



# HARMONY ROAD (SH 68) ACCESS CONTROL PLAN UPDATE REPORT



**NOVEMBER 2004** 

## ACCESS CONTROL PLAN UPDATE REPORT

#### Harmony Road (SH68)

South College Avenue (US 287) to Interstate 25 (I-25)

November 2004

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# **EXECUTIVE SUMMARY**

#### **Background and Purpose**

The City of Fort Collins and Colorado Department of Transportation (CDOT) are updating the existing Access Control Plan for Harmony Road (SH68). This is an important regional highway in northern Colorado, providing east/west connectivity between South College Avenue (US287) and Interstate 25. As such, this route carries a wide range of vehicle and travel types: semi-truck delivery vehicles serving the Fort Collins city limits, special event traffic for Colorado State University, and commuter traffic to the employment bases in Fort Collins and other areas of the region as well as growing commercial centers. Development pressures within the study corridor will continue to increase the travel demand along this route. Therefore, providing good mobility and a safe operating environment for all modes of transportation is essential.

Over 15 years ago, the City of Fort Collins and CDOT approved the initial Access Control Plan for the Harmony Road (SH68) corridor. This plan has served the community well as development and redevelopment have occurred along this corridor. However, some of the land use and transportation assumptions made during the initial planning project have not occurred as predicted, leading to the need to update this plan to reflect the current conditions and revisions to future projections.

The purpose of the current planning project is to work closely with residents, property and business owners and highway users to develop an update to the long range Access Control Plan for SH68. The updated plan addresses how access in the corridor should be treated, the cost for the recommended access modifications, and the recommended implementation process for the improvements. The ultimate goal is to develop an updated Access Control Plan and Intergovernmental Agreement adopted by the City and CDOT.

#### **Study Area**

The study area extends along Harmony Road (SH68) from South College Avenue (US 287) on the west to Interstate 25 (I-25) on the east. As such, the study area encompasses approximately 4.5 miles along this route and covers the entire length of Harmony Rd that is designated as a state highway.

The Harmony Road (SH68) corridor serves as a major commercial and employment corridor for the City of Fort Collins.

#### **Development of the Plan**

The physical and operational characteristics of SH68 are managed by CDOT; however, this roadway also traverses the boundaries of the City of Fort Collins. The City of Fort Collins, through the office of Transportation Planning, worked jointly with CDOT to develop this Plan Update.

The primary project team for development of the Access Control Plan was comprised of City staff, the Access Manager for CDOT - Region 4, and representatives of Felsburg Holt & Ullevig. Plan progress was coordinated with other departments within the City and with CDOT. Public open house events and meetings with local business owners, property owners and residents were also conducted.

#### **Access Types**

The access types on Harmony Road have been classified as follows:

| Corridor                            | Public Road<br>Intersections<br>with Signals | Public Road<br>Intersections<br>without Signals | Driveway<br>Accesses | Total Number<br>of Accesses |
|-------------------------------------|--|---|----------------------|-----------------------------|
| Harmony Road<br>(SH68)<br>4.5 miles | 11   | 6   | 39                   | 57                          |

The accident history of each corridor reveals that 328 accidents occurred during the period from January of 1997 through June of 1999. Of these, approximately 87% percent were access related and 25% of the total accidents involved at least one injury. It is important to note, though, that the overall accident rate for Harmony Road (SH68) is below the state average for this type of highway.

#### **Public Involvement**

One of the most critical elements of this project was involvement with the public at open houses that were held at key stages of the study. A total of four public open houses were conducted. The first meeting included a formal presentation that addressed the objectives of the access management efforts and provided information as to the plan process, access management principles and techniques, draft conceptual plans, and how the project may be implemented. The subsequent open houses provided exhibits on the revised plan based upon public input. Comment sheets were used to record property and business owner concerns.

Visual aids were used that included a video on access management prepared by the Federal Highway Administration. Exhibits showing historic accident data, existing and proposed traffic volumes, and existing and proposed access locations were available, with City, CDOT and consultant representatives in attendance to answer questions and to receive comments, concerns, and input. Mailing lists of adjacent property owners within 500 feet of the highway were maintained for the study, with each property owner and business being notified of each public meeting. Press releases were also used to inform the general public.

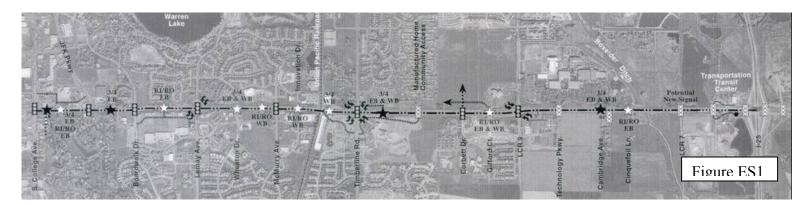
City and CDOT staff also visited numerous sites along each corridor to talk individually with property owners, business owners and residents. These meetings were very informative since issues related to a specific access or property owner need could be addressed on a one-to-one basis.

