



Access Control Plan

State Highway 257 to 35th Avenue



Prepared by:



In cooperation with:



November 2012

US 34 Business Route Access Control Plan
(West 10th Street)
State Highway 257 to 35th Avenue
Greeley

Prepared by:

North Front Range Metropolitan Planning Organization

In cooperation with:

Colorado Department of Transportation, Region 4

City of Greeley

Weld County

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1.0 INTRODUCTION

1.1 Project Background and Goal

The North Front Range Metropolitan Planning Organization (NFRMPO) adopted a **Strategic Action Plan** in March of 2004. Its purpose was to provide policy guidance to the organization over the following six to ten years and to set the overall direction of the MPO. The Plan established long range goals in two areas: Value Statements and Propositions. The Plan also listed specific action steps associated with each value statement and proposition to accomplish these many goals.

The MPO's objective is to provide the information, tools and public input needed for improving the regional transportation system's performance in the North Front Range.

“Proposition 6” of the **Strategic Action Plan**, as updated in December 2006, addressed the role of the NFRMPO by stating:

There is a clear understanding of what the ‘regional’ transportation system consists of, and what transportation/congestion improvements are planned for the future.

“Key Strategy #1” for Proposition 6 followed with the following:

By focusing the MPO's activities and resources on the regional transportation system and its connectivity functions into, through and between cities & towns and other regional centers.

One of the **“Action Steps”** for “Key Strategy #1” was:

In conjunction with the Colorado Department of Transportation, develop Corridor Optimization Plans & access management plans for regionally significant corridors.

An explanatory note for this action step (added in December 2006) said:

The MPO has successfully partnered with CDOT Region 4 to complete access management plans/environmental overview studies on almost all state highways in the region, including most recently US 287 from 29th Street in Loveland to Harmony; SH 60 from I-25 to Two Rivers Parkway; and SH 392 from US 287 to E of Windsor. A similar partnering will occur in FY 2007-2008 on SH 56, though the actual study will be conducted in-house...

An Access Control Plan for State Highway 56 was completed in August of 2009.

Through deliberations with the Colorado Department of Transportation (CDOT) and local agencies of the NFRMPO, the US 34 Business Route in Greeley, extending from State Highway 257 to 35th Avenue, was selected as the next priority for the development of an Access Control Plan (ACP). Work on the “Business US 34 ACP” commenced in the spring of 2011.

1.2 Access Control Benefits

Directly quoting (in *italics* throughout this sub-section) from the previously-prepared Access Control Plan documents for State Highway 60 and State Highway 56, the following summary of benefits is applicable to the US 34 Business Route:

Colorado's State Highway Access Code (2CCR 601-1) provides the legal authority for the Colorado Department of Transportation and local jurisdictions to regulate access to the Colorado state highway system. Recognizing that appropriate control of public and private access to state highways provide important safety and mobility benefits, the State Highway Access Code provides the appropriate policies and design standards for the regulation of accesses.

An important tool for regulating access in state highway corridors is the Access Control Plan. Developed for specific highway segments, the Access Control Plan provides the Colorado Department of Transportation and local agencies with a comprehensive access plan that is designed to bring, to the extent feasible given existing conditions, the designated portion of the state highway into conformance with its defined access category and functional needs.

According to the **State Highway Access Code**, Volume 2, Code of Colorado Regulations 601-1, March 2002, "access control plan" means:

a roadway design plan which designates preferred access locations and their designs for the purpose of bringing those portions of roadway included in the access control plan into conformance with their functional classification to the extent feasible.

The purposes of an access control plan for the US 34 Business Route are to:

- ▶ Help maintain for as long as possible the high levels of service regarding traffic flow and safety that resulted from the recent years' investments in this roadway's traffic carrying capacity.
- ▶ Identify where future intersections will be located.
- ▶ Identify where future traffic signals can (and, by implication, might not) be installed.
- ▶ Clarify policies for future public and private access to the highway.
- ▶ Provide a written report and accompanying graphics that can be referenced in formal agreements between CDOT, the City of Greeley, and Weld County about future accesses.

Regulating the number and location of accesses to the highway corridor creates a safer environment for drivers with less congestion and delay. Access control helps maximize the public's investment in the corridor by improving operating efficiency and prolonging the functional life of the facility. In commercial areas, access control can improve traffic flow and circulation patterns, allow for more predictable development, and stabilize property values.

