





### VI. PUBLIC INVOLVEMENT PROCESS

#### VI.1 Outreach

There were several methods used to identify and reach stakeholders in the corridor and those who were interested in the project. The initial mailing list included business owners and residents located within one half-mile of the US 287 project corridor. This established an initial mailing list of 980 addresses. Added to the list were bicycle clubs and businesses as well as outreach contacts for: Front Range Community College, Hewlett Packard and Agilent. Media release announcements for each open house were placed in the local daily and weekly papers. The City sent three mailings during the project describing the upcoming open houses and project progress. An e-mail address list of interested parties (about 30) was also established. A contact list of City and CDOT staff was provided for media, residents and stakeholders to follow up with any questions.

#### VI.2 Website

The City website at <a href="www.fcgov.com">www.fcgov.com</a> publicized the open houses and posted the project description, materials and activities in the Transportation Planning Department section of the site. The website also contains materials presented at the open houses. From November, 2004 through February, 2005 there were 485 visits to the US 287/South College Avenue Bicycle Lane Project website.

### VI.3 Open Houses

The project held three open houses in the Community Room at the Harmony Library which is located at 4616 S. Shields Street in Fort Collins. Those on the mailing list and the media received an invitation and explanation of the project. The first open house was held on September 22, 2004 and had thirty-five people in attendance 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 first open house:

- Described the existing corridor conditions,
- Presented various bicycle treatment options, and
- Solicited the Public's input regarding their preferred alternatives, areas of concern, and questions.

A second open house was held on December 1, 2004 and a second announcement was mailed. The forty-one people who signed-in represented: bicyclists, property owners, residents, business owners, and those working on these issues in the City and CDOT. The second open house:















- Presented proposed bicycle treatments for the corridor and concepts for the Draft Vision Plan, and
- Showed proposed bicycle connections to the Fossil Creek Trail and to Harmony Road.

The third and final open house was held on February 2, 2005. The announcement mailing provided an overview of the project activities to date. The sixteen people who signed-in represented: bicyclists, property owners, residents, business owners, employees and those working on these issues in the City and CDOT. The final open house provided:

- A synopsis of the Interim Vision Plan for the project,
- Proposed bike lane treatments for the entire corridor,
- A project summary,
- The construction cost estimate and phasing, and
- A list of questions (gathered from previous open houses) with answers.

At all open houses, project team members were available to discuss the project with the public.

There was a high level of interest in this project and the public provided valuable input that was incorporated into the project. The following summarizes key areas of the public's concern. The phrases are quotes from comment sheets.

- Current Conditions: "There needs to be a practical way and safe way to get to Loveland that is useful for commuting and biking. Some thought that with the high traffic volume and speeds it is dangerous to bicycle on US 287. Additional improvements will make the road safer and more attractive to initiates (less experienced cyclists), which will encourage alternative transportation. It is important to raise the level of safety for those cyclists who use US 287. An alternative bike trail through neighborhood streets parallel to or adjacent to US 287 would go far in meeting the needs of all levels of bicyclists. The linkage with transit and connections to other bike facilities are important."
- Connectivity with Other Bike Facilities: "Connectivity and uniform markings for cyclists are important." There were also specific recommendations for the corridor. "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. 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. Access from Fossil Creek Parkway under US 287 and North to Wal-Mart / Harmony is extremely important for children and newer riders... In the future, can the Mason Transportation Corridor continue South to tie into trail at the west end of Skyway?"















