Chapter 9: Multi-Modal Connectivity



Multi-Modal Connectivity



Enhancing the link between bicycles and transit, bicycles and pedestrians, and bicycles and automobiles, in combination with end-of-trip facilities, will improve overall connectivity within Fort Collins.

Improving the link between bicycles and transit is an important component of making bicycling a convenient, beneficial, and environmentally friendly part of life in Fort Collins. Linking bicycles with transit helps to overcome such barriers as lengthy trips, personal security concerns, and riding at night or in poor weather. This link also enables bicyclists to reach more distant areas and increase transit ridership. Traditionally, transit users are identified within approximately ¼ mile of a bus stop. Depending on one's ability, the bicycle can extend this distance to well over a mile, thus it is particularly important to provide linkages between bicycles and transit in those areas with limited transit access. By encouraging the use of bicycles as access to transit, TransFort can increase ridership levels and serve a larger area while minimizing costs.

The additional integration of bicycles with pedestrians and automobiles simply magnifies the potential for multi-modal transportation strategies to be successful. The multiple components of the urban transportation system have a tremendous ability to complement each other in several ways. A bicyclist that uses transit and a pedestrian that incorporates bicycling can easily extend the range of travel without accruing a tremendous increase in travel time. An automobile driver that combines his trips with bicycling can still receive all of the benefits of bicycling particularly if the trip was at a distance that deterred him from bicycling at all. There are many benefits to the bicyclists and the community when multi-modal transportation choices are made.

Bicycling and walking are also a great combination. For example, after bicycling downtown and locking up one's bicycle, a resident can walk through downtown to shop and eat. A bicycle that is equipped with baskets or panniers allows the bicyclist to carry goods home as well. Recreationally speaking, a bicyclist may also ride to several of the City's Natural Areas along the local trail system, lock their bicycle, and then enjoy a nice walk through the Natural Area where bicycling is not allowed.

Currently, there are a limited number of people that commute by bicycle into Fort Collins from Loveland, Windsor, Timnath, Laporte, and Wellington. For many residents, this distance is too great to commute by bicycle and instead they will choose vehicular travel. However, the potential is there to incorporate some programs to encourage multi-modal connectivity that would

get residents of those outlying communities to combine bicycle travel with their automobile travel.

Bike-n-Ride

The Bike-n-Ride program is an effort initiated by Transfort to encourage bicyclists to ride local City buses. As part of the program, TransFort has adopted the use of front-mounted, bicycle racks on all transit vehicles. In 2006, the City received a grant through the Colorado Department of Health and Environment's "Colorado Physical Activity and Nutrition" (CoPAN) program. This grant was used to increase the bicycle carrying capacity of each bus in the TransFort fleet by replacing the older two-bicycle racks with those that can carry three. Even though all Transfort buses are equipped with three bike racks, it is often not enough to serve the needs of the community.

In practice, a bicyclist wishing to board a bus with a bicycle waits for a vehicle to arrive at a stop, loads the bicycle onto the rack, and then boards the vehicle. Front-mounted bicycle racks incur a minimum amount of increase in operating and maintenance costs for transit operators and are located close to the access point of the bus. This design minimizes the increased dwell time due to the loading and unloading of bicycles. Front mounted bike racks are safer because the operator of the vehicle is much more aware of a person loading or unloading a bicycle. Experience reveals that the bicycle can be loaded or unloaded in less than 15 seconds – even by an inexperienced user.

Bicycle parking at many stops throughout the City is lacking, althoug, newer stops that have been installed under current development guidelines and policies have bicycle parking. Older stops often have no bicycle parking.

When the Mason Corridor /MAX BRT system (a 5-mile corridor west of College Avenue) is fully developed, it is anticipated that bicycles will be allowed on the buses with the passengers. In addition, bicycle parking will be provided at all stops and stations.

Multi-Modal Recommendations

It is recommended that the City continue to support and pursue programs that foster multi-modal connectivity between bicycles and transit, bicycles and pedestrians, and bicycles and automobiles.

Further recommendations include:

Improve bicycle parking at existing transit stops/stations as well as at new stations to be constructed for the Mason Corridor / MAX BRT system.

Enhance both the Bike Map and the Transfort Map by including information indicating locations with easy access for bicycle-transit connectivity.

Consider a "Park-n-Ride" concept for bicycle use to encourage regional bicycle commuters. A "Park n' Ride" program would motivate regional car commuters to park their vehicle on the edges or entrances to Fort Collins and then ride their bicycles into the City. An effort of this nature might decrease traffic within the City and offer health benefits to daily commuters.

Coordinate with businesses to encourage employees to bring bicycles to work or utilize the FC Bike Library for daily trips near their offices such as meetings and lunch.

End-of-Trip Facilities

Every bicycle trip has two basic components: the route selected by the bicyclist, and the "end-of-trip" facilities at the destination. These end-of-trip facilities can include the simple provision of secure and convenient bicycle parking or more elaborate indoor-parking facilities and/or provision of showers and changing space. These facilities promote bicycling.

