathway and Bicycle Route Map is updated every two years. It is recommended that a process be established to identify and analyse potential routes on an ongoing basis, such that new routes can be added to the network in conjunction with the regular updates of the Pathway and Bicycle Route Map. Consultations with adjacent landowners, residents and community associations are recommended before new pathways or bikeways are installed.

RECOMMENDATIONS

- 12. That the pathway routes which have been identified as suitable for construction or installation be so indicated on the appropriate community plan or outline plan, and constructed at the time of development (in new communities), or as part of the Parks work program commencing in 2000 (established areas and missing links).**

- 13. That the bikeways which have been identified as potential signed bike routes, bike lane, wide curb lane or bike corridor routes be evaluated against all the criteria in Exhibit 2.2 in consultation with adjacent residents and communities, and affected City departments. Ongoing route evaluation should be carried out to coordinate with the biennial production of the Pathway and Bicycle Route Map.**

6.0 MISSING LINKS

6.1 INVENTORY

Based on the field investigations described in Section 5, a number of “missing links” in the system were identified. Missing links may include new pathways, new bikeways, and pedestrian/cycle overpass bridges.

The missing links were selected as candidate projects for construction based on a roundtable discussion among the field investigators, who each relayed their findings to the rest of the team.

Priority was established based upon the criteria set out in Exhibit 6.1. The discussion examined how closely a route corresponded to the objectives set out in the pathway and bikeway route selection criteria established in section 2 of this report. Likely utility of the route (potential population served) and an informal cost/benefit analysis were also considered. Where a nearby alternative route already exists, a proposed path was not considered a “missing link”.

The list of candidate projects was narrowed by considering whether projects:

- are expected to be built by developers in the near term,
- would be addressed through anticipated road or LRT construction,
- are unlikely to be built unless land acquisitions occur,
- cannot feasibly be connected because development around discontinuous segments is complete.

Order-of-magnitude costs were estimated based upon the best available information.

The results of the Missing Links analysis are summarized in the tables set out in a Technical Report.

Missing links that cannot be planned for in this report are those that will occur along recommended pathway alignments on public land that is not being serviced by the developer. The Pathway Coordinator will ensure that these missing links are identified as early as the signing of the Developer Final Acceptance Certificate for regional pathways. When these missing links are identified, they will be classified as priority one development items by the City and budgeted for within the upcoming 5 year capital envelope.

MISSING LINKS: PRIORITIZATION CRITERIA

I. Functional Criteria

- importance to the network
- enables or improves crossing of a major/arterial road, railway or water
- connects to other pathways (regional, local) and/or bikeways
- connects neighbouring residential areas to each other
- makes route more direct
- improves safety of existing connection
- already an informal link
- good potential for use
- cost

II. Location Criteria

- prefer routing through public property
- should minimize loss of significant vegetation (e.g. mature trees)
- connects to existing infrastructure (signalized intersections, pedestrian crossings)
- distance from existing linkages
- ability to tag on to planned road/bridge (re)construction
- safety of road/pathway interface
- personal security / informal surveillance
- construction feasibility

RECOMMENDATION

- 14. Key missing links, including new pathways, new bikeways and pedestrian/cycle overpasses should be identified as early as the signing of the Developer Final Acceptance Certificate for the subdivision. When the missing links are identified, they will be classified as priority one development items by the City and budgeted for within the upcoming 5 year capital envelope.**

7.0 FUNDING

In order for the goals and objectives of this plan to be realized, funding must be secured. It is desirable to establish a secure base of funding for both the pathways and bikeways to ensure continued expansion, development, maintenance and lifecycle replacement of these important urban facilities.

Through analysis of the existing funding system and the public participation process, a number of potential sources for funding were identified. Some of these are existing sources, and others are new sources. Potential funding sources from both within the City administration and outside it are discussed below.

7.1 INTERNAL SOURCES

7.1.1 *Transportation planning*

Since the adoption of the Calgary Transportation Plan (CTP) in 1994, there have been numerous plans and initiatives undertaken to implement the principles of the CTP. Bicycle and pedestrian issues should be addressed in all transportation plans undertaken, such as the Inner City Transportation Study, LRT functional studies, the North Sector Transit Planning Study, community traffic studies, or any other transportation planning initiatives.