- ▶ Road Surface Concerns: "The debris carried by vehicles turning onto US 287 makes riding a challenge. After holidays, there is a lot of glass on the highway. Need someway to keep lanes clean. There is a LOT of debris on road currently. Need to pave all entrances to highway from places like stone/rock businesses (Pioneer Sand and Gravel and Fossil Creek Nursery) so it is not tracked onto bike lanes. Biggest safety concern is the "ruts and waves" in the roadway at the Harmony and Trilby intersections. Possible replacement of the intersections with concrete may improve road conditions."
- ▶ Safety: "The signage and stripes look consistent with other bike lanes in the city, which is helpful to both drivers and bicyclists...The Carpenter intersection is very dangerous. Westbound drivers on Carpenter who are turning North onto US 287 cannot see Northbound US 287 bicyclists. A blinking light activated by bicycle detection would be ideal...Recommend top priority for completing the off-street portion on the Southeast corner of Harmony and College, not only for bicyclists, but for safety of existing pedestrians... There needs to be secondary road access North of Palmer and east of US 287 convenient for bicycles... Danger, Danger, Danger (Harmony and US 287)... Need to improve detectors for left turn lanes so they detect bikes... For traffic approaching from the west and east at US 287 and Skyway, there are long delays and then only 5-10 seconds for crossing... At the intersection of US 287 and Fossil Creek Parkway / Cameron a southbound warning signal is needed... There should be a traffic signal at Triangle Drive. [Note: this signal is planned for the near future.]"
- Project Opposition: "From a cycling perspective a combination of bike lanes, bike/hike trails and relatively quiet residential streets can be used for north/south travel between Fort Collins and Loveland. The building of any bicycle lanes along College Avenue south of Harmony will be a trail from nothing to nowhere... Projects like extending the Fossil Creek Trail to Timberline or Ziegler or connecting the Fossil Creek and Spring Creek trails will do more to promote recreational cycling south of Harmony than complex and problematic lanes along College Avenue... College is too busy, bicyclists don't pay road use taxes and they certainly already cause safety problems on our roads as it is... The money proposed for this project could be better applied to expanding and connecting existing non-motorized trails."
- **Education:** "Cyclists and motorists could use an education campaign to teach the basics of vehicular cycling... 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... Provide public information regarding the new shared lane bike signs and pavement markings... Use reflective marking or yellow coloring for the bike under chevrons symbol... The shared by cars and bikes signage does not provide clear information, do the chevrons over the bike mean "bike shelter"? Is the dashed arrow around the bike a "bike house"? Perhaps it would help to combine a car symbol with a bicycle and the word shared."















## VI.4 Incorporating Input

The main goals of this project are to accommodate both commuter and recreational cyclists and to provide a safe and user-friendly addition to the City's and the region's integrated system of on-street bike lanes and off-street trails. The results of this project will also improve bicyclist access to transit along US 287. This report also identifies future corridor improvements recommended to enhance further bicycle accessibility and safety along US 287 / South College Avenue. The concerns identified by the public were instrumental in determining the project phasing and in creating the Interim Vision Plan. Listed below is a partial summary presented at the final open house:

#### **Phase 1 Construction**

- ▶ Funding will allow for full corridor on-street bike lanes on US 287 /South College Avenue between Carpenter and Harmony Roads.
- Off-road trail connections to the Fossil Creek and Mason Transportation Corridor Trails and to Harmony Road (East side of US 287 / South College Avenue between Palmer Drive & Harmony Road) will be included in this project.
- Construction schedule is summer/fall 2005.
- Increase safety for those commuters using the bicycle lane facility with: improved road maintenance, lane designations, and new bike signage.
- Promote use of bike racks on the FoxTrot and Transfort buses.
- Pave the Pioneer Sand and Gravel driveway to reduce migration of debris onto US 287.
- Construction cost estimated to be: \$354,246.

#### Further Vision Plan Recommendation

- Add wider detached sidewalks (8' or wider) along US 287 /South College Avenue to serve as multi-use paths.
- Improve bike detection at signalized intersections.
- Maintain and repair roadway surface.
- Separate bike lanes from turning lanes at all major / signalized intersections as specified in the Larimer County Urban Area Street Standards.
- Create an awareness/education/information campaign.















It is also important to work with other bicycle advocates to create an awareness / education / information campaign to promote safe use of the transportation corridors shared by vehicles and bicycles and that introduces the new shared lane pavement markings and road signage (see **Section V.3**). Outreach should include information for public schools, the CSU and local newspapers, and for general population. The information about the new pavement marking and signage could be included on the new City <u>Bike Map</u>. A descriptive flyer could be developed and distributed in public buildings (i.e., libraries, schools, etc.).

More detailed summaries of the three public open houses can be found in Appendix A.















### VII. PRIORITIZATION

The City of Fort Collins has a limited budget that can be applied toward the installation of the Conceptual Design Plan. As such, a phasing plan was developed by assessing estimated costs associated with improvements to each segment of the US 287 / South College Avenue corridor and for the trail connections. **Section VII.1** presents the conceptual cost estimates for each corridor segment. The Phasing Plan is described in **Section VII.2**.

