

Medicine Hat and Redcliff Bike Rack Evaluation: Summary Report



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Introduction

The current evaluation project is part of a larger project based out of the University of Alberta: Community Health and the Built Environment (CHBE). CHBE is a community-based participatory research project. The goal of this project is to understand how community environments influence individuals' levels of physical activity and healthy eating in four communities in Alberta, Canada:

- Eleven neighbourhoods comprising North Central Edmonton (Alberta Avenue, Boyle Street, Central McDougall, Cromdale, Delton, Eastwood, Elmwood Park, McCauley, Parkdale, Spruce Avenue, and Westwood),
- The Town of Bonnyville,
- The City of Medicine Hat and the Town of Redcliff, and
- The Town of St. Paul.

As part of this project, researchers have been working with a group of representatives from each of these communities to develop community-level projects. The goal of these projects is to help residents be more physically active and eat healthy. The representatives from Medicine Hat and Redcliff identified that it would be valuable to evaluate the implementation of bike racks throughout the community to understand usage and perceptions of the bike racks.

Background

The bike racks were installed by the Coalition for Active and Alternate Transportation at key locations in Medicine Hat and Redcliff. In total, 43 bike racks were installed throughout these communities in the spring and summer of 2010.

The bike rack installation is well aligned with the overall mission of the Coalition for Active and Alternate Transportation, which is to ensure the safe integration of pedestrians, cyclists and other active users among motorized vehicles on roadways. They also strive to create accessibility to active and alternate transportation choices for residents of Medicine Hat, Redcliff and area.

What we Did

To learn about usage and perceptions of the bike racks in the fall of 2010, a survey was conducted in the community. The results of the survey could be used to inform decision-making about future bike rack initiatives in the area. The survey was conducted with local businesses located within a half a block radius of the bike racks.

In order to identify the businesses to contact, all of the bike rack locations were mapped. Following the mapping process, *Google Earth* (<http://www.earth.google.com>) was used to determine the names of businesses within a half block radius of the bike racks. Subsequently, the *White Pages* (www.whitepages.ca) were searched to identify the contact phone numbers for these businesses.



Each business was contacted three times (with approximately one week between contact attempts) to determine the overall level of interest in participating in the survey. Ideally, the surveys were conducted with the business owner or manager. A research assistant conducted all of the surveys over the phone.

Two sets of questions were developed: one for respondents who were aware of the bike racks in the community and another for respondents who were not aware of the bike racks.

The survey was comprised of a series of open-ended and multiple choice questions that were designed to collect the following information:

- awareness of the bike racks,
- personal use of the bike racks,
- perceived use by residents,
- benefits to business,
- benefits to community, and
- suggested improvements.

In total, 172 businesses in the Medicine Hat and Redcliff area were contacted.

What we Found

The following section provides an overview of some of the key findings from the survey. Of the 172 businesses contacted, 86 (50.0%) agreed to complete the survey, 39 (22.7%) refused, and 47 (27.3%) could not be reached (after three call attempts).

Of the 86 respondents who agreed to complete the survey, 53.5% were aware of the bike racks located near their business and 45.3% were not aware of the bike racks. It is important to note that 1.2% of respondents selected the response "do not know" when asked if they were aware of the bike racks. For analysis purposes, these respondents were grouped with the respondents that were not aware of the bike racks. The remainder of this section will be divided into a number of subsections to illustrate the differences in responses for these groups.

Respondents Who Were Aware of the Bike Racks

The following section summarizes the survey responses of respondents who indicated that they were aware of the bike rack placed near their business (53.5% of respondents).