Bicycle and pedestrian needs can best be provided for in a cost-effective manner when they are dealt with at the design stage. In particular, when road widening, bridge reconstruction, or new roads are being planned, cyclist/pedestrian access must be addressed. For example, when new communities begin development, the City pays for and constructs the major, expressway and freeway roads. Planning from the outset for pedestrian/cycle access on and across these roads will obviate the need to spend more money later to retrofit inappropriate or inaccessible designs.

7.1.2 *Recreation planning*

The City of Calgary has a major program of planning and development for parks and recreation facilities. Where possible, pathways should connect to parks and recreational facilities, and be incorporated into the site plan and project budget at the design stage. This will ensure that pathways continue to be a component of the City's overall recreation strategy, and are provided in a cost-effective manner.

7.1.3 *Network Funding*

As part of the establishment of a Pathway/Bikeway administrative team, a budget should be established to provide for capital and programming budget items over a 6-year budget horizon.

7.2 EXTERNAL SOURCES

7.2.1 Community planning

The pathway system continues to expand into new subdivisions under the auspices of the standard development agreement, whereby developers are required to build regional pathways as part of the parks and open space program. This practice makes a major contribution to the expansion of the pathway system, and should continue as it ensures that the regional pathway system is part of every new community.

However, at present there is no provision for constructing bikeways in the standard development agreement. Developers are responsible for building subdivision roads up to the collector level. The City should work with the development industry to ensure that bikeways are incorporated into new communities, similar to the present practice respecting pathways. City staff and developers can jointly identify roads suitable for bikeway routes at the planning stage, and employ appropriate designs to accommodate bicycles when the roadways are constructed. The new bikeways should connect to the existing bikeway network, as well as to existing and planned pathways.

7.2.2 Provincial funding

The province of Alberta has recently indicated its intention to develop a strategy to reduce greenhouse gas emissions, consistent with the Kyoto Protocol. It is important that the City of Calgary support the non-motorized modes by promoting pathway and bikeway use as ways to reduce the City's emission levels.

Furthermore, the City should be a major force in lobbying the province to:

- recognize the non-motorized modes as a positive tool to improve air quality, and
- fund programs and facilities which support non-motorized modes.

The province provides monies specifically for trail building through:

Alberta Sport, Recreation, Parks and Wildlife Foundation: Alberta Community Development

- this agency is funded through Lottery monies. Government departments may be considered for grants through partnerships; government agencies may be funded through arms' length bodies (societies, councils, etc.)

A more traditional funding source which may be accessible for non-motorized modes is:

The Alberta Cities Transportation Partnership – Basic capital grants

- Although this program primarily provides cost-sharing grants for primary highways, major truck routes through cities and major public transit system requirements, it also

includes Barrier-Free Transportation initiatives to improve accessibility for seniors and persons with disabilities. It may be possible that this program could cover pathways or improvements thereto directed towards enhancing accessibility.

The following provincial initiatives may assist in research or education relating to non-motorized modes and active living.

Climate Change Central – the Roundtable on Climate Change

This group released its report in May, 1999 and is expected to work on developing a strategy to address climate change issues in Alberta.

Provincial Active Living Network – comprised of individuals, groups, companies, municipalities and organizations to promote active living; includes Alberta Community Development as a member. Program delivery and service groups include:

- *The Alberta Centre For Well-being* - a provincial organization mandated to enhance the health and well-being of Albertans by providing leadership and creating educational, research and networking information for wellbeing professionals.
- *Alberta's Be Fit For Life Network* - made up of a coordinating Provincial Centre and seven Regional Resource Centres. Provides a mechanism to share information and offer services and programs to promote regular physical activity and other healthy lifestyle practices.

Clean Air Strategic Alliance (CASA) – a network of government and non-government groups, including Alberta Ministry of Environment, which conducts research on air quality issues.

7.2.3 Federal funding

In the past, National Infrastructure Programs (NIP's) have been fertile sources of funding for pathways, roads and bridges. These programs appear to be a regular feature of federal budgets and should continue to be accessed when in place.