# VII.1 Opinion of Probable Costs

The entire corridor was divided into nine segments for assessment of the project costs. A description of each segment is given below. To summarize, the preliminary opinion of cost for improvements to the entire corridor is \$569,299 which is greater than the construction budget allotted for the initial stages of the project. The cost estimates for all nine corridors, including the entire corridor, is shown in **Table 2**. Since the cost of the entire corridor is slightly over the budget constraints for the initial construction, it is estimated that the widening improvements for the designated acceleration and bike lanes at Carpenter Road will need to be constructed at a later date. The final design phase of the project will verify project impacts and a more precise cost estimate will be calculated once the improvements are designed in greater detail. This cost estimate will confirm the possible construction of the Carpenter Road acceleration and bike lanes as part of the first construction project.

Segment 1: Carpenter Road Acceleration Lane – Costs associated with widening the

east side of US 287 / South College Avenue to the north of Carpenter

Road for separately designated acceleration and bicycle lanes.

**Segment 2:** Carpenter Road to Trilby Road – Costs associated with signing and

pavement striping improvements between Carpenter Road and Trilby

Road.

**Segment 3:** Trilby Road to Skyway Drive – Costs associated with signing and

pavement striping improvements between Trilby Road and Skyway Drive.

Segment 4: Skyway Drive to Fossil Creek Parkway – Costs associated with signing

and pavement striping improvements between Trilby Road and Skyway

Drive.

Segment 5: Fossil Creek Connections – Costs associated with a trail connection from

US 287 / South College Avenue to the Fossil Creek Trail near Fossil

Creek Parkway.

**Segment 6:** Fossil Creek Parkway to Spradley-Barr Ford – Costs associated with

signing and pavement striping improvements between Fossil Creek

Parkway and the south entrance to Spradley Barr Ford.















Segment 7: Spradley Barr Ford to Harmony Road - Costs associated with signing and

pavement striping improvements between the south entrance to Spradley

Barr Ford and Harmony Road.

Segment 8: Mason Street Acceleration Lane - Costs associated with widening the

west side US 287/South College Avenue south of Mason Street for

separately designated acceleration and bicycle lanes.

**Segment 9:** Harmony Road Connection – Costs associated with a trail connection

from the northbound US 287 / South College Avenue on-street bike lane to the southeast corner of the intersection at US 287 / South College

Avenue and Harmony Road.

Entire Corridor: Costs associated with widening at Carpenter Road and Mason Street, off-

street paths at Fossil Creek and Harmony Road and pavement striping

and signing for the entire corridor.

Table 2. Opinion of Probable Costs by Segment (Year 2005 Dollars)

| ITEM<br>DESCRIPTION         | SEGMENT   |          |          |          |          |          |          |          |          |                    |
|-----------------------------|-----------|----------|----------|----------|----------|----------|----------|----------|----------|--------------------|
|                             | 1         | 2        | 3        | 4        | 5        | 6        | 7        | 8        | 9        | Entire<br>Corridor |
| Roadway Items               | \$132,027 | \$32,035 | \$18,342 | \$26,609 | \$21,084 | \$15,130 | \$12,703 | \$34,187 | \$62,909 | \$355,025          |
| Drainage/Utilities          | \$3,037   | -        | ı        | ı        | \$1,940  | -        | ı        | \$2,359  | \$7,235  | \$14,570           |
| Traffic Control             | \$23,230  | \$5,526  | \$3,164  | \$4,590  | \$262    | \$2,610  | \$2,191  | \$6,251  | \$796    | \$48,620           |
| Mobilization                | \$8,905   | \$2,118  | \$1,213  | \$1,759  | \$1,322  | \$1,000  | \$840    | \$2,396  | \$4,019  | \$23,574           |
| Miscellaneous               | \$19,804  | \$4,805  | \$2,751  | \$3,991  | \$3,163  | \$2,269  | \$1,905  | \$5,128  | \$9,436  | \$53,254           |
| SUBTOTAL                    | \$187,003 | \$44,485 | \$25,469 | \$36,949 | \$27,771 | \$21,009 | \$17,640 | \$50,321 | \$84,394 | \$495,043          |
| Construction<br>Engineering | \$28,050  | \$6,673  | \$3,820  | \$5,542  | \$4,166  | \$3,151  | \$2,646  | \$7,548  | \$12,659 | \$74,256           |
| TOTAL                       | \$215,053 | \$51,158 | \$29,290 | \$42,492 | \$31,936 | \$24,161 | \$20,286 | \$57,869 | \$97,054 | \$569,299          |

