



4.0 PLANNING AND DEVELOPMENT GUIDELINES

4.1. THE IMPORTANCE OF PATHWAYS

Pathway networks provide connectivity between residents and their community. They have become an integral part of a lifestyle choice for many users.

Pathways provide exceptional opportunities to participate in outdoor recreation and adventure pursuits. They encourage outdoor activity, such as walking, which has become the physical activity of choice for many Canadians. Research indicates that brisk walking for 30 minutes, 4 to 7 days per week, provides many health benefits including reduced risk of morbidity and mortality from chronic diseases such as heart disease, high blood pressure, obesity, osteoporosis, non-insulin-dependent diabetes, and certain cancers. Regular walking is also associated with improved mental health including reduced anxiety, tension and depression, and improved self-esteem. Regular walkers experience increased energy levels and stamina, better sleep and lower stress levels.

High levels of pathway use have been known to improve self-image and social relationships, reduce certain crimes, enhance community atmosphere and create a lifestyle that encourages city residents to find their entertainment in healthier and more wholesome ways.

4.2 THE SPINE OF LETHBRIDGE A VISION FOR PATHWAYS

The Master Plan Vision Statement was developed at the July 12, 2006 stakeholder round table discussion.

The pathways of Lethbridge are key to the quality of life and the health of citizens of all ages and abilities.

The Master Plan will guide the development of an integrated recreational and commuter pathway system that responds to the needs of current and future generations of users.

Through continuous promotion and education, the system will be safe, accessible to all and sustainable for the long term.

The key indicator of success will be the implementation of a ‘made in Lethbridge’ strategy; a pathways system that reinforces identity, that preserves our natural assets and that tells the stories of the unique cultural, social and natural landscapes of the City.

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4.3 GUIDING PRINCIPLES FOR TRAIL DEVELOPMENT

4.3.1 Overview

Public and stakeholder comments about the existing pathway network – what is working, what is not, what improvements should be made, and what an ideal network would look like – were captured in workshops, stakeholder meetings and Open Houses. This input captured participant values and ideals and was transformed into a Vision Statement.

The Vision Statement led to the development of guiding principles that would achieve those ideals. These are the high level precepts that guide the Plan in order to realize the vision. Feedback, specific suggestions and visionary ideas all fall under one or more of the following guiding principles.

The guiding principle statements are universal and general, capturing the big idea. Each statement is followed by a discussion of the implications to the recommendations contained in the master plan.

4.3.2 Accessibility

The bikeway and pathways system must be easily accessible and user friendly for people of all ages and abilities.

Pathways are used by people of all ages and abilities, from young families and active seniors to commuters, marathon runners, and sport enthusiasts. By addressing specific requirements and needs in the design of the different use categories, pathways can continue to be accessible to this wide range of users and will achieve the greatest number of pathway system objectives including:

- Health and vitality
- Encourage alternative modes of transportation
- Elimination of barriers

Municipalities with a structured pathway system report that adults are the largest group of users, with varying skill levels based on age, experience and level of fitness. Adults account for the largest number of trips, as reported by other Canadian municipalities. Trip purposes include errands within the immediate neighbourhood, getting to work, and recreational use such as fitness and family outings; therefore adults are the primary users of the widest range of pathway types.

Children are the next largest user group and use pathways to bike or walk to friends' homes, to the corner store, or to join family members for recreation. Both adults and children require easy entry to a pathway system, that is accessed close to home, and that is designed to

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accommodate a variety of uses.

Seniors need easy and direct access from where they live. They walk for health, nature appreciation and to socialize. These uses were confirmed by senior stakeholder representatives together with general comments and feedback on path materials, design, and missing links that have been addressed in the recommendations. Seniors are hesitant to access a pathway system if there are hazards or difficulties for reduced ambulatory abilities. Surfaces must be smooth and slip-resistant with flatter gradients. Changes in material, curbs, congested intersections and long street crossings were also noted as barriers.

Individuals with physical challenges have similar needs. Universal access requirements must consider eliminating stairs and when possible and the provision of ramps for wheelchair access. Also important for greater accessibility are:

- Maximum gradients and maximum length of sections with steeper gradients;
- Elimination of sudden grade changes such as curbs; raised crossings whenever possible in roadway designs;
- Safety railings at steep gradients or adjacent to steep shoulders;
- No soft, unconsolidated materials in shoulder safety zones;
- Avoidance of long continuous ascents, which are also discourage casual users and commuters; and
- Rumble strips or other warning devices approaching busy intersections, or other safety concerns.

Facilities for bike commuters can increase accessibility for those who do not already commute regularly. Convenient bike racks at local destinations and workplace bike storage lockers and showers make the commuter system more accessible and encourage more regular use.

Public feedback also indicated a desire for facilities such as rest rooms for longer trips and lighting where pathways are remotely located away from streets and public areas.

The pathway system enjoys a mutually supportive relationship with public transit. Currently selective bus routes utilize busses that are equipped with bicycle racks that provide an option to overcome the long river crossing grade, thereby improving and encouraging access to the downtown and other destinations. For many that use public transit on a regular or even infrequent basis, the pathway system has become an integral link to transit.

Benefits including social interaction, access to natural, cultural and

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sport destinations, support for programmed events such as marathons, and the increased use of the transit system to augment cycling and walking will continue to accrue from an accessible pathway system as the city continues to grow.