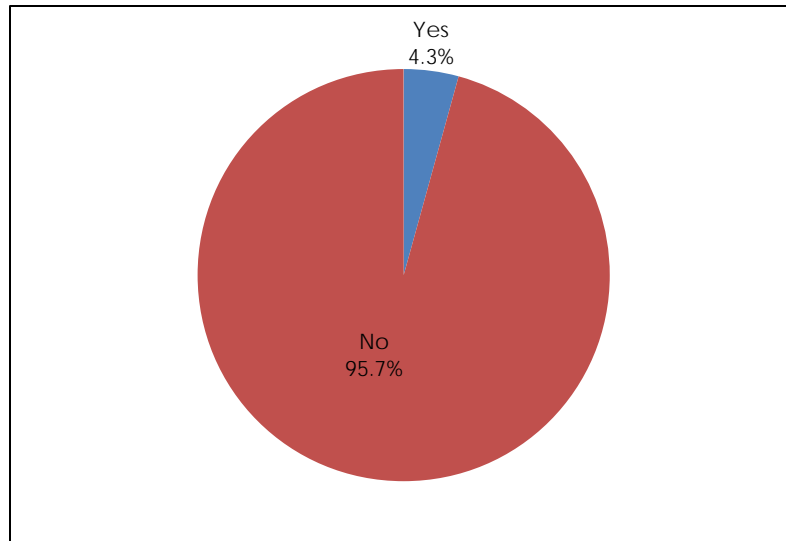
Knowledge of Bike Racks

Respondents were asked to indicate how they found out about the bike racks. A series of response options was provided to the respondents and they were asked to select all of the appropriate response options provided. The majority of respondents indicated that they either saw them in the community (41.3%) or were informed that they were being installed near their business (41.3%). 10.9% of respondents were informed through the local media and only 4.3% were told by a friend or family member.

Use of Bike Racks by Respondents

An overwhelming number of respondents (95.7%) who were aware of the bike racks indicated that they had not used them personally. *Figure 1* illustrates respondents' use of the bike racks.



Figure 1: Respondents Use of Bike Racks

The two respondents who had used the bike racks indicated that they used them to lock up their bikes while at work. Only one of the two participants indicated that they used the bike racks while visiting local community destinations and neither respondent indicated that they visited local community destinations more often because of the bike racks at these locations. Despite this, both participants indicated that they rode their bikes more often to get to destinations because of the bike racks in the community.

Use of Bike Racks by the Community

Respondents that were aware of the bike racks were asked to indicate if they saw other people in the community using the bike racks. *Figure 2* provides a summary of the respondents' responses. Overall, 73.9% of respondents saw the bike racks being used by other members of the community.

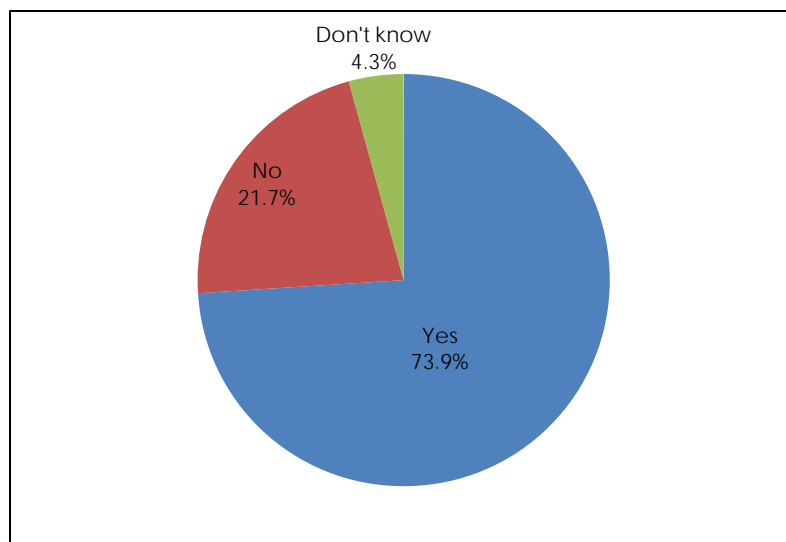
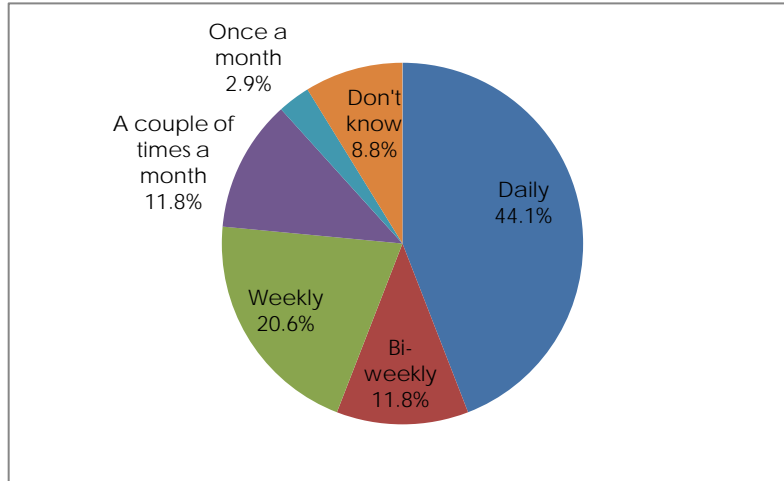
Figure 2: Use of Bike Racks by Members of the Community

Figure 3 indicates how often respondents saw other people in the community using the bike racks. The majority of respondents (44.1%) indicated that the bike racks were used daily.