## VII.2 Phasing Plan

Cost assessments of the US 287 / South College Avenue improvements reinforced the City's ability to construct most of the Conceptual Design Plan, but it is still essential to prepare a phasing plan for implementation of the vision for the corridor due to the project's financial constraints at this time. The following information provides a basic two-phase strategy for implementation of the Conceptual Design Plan.

#### Phase 1

- ▶ Full corridor on-street bike lanes on US 287 /South College Avenue (Segments 2 9) between Carpenter and Harmony Roads. Does not include widening northbound at Carpenter Road.
- Off-street trail connections to the Fossil Creek Trail and to Harmony Road (East side of US 287 / South College Avenue between Palmer Drive & Harmony Road).















- Provide public information regarding new shared lane pavement markings and signs.
- ► Construction Cost Estimate: \$354,246 (Segments 2 9).

#### Phase 2

- ▶ Widen northbound US 287 / South College Avenue to the north of Carpenter Road to provide separate acceleration and bike lanes (Segment 1).
- ▶ Construction Cost Estimate: \$215,053.















### VIII. ADDITIONAL PROJECT REQUIREMENTS

#### VIII.1 Public Education

Since the Shared Lane Marking concept is new to the traveling public, it is necessary to assure that both motorists and bicyclists understand the intent of the Share Lane Marking. To that end, several educational avenues are being pursued by the City and by CDOT. These avenues include:

- During the experiment time period for the Shared Lane Marking, signs will be placed at each end of the corridor that identifies that an experimental pavement marking is being used. A representation of this sign is shown in **Section IV.3**.
- ▶ The City of Fort Collin's and CDOT's web pages will include the Shared Lane Marking and will provide an explanation of its intent and locations of its use.
- The City will add the Shared Lane Marking symbol and use explanation to the City's <u>Bike Map</u>.

### VIII.2 Ongoing Maintenance

There are two maintenance issues that will influence the success of this project. First, given the unique nature of the Shared Lane Marking, the City of Fort Collins will be responsible for maintenance of this symbol. It will be necessary for City pavement marking crews to provide ongoing maintenance so that the symbol is clear and visible to the traveling public.

Second, many existing bicyclists have stated at the public open houses that the biggest detriment to having a higher use of this facility is that debris is not removed from the current shoulder (future bike lane) on a regular basis. For example, there is one business along the corridor where mud and stone is transported onto the state highway from the tire tracks of larger trucks. At this location, the project will pave a portion of the current dirt driveway in anticipation that an asphalt apron will reduce the amount of debris that migrates onto the roadway shoulder. The Technical Advisory committee members for CDOT and the City have informed their maintenance departments of the maintenance needs of the bike lanes proposed for this corridor. In addition, it has been stressed to the bicycling community that more frequent notification to CDOT or the City of debris instances will result in a better-maintained highway.















### IX. PHASE 1 CONSTRUCTION PROJECT

This report has described the necessary steps for implementation of the Interim Vision Plan. The next step after assessing the corridor through this report is to construct Phase 1. **Section IX.1** explains the improvements included in the Phase 1 construction project and the steps to complete that construction, while the opinion of probable cost is included in **Section IX.2**.

### IX.1 Phase 1 Construction Steps

There are three major steps necessary for completion of the Phase 1 construction project:

- Engineering Design The engineering plans, specifications and cost estimates will be completed for the entire corridor in the Summer of 2005. This includes all widening improvements, signing and striping improvements for the entire length of the corridor, and trail connections to the Fossil Creek Trail and to the intersection of US 287 / South College Avenue and Harmony Road.
- Right-of-Way Acquisition Acquisition of rights-of-way (ROW) for the roadway
  improvements is slotted for Summer of 2005. It is anticipated that ROW is required for the
  trail connections at Fossil Creek and at Harmony Road but not for the roadway widening at
  Mason Street. More detailed ROW requirements will be determined once the final
  engineering plans are complete.
- Construction Construction of Phase 1 will begin Fall of 2005.