Similar to previous access control plans in the North Front Range region, this Access Control Plan for the US 34 Business Route addresses primarily a State Highway facility but as part of the plan, there are proposed changes to the adjacent and adjoining street and road systems



which are administered by the City of Greeley and Weld County. With this Access Control Plan addressing future roadways that would be under local jurisdiction, those portions would be outside the regulatory purview of CDOT with regard to the issuance of access permits. Depending on the status of municipal annexations at the time a new driveway or change to an existing driveway would be proposed by a property owner, access-related management and approvals on these segments of roadway will be under the jurisdiction of the City of Greeley or Weld County.

As noted above, this Access Control Plan addresses the portion of the US Highway 34 Business Route (also known as Greeley’s West 10th Street) from its interchange with State Highway 257 on the west to the 35th Avenue intersection on the east. CDOT is required by this plan to be consulted about any approvals of new access within the functional influence area of the State Highway 257 interchange on the US 34 Business Route that might extend beyond the limits of the U.S. Highway 34/State Highway designation. To the east of 35th Avenue, a separate access control plan already existed. There is another access control plan for US 34 that addresses several miles to the west of SH 257 as well as the “US 34 Bypass Route” in Greeley, which runs roughly parallel to this route and is included in the National Highway System.

Throughout the rest of this document, the phrase “US 34 Business” has often been used as a shortened reference to Greeley’s “US 34 Business Route.” In CDOT’s identification system for State Highways, this route is known as “034D.”

1.3 Coordination with Local and Regional Transportation Planning Efforts

1.3.1 NFRMPO 2035 Regional Transportation Plan (RTP) & Transportation Improvement Program (TIP)

The NFRMPO provides comprehensive transportation planning functions for Colorado’s North Front Range region involving the identification of transportation system needs and priorities for CDOT and fifteen local agencies (thirteen municipalities and two counties). Planning efforts address roadway improvements, the implementation or expansion of multi-modal services and infrastructure, and transportation demand management.

The NFRMPO’s 2035 Regional Transportation Plan (RTP) was updated during 2011 and is “a corridor based plan.” No specific projects are listed, except those which were analyzed during the determination of conformity with air quality regulations. The vision plan and the fiscally constrained plan are at the corridor level giving greater flexibility in project selection which occurs as the NFRMPO’s *Transportation Improvement Program (TIP)* is periodically updated (or amended in between regular updates). Particularly with regard to projects programmed to receive federal or state funding, the TIP presents the project list that must be included by CDOT in the *Statewide Transportation Improvement Program (STIP)*.

Transportation Improvement Program (TIP)

At the time this access control plan was being prepared, the only roadway improvements planned and programmed for the use of federal and/or state funds via the TIP within the study limits were:

- ▶ A **fiber optic-based communications system** that will facilitate the coordination of traffic signals in a wide area of the Greeley street and highway network. This enables a computer-based, “Intelligent Transportation System” (ITS) to control, monitor, and manage traffic flow, thereby decreasing motorist delay. It will also allow for future expansion in terms of traveler information, incident management, transit operations, and future regional traffic operations.
- ▶ An adaptive, computerized traffic signal timing system that will include the use of video cameras to sense traffic movements and adjust cycle lengths and phase splits at each intersection on a second-by-second basis

2035 Regional Transportation Plan (RTP)

Corridor Vision

The 2035 RTP describes “Corridor Visions” for various regionally significant travel corridors throughout the North Front Range region. The “US 34 Urban corridor” is addressed in “Corridor Vision #10,” which addresses all of US 34 from the eastern NFRMPO boundary across the region to the western NFRMPO boundary. This statement includes routes that run roughly parallel to the main US 34 route (which is the “Bypass” route in Greeley).