Figure 3: Frequency of Use of Bike Racks by Community



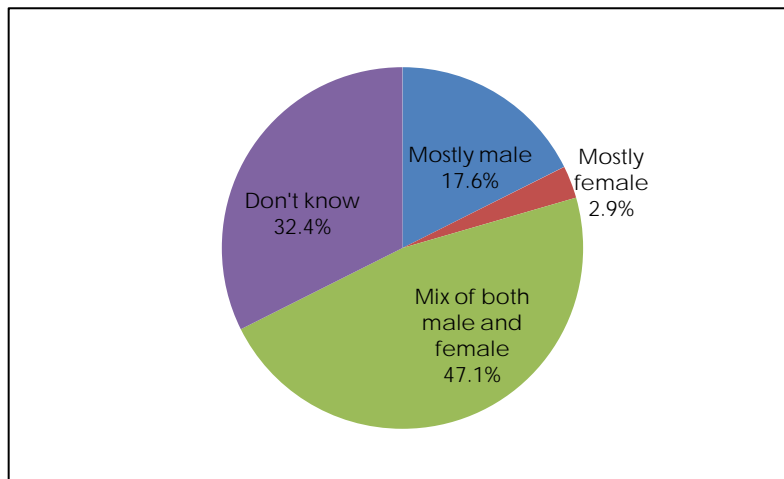
Of those respondents who indicated that they saw people using the bike racks, 47.1% indicated that members of the community used the bike racks while visiting their business. 38.2% of respondents were not sure if the bike racks were used while members of the community were visiting their business, and 14.7% indicated that the racks were not used by members of the community when visiting their business.

Respondents indicated that the members of the community that were observed to be using the bike racks were both male and female (see Figure 4 for a summary) and of all ages, including:

- 21.7% youth (aged 13-17),
- 26.1% young adult (aged 18-29),
- 37.0% middle aged (aged 30-54), and
- 8.7% seniors (aged 55+).

It is important to note that for this question respondents were asked to indicate all age groups that they saw using the bike racks.

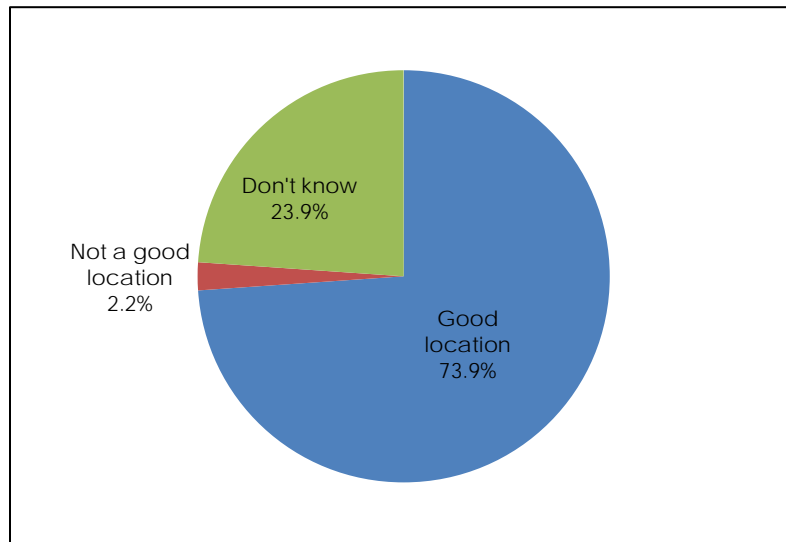
Figure 4: Gender of Bike Rack Users



Bike Rack Locations

All respondents that were aware of the bike racks were asked to indicate whether they felt the bike racks were in good locations throughout the community. A summary of responses is provided in *Figure 5* below.

