US 287 / South College Bicycle Lane Project
Harmony Road to Carpenter Road (LCR 32)

What: Open House
When: Wednesday, September 22, 2004
      5:30 to 7:30 p.m.
Where: Community Room at the Harmony Public Library
       4616 South Shields Street
       Southeast Corner of Shields and Harmony

Please join us, learn about the project and provide your input.

The US 287 / South College Bicycle Lane Project will develop a Vision Plan for the project corridor. The plan will accommodate cyclists of varied experience levels and provide connections to the area’s on-street bicycle lanes and off-road multi-use trail system. There will also be priority recommendations for phasing the project to match current funding levels and as additional funding becomes available.

This first open house will provide information on the project scope, the proposed schedule, alternative bike lane treatments, and the available funding. A second open house will be held in November to present a draft Vision Plan. In early 2005, a final open house will show how public input was incorporated into the final plan.

This project is sponsored by the City of Fort Collins and funded by a Congestion Mitigation and Air Quality (CMAQ) grant provided by the North Front Range Metropolitan Planning Organization (NFRMPO) and the Colorado Department of Transportation (CDOT).

For more information, please contact:
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This project will plan the phased design and construction of bicycle facilities along US 287 / South College Avenue, from Harmony Road / SH 68 to Carpenter Road / LCR 32.

The goals of the project are to:

- Accommodate both commuter and recreational cyclists, and
- Provide a safe and user-friendly addition to the City’s integrated system of on-street bike lanes and off-street trails.

The project will create a Vision Plan for the US 287 / South College Avenue corridor, prioritize a phased implementation program, and establish a functional and cost-effective Phase 1 project that can be constructed within the currently allotted funds.
US 287 / South College Avenue Bicycle Lane Project

Bicycle Lane Treatment Options

OPTION A: 8'-10' Bike Lane

DESCRIPTION

An 8'-10' bike lane is installed to the right of the travel lane with a break in the striping to accommodate turning vehicles at unsignalized intersections. Solid white striping and appropriate signage and stenciling should discourage motorists from using the lane, which is generally designated for bikes only.

APPLICATIONS

For use on segments with few or minor access conflicts in locations where acceleration and deceleration lanes are not required.

Advantages

- Wider lane provides greater separation from motorists;
- Greater separation reduces affects of “blow-by” at high speeds;
- Encourages motorists to make turning maneuvers directly at the access point;
- Reduces overtaking conflicts;
- Conflict points are at an expected location for cyclists and motorists; and
- Defines the maximum amount of space and separation for cyclists;

Disadvantages

- Motorists may encroach into the lane as they slow down to make the turn; and
- Not suitable for locations with high turning movement volume intersections.
Bicycle Lane Treatment Options

OPTION B: 10'-12' Shared Bike Lane

DESCRIPTION
A 10'-12' shared bike lane is installed to the right of the travel lane with a break in the striping to accommodate turning vehicles at unsignalized intersections. A dashed stripe should replace the solid edge line in locations with higher right turn volumes and/or bus stops. This treatment defines a transition area for motorists and cyclists. Signage should be installed to instruct motorists and cyclists of the usage of the facility. Shared bike lane stencils should be used.

APPLICATIONS
For use on segments with moderate to high volume access locations where acceleration and deceleration lanes may be required.

Advantages
- Wider lane provides greater separation from motorists;
- Requires motorists to slow down more to make their turn when cyclists are present, thus bringing their speed closer to that of cyclists;
- Encourages motorists maneuvering into the shared lane to look for and yield to cyclists; and
- Defines the merge or transition point for both cyclists and motorists.

Disadvantages
- With a wide lane, motorists may attempt to overtake cyclists riding in the far right portion of the lane; and
- On high speed facilities a long transition area is needed, increasing the length of the potential conflict area.

In California, the vehicle code specifically notes that cyclists are allowed use of the full travel lane.

The "Bike-In-House" and "Sharrow" symbols are examples of shared lane stencils used in Denver and San Francisco.
Bicycle Lane Treatment Options

OPTION C: 10’-12’ Combined Bike / Right Turn Lane

DESCRIPTION
The bike lane transitions to a 4-6’ lane marked within the dedicated right turn lane. A dashed stripe divides the bike portion and right turn portion of the lane. Signage should be installed to instruct motorists and bicyclists of the usage of the facility.

APPLICATIONS
For use on roadways where there is not enough space to implement a standard width bike lane and a standard width dedicated right turn lane at the intersection, preferably on roadways with slow vehicle speeds and a low level of heavy vehicle traffic.

Advantages
- Guides cyclists traveling through the intersection to the correct position at the intersections with a dedicated right turn lane;
- Encourages motorists to yield to cyclists when crossing into the narrow right turn lane;
- Requires motorists to slow down more to make their turn, thus bringing their speed closer to that of cyclists; and
- Enhances bicycle safety in the FHWA evaluation; most cyclists either felt safer or as safe as in standard width bicycle and dedicated right turn lanes.