The following information (in *italics*) is a direct quote from the RTP (September 2011 Final):

Corridor Vision #10: US 34 Urban

Primary Investment Need: Increase Mobility

Vision Statement

The Vision for the US 34 Urban corridor is primarily to increase mobility as well as to maintain system quality and improve safety. This corridor includes US 34 (a National Highway System facility), the US 34 Business Route and SH 402, WCR 43 (local State Highway facilities), and the Crossroads/O Street and LCR 18/WCR 54 alignments (off-system arterials). Additionally, the corridor includes the Big Thompson bike trail through Loveland. Together, these facilities comprise a corridor that provides commuter access and makes east-west connections within the Loveland, Greeley, Evans, Johnstown, and Windsor areas. Future travel modes to be planned for include passenger vehicle, bus service, bus rapid transit, truck freight, bicycle and pedestrian facilities, and aviation. Transportation Demand Management (TDM) would likely be effective in this corridor. The transportation system in the area serves towns, cities, and destinations both within and outside of the corridor. Based on historic and projected population and employment levels, both passenger and freight traffic volumes are expected to increase. The communities along the corridor value high levels of mobility, transportation choices, connections to other areas, safety, and system preservation. They depend on manufacturing, high-tech industry, agriculture, commercial activity, and residential development for economic activity in the area. The Larimer County Fairgrounds and Events Complex and the University of Northern Colorado are situated along this corridor, contributing to the activity. While the majority of the



area surrounding the corridor is transitioning from agricultural to suburban, sections of the corridor through Loveland and Greeley are urbanized. Users of this corridor want to support the movement of tourists, commuters, freight, and farm-to-market products in and through the corridor while recognizing the environmental, economic, and social needs of the surrounding area.

Goals

1. Increase travel reliability and improve traffic flow.
2. Reduce dependency on single occupancy vehicles by enhancing transit and TDM usage.
3. Accommodate growth in freight transport and support recreational travel.

Strategies

1. Perform and implement studies that focus on enhancing mobility.
2. Improve mobility by constructing improvements such as auxiliary lanes, wider shoulders, and new/improved intersections and interchanges.
3. Preserve right of way for future widening such for general purpose lanes and/or completing missing linkages.
4. Expand transit service coverage and frequencies; provide improved transit amenities and pedestrian connections to transit services; and support modal connections between public and regional transit services and other modes.
5. Implement appropriate TDM mechanisms.
6. Promote ITS strategies such as variable message signs, incident response, traveler information and traffic management.
7. Maintain and improve the existing infrastructure through enhancements such as surface treatment, bridge repairs or replacements, improved striping paint, and sign replacements.
8. Increase safety by implementing improvements such as guardrails, rumble strips, and geometric modifications (i.e., flatten slopes and curves).

References

- US 34 Corridor Optimization Plan and Access Control Plan* (COP – May 2003; ACP addressed in the Greeley area the US 34 Bypass Route not the Business Route)
- US 34 Business Route Environmental Assessment* (Finding of No Significant Impact – July 2007)
- US 34 Environmental Assessment/FONSI* (Loveland area)
- North I-25 Environmental Impact Statement* (Record of Decision – December 2011)

Regional Transit Element

The 2035 RTP also has a “Regional Transit Element” (RTE) which may affect decisions about access points on US 34 Business in the future, particularly if they might be situated in close proximity to current or future transit stops.

The following information (in *italics*) is directly quoted from the RTP:

The RTE, updated in 2011, looks at regional transit service both inter- and intra-regionally. Structural and funding issues that need to be considered in the development of a regional system are discussed and would be further refined based on the level of interest in pursuing a regional system...

The Basic + Alternative provides a benchmark of the level of service that the NFRMPO Planning Council envisions.

In the RTE, several transit routes are envisioned for “peak hour service; 4-6 trips in AM and PM; weekdays only,” according to Figure 7-4 of the RTP, which is a map of regional transit service routes. These include:

- ▶ US 34 between central Loveland and US 85 (following US 34 Business into downtown Greeley);
- ▶ State Highway 14 (Jefferson/Riverside/Mulberry) between downtown Fort Collins and Interstate 25;
- ▶ State Highway 392 between Interstate 25 and State Highway 257;
- ▶ State Highway 257 between State Highway 392 and US 34;
- ▶ US 85 between Eaton and the southern North Front Range Region boundary (extending into the Greater Denver region); and
- ▶ Interstate 25 between State Highway 14 and Harmony Road

Higher frequency services (“hourly service mid-day with ½ hour peak service ~6 AM to 7 PM”) are envisioned for:

- ▶ US 287 between downtown Fort Collins and the southern NFR Region boundary (extending into the Greater Denver region);
- ▶ Harmony Road between US 287 and Interstate 25; and
- ▶ Interstate 25 between Harmony Road and the southern NFR Region boundary (extending into the Greater Denver region)

1.3.2 Current Status of the RTP’s Corridor Vision:

The section of US 34 Business between SH 257 and 71st Avenue was recently improved with a major widening project that increased its capacity from two to four lanes (i.e. two through lanes in each direction) and added a continuous left-turn median. The roadway construction on this project was completed in the fall of 2009 and it made US 34 Business a continuous four-lane arterial divided by a center median all the way from its western terminus at SH 257 to 23rd Avenue in Greeley. This marked the culmination of widening projects over that distance that spanned roughly four decades. (Farther to the east, between 23rd and 10th Avenues, the route was split apart into a pair of parallel one-way streets, one block apart: 9th and 10th Streets.)

Consequently, a major goal of this access control plan is to maximize over future years the benefits of these publicly-funded investments, ensuring that this route continues to meet travelers’ expectations for a “U.S.”/State Highway.



On several occasions during the preparation of this document, there was discussion amongst staff members of the participating governmental agencies that there may someday be a decision for this route to be removed from the State Highway System, which would imply that it would become a locally owned and operated facility, administered by the City of Greeley (and possibly by Weld County for any portions that have not yet been annexed by the City).

In the event US 34 Business would be removed from the State Highway System, which would imply a shift of access management responsibilities away from the CDOT, the intention would be for this access control plan to inform and guide whichever jurisdiction will ultimately have the responsibility of making decisions regarding access.

1.3.3 Greeley 2035 Comprehensive Transportation Plan

The Greeley 2035 Comprehensive Transportation Plan presents the following city-wide goals:

1. To develop transportation policies that contribute to the improvement of the environment and the travel experience in the community.
2. To recognize the interrelationship between land use and transportation planning and to encourage transportation planning that complements economic development and is consistent with the City of Greeley 2060 Comprehensive Plan and the plan's Land Use Guidance Map.
3. To develop collaborative transportation strategies with neighboring communities through Intergovernmental Agreements.
4. Promote increased opportunities for pedestrians, bicyclists, and transit, and reduce vehicle miles traveled (VMT).
5. Identify and recommend Access Management Policies, Roadway Design Standards, and Traffic Calming options that protect the safety and carrying capacity of the multi-modal transportation network.
6. Develop a plan and an implementation strategy that recognizes funding parameters and aggressively seeks alternative sources to enhance funding resources.
7. To include an ongoing process of review and research to ensure that the Transportation Plan remains consistent with the evolving needs of the community and applicable City-wide plans, i.e., water, sewer, Comprehensive Plan, Adequate Public Facilities Plan

This plan recognizes US 34 Business as one of four existing roadways forming a "backbone" of Greeley's street and roadway network. The other three noted as such are the US 34 Bypass Route, US 85 and I-25.

US 34 Business is functionally classified as a Major Arterial in this plan. Greeley's Major Arterials are defined as facilities that "provide a high-level of mobility at higher speeds for the longest distances. **Access should be controlled with a limited number of intersections, medians with infrequent openings, and no direct parcel access, depending on use and geographic setting.** Existing and future land uses adjacent to Major Arterials shall be served by other network roadways, service roads, and inter-parcel connections." (emphasis added)

1.3.4 Weld County 2035 Transportation Plan

The overall policy goals for the Weld County Transportation Plan are as follows:

1. Establish a classification system that preserves the functional integrity (safety, capacity, and mobility) of the County roadway network through coordinated right-of-way, access, and cross-section guidelines.
2. Develop and maintain a safe and efficient roadway network.
3. Encourage partnerships with CDOT, North Front Range Metropolitan Planning Organization (MPO), Denver Regional Council of Governments MPO, Upper Front Range Transportation Planning Region (TPR), municipalities, special districts, and private entities to coordinate transportation improvements, land use strategies, and enhance interagency communication.
4. Improve the movement of people and goods to all Weld County communities by enhancing regional arterial roadways.
5. Support good land use planning policies by coordinating long-range and transportation planning decisions to ensure new development maintains a sufficient level of service by paying its fair share of improvements to the transportation network.
6. Create a transportation planning document that functions for staff and elected officials when making future development decisions.
7. Develop a plan and implementation strategies that recognize funding limitations and seeks alternative funding sources.
8. Ensure the transportation plan remains current with the evolving conditions and needs of the County, as well as continues long-range planning projections to prepare for future system expansions.