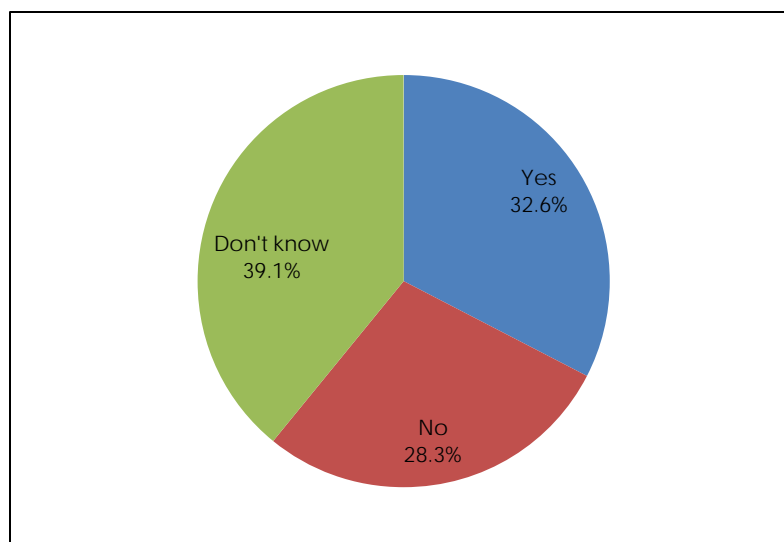
Figure 5: Location of Bike Racks in the Community



Overall, 73.9% of respondents indicated that the bike racks were in good locations; respondents that were not sure if the bike racks were in good locations stated that they did not cycle themselves and were thus unable to provide feedback on the appropriateness of the locations. The two respondents who indicated that the bike racks were not in good locations noted that the bike racks were too far away from business entrances.

Respondents were also asked to indicate whether there were enough bike racks installed within the community. These responses are shown in *Figure 6* below.

Figure 6: Sufficient Number of Bike Racks in the Community



The 28.3% of respondents that indicated that there were not enough bike racks in the community suggested that more bike racks should be installed in the downtown area. In addition, they suggested that there be more than one bike rack on each block (i.e., on both sides of the street instead of on just one side). Those respondents who did not know whether there were enough bike racks (39.1%) indicated that they responded in this way because they were not part of the cycling culture in the community.

Respondents provided examples of a number of locations where they felt that bike racks should be added to the community:

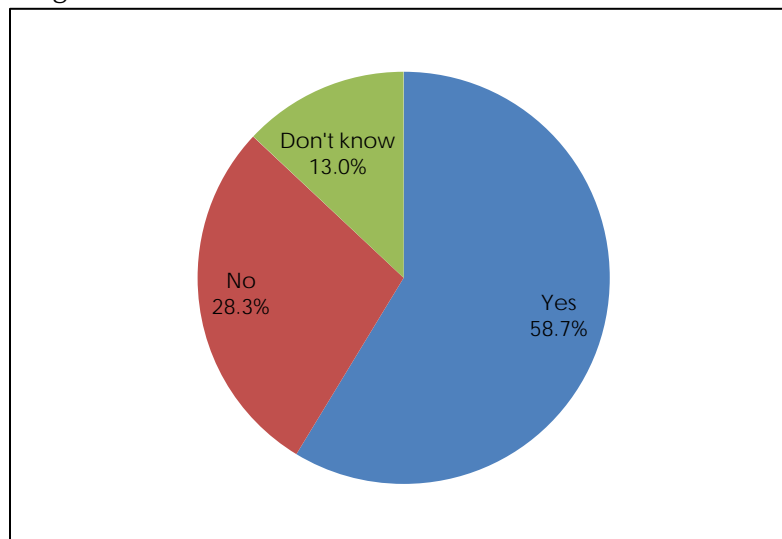
- grocery stores,
- Tim Horton's outlets,
- convenience stores,
- commercial shopping areas,
- the downtown area,
- community centres, and
- parks.

Benefits to Business

When asked to indicate if the bike racks were beneficial to their business, the majority of respondents indicated that they were (58.7%). Please see *Figure 7* for a summary of survey responses regarding perceived benefit to respondents' businesses. Respondents were also given an opportunity to provide general reasons (in their own words) as to why bike racks were beneficial. Some of the reasons provided by respondents included that the bike racks:

- decrease the number of cars that come to the business,
- are good for the environment,
- allow for people that don't have a vehicle to get downtown,
- promote a healthy lifestyle,
- work with the dynamics of the business because the clientele is active
- increase public health awareness,
- improve the flow of traffic on local roadways,
- promote alternate modes of transportation, and
- allow cyclists to visit my business (i.e., more repeat customers).