In addition to the public open houses and individual meetings, agency staff met with the Fairway Estates neighborhood representatives as well as with the full property owner association. City staff also presented information on the Plan Update to the Fort Collins Chamber of Commerce Legislative Affairs Committee. These meetings provided good feedback from organized groups within the study corridors.

Public involvement for this project resulted in business and property owners being actively involved in developing access solutions. This involvement represents a valuable piece of the project and has led to the development of Access Control Plan update that is supported by the majority of business and property owners within the corridor with a high potential for success.

#### **Access Control Plans**

Figure ES1 provides an overview of the major access improvements included in the Access Control Plan Update.



A few of the major projects along the Harmony Road (SH68) corridor are listed below:

#### Harmony Road (SH68) Access Management Plan Update – Long Term Improvements:

- Construct the City of Fort Collins Major Arterial Street section along the entire length of SH68, from US 287 to I-25. This section calls for six through lanes (three in each direction), a raised landscaped center median, 10' bikelanes, and detached sidewalks. From Boardwalk to I-25, the Major Arterial section includes an 80' setback from the roadway edge as a landscape buffer that contains an 8' meandering pedestrian trail.
- New traffic signals are planned at Snow Mesa Drive, Technology Parkway, Cambridge/Hewlett Packard east access and County Road 7/Strauss Cabin Road. These signals would be installed when these locations meet the appropriate warrants of the national <u>Manual on Uniform Traffic Control Devices (MUTCD)</u>. New streets are to be constructed at some of these intersections.
- Private property access on the south side of SH68 between South College Avenue (US287) and Hogan Drive would be limited to shared, right in/right out (RIRO) movements.
- Stover Street will become a <sup>3</sup>/<sub>4</sub> movement intersection, allowing for right in, right out, and left in traffic movements.
- The private property accesses on Harmony between the Union Pacific Railroad and Timberline Road will be changed to <sup>3</sup>/<sub>4</sub> movement on the south side and RIRO on the north side.
- ➤ A <sup>3</sup>/<sub>4</sub> movement access would be allowed approximately XXX' on the north side east of Timberline Road.
- ➤ A RIRO access will be allowed at approximately XXX' east of the Timberline road on the south side.
- Provide two RIRO accesses at Gifford Court/LSI Logic entrance.
- ➤ The intersection of Harmony and Cambridge/Hewlett Packard East Access would be designed to operate as two <sup>3</sup>/<sub>4</sub> intersections, providing for right-in, right-out, and left-in traffic movements as an interim condition until it meets the appropriate MUTCD signalization warrants and/or the left turn movements at Technology Parkway fail. At that point in time it will be converted to a signalized intersection.
- Cinquefoil Lane to be RIRO only.
- Geometry Improvements Signalized Intersections
  - South College Avenue Exclusive right turn deceleration lanes on all approaches.

■ Boardwalk Drive – Dual left turn lanes on the northbound and southbound approaches. Exclusive eastbound and westbound right turn lanes.

■ Lemay Avenue – Dual left turn lanes on all approaches. Exclusive eastbound and westbound right turn lanes with a northbound right turn deceleration lane.

McMurray Avenue - Exclusive eastbound and westbound right turn deceleration lanes.

■ Timberline Road – Dual left turns on all approaches (City project 2000/2001). Exclusive eastbound, westbound, and southbound right turn deceleration lanes.

Snow Mesa Drive – South leg of intersection to be built with future development. Dual left

turn lanes on the northbound approach only.

Corbett Drive – Provide north leg of intersection with future development. Dual northbound left turn lanes.

■ Ziegler Road (CR9) – Dual left turn lanes on the northbound and southbound approaches. Exclusive eastbound and westbound right turn deceleration lanes.

Cambridge Drive/HP East Access – Dual northbound left turn lanes.

In order to achieve Level of Service (LOS) D which is the City's minimum standard according to <u>The City of Fort Collins Multimodal Level of Service Manual</u>, the following three intersections would need to be improved beyond the typical level of improvements. While these improvements would then achieve LOS D, they may be impractical from a community and/or cost benefit perspective.

#### Signalized Intersections:

South College Avenue – Three through lanes on the eastbound and westbound approaches and triple southbound left turn lanes.

