



2.0 CORRIDOR IDENTIFICATION

Initially, the study area was broadly defined to enable a regional assessment of alternative routes. The study area was bounded by US 287 on the west, WCR 23 on the east, Harmony Road/WCR 74 on the north, and Crossroads Boulevard/WCR 62 on the south. The study area is contained in both Larimer and Weld counties. While this broad study area was used to assess mobility and potential effects at a regional level, the study's logical termini were subsequently refined as described in Section 2.3 of this report.

SH 392 provides regional access to the towns of Windsor, Severance, and Timnath, and the cities of Loveland, Greeley, and Fort Collins. The SH 392 corridor crosses through both long-standing rural farming communities and emerging suburban development. Some of the features present in the study area include open spaces, trails, and golf courses. Commercial districts are developing not only along the SH 392 corridor, but also at the I-25/US 34 Interchange, and along Crossroads Boulevard. Other features of regional significance include the Cache La Poudre River (commonly referred to as the Poudre River), the Fort Collins-Loveland Municipal Airport, the Great Western Railway, the Union Pacific Railroad (UPRR), the Budweiser Events Center, and Fossil Creek Reservoir.

The I-25 interchange was specifically excluded from this study, as it is being evaluated as part of the North I-25 EIS.

2.1 Regional Transportation Plan Vision

The NFRMPO has identified several highways as being “Regionally Significant Corridors” and SH 392 is one of them. The NFRMPO defines a Regionally Significant Corridor as, “A multi-modal, regional system comprised of transportation corridors that connect communities by facilitating the movement of people, goods, information, and services” (NFRMPO, 2003). Three criteria are considered in the identification of regionally significant corridors: connectivity, functional classification, and trip length.

The *NFRMPO 2030 Transportation Plan* contains the following Corridor Vision for SH 392:

“The vision of the SH 392 Urban corridor is primarily to increase mobility as well as maintain system quality and improve safety. This corridor serves as a local facility, provides commuter access, and makes east-west connections within the south Fort Collins, Windsor, Lucerne and Severance areas. SH 392 serves as Main Street through Windsor. Future travel modes to be planned for in the corridor include passenger vehicle, bus service, truck freight, and bicycle and pedestrian facilities. Transportation Demand Management (TDM) would likely be effective in this corridor. The transportation system in the area serves towns, cities, and destinations within the corridor as well as destinations outside of the corridor. The communities along the corridor value high levels of mobility, transportation choices, connections to other areas, safety, and system preservation...Users of this corridor want to support the movement of commuters,



freight, and farm-to-market products in and through the corridor while recognizing the environmental, economic and social needs of the surrounding area.”

Current Planning Efforts

Local jurisdictions are conducting the following transportation planning efforts related to the SH 392 EOS.

- The NFRMPO is in the process of preparing the *NFRMPO 2035 Transportation Plan*. A draft plan is anticipated to be submitted to CDOT in 2007.
- Larimer County is actively coordinating with Fort Collins on the Growth Management Area (GMA) expansion and on the airport master planning efforts.
- Weld County is currently planning improvements to both WCR 7 and WCR 13.
- Fort Collins recently approved a proposal to expand the boundary of the City's GMA to include the Fossil Creek Cooperative Planning Area, an area generally located immediately west of I-25, both north and south of Carpenter Road. Once Larimer County and the City sign a revised Intergovernmental Agreement (IGA), the City will formally amend the City's Comprehensive Plan and the Structure Plan Map to depict the amended GMA boundary. In addition to approving the GMA boundary amendment, the City is pursuing annexation of the enclave and working with property owners (in particular, those with properties near the I-25 interchange) regarding the appropriate land uses on the current Structure Plan Map.
- Windsor is currently conducting a revitalization plan with a traffic and parking component. Current recommendations include diverting truck traffic around the downtown area, signalization of the Main Street/5th Street intersection, decreasing in-town posted travel speed, examining a roundabout at the east entrance to downtown Windsor, and altering the on-street parking configuration to allow parallel parking.
- The Fort Collins/Loveland Municipal Airport updated their Master Plan in April 2006.
- On March 23, 2005, the Timnath Board of Trustees approved a resolution adopting the *North Area Comprehensive Plan Amendment* for the Town. This Plan provides the principles, goals, policies, and future land use plan. The intent of the Comprehensive Plan is to preserve and enhance the Town's identity, while still allowing for it to grow and flourish in a manner that is acceptable to its residents.

Additional planning documents that are pertinent to the SH 392 EOS are listed in the *SH 392 EOS Purpose and Need Technical Memorandum*.

2.2 Purpose and Need

Based on preliminary study scoping efforts, which are further described in *Section 5.0, Public Involvement*, a preliminary statement of goals and objectives was crafted. This statement was then refined through additional agency and public input, and ultimately formed the basis for the



study's purpose and need. The identified goals and objectives are discussed in *Section 4.0, Alternatives Development and Screening*.

The purpose and need statement follows CDOT and FHWA guidelines on preparing purpose and need statements (*40 Code of Federal Regulations (CFR) 1502.13-14*).

2.2.1 Project Purpose

A primary goal of this study was to identify ROW needs for future transportation improvements to meet travel demand in 2030. Based on the project need as described below, the project purpose was to identify the mobility needs in 2030 and develop solutions that meet this need.

This study will guide future roadway improvement projects and ongoing development for the SH 392 corridor. The primary goal of the transportation improvement was to ensure that adequate provisions were made to the SH 392 corridor to meet regional transportation mobility needs for 2030 and beyond.

In addition to the primary purpose of the EOS, other factors were also considered. These include making provisions for transportation solutions that minimize effects to the natural, cultural, and social environment of the surrounding communities, that provide for the safe movement of people and goods, and that make full use of the EOS to identify other opportunities to address the needs of SH 392.