There are several federal funding programs which are aimed at improving air quality, creating livable communities or counteracting climate change. Departments working on these issues include the Ministry of Environment, Ministry of Health and Transport Canada. Funding may be available for capital projects, education and awareness campaigns, and special events. Programs include:

- **Climate Change Action Fund** – Climate Change Secretariat (Natural Resources, Environment Canada)
 - providing funding for projects which work towards the goal of meeting the targets of the Kyoto Protocol on Climate Change – reduction of greenhouse gases

- municipal government, business, non-profit organizations are all eligible
- not available to provide “core funding for existing programs”
- there are a number of application deadlines through 2000 and 2001
- **Clean Air Day** – Environment Canada
 - provides funding for Calgary’s Commuter Challenge which takes place during Environment Week
- **Eco-Action 2000** – Environment Canada
 - provides funding to non-government, non-profit agencies for environmental initiatives.

7.2.4 Outside agencies

Governments are not the only source of funding. Non-profit and environmental agencies make monies available for environmentally-positive initiatives. These groups may not provide capital funding, but often provide money to put towards studies or plan implementation (e.g. education programs, special events).

Examples of agencies which may help fund pathway and bikeway-related projects and programs include:

- Sustainable Alberta
- Alberta Environment Network Society
- Alberta Sport, Recreation, Parks and Wildlife Foundation - will fund trail-building
- Go for Green – this national non-profit agency, partially funded by Environment Canada, provides education, information, and networking opportunities relating to active transportation initiatives. It has recently entered a 10-year partnership with Compaq Corporation to provide seed money funding towards the purchase and conversion of abandoned railway lines into recreational trails
- Calgary Parks Foundation
- Alberta TrailNet
- Trans-Canada Trail Foundation.

Private corporations which provide funding for environmental initiatives include:

- Canada Trust: Friends of the Environment Canada Fund and Community Fund

- Allstate Foundation Canada - provides financial support to registered charitable organizations delivering educational programs on the environment.
- Shell Environmental Fund - projects must be action-oriented to improve and protect the Canadian environment.

The Government of Alberta's Ministry of Agriculture, Food and Rural Development website maintains a list of outside agencies which will contribute to funding for environmental projects: see the listing at:

www.agric.gov.ab.ca/sustain/programs/organizations.html.

7.2.5 Community groups

Many of the outside agencies listed in the previous section do not provide funding to municipal governments but will fund non-profit groups. Calgary is rich in non-profit societies, a term which encompasses most of the community associations, as well as numerous other environmental, sports and community development groups (e.g. Sustainable Calgary, Clean Calgary, etc.). These groups should be encouraged to create their own pathway planning and improvement projects, using outside sources of funding. The pathway/bikeway coordinators' office would be the ideal link through which City and community goals could be harmonized.

Existing community resource programs could be expanded to encompass the pathways, such as the Adopt-a-Park program. There is also the option of a special tax levy for local improvements; this requires a petition demonstrating 2/3 of the affected area residents support the initiative.

This list of funding sources indicates that many of the recommendations in this report could be funded at least in part through outside agencies. In particular, education and awareness programs, special events and promotions may be able to make use of existing resources, such as information brochures and literature from other organizations.

RECOMMENDATIONS

- 15. Bicycle and pedestrian issues must be addressed in all transportation plans and studies. Pathways should be considered and included where possible in all parks and recreational facility plans. The pathway and bikeway coordinators should be consulted in the course of such planning initiatives.**
- 16. The City should continue to partner with other governments, outside agencies and community groups to access funding to support education, promotion and development projects related to the pathway / bikeway system.**

8.0 IMPLEMENTATION STRATEGY

8.1 ADMINISTRATIVE FRAMEWORK

8.1.1 Introduction

To achieve a successful pathway and bikeway planning program, three elements are needed:

1. designated staff who are committed to recreation and non-motorized transportation initiatives;
2. an active citizens' advisory committee on recreation and non-motorized transportation issues;
3. civic officials willing to support recreation and non-motorized transportation programs.