1.3.5 Weld County Comprehensive Plan

Weld County's 2007 update of its Comprehensive Plan was adopted by the Board of County Commissioners in November 2008. According to the county's web site, the Comprehensive Plan, "provides guidance for a variety of issues that directly affect the quality of life of County residents, including creating a sense of community in existing and new development, providing services, and planning for transportation and water needs, for example. The community vision contained in the Comprehensive Plan guides decision-makers and helps prioritize community values."

The following excerpt, describing "Transportation Goal 3" from the "Transportation Goals and Policies" (Sec. 22-3-60) portion of the comprehensive plan, specifically addresses the county's policy (see "Policy 3.2" below) with regard to the design of roads, streets and highways:

Transportation Goal 3

Promote a unified, functionally integrated, and coordinated County-wide street and highway system that moves people and goods in a safe, economical, and efficient manner.

- Policy 3.1. Maintain a Roadway Classification Plan so that County roads are designed and maintained according to their planned function.



Policy 3.2. The design of roads, streets and highways should take into consideration adjacent land uses.

Recommended Strategy T.3.2.a.

Establish standards for the regulation of accesses to key streets and highways from adjacent land uses and intersecting roads. (emphasis added)

In "Transportation Goal 8," the comprehensive plan specifically addresses the county's policy (see "Policy 8.2" below) with regard to access points on the county's collector and arterial roads and how improvements of roads, streets or highway facilities can be required as a condition of land development:

Transportation Goal 8

Provide a coordinated approach to the transportation system between all applicable jurisdictions.

Policy 8.1. Plan and maintain a transportation system that unifies and coordinates with other state, County, city, and community transportation systems.

Policy 8.2. **The number of access points on collector and arterial roads should be kept to a minimum in order to minimize interruptions to traffic flow and to promote safety to the traveling public.** (emphasis added)

Policy 8.3. Review and determine that all road, street, and highway facilities are adequate in width, structural capacity, and classification to meet the traffic demands of any land development. **As a condition of land development, require improvement of roads, streets or highway facilities in proportion to their respective impacts when dictated by traffic demand and land development patterns.** (emphasis added)

In its "Commercial development Goals and Policies" (Sec. 22-2-100), the comprehensive plan specifically encourages commercial developments to share access points; recommends a strategy for transportation plans to be coordinated between Weld County, other counties, municipalities and other jurisdictions; and recommends a strategy for establishing road reservation/dedication standards for commercial developments.

Commercial Development Goal 6

Consider how transportation infrastructure is affected by the impacts of new or expanding commercial developments.

Policy 6.1. Support transportation systems within and into commercial developments that address a full range of mobility needs, and which effectively provide connectivity in a cost-effective, efficient and comprehensive manner. **Encourage shared access points.** (emphasis added)

Policy 6.2. The land use applicant should demonstrate that the roadway facilities associated with the proposed commercial development are adequate in width, classification and structural capacity to serve the development proposal.

Recommended Strategy C.6.2.a.

Coordinate transportation plans between Weld County, other counties, municipalities and other jurisdictions. (emphasis added)

Recommended Strategy C.6.2.b.

Establish road reservation/dedication standards for commercial developments that are in accordance with the Weld County Transportation Master Plan and with other local and regional transportation plans. (emphasis added)

1.4 Major Project Tasks for the US 34 Business Route Access Control Plan

With these various planning documents providing policy guidance, the major tasks of the US 34 Business Access Control Plan included:

- ▶ Completing a comprehensive survey and inventory of property ownership and existing accesses in the study area
 - Aerial photography of the corridor was obtained
 - A photograph of every access point along the corridor was obtained from street view
 - Every real estate parcel immediately adjacent to US 34 Business and its property boundary was identified using records from the County Clerk and Recorder.
 - Identification numbers were assigned to each existing access point (driveway, alley, or street) using the following pattern:
 - The alpha prefix indicates whether the access point is on the north ("N") or south ("S") side of the highway.
 - The CDOT-established "Reference Point" (essentially a "mile marker") follows the alpha prefix. In many instances, State Highways have been given separate section identifications, particularly for those places where there may be a bypass route running parallel to a business route. US 34's "Section D" is the Business Route in Greeley and its Reference Points begin with "O" where US 34's Business and Bypass routes diverge near the State Highway 257 interchange.
 - As an example, a driveway number of "N2.59" would indicate that the driveway:
 - Is on the **N**orth side of the highway
 - Is **2.59** miles east of the applicable highway section's beginning point (which, in this case, is where "Section D" of US 34 intersects with the US 34 Bypass route just west of State Highway 257)
 - On aerial photography (see **Appendix B**), these identification numbers were shown inside a bold arrow at each access point and were color coded:
 - Access points serving private properties had arrows outlined in red
 - Access points serving public alleys or streets had arrows outlined in blue
- ▶ Separating the corridor into several segments and forming for each a separate set of "Objectives" and "Strategies," having taken into consideration the transportation plans and comprehensive plans of the City of Greeley and Weld County along with existing patterns of development



- ▶ Taking into consideration the current roadway typical sections for various segments and ones envisioned for the future from transportation plans.
- ▶ Hosting jointly with the staffs of the City of Greeley, Weld County, CDOT, and the North Front Range Metropolitan Planning Organization (NFRMPO) a public open house/meeting on October 5, 2011 at the Greeley Family FunPlex (community recreation center at 1501 65th Avenue), which provided displays on:
 - The purposes and proposed timeline for the preparation of the US 34 Business ACP
 - Principles of Access Management
 - Aerial photography showing parcel boundaries and existing driveway identification numbers
 - Oral and written comments were received from participants; comments addressing specific places were marked on the aerial photography displays.
 - Of particular interest to the technical advisory committee (state, regional and local staff members) was to ensure that every existing driveway had been identified on the aerial photography; attendees helped confirm the inventory of access points.
 - Create stakeholder contact list for future interaction throughout the planning process

[The event was publicized in local newspapers, government websites, by hand-delivered posters at various locations, and by postcards sent from the North Front Range Metropolitan Planning Organization to each property owner within approximately one-quarter mile along US 34 Business.]
- ▶ Holding a second public open house on January 25, 2012, also at the Greeley Family FunPlex and similarly staffed, which specifically addressed the proposed US 34 Business ACP:
 - The proposed action for each access was displayed on aerial photography (similar to what is presented in **Appendix B**).
 - Oral and written comments were received from participants.
 - Aerial photos on display were marked to record comments received about specific locations or driveways.
 - Other displays provided information about access management principles, future roadway typical sections, and estimated costs for future roadway widening.
- ▶ Door-to-door site visits with potentially-affected business representatives to review preliminary considerations (in particular, between 38th Avenue Court and 37th Avenue Court along the north frontage road)
- ▶ Reviewing the comments received from the public participation process. This review included the technical staff representatives from the NFRMPO, towns, and counties; and CDOT Region 4's access manager.
- ▶ Preparation of this ACP report and its accompanying graphics, taking into consideration the comments received from the public and various local jurisdictions.

See **Appendix C** for more information about public involvement efforts and input received.

2.0 EXISTING AND FUTURE CONDITIONS IN THE US 34 BUSINESS ROUTE CORRIDOR

2.1 Highway Access Categories

CDOT uses a system of eight access category classifications for defining highway functions and their corresponding access characteristics. A highway's access category determines in large measure the number, spacing, type and locations of allowed access points.

See **Table 2.1** for an overview of CDOT's eight Highway Access Categories. As noted in this table, the portions of the US 34 Business addressed in this Access Control Plan have been assigned two access categories and these have come from the middle range of the eight classifications: "Non-Rural A" (NR-A) and "Non-Rural B" (NR-B). The highway has characteristics that reflect a desire to balance the accommodation of relatively high speeds for through traffic with the need for intersecting streets and driveways to have access.