Disadvantages
- On high speed facilities, long right turn lanes may delay motorists or encourage late lane changing to overtake cyclists;
- Cyclists may be forced into the adjacent through lane when large vehicles are turning right, however, usually they fit next to each other comfortably or the motorist waits behind; and
- A combined lane may not be effective where a right turn island is required.

This treatment is used in Eugene, OR, where intersection widening was not possible.
OPTION D: Bike Lane with Separate Right Turn Lane

DESCRIPTION

The bike lane transitions to a 6’ lane installed between the through travel lane and the dedicated right turn lane. A dashed stripe should be installed to define the transition area. Signage should be installed to instruct motorists and bicyclists of the usage of the facility. Shared bike lane stencils should be used.

APPLICATIONS

For use on roadways where there is enough space to implement both a standard width bike lane and a standard width dedicated right turn lane at the intersection.

Advantages

- Guides cyclists to the correct position at intersections with a dedicated right turn lane;
- Encourages motorists maneuvering into the dedicated right turn lane to look for and yield to cyclists; and
- Defines the merge or transition point for both cyclists and motorists.

Disadvantages

- For long right turn lanes, cyclists may be overtaken on both sides by motorists; and
- On high speed facilities a long transition area is needed, increasing the length of the potential conflict area.
Bicycle Lane Treatment Options

OPTION E: 6'-8' Bike Lane with 12' Auxiliary Lane

DESCRIPTION
A 6'-8' bike lane is installed to the right of a 12' auxiliary lane with a break in the striping to accommodate turning vehicles at unsignalized intersections. A dashed stripe should be installed to define a transition area for higher right turn volumes and/or bus stops. Appropriate signage and stenciling should define the bike lane.

APPLICATIONS
For use on segments with moderate to high volume access locations where acceleration and deceleration lanes may be required.

Advantages
- Long transition areas and conflicts are avoided;
- Conflict points are at an expected location for cyclists and motorists; and
- Provides additional separation between cyclists and motorists when auxiliary lane is not heavily used.

Disadvantages
- Allows higher speed deceleration movements to occur alongside cyclists;
- Does not require motorists to look for or yield to cyclists until reaching the access point; and
- May require additional pavement width, increasing construction and maintenance costs.
OPTION F: Off-Street Multi Use Path

DESCRIPTION

An exclusive shared bike and pedestrian facility with minimal cross flow by vehicles, best used as an extension of or supplement to an on street bike lane system. Under most conditions, the path should be at least 10’ wide to allow for two-directional travel.

APPLICATIONS

Shared use paths adjacent to roadways are generally not recommended for a number of reasons outlined in the disadvantages below. However, they can serve as connections to other off-street paths or as an alternative to on street facilities in uniquely constrained locations.

Advantages

- Physically separates cyclists from motorists;
- Provides a learning ground for inexperienced cyclists who may fear high speed traffic conditions associated with on street lanes; and
- Can attract experienced cyclists who prefer an aesthetic ride.

Disadvantages

- Requires one direction of cyclist traffic to ride against motor vehicle traffic, leading to wrong way riding at the end of the path;
- Motorists crossing the path at intersections do not expect cyclist traffic approaching both directions;
- Many cyclists will still choose to use the roadway because it may be more convenient, better maintained, or safer. This may lead to harassment by motorists who expect cyclists to use only the adjacent path;
- Motorists falsely expect cyclists to stop or yield at all cross-streets and driveways, but efforts to require or encourage cyclists to yield of stop at these locations are inappropriate and frequently ignored; and
- Stopped cross-street motorists may block the path crossing.

Multi-use path standards
Source: Oregon Department of Transportation
US 287 / South College Avenue Bicycle Lane Project

Bicycle Lane Treatment Options

OPTION G: Colored Bike Lanes in High-Risk Conflict Locations

DESCRIPTION

A short section of the bike lane is colored (typically light blue) at high-risk conflict locations, where motorists are permitted or required to merge into or cross the bike lane. Some cities are using this treatment to enhance bike lane locations previously marked with dashed lines.

APPLICATIONS

For use at hazardous intersections and high speed conflict zones, especially where motorists may fail to yield to cyclists. North American cities that have used this treatment include Portland, OR, Cambridge, MA, Petaluma, CA, and Montreal, QC, Canada.

Advantages

- Improves bicycle safety at high conflict areas, with statistically significant results;
- Improves the visibility of the bike lane at key locations;
- Encourages motorists to yield to cyclists more often when crossing the lane;
- Results in motorists encroaching less on bike lanes; and
- Warns cyclists and motorists of especially hazardous areas.