This plan addresses the first two administrative elements; it is hoped that strengthening the administrative support for recreation and non-motorized transportation will encourage political support for same.

8.1.2 Coordination Team

It is recommended that a Pathway/Bikeway coordination team be established to coordinate the pathway and bikeway systems, dealing with both recreation and non-motorized transportation concerns.

Presently, there are extensive staff resources in the Parks department dedicated to pathway planning, design, development, and maintenance. Hence there is a strong case to be made for an overall pathway coordinator position within these divisions.

Therefore, appointment of a counterpart coordinator in the Transportation department is imperative. Presently there is no single person responsible for bikeway planning, design, development or maintenance, or for general cycle/pedestrian issues that arise in roadway planning. A coordinator charged with these responsibilities would create a channel for the public, developers and administration to refer questions about bicycle/pedestrian issues and road design to the city administration.

The pathway and bikeway coordinators, through the establishment of a Pathway/Bikeway coordination team, would:

- manage and direct the planning, design, construction, maintenance, lifecycle replacement and operations of the pathway and bikeway system;
- educate staff from other departments where necessary about cycle/pedestrian issues;
- consult with community planning staff;

- consult with local communities and citizens on specific projects;
- provide staff support to the Citizen's Advisory Committee;
- liaise with other levels of government, outside agencies and interest groups;
- other related duties as necessary.

A conceptual diagram showing the proposed linkages between the Pathway and Bikeway Coordinators' offices, and other administrative departments, is set out in Exhibit 8.1.

RECOMMENDATION

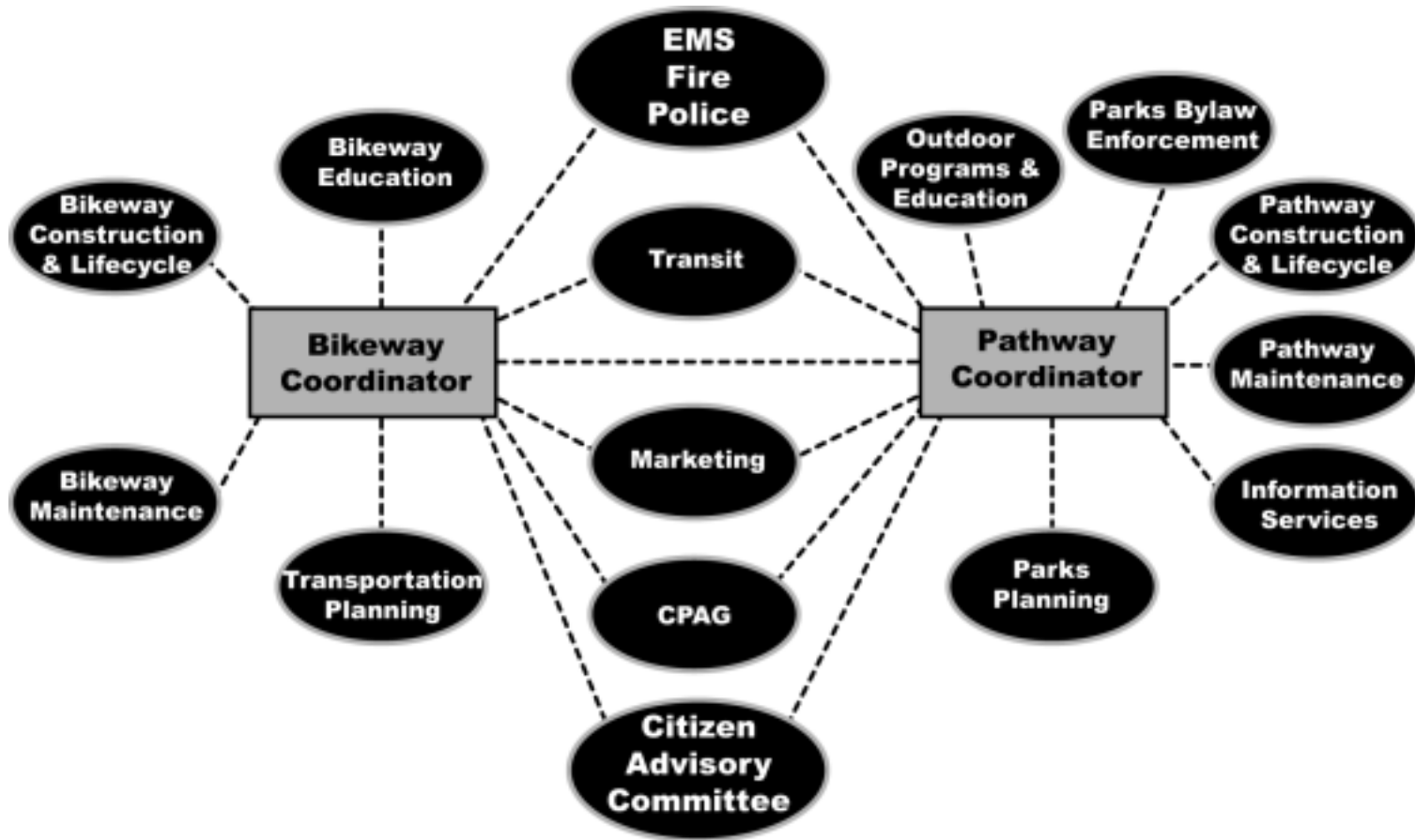
17. That Pathway and Bikeway co-ordinator positions be established within the Parks and Transportation divisions to coordinate the planning, development, design, operations and maintenance of the Pathway and Bikeway systems.