These two categories are in contrast with the portion of US 34 to the west of this ACP's study area where an "Expressway" category has been assigned: That portion of US 34 is a four-lane divided highway with a depressed center median that physically restricts left-turn movements. To the east of the ACP's eastern study area terminus, the "Non-Rural B" category continues between 35th and 23rd Avenues. Similar to the few blocks immediately to the west of 35th Avenue, this portion has numerous, long-established commercial businesses whose driveways directly connect with US 34. Many of these access points predate Colorado's State Highway Access Code. Traffic flow is facilitated by a raised center median that has auxiliary left-turn lanes only at intersections with cross streets; consequently, driveways at nearly all locations are restricted to "right-in/right-out" turning movements.

(The characteristics of the route change even more to the east of 23rd Avenue where the route splits into a pair of parallel, one-way streets (9th and 10th Streets) and the access category assigned is "Non-Rural C.")

It is not unusual on long-established highway routes like US 34 for CDOT to have assigned "higher" (more restrictive) categories where there are rural conditions and progressively "lower" (less restrictive) categories where there are increasingly higher intensities of land uses.

As defined in the *State Highway Access Code* (CCR 601-1, March 2002), the two access categories for the portions of the US 34 Business route addressed by this Access Control Plan are:

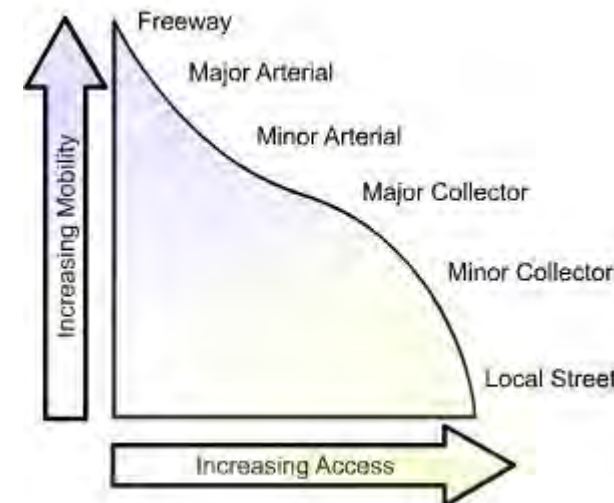
- ▶ NR-A Non-Rural Principal Highway (and sometimes noted as a "Regional Highway")

Used for non-rural principal highways, this category is composed of non-rural highways that operate at medium to high speeds with medium to high traffic volumes. Typical "NR-A" highways include routes on the National Highway System and other routes of regional or state significance, including major arterials in smaller communities. Full-movement at-grade intersections are allowed, preferably on one-half mile spacing. Direct access to private property (usually one driveway per property and restricted to right-in/right-out, or right-in/right-out/left-in turning movements) is allowed only when a property lacks reasonable access to the general street system.

- ▶ **NR-B Non-Rural Arterial Highway**
NR-B highways operate at medium speeds and serve moderate to heavy highway traffic volumes. This category is often used for sections of regional highways that pass through rural communities. Full-movement at-grade intersections are allowed, preferably on one-half mile spacing. Direct access to private property (usually one driveway per property and restricted to right-in/right-out, or right-in/right-out/left-in turning movements) is allowed only when a property lacks reasonable access to the general street system.

Figure 2.1 illustrates the concept that high levels of mobility can be achieved by providing Major (or Principal) Arterials and Freeways but those have the least convenience in terms of accessibility; conversely, the high degree of accessibility that can be provided by Local Streets and Minor Collectors will not be favorable for mobility.

Figure 2.1 Mobility vs. Access



Adapted from the Transportation Research Board's Access Management Manual, 2003

Table 2.2 gives the beginning and ending Reference Points (mileposts) of each access category assigned to the US 34 Business Route within the effective limits of this Access Control Plan. In addition to the assigned access categories, CDOT and the local jurisdictions have assigned functional classifications.

Table 2.3 illustrates the assigned functional classifications for the corridor along with the CDOT Access Categories. Going from west to east, the assigned Access Category changes from "NRA" to "NRB" at 71st Avenue. The City of Greeley has classified the highway as a Major Arterial and, according to the City's recently updated *2035 Comprehensive Transportation Plan*; it is to remain as a four-lane roadway. In the early 2000s, CDOT and the Federal Highway Administration (FHWA), with the NFRMPO's input, functionally classified the highway as an "Other Principal Arterial." (The "Other Principal Arterial" classification distinguishes it from Expressways and Freeways in a broad grouping of arterials.)