Figure 7: Bike Racks Perceived to be Beneficial to Business



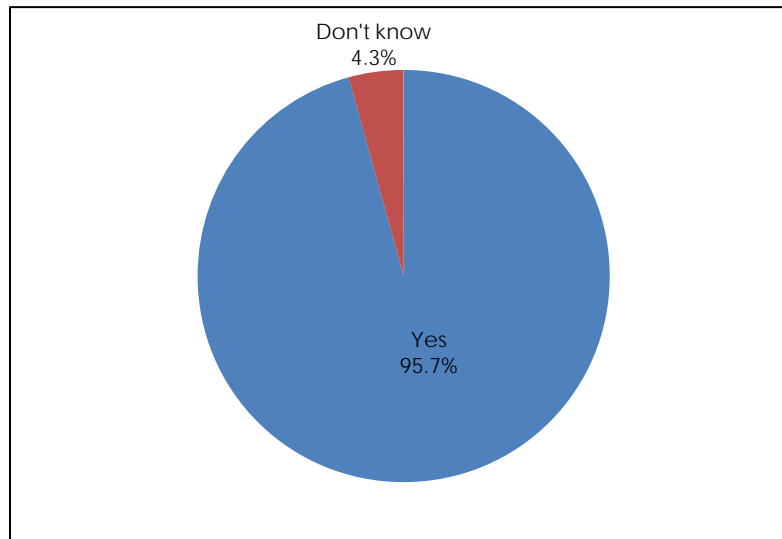
Respondents that indicated that they did not perceive the bike racks to be beneficial to their business (28.3%) were asked to describe the reasons for this response (in their own words). Respondents indicated that:

- *people would visit their business regardless of whether there was a bike rack or not,*
- *the bike racks would not benefit their business directly,*
- *the patrons that shop at that business don't bike,*
- *they do not want kids hanging around and loitering, and feel that the bike racks would contribute to this problem, and*
- *their clientele comes into their business from oilfields and long distances so they do not use bikes as a mode of transport.*

Benefits to the Community

An overwhelming number of respondents who were aware of the bike racks indicated that the racks were beneficial to the community (95.7%). It is important to note that none of the respondents indicated that they were not beneficial, while 4.3% indicated that they did not know. *Figure 8, below, provides a summary of these responses.*

Figure 8: Bike Racks Beneficial to the Community



The respondents indicated that the bike racks were beneficial to the community for a number of reasons. Respondents indicated that the bike racks:

- provide a place for people to lock up their bikes (80.4%),
- encourage people to bike more often (80.4%),
- may help people to be more active (71.7%),
- help to support local businesses (56.5%), and
- were of benefit to the community in other ways (19.6%; responses included: benefit to the environment and promotes cycling).

It is important to note that for this question, respondents were read a series of responses and were asked to select all the applicable responses.



Suggested Improvements for the Bike Racks

Respondents had a number of suggestions on how to improve the bike racks, including:

- *the bike rack could be larger,*
- *the racks should be able to hold at least two to three bikes,*
- *locating the racks on the city map so that people know where they are,*
- *a need for more information and signage about them,*
- *having more racks available throughout the community,*
- *adding bike lanes to roadways to support the use of the bike racks,*
- *the implementation of low profile racks (as they take up less space),*
- *making sure the bike racks are well maintained, and*
- *having the bike racks closer to business entrances.*

It is important to note that all of the above statements were collected using the respondents' own words.

Respondents Who Were Not Aware of the Bike Racks

The following section summarizes the results of surveys completed by respondents who indicated that they were not aware that a bike rack was placed near their business (45.3% of respondents were not aware and 1.2% did not know.)

Desire to Have Bike Racks

The majority of respondents (65.0%) who were not aware that a bike rack was placed near their business indicated that they would like to have a bike rack near their business. These respondents were asked to indicate (in their own words) why they would want one in close proximity, the responses included:

- *that lots of people leave their bikes outside so it would be of benefit for people to have a safe place to lock up their bikes while inside the business,*
- *that the bike racks would be good for kids, students and anyone because they would promote biking in the community,*
- *that the bike racks would provide people the option to bike,*
- *that the bike racks service the area and other businesses,*
- *that bike transportation cuts down on gas and pollution, so a location to safely lock bikes would be of benefit to the environment, and*
- *attracts people to the business so good for business.*

Respondents who suggested that they would not want a bike rack near their business (35.0%) indicated that the bike racks would:

- *take up too much space in front of their business (50.0%),*
- *not be used (35.7%),*
- *block sidewalks (28.6%), and*
- *require too much maintenance (7.1%).*

For the same question, 57.1% of participants selected the "other" response option. Responses included: *clientele are too old to use bicycles so the bike racks would not be utilized, the racks do not suit their business, and there is too much traffic to safely accommodate bicycles on roadways.*



Respondent Demographics

The majority of respondents who completed the survey were business owners (36.5%). *Table 1* provides a summary of the positions within the business of respondents.