4.3.3 Connectivity

The bikeway and pathway system should provide an interconnected hierarchy of routes which connect homes, neighbourhoods, communities, workplace, and other destinations and recreational opportunities.

The pathway system will enjoy increased use if purposefully interconnected between destinations and linked with other systems such as the open space network. Home, workplace, parks, schools, entertainment, shopping, transit, and recreation are connected by the pathways like “pearls on a necklace.”

Encouraging people are to leave their cars at home more often and to walk or ride to transit connections requires a pathway system that is convenient and interconnected with the transit system.

In addition to purposeful movement from one destination to another, pathways are also used for simple recreation. This experiential and social activity is best served by pathway “looping.” For this category of use, the same principle – that loops are interconnected – applies in order to provide length of trip alternatives and ultimately a variety of experiences for users.

Moving forward, alternate solutions should be pursued identifying alternate connectivity where pathways are discontinuous or connections difficult, such as in the river corridor at the quarry, around the golf course, and across the river valley. In the interim, the feasibility of railway trestle crossing should be investigated.

4.3.4 Functionality

Pathways should be classified and built according to function, volumes and types of users. Each type of pathway in this hierarchy of functions will have differing characteristics such as width, design criteria and surfacing.

Pathway function matches the specific character and design of each pathway classification to its intended use. Comments from stakeholders indicated that variety in character and visual appearance of pathways and trails is desirable.

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User service level, or anticipated function, describes the design volume and intensity and type of use from nature trail to high speed / high volume commuter pathways. Design standards, signage, and level of maintenance varies for each classification and are based on needs specific to the unique open space network and demographics of Lethbridge, as identified in the public/stakeholder engagement process and analysis of the overall system. Basic space requirements and design criteria are also based on a review of adopted national standards and guidelines in other urban centres.

A range of pathway functions creates an identity for each class of pathway thereby clearly establishing the intended use and reducing user conflicts.

4.3.5 Education and Promotion

An on-going and effective education and promotion programme is essential to the successful implementation of the bikeways and pathways plan.

As a result of growth, pathway use will increase as more people participate in activities and / or turn to the pathway system for alternative transportation. Stakeholders identified a need for education aimed at raising awareness of pathway etiquette to create a harmonious and pleasurable pathway environment.

A well-integrated and interconnected system of pathways will promote sustainability and provide access to natural, cultural, and social heritage resources. Users and potential users should be knowledgeable of routes to access these special places, making them more accessible by alternative transportation. As an example, provincial cross country trails are mapped with distances between points and degree of difficulty.

Concerns were expressed by stakeholder users that inconsiderate actions have been a problem. Appropriate pathway design, signage programs and informative printed materials will help to reduce inappropriate behaviours and conflicts between users. Interpretive signage programs would enhance the pathway system by educating users of all ages about the natural environment, wildlife, points of interest and important destinations. Public promotion of the pathway system through special events and awareness programs will encourage participation and educate users on pathway courtesy.

4.3.6 Safety

Pathways and bikeways must be designed to be as safe as possible to encourage use by all ages and skill levels and reduce the potential for conflicts and accidents.

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Safety considerations are an important aspect of pathway development. Pathway planning must consider several factors such as emergency access, visibility and site lines, maintenance, and appropriate space requirements.

Children under age 13 have less developed motor skills and often perform unexpected maneuvers. The potential for conflicts rises, especially when volumes are high and strollers, dogs, pedestrians, skateboarders and other self-propelled users are on the path.

Families with children and pets strolling along a path are often frustrated or at risk of accident when required to share an inadequate pathway with high-speed cyclists. The greater the anticipated volume of traffic and types of users, the greater the need for wider surfaces, separation of incompatible uses, signage and other measures to reduce potential conflicts. The design of a specific path must take into account and mitigate obscured hazards, traffic crossings and path intersections, grade differentials limiting sight lines, sudden steep grade changes and other potentially dangerous conditions.

Steep downhill bike paths result in both increased speed and required stopping distances. Lethbridge has several coulee access points to the river valley and each of these paths may require unique solutions, such as split paths for cyclists and pedestrians, posted and enforced speed limits on steep inclines and at congested pedestrian areas, and / or extra warning signage at points of limited visibility or changes in pathway widths.

Although the adoption of a pathway classification system and appropriate design criteria for each class of pathway will help to reduce potentially dangerous conflicts, a coordinated education program is an important component of a successful implementation plan. Once a program is in place and public awareness has increased, creation of rules and / or bylaws together with enforcement and penalties for unsafe actions and violations may be necessary, especially on multiple use regional pathways in high-use sections.

Courtesy signage indicating mixed use and developing general rules and enforcement may also be necessary on single track or nature trails to mitigate conflicts. Stakeholders indicated security lighting in dark and secluded pathway sections is desirable in those areas that are not lit by adjacent roadway lighting.

Lastly, there was significant discussion about the lack of perceived cyclist safety on high volume roadways, on downtown streets and on major routes such as Mayor Magrath Drive. Downtown cyclist safety

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can be addressed through dedicated bike lanes, signage, education and crossing facilities. Major roadways require site by site solutions, a number of which are contained in the recommendations.