■ Lemay Avenue – Three through lanes on the southbound approach and a northbound right turn deceleration lane.

■ Timberline Road – Four through lanes on the westbound approach, dual right turn lanes on the southbound approach, and an exclusive northbound right turn deceleration lane.

Unsignalized Intersections: (locations that will exceed LOS D for movement listed)

■ <sup>3</sup>⁄<sub>4</sub> Access at Harmony Center approximately 800' east of US287 – Eastbound left turns from SH68 during the PM peak hour.

Stover Street – Eastbound left turns from SH68 during the PM peak hour.

• Wheaton Drive – Westbound left turns from SH68 during the PM peak hour.

■ Innovation Drive – Southbound right turns to SH68 during the PM peak hour.

Gifford Court – Northbound right turns during the PM peak hour.

Cinquefoil Lane – Northbound right turns during the PM peak hour.

#### Cost Estimate

The costs associated with the remaining improvements to Harmony Road (SH68) are primarily related to widening the highway from four lanes to six lanes in accordance with the City of Fort Collins Master Street Plan as well as for individual intersection and other access improvements. The cost estimate is anticipated to be approximately \$25 million. This level of improvement would most likely be funded over the next 20+ years through a combination of public (local & regional) and private sources.

#### Implementation

The improvements recommended in the updated Access Control Plan represent long-range projects and, as such, will be implemented over time as traffic and safety needs arise, or as development occurs and as funding allows. Future funding for implementation will require participation from both public and private sources. The designs shown in this plan are schematic concepts. Detailed engineering drawings of exact roadway alignments and other access related improvements will be created as project funding is identified and will consider constraints due to natural area features, storm drainage, flood plain issues and other topographic features.

In order to ensure that these improvements can be implemented in the future, it is important that the Access Control Plan be adopted by each of the governing entities in the corridor and that it be used in all transportation and land use planning which could affect SH68. Therefore, it is recommended that the updated Harmony Road (SH68) Access Control Plan be re-adopted through a new Intergovernmental Agreement (IGA) between CDOT and the City of Fort Collins.

Since conditions may change over time, a key element of the IGA is a specified process for modifying the plan in the future. This process calls for the creation of an Advisory Committee comprised of one representative from each of the signatories of the IGA. Amendment requests would be reviewed by the Committee and changes could be made only with the affirmative vote of all signatories. The Advisory Committee will review the Access Control Plan and IGA at least every three years or as deemed necessary by the agencies for needed updates and will adjust project cost estimates annually to reflect inflation. This process should ensure continuing coordination between the agencies for this corridor.

# **1.0 INTRODUCTION**

## 1.1 Project Background

The City of Fort Collins (City), in concert with the Colorado Department of Transportation (CDOT), is promoting the development of an Access Control Plan Update for Harmony Road (SH68), a major artery of the City street system. The establishment of an Access Control Plan is authorized by the <u>State Highway Access Code</u> (Access Code), Section 2.12. State Highway 68 provides east/west access along the major east/west regional route. This route carries a wide range of vehicle and travel types: long distance interstate traffic, semi-truck delivery vehicles within the Fort Collins city limits and Larimer County, special event/visitor traffic, and commuter traffic to the employment bases in Fort Collins, Greeley, Loveland and the Denver metropolitan area. Development pressures within the study corridor will continue to increase the travel demand along these routes. Therefore, providing good mobility and a safe operating environment for all modes of transportation is essential.

Over 15 years ago, the City of Fort Collins and CDOT approved the initial Access Control Plan for Harmony Road (SH68). This plan has served the community well as development and redevelopment have occurred along the corridor. However, some of the land use and transportation assumptions made during the initial planning project have not occurred as predicted, leading to the need to update the plan to reflect current conditions and revisions to future projections.

The purpose of the current planning effort was to work closely with residents, property and business owners and highway users to develop an <u>updated</u> long range Access Control Plan for SH68. The updated plan addresses how access along the corridor should be treated, the cost for the recommended access modifications, and the recommended implementation process of the improvements. The ultimate goal is to develop an updated Access Control Plan which will be adopted as Intergovernmental Agreement by the City and CDOT.

#### **Study Area**

The study area extends along Harmony Road (SH68) from South College Avenue (US 287) on the west to Interstate 25 (I-25) on the east. As such, the study area encompasses approximately 4.5 miles along the route. The Harmony Road (SH68) corridor serves as a major commercial and employment corridor for the City of Fort Collins. Harmony Road is also an important east – west regional connection linking the southern reaches of Fort Collins to Interstate 25 and eastward to Timnath, Windsor, Greeley and other communities.