### IX.2 Phase 1 Opinion of Probable Cost

It is anticipated that the Phase 1 improvements will cost \$308,040 to construct and that the construction engineering will cost an extra \$46,206 for a total of \$354,246. **Table 3** shows the conceptual opinion of probable cost.

Table 3. Opinion of Probable Cost for Phase 1

| ITEM DESCRIPTION          | PHASE 1 COST |  |  |  |  |
|---------------------------|--------------|--|--|--|--|
| Roadway Items             | \$222,998    |  |  |  |  |
| Drainage/Utilities        | \$11,533     |  |  |  |  |
| Traffic Control           | \$25,390     |  |  |  |  |
| Mobilization              | \$14,669     |  |  |  |  |
| Miscellaneous/Contingency | \$33,450     |  |  |  |  |
| SUBTOTAL                  | \$308,040    |  |  |  |  |
| Construction Engineering  | \$46,206     |  |  |  |  |
| TOTAL                     | \$354,246    |  |  |  |  |















## X. FUTURE STEPS

#### X.1 Phase 2 Construction

The City of Fort Collins will continue to pursue additional funding to implement the remainder of the Conceptual Design Plan. The Phase 2 construction package will include the widening of US 287 in the northeast quadrant of the Carpenter Road intersection to provide a separated bike lane from the vehicle acceleration lane. It is anticipated that this improvement will cost \$187,003 to construct and that the construction engineering will cost an extra \$28,050 for a total of \$215,053. The purchase of right-of-way for the construction of these improvements is anticipated. A conceptual cost estimate of these improvements is included in **Table 4**.

Table 4. Opinion of Probable Cost for Phase 2: Carpenter Road Acceleration Lane

| ITEM DESCRIPTION          | PHASE 2 COST |  |  |  |  |
|---------------------------|--------------|--|--|--|--|
| Roadway Items             | \$132,027    |  |  |  |  |
| Drainage/Utilities        | \$3,037      |  |  |  |  |
| Traffic Control           | \$23,230     |  |  |  |  |
| Mobilization              | \$8,905      |  |  |  |  |
| Miscellaneous/Contingency | \$19,804     |  |  |  |  |
| SUBTOTAL                  | \$187,003    |  |  |  |  |
| Construction Engineering  | \$28,050     |  |  |  |  |
| TOTAL                     | \$215,053    |  |  |  |  |

### X.2 Additional Vision Plan Recommendations

Additional recommendations for the corridor are proposed that will further enhance the bicycling experience along US 287/South College Avenue. These recommendations include:

- Detached Sidewalks The City will continue to pursue funding to install off-street, detached sidewalks along the corridor to provide a safe and convenient route for recreational bicyclists. Detached sidewalks of eight (8) feet or wider could serve as a multi-use path, providing opportunities for both bicyclists and pedestrians to better access along the corridor.
- Bicycle Detection The City is evaluating the use of bicycle detection at the signalized intersections along the corridor. This improvement would provide a detection system to assist bicyclists that wish to cross US 287, essentially providing a "green" traffic signal indication when a bicycle is detected on the intersecting cross street.















- Roadway Maintenance and Repair Open House comments indicated that bicyclists may experience difficulty in traversing some sections of roadway due to the condition of the existing roadway pavement, i.e., pavement waves or ruts throughout the corridor need improvement. The US 287 roadway surface will be repaired as funding allows.
- Separate Bike Lanes As noted in other sections of this report, there are several locations where it is not currently financially feasible to provide bike lanes that are separated from acceleration or deceleration lanes. The City will strive to provide separate bike lanes for motorists and bicyclists, specifically at the major intersections along the corridor as funding allows. Private development and future public capital improvement projects will likely be the catalyst for the construction of separate bike lanes.

# X.3 Implementation of Vision Plan

The City and CDOT will continue to avail themselves of opportunities to implement the Vision Plan cross-section throughout this corridor. Those opportunities could include infrastructure improvements associated with private development of existing parcels or the construction of larger-scale capital improvement projects funded with public monies. Obtaining grant funding of federal resources will also be pursued.

### X.4 Project Coordination

The City of Fort Collins and CDOT will continue to work cooperatively on this project to further the completion of the Vision Plan.