8.1.3 Advisory committee

The Calgary Pathways Advisory Committee (CPAC) was created in 1989 as an advisory committee to City Council. It has been an example of the successful use of ongoing public participation in civic administration. Its mandate is limited to making comments and recommendations about the pathway system to Council; there is no mechanism for committee members to comment on the bikeway system. Ideally, a single citizens' advisory committee should be mandated to address both pathway and bikeway issues.

Council should be approached to modify the Terms of Reference and expand the mandate of CPAC members to:

- include bikeways as a joint mandate with pathways;
- provide a broad range of experience and expertise to emerging issues;
- participate in route evaluation field work;
- undertake community participation and liaison activities;
- develop education and awareness campaigns;
- promote cycling and other non-motorized modes as an alternative to the automobile;
- promote expansion of the pathway and bikeway network;
- participate in planning processes for special projects such as LRT expansion or major redevelopments (e.g. CFB, former General Hospital site);



**CONCEPTUAL ADMINISTRATIVE LINKS -
PATHWAY AND BIKEWAY COORDINATORS**

EXHIBIT 8.1

-
- lobby for facilities, e.g. bike parking, workplace shower/change rooms, bike racks on buses;
 - lobby other levels of government for policy/ legislative changes;
 - serve as ambassadors to the larger community;
 - provide an ongoing communication link between the public, user groups and the city administration.

RECOMMENDATIONS

18. Administration should investigate the expansion of the existing committee (CPAC), or development of a new Citizens' Advisory Committee to address both pathway and bikeway issues.

The Citizens' Advisory Committee should encompass representatives from a cross-section of stakeholders and relevant agencies including:

- **the general public**
- **runners, walkers, hikers**
- **cyclists, bicycle messengers**
- **persons with disabilities**
- **youth, seniors**
- **in-line skaters and skateboarders**
- **other pathway providers (e.g. Fish Creek Provincial Park)**
- **community associations**
- **school boards, universities and/or colleges.**

8.2 DEPARTMENTAL RESPONSIBILITIES

A number of recommendations are required to ensure that the pathways and bikeways are appropriately planned and managed. In addition to the duties to be taken on by the Pathway and Bikeway Coordinators, some specific items which should be explicitly adopted into the administrative process are addressed below.

8.2.1 Transportation and Parks – Land Use Planning

Linear recreation and non-motorized transportation concerns should be dealt with in all planning processes. While this is easy to say, it requires education and vigilance to

ensure that it actually occurs through the Corporate Planning Applications Group (CPAG) process. CPAG should ensure that pathways and bikeways are identified early in the community planning process, and are treated as a core facility in plans.