The purpose of the current study effort was to work closely with residents, property and business owners, and highway users to develop a detailed, long-range Access Control Plan for the SH 68 corridor. The study limits are illustrated on Figure 1.

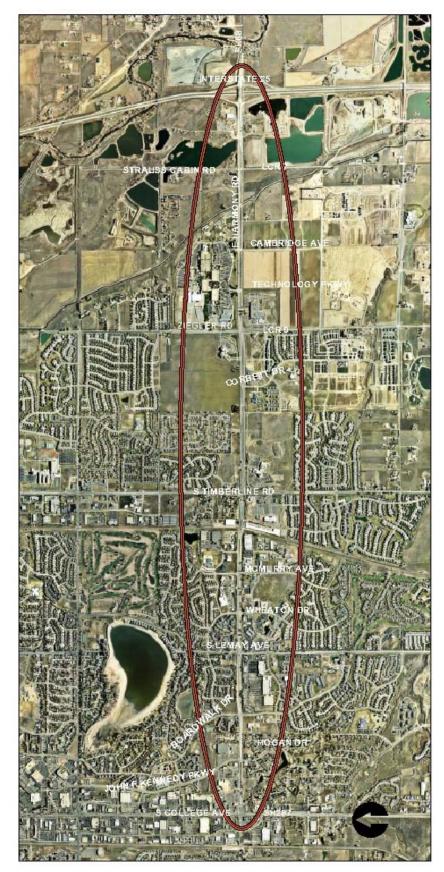


Figure 1: Harmony Road/SH 68 Study Area, College Avenue/US 287 to Interstate 25 This plan summarizes all of the collected data, analyses and access control recommendations for the study area adjacent to SH68. The goal of the plan is to develop a new Intergovernmental Agreement (IGA) for the corridor. An IGA provides the legal basis for the implementation of the Access Control Plan and furnishes direction to property owners and the governing agencies for the continued development of the area.

## **1.2 Project Coordination**

The physical and operational characteristics of SH 68 are managed by the CDOT; however, the roadway also traverses the boundaries of the City of Fort Collins. The City of Fort Collins, through the office of Transportation Planning, was the primary force behind the development of this project with direct input and cooperation with CDOT.

The primary project team for development of the Access Control Plan update was comprised of City staff, the Access Manager for CDOT Region 4, and representatives of Felsburg Holt & Ullevig. Plan progress was coordinated with other departments within City and CDOT organizations, while meetings with local business owners, property owners and residents were conducted.

## 1.3 Public Involvement

One of the most critical elements of this project was involvement with the public at open houses that were held at key stages of the study. Open house events were conducted for discussion of the Harmony Road Access Improvements in conjunction with meetings that were related to the access control plan update for South College Avenue (US 287).

The first meeting included a formal presentation that addressed the objectives of the access management efforts and provided information as to the plan process, access management principles and techniques, exhibits on the conceptual plans, and how the project may be implemented. The following open house events provided information on the revised, recommended final plan. Comment sheets were used to record property and business owner concerns.

Visual aids were used that included a video on access management prepared by the Federal Highway Administration. Exhibits showing historic accident data, existing and proposed traffic volumes, and existing and proposed access locations were available, with City, CDOT, and consultant representatives in attendance to answer questions and to receive comments, concerns, and input. Mailing lists of adjacent property owners within 500 feet of each highway were maintained for the study, with each property owner and business being notified of each public meeting. Press releases were also used to inform the general public.

City, County and CDOT staff also visited numerous sites along each corridor to talk individually with property owners, business owners and residents that were not able to attend one of the public meetings. These meetings were very informative since issues related to a specific access or property owner need could be addressed on a one-to-one basis.

In addition to the public open houses and individual meetings, agency staff met with the Fairway Estates neighborhood representatives as well as with the full property owner association. City staff also presented information on the Plan Update to the Fort Collins Chamber of Commerce Legislative Affairs Committee. These meetings provided good feedback from organized groups within the study corridors.

Public involvement for this project resulted in business and property owners being actively involved in developing access solutions. This involvement represents a valuable piece of the project and has led

to the development of the Access Control Plan Update that is supported by the majority of business and property owners within the corridor with a high potential for success.

### 1.4 Report Format

The Access Management Report summarizes the efforts to complete an Access Control Plan update for the corridor. The remainder of the Access Management Report is divided into five sections. **Section 2.0** describes the objectives of the study, the access management principles that were applied to the corridor and the strategies for developing the plan. These goals define the guiding rationale for the development of the plan. **Section 3.0** summarizes the recommended Access Control Plan elements for the Harmony/SH68 corridor. **Section 4.0** documents both implementation and funding strategies for the Access Control Plan.