Community surveys of schools and employers indicated that a lack of adequate end-of-trip facilities serve as barriers for the work/school-commute trip. Of those surveyed, many say they would sometimes commute to work or school by bicycle, or commute more often, if there were showers, lockers, and secure bicycle storage at work. Clearly, the availability of safe, secure, convenient parking is a critical factor for bicycle commuting.

Good, secure bicycle parking offers the following:

- Increases a building's overall parking capacity.
- Serves those who use bicycles as a mode of transportation.
- Encourages bicycle use.

Bicyclists' needs for bicycle parking ranges from easy-to-use bike racks to storage in a bicycle locker that affords weather and theft protection, gear storage space, and 24-hour personal access. A bicyclist's needs are defined by several factors, including the following:

- The length of trip (all-day or just minutes).
- Weather conditions.
- Value of the bicycle.
- Security of Area as determined by the bicyclist's perception..

Other end-of-trip facilities useful for commuting bicyclists are access to showers, lockers for personal effects, and/or changing rooms at trip destinations. For those bicyclists needing to dress more formally, travel longer distances, or cycle during wet or hot weather, the ability to shower and change clothing can be as critical as bicycle storage.

Bicycle Parking is the primary way to provide convenience and security for bicyclists at destinations. Inadequate facilities and fear of theft are major deterrents to bicycle transportation. Bicycles regularly locked to trees and posts demonstrate that additional bicycle parking is needed at that location. Effective bicycle parking requires a properly designed rack in an appropriate location.

There are many types of bicycle racks and lockers available. There are two general categories of bicycle parking requirements:

- Short-term parking is needed where bicycles will be left for short stops. It requires a high degree of convenience and should be as close to destinations as possible. At least some short-term bicycle parking should be protected from the weather.
- Long-term parking is needed where bicycles will be left for hours at a time. It requires a high degree of security, weather protection, and welldesigned racks in covered areas, lockers, storage rooms, or fenced areas with restricted access offering added security.

Factors to consider when installing bicycle parking are as follows:

- Visibility Racks should be highly-visible so bicyclists can spot them immediately when they arrive from the street. A visible location also discourages theft and vandalism.
- Security- Adequate lighting and surveillance is essential for the security of the bicycles and the users. Bicycle racks and lockers must be well anchored to the ground to avoid vandalism and theft.
- Weather Protection A portion of bicycle parking should be protected from the weather (some short-term bicycle parking can be unprotected since bicycle use tends to increase significantly during fair weather). Protection can include an existing overhang or covered walkway, a special covering, weatherproof outdoor bicycle lockers, or an indoor storage area.
- Clearance Adequate clearance is required around racks to give bicyclists room to maneuver and to prevent conflicts with pedestrians or parked cars. Racks should not block access to building entrances or fire hydrants.

Current State of End-of-Trip Facilities

Bicycle Parking at Community Destinations within Fort Collins
In general terms, bicyclists will always find a bicycle parking option at all community destinations. Ideally, a choice of long- or short-term alternatives will be at their disposal; however, many times, the existing alternatives may not meet bicyclist's needs. The application of development standards with quantity requirements is limited to current development and redevelopment; therefore, some areas of our community are left with a bicycle parking deficit.

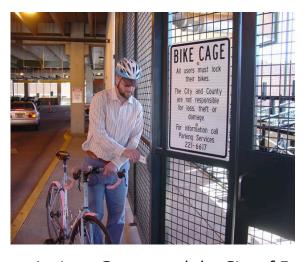
Table 4 summarizes the general availability of bicycle parking at community centers and destinations.

Table 4. Bicycle Parking at Community Facilities

Destination	Does bicycle parking exist?
Libraries	Yes, at all locations.
Transit Stations	Yes, at all locations.
Transit Stops	At most locations.*
Recreation Centers	Yes, at all locations.
Government Buildings	Yes, at all locations.
Office Buildings	At most locations.*
Retail Centers	At most locations.*
Public Spaces and Parks	Yes, at all locations.

^{*} Some existing Transit Stops, Office Buildings, and Retail Centers do not have bicycle parking since they were approved and constructed subject to older standards. With infill and redevelopment projects sites and bicycle parking facilities are routinely brought into compliance with current development standards as adopted with City Plan in 1997.

Much of the bicycle parking found in Downtown and Old Town Fort Collins is the result of a vigorous installation program undertaken by the City in 1992 when 428 U-shaped bike parking racks were installed. Funding for these racks came from a CMAQ grant. Throughout Old Town, there are more than 100 short-term parking spaces (mostly installed on street sidewalks) and 28 long-term spaces in the form of a recently installed bicycle cage. The bicycle



cage project was a joint-venture between Larimer County and the City of Fort Collins' Parking Services and is located in the Civic Center Parking Garage.

Downtown and Old Town Area Bicycle Parking

In essence, the condition of the short-term parking supply in Old Town is inconsistent. It ranges from sufficiently maintained, well located, and heavily-used frame style racks to neglected, not secure, and rarely used clip-styles that in many cases discourage use.