The EOS allowed CDOT to examine various alternatives for meeting those mobility needs on this major east-west connection between Loveland/Fort Collins and Windsor/Greeley. The study incorporated a context sensitive solutions approach to balance mobility needs with potential environmental and socio-economic effects.

The EOS served as a planning document that identified the ROW necessary for future transportation needs resulting in a recommended "footprint" characterized by each alignment. This footprint may be used by local planning agencies and CDOT to preserve a roadway corridor for future improvement projects and guide ongoing development.

2.2.2 Project Need

The need for action was centered on continued growth in Northern Colorado and along SH 392 in particular. The population for Larimer and Weld counties combined was projected to be approximately one million by 2030. The Department of Local Affairs (DOLA) estimated that 8,475 residents of Weld County commute to Larimer County for employment, and 6,292 residents of Larimer County commute to Weld County for employment.

As this growth occurs, traffic growth also follows. Increased traffic on the roadway continues to put pressure on the aging system, in terms of both capacity and structural sufficiency. While the traffic demand continues to grow and requires that roads be expanded, the development that causes this increased traffic continues to use up the land on which the road could be expanded.



The primary driving force for the need for transportation improvements in the corridor was mobility.

Existing and Future Traffic

Existing traffic volumes and operations were analyzed along the corridor and are shown in Figure 2.1. Currently, the highest volumes are found just east of I-25 with over 20,400 vehicles per day (vpd). Volumes decrease gradually traveling east and west to approximately 9,500 vpd at each end of the study area. The LOS will continue to degrade as these traffic volumes increase over time. Currently, the worst LOS on the corridor occurs at the I-25 interchange and is LOS E. The data indicates that existing signalized intersections operate at LOS D or better, and in most cases operate at a LOS of C or better.

Consistent with regional planning, the SH 392 EOS considered future travel demand for the year consistent with the currently-approved *NFRMPO 2030 Regional Transportation Plan*. Travel demand projections for the SH 392 EOS were forecasted using the 2030 NFRMPO Travel Demand Model. Volumes on the corridor were projected to increase in 2030 to 37,500 vpd just east of I-25 and taper off to 21,000 vpd at the western terminus and 24,600 vpd at the eastern terminus. These numbers represent a two- to three-fold increase in volumes over the existing year. In 2030, all sections of the corridor will operate at LOS of F.

Existing and 2030 intersection operations are summarized in Table 2.1.

**Table 2.1
Intersection LOS**

Intersection	Existing LOS (AM/PM)	2030 LOS (AM/PM)
SH 392/US 287	B/B	F/F
SH 392/Lemay Avenue (LCR 13)	ND*	ND*
SH 392/Timberline Road (LCR 11)	A/A	F/F
SH 392/West Frontage Road	C/D	F/F
SH 392/I-25 SB ramps	B/C	E/F
SH 392/I-25 NB ramps	B/C	F/F
SH 392/East Frontage Road	B/C	F/F
SH 392/LCR 5	B/A	F/F
SH 392/LCR 3	C/C	D/F
SH 392/WCR 13	B/A	F/F
SH 392/15 th Street (Windsor)	B/C	E/F
SH 392/11 th Street (Windsor)	C/C	C/E
SH 392/9 th Street (Windsor)	A/A	C/A
SH 392/7 th Street/SH257 North/ WCR 17 (Windsor)	C/C	F/F
SH 392/SH 257 South (WCR 19)	A/B	D/F

*ND=No data has been calculated for un-signalized intersections.



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Results of the traffic operational analysis for year 2030 volumes indicated that intersections along SH 392 and mainline SH 392 will experience congestion if no improvements are made to the existing facility. This additional congestion and delay will force traffic onto local roads and exacerbate congestion in the community.

2.3 Logical Termini

A logical termini analysis was performed to ensure that the study limits are appropriate for the stated goals and objectives, and that they would be consistent with a potential future NEPA study on the corridor. This analysis was fully reported in the *SH 392 EOS Logical Termini Analysis Technical Memorandum*.

The purpose of a logical termini analysis is to “ensure meaningful evaluation of alternatives and to avoid commitments to transportation improvements before they are fully evaluated.” The study limits for this EOS adhere to the guidance for the development of logical termini in the Code of Federal Regulations (23 CFR 771.111 (f)), and the *FHWA Guidance on the Development of Logical Project Termini* (FHWA, 1993). This guidance states that a project must:

- Connect logical termini and be of sufficient length to address environmental matters on a broad scope
- Have independent utility or independent significance (i.e., be usable and be a reasonable expenditure even if no additional transportation improvements in the area are made)
- Not restrict consideration of alternatives for other reasonably foreseeable transportation improvements

The logical termini analysis indicated that the appropriate limits for the SH 392 EOS were from US 287 on the west to SH 257 South on the east, with the provision for the study area being extended to WCR 23, to encompass potential alternatives around the Town of Windsor.

US 287 is a significant regional transportation corridor in northern Colorado and provides direct access to Fort Collins and Loveland. Therefore, US 287 is a logical western endpoint, because:

- It has an independently operating travel system
- It links travelers to a major north-south highway (US 287) and is a north-south regional highway accessing the cities of Fort Collins and Loveland
- It acts as a terminus for Carpenter Road which does not continue further west
- It has traffic projections which support a need for capacity improvement
- It requires safety improvements at the US 287/Carpenter Road intersection



SH 257 South is a logical eastern terminus for the SH 392 EOS because:

- SH 257 South operates as an independent corridor
- It provides access to US 34 and WCR 62 and generates its own regional traffic
- Traffic volumes decrease on SH 392 east of SH 257 South
- The projected intersection LOS is D/F and is in need of capacity improvements
- Safety improvements are needed at the SH 392/SH 257 south intersection