Disadvantages

- May create a false sense of security for cyclists;
- Disabled users may be confused by the light blue color;
- Local policies and/or traffic laws may prohibit the use of this treatment;
- Costs of on-going maintenance is a concern; and
- Unfamiliar drivers may be confused or uncertain about the purpose of the markings.
An open house was held on September 22, 2004, in the Community Room at the Harmony Public Library. A description of the project, its schedule and bike lane alternatives were informally presented. Thirty-five people signed-in representing: bicyclists, property owners, residents, business owners and those working on these issues in the City, CDOT, North Front Range Metropolitan Planning Organization (NFRMPO), and regional SmartTrips.

The following summarizes comments which are the opinions of the attendees. Parentheses and a number represent number of similar comments.

Other Fort Collins Bicycle Issues:
There were requests for additional bike lanes and bicycle underpasses. Comments on improving safety and visibility of bike lanes and where to obtain bike road detector information.

Project Specific Comments:
- There needs to be a practical way and safe way to get to Loveland that is useful for commuting and biking. It is dangerous to bicycle on US 287. (1) Commuting for experienced riders on US 287 is currently safe (2), additional improvements will make the road safer and more attractive to initiates, which will encourage alternative transportation. (1) An experienced cyclist does not feel this is a project that should be done. Traffic volume and speed on 287 is high and a path adjacent to 287 would not be able to provide a level of safety appropriate for cyclists. The recommended alternative was a path between S. Ziegler Road and HW 392 (Carpenter) to provide commuting cyclists a way to ride between Loveland and SE Fort Collins. (1) This project should consider an alternative of a bike trail through neighborhood streets parallel to US 287. (1)

- Road surface concerns: The debris carried by vehicles turning onto US 287 makes riding a challenge. (2)

- Environmental concerns: The raptor nest has not been used the last two years. Can the tree be sectioned off and labeled so the Fossil Creek path can be built around it? Minimize the addition of asphalt to not increase impervious surfaces and raising stormwater concerns.

- Education: Cyclists and motorists could use an education campaign (2) to teach the basics of vehicular cycling in public schools, CSU's newspaper, and general population. (Ride on right, left turn from left turn lane, not right turn lane or switching to left side of street ½ block ahead of turn, etc.) Too many cars are unfamiliar with how fast bicycles can go and pull right in front of you. Cyclists and motorists need to respect each other. (1)

- Connectivity with other bike facilities: Northbound bikers on US 287 wanting to go east should be intercepted at Palmer Drive to be routed on a sidewalk and sent east on the Harmony bike lane. (2) Northbound bikers wanting to go west should intercepted at Fossil Creek Parkway and be sent west up the Fossil Creek Trail to the BNSF Tracks to Harmony and cross at a new pedestrian light at Harmony and the Mason Street Corridor. (1)
• **Traffic signal concerns:** At the intersection of 287 and Fossil Creek Pkwy. / Cameron a southbound warning signal was requested. The light at 287 and Skyway also brought up some concerns. For traffic approaching from the west and east there are long delays and then only 5-10 seconds for crossing.

The following Option Choices were described at the open house, a few people made specific comments about the options:

A. 8’ – 10’ Bike Lane (Preferred by 1)
B. 10’ – 12’ Shared Bike Lane (Disliked 1, preferred over A – 1)
C. 10’ – 12’ Combined Bike / Right Turn Lane (Preferred by 2)
D. Bike Lane with Separate Right Turn Lane (Preferred by 1)
E. 6’ – 8’ Bike Lane with 12’ Auxiliary Lane
F. Off-Street Multi Use Path (Preferred by 3, disliked as dangerous 1)
G. Colored Bike Lanes in High-Risk Conflict Locations (Preferred by 1)

Post-It comments were placed on the corridor map. The comment along with the location the comment was placed are listed below. (Option choices are referenced above.)

- Option A! West side of US 287 and North of Smokey near U Build It and Amigo Motors
- Put bike path/lane thru here – At Mason near Pizza Hut on the west side of US 287
- Bike lane ends [for northbound cyclers] (East side at S. Palmer). Bike lane starts again (onto Palmer) begin connection to secondary street system (east of US 287)
- There needs to be secondary road access to College here convenient for bicycles. (North of Palmer and east of US 287)
- Danger, Danger, Danger (Harmony and US 287)
- I’d like to see a bike path to the rear of these businesses providing a second front to their stores (Placed in front of Carl Duke Volvo which is located north and east of Trilby)
- Option A! East side of US 287 just west of Benson Lake

Another person drew a path to the east of US 287 between Harmony and Trilby, which an alternative to riding on the highway. (1)

The full set of comments was shared with the project team and those in the City and at CDOT who could address concerns outside of this project. Please contact Kathleen Reavis, City of Fort Collins Transportation Planning, 970-224-6140, kreavis@fcgov.com. Information is also available at the City's website: http://www.fcgov.com/transportationplanning/scbl.php

The final Vision Plan is scheduled to be presented at an open house on February 2, 2005, from 5 to 7 p.m. at the Community Room in the Harmony Public Library, 4616 S. Shields, southeast corner of Shields and Harmony.