Table 1: Respondent Position within Business

Title	Percentage of Respondents
Business Owner	36.5%
Business Manager	21.2%
Employee of Business	18.8%
Employee of Organization	7.1%
Organization Manager	4.7%
Prefer not to Answer	1.2%
Other (e.g., administrative assistant, assistant manager, general manager, project manager, office manager)	10.6%

Most of the participants were female (64.7%) and between the ages of 35 and 54 (42.4%). *Figures 9 and 10* provide overviews of the participants' gender and age, respectively.

Figure 9: Respondent Gender

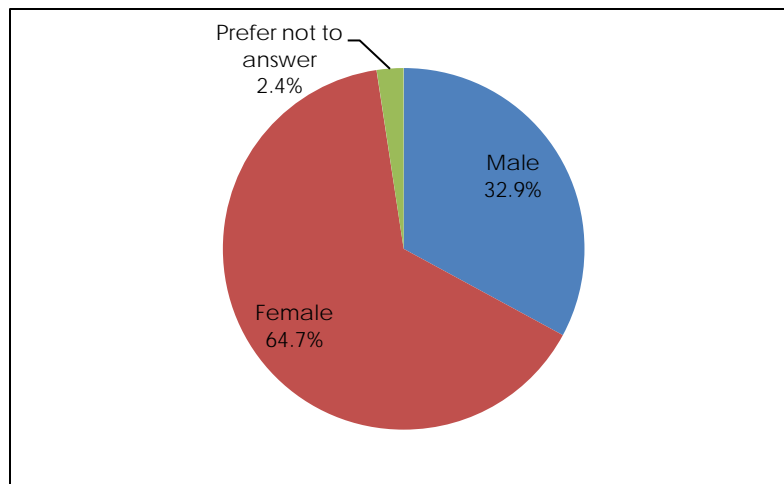
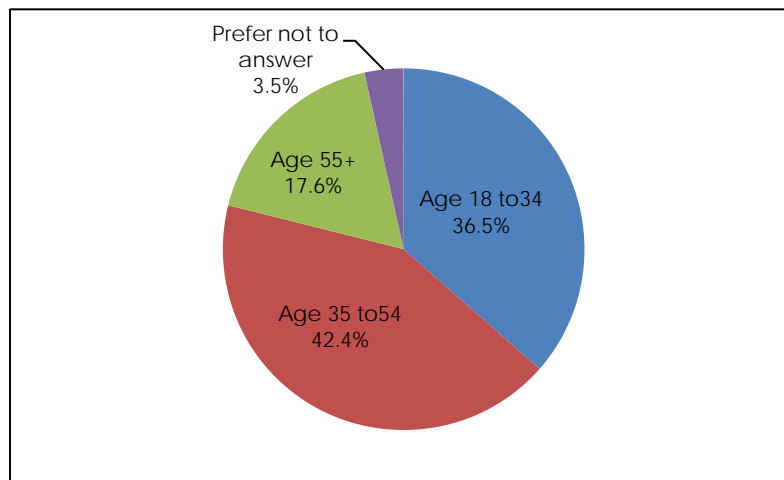


Figure 10: Respondent Age



Evaluation Strengths and Limitations

It is important to note that there are a number of strengths and limitations of this evaluation project that should be considered while interpreting the results.

Strengths

- Community stakeholders (e.g., Coalition for Active and Alternate Transportation) provided input into the development of the survey questions and the evaluation design.
- A large number of local businesses were contacted (specifically those with a bike rack within a half a block radius). Overall, 50% of businesses contacted agreed to complete the survey.

Limitations

- The survey conducted only provides a snapshot of information. In the future, it would be beneficial to conduct the survey over a longer period (i.e., repeat the survey again in the summer of 2011).
- Only local businesses in close proximity to the bike racks were contacted. It would be beneficial for future evaluation projects to explore these same topic areas using different population groups (e.g., general public) or methods (e.g., focus groups with residents).

Conclusions

The current evaluation results provide a snapshot of awareness, use and perceived benefits of the bike racks amongst local businesses within the Medicine Hat and Redcliff area. Overall, those who were aware of the bike racks perceived them to be a positive asset in the community and those who were not aware of them were interested in having them located near their business in the future.