Areas of particular concern are:

- Southern and northern entrances to Old Town Square
- College Avenue, between Mountain and Laporte Avenues, and

- Mountain Avenue, between College Avenue and Mason Street.
- Walnut Street, between College Avenue and Linden Street.

Bicycle Parking at Colorado State University

Colorado State University has recently purchased hundreds of new, user-friendly bike racks to accommodate over 15,000 bicyclists daily. The growth of partnerships between the City and CSU (such as UniverCity), discussed in Chapter 7, has the potential to provide innovative solutions to bicycle parking and scofflaw issues downtown and on the CSU campus.

Bicycle Parking at Primary, Middle and Secondary Schools
All public schools within Fort Collins have bicycle parking. In most but not all cases the supply is adequate. The provision of bicycle parking at schools is ultimately the responsibility of the Poudre School District. The City of Fort Collins provides advice on safe and effective parking at schools, primarily through the Safe Routes to School Program.



One factor that makes it difficult to assess what level of bicycle parking should be provided at schools is the "school of choice" policy in the Poudre School District. A neighborhood school is open to students from all around the community. The reality of this policy, with regard to bicycling, is that it can result in student attendees who live more than a reasonable bicycling distance from their school so that potential ridership is decreased.

End-of-Trip Facility Recommendations

It is recommended that the City encourage the development of long- and short-term parking strategies throughout the community. Schools and significant community destinations (Old Town, Foothills Mall) should always have an ample supply of secure, high-quality, bicycle parking.

Further recommendations include:

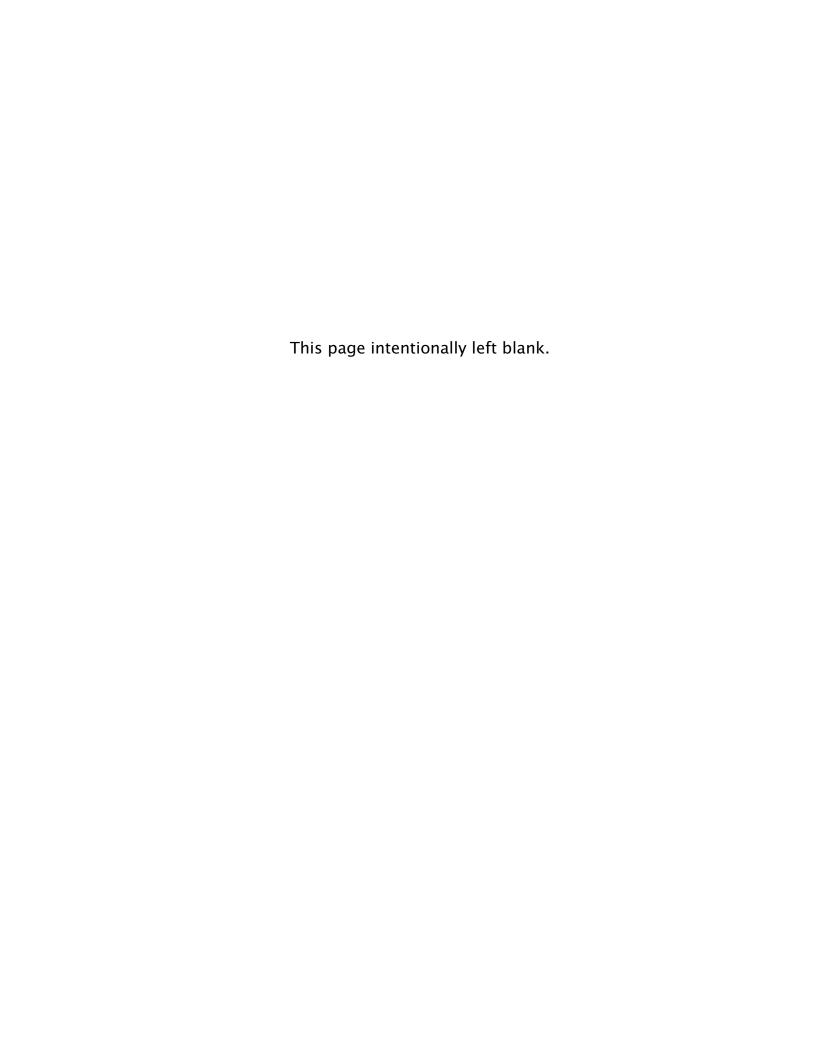
Explore ways through which it can encourage the development of indoor, long-term, bicycle parking facilities with new public and private development.

Areas of focus should include transit stops and stations, community facilities, public and private parking structures, and major employment and commercial centers.

Pursue avenues through which a greater supply of bicycle parking can be implemented at all locations throughout the community.

Downtown Bicycle Parking Recommendations

There is a shortage of short-term parking at certain locations in Old Town. Several businesses, in conjunction with FC Bikes, have begun to explore the option of using vehicular parking stalls as short-term bicycle parking. The use of removable, bicycle parking racks would enable a dramatic increase in parking supply for limited hours when bicycle-parking demand is highest – typically weekend evenings and during special events. Close coordination and cooperation should continue with local businesses to encourage innovative parking solutions in the downtown area.



Chapter 10: Conclusions