RECOMMENDATIONS

19. The Corporate Planning Applications Group (CPAG) planning process should ensure that:

At the Community Plan stage, pathway alignments and bikeway routing are identified. These facilities should connect to existing and planned linear recreation/ non-motorized mode facilities in adjacent developments.

At the Outline Plan stage, pathway and bikeway routes are finalized.

8.2.2 Transportation Planning

All the major divisions of the Transportation Department are involved in both pathway and bikeway issues. For example:

- Transportation Planning has taken on the responsibility of bikeway planning and cycling issues in general;
- Calgary Transit carries out its own planning and design for LRT station areas, including pathway alignments;
- Traffic Operations designs and manages intersections, traffic controls, pedestrian corridors, parking meters, etc.

When a Coordinator is appointed within the Transportation Department to oversee the bikeways, that staff person will be able to liaise with each of the three divisions noted above to coordinate bikeway issues, and provide a communication link to the Parks department about pathway issues.

In order to effectively carry out bikeway planning and development, the Transportation Department should be given the responsibility and the budget to carry out the following:

- include cyclists and pedestrians in transportation counts
- maintain a database of collisions involving cyclists and/or pedestrians.

This type of baseline information is necessary to have a complete overview of the entire transportation system, including non-motorized modes. It can be used to:

- identify locations that need improved cycle/pedestrian facilities;
- analyse the effectiveness of measures after being installed.

RECOMMENDATION

20. The Transportation Department should expand current cyclist and pedestrian traffic counts, and maintain a database of collisions involving cyclists and/or pedestrians.

Detour policy

An effective detour policy is needed to maintain the functionality of the Pathway and Bikeway system. There is a detour policy in place for pathways which may be closed for construction, maintenance or winter. This policy should continue to be applied. A similar policy should be developed for the bikeway system.

RECOMMENDATION

21. The Bikeway coordinator should develop a detour policy to address closures of the bikeway system through the Pathway/ Bikeway Coordination team. The detour policy should entail:

- **advance notice of closures by on-site signage;**
- **identification of a suitable detour route for the duration of the closure;**
- **provision of directional signs advising of the detour route;**
- **consultation with the Bikeway coordinator in all major road construction projects at the planning stage.**

8.2.3 Calgary Roads

Calgary Roads has the responsibility for maintenance and operations of both roadways and pathways. This division:

- is presently responsible for inspecting and maintaining regional pathways in street rights-of-way, where the pathway doubles as or is provided in lieu of a sidewalk;
- maintains roadways, including designated bikeways;
- is involved in design and installation of traffic calming measures;
- is responsible for incorporating bikeway and pathway facilities into bridge, overpass and major road construction projects.

RECOMMENDATION

22. That Calgary Roads identify a staff person who meets on a regular basis with the Pathway & Bikeway Coordinators to ensure that pedestrian, bicycle, pathway and bikeway issues are co-ordinated and dealt with consistently.

8.2.4 Parks

Presently, numerous divisions and sections of the Parks Department are responsible for pathway planning, design, maintenance and repair. In order to ensure that the present and future pathway system is compliant with this and other policies, it is recommended that the Pathway Coordinator be the centre for resources and departmental approvals regarding pathway issues.

There are a few matters which are not presently dealt with in a comprehensive way within the Parks department. These are:

- a pathway counting program; and
- co-ordination of pathway bookings.

Pathway counts

As was recommended for the Transportation Department, it is recommended here that user counts on key pathways be conducted on a regular basis. Users should be counted according to the mode they use. This baseline data can be very important in determining how well the system is functioning and where it needs improvement. Examples of how this data can be used include the following:

- to determine high use areas – relevant to decisions to upgrade, widen, twin, or provide winter maintenance;
- to determine where pathways are under-utilized – indicates a need for additional promotion or marketing;
- to develop a profile of the typical or dominant user, by geographical location – useful for route planning and design which is context-specific;
- to indicate whether under-utilized pathways that require lifecycle funding should be considered for elimination;
- comparison with roadway counts – where a parallel bikeway exists, data can be used to determine whether cyclists have been encouraged to use alternative facilities.

RECOMMENDATION

23. The Pathway/Bikeway Coordination Team should develop a program for conducting pathway and bikeway counts every two years, as well as user surveys every four or five years.

Information Services / Pathway hotline

Groups often seek to “book” sections of the pathway system for special events, such as a charity run or Stampede event. These bookings are presently carried out on an ad hoc basis. A more formal system needs to be established by the Information Services section to ensure that bookings are fair and orderly, and to ensure that sufficient notice of any pathway special use is publicized.

Information services is also responsible for updating the Pathway Hotline. This service allows the public to inform the City of problems noted on the pathway system, and obtain information on pathway closures.

Finally, the general public can call Information Services directly to receive up-to-date information on specific programs, activities, events and maintenance/ lifecycle work that are occurring on the pathways.

RECOMMENDATION

24. The Pathway Coordinator should work closely with the “Information Services” section of Parks to:

- **establish a booking system for pathway programs;**
- **ensure the Pathway Hotline is up-to-date; and**
- **ensure that Information Services has sufficient information to answer general public enquiries regarding the pathways.**

8.2.5 Location Markers

The pathway system reaches into most corners of the City. If an emergency arises on a pathway, there is not always an easy way to identify one’s location. A set of field markers along the pathways should be provided to serve as location identifiers to aid emergency service providers. These markers will also assist Information Services in booking specific sections of the pathway for programs and events, and for identifying pathway closures to the public.

RECOMMENDATION

25. The Pathway Coordinator should establish location markers along the entire pathway system in conjunction with the development of the signage master plan.

8.2.6 Staff Awareness

As noted in this section, responsibility for the pathway and bikeway system is not limited to the Parks and Transportation departments. In many ways, numerous other departments and divisions within the City administration will be required to implement the objectives of this plan. These include:

- Calgary Roads
- Calgary Parking Authority
- Calgary Transit
- Calgary Police Service
- Planning & Building – Policy, CPAG divisions
- Corporate Properties – as developer of industrial property.

If the principles and guidelines set out in this plan are communicated to the many City divisions listed above, there is a much greater likelihood that the plan will be implemented at the appropriate stage of the city-building process. To achieve a broad understanding of the plan, it is recommended that all the affected departments be provided with internal staff education about the Pathway and Bikeway Plan.

Communication could take the form of a briefing, circulation of the plan's recommendations, a presentation, or a workshop with key department members to work through the detailed decisions about who is responsible for implementing the recommendations and how that could be achieved.

RECOMMENDATIONS

26. That City staff from all affected departments should be provided with appropriate communication and education to inform them of the objectives and principles of the Pathway and Bikeway plan.

8.2.7 By-law amendments

Through the course of the study a number of by-law provisions or departmental policies were found to be in conflict with each other. These conflicts should be resolved. Areas for action are highlighted below.

Off-leash areas and pathways

There is ambiguity as to which rules apply when a pathway runs through an off-leash area: the Animal Control By-law, or the Parks By-law. For the safety of all pathway users including dogs, it is recommended that the by-laws be clarified and made consistent with each other.

RECOMMENDATION

27. That the Animal Control by-law (23M89) be amended to indicate that dogs in an off-leash area must not be on the pathway unless:

- the dog is under its owner's control; and

-
- **the dog and owner do not occupy more than half of the pathway, and keep to the right except to pass;**

and that the Parks By-law (36/76, as amended) be amended to be consistent with the Animal Control By-law, according to the foregoing terms.

Pathways and sidewalks

The rule that sidewalks which form part of the regional pathway system are deemed to be pathways, such that cycling is permitted, should be formalized. Cycling should be expressly permitted on bridge sidewalks, unless it is clearly unsafe to permit same. See the discussion in section 2.4.3 which details the recommended changes.

8.3 SUMMARY

The recommendations set out throughout the report are summarized and tabulated in Exhibit 8.2. The table indicates the subject area, issue, action required, time frame, person or department responsible, and implications and budget requirements associated with the action. Time frames are indicated as follows:

- Short term: 1-2 years
- Medium term: 3-5 years
- Long term: more than 5 years.

This table should be used as a reference to monitor the progress of plan implementation.