Table 2.1 CDOT Access Categories Assigned to the US 34 Business Route

CDOT's Access Categories

- Assigned to **US 34 Greeley Business Route**:
 - NR-A:** SH 257 to 71st Avenue
 - NR-B:** 71st Avenue to 35th Avenue
- Assigned to other State Highways

HIERARCHY OF ACCESS CATEGORIES FOR STATE HIGHWAYS:

F-W Interstate System, Freeway Facilities	
E-X Expressway, Major Bypass	
Rural	Non-Rural
R-A Regional Highway	NR-A Principal Highway
R-B Rural Highway	NR-B Arterial
	NR-C Arterial
F-R Frontage Roads (both urban and rural)	

Through traffic takes priority over access needs

Access needs take priority over through traffic movements

The *State Highway Access Code* has a complete description of each of the eight access categories along with information about design standards. These descriptions are included in Appendix E. The various highway access categories are correlated with a range of functional classifications that are assigned to the federal-aid highway system, on which the US 34 Business Route is included.



Table 2.2 CDOT Access Category Assignments for the US 34 Business Route

034D	
Beginning Ref Pt:	0.399 (Junction with State Highway 257)
Ending Ref Pt:	4.669 (Junction with 71 st Avenue in Greeley)
Access Category:	NRA (i.e. Non-Rural Principal Highway)
034D	
Beginning Ref Pt:	4.669 (Junction with 71 st Avenue in Greeley)
Ending Ref Pt:	7.737 (Junction with 35 th Avenue in Greeley)
Access Category:	NRB (i.e. Non-Rural Arterial)

Source: *State Highway Access Category Assignment Schedule*, Effective April 30, 2011, Section Two, Pages 8 & 9 of 37 (from a version accessed on the CDOT Web Site 2/15/2012). Items in parentheses are explanatory additions to what appears in the CDOT publication.

Table 2.3 Access Categories and Functional Classification Assignments for the US 34 Business Route

	CDOT/FHWA Functional Classification	CDOT Access Category	City of Greeley Classification
SH 257	Other Principal Arterial	NRA	Major Arterial (4 lanes)
71st Ave	Other Principal Arterial	NRB	Major Arterial (4 lanes)
35th Ave			

For purposes of comparing and contrasting these access assignments with those for other, nearby State Highways, **Figure 2.2** provides an area-wide map of Access Categories assigned to State Highways in and around Greeley. This map illustrates that the US 34 Bypass and US 85 Bypass routes in the Greeley area are the east-west and north-south routes, respectively, that are to provide the highest levels of mobility on the State Highway System in the Greeley area, given their “Expressway” (E-X) Access Category assignments. US 34 Business has similar Access Category assignments (“NR-A” and “NR-B”) as State Highways 257 and 392 in central Windsor, or State Highway 60 in Johnstown and Milliken. In the oldest portion of LaSalle, US 85 also has an Access Category of “NR-B,” where conditions are similar to US 34 Business between 71st and 23rd Avenues.

It was not considered necessary or desirable as part of the process of preparing this ACP to request CDOT to change the Access Category assignments for US 34 Business. Consequently, the plan for each individual existing and future access point was prepared such that it would be consistent with the currently assigned Access Category.

2.2 Land Use & Transportation Facilities

Land uses in the US 34 Business corridor range from active agricultural lands in the western reaches of Greeley to established residential, commercial, and industrial uses as the highway reaches and extends into the developed areas of the city. A considerable number of commercial and industrial sites rely on direct access US 34 Business but in some of the newer developments, these types of uses rely on connections to intersecting streets and roads instead of direct access to US 34 Business. Similarly, some of the older residences along the route have direct access to US 34 but in newer subdivisions, the collector and arterial street system connects to US 34 and local streets branching off those provide access for individual residences. There are a total of 89 access points along the corridor (more on this in Section 2.3).

Figure 2.3 (separated into four parts on the following pages of this report for purposes of readability) shows the City of Greeley’s land use zoning along the corridor. Starting at State Highway 257, the Promontory business park immediately to the northeast of the SH 257 interchange is a major traffic generator served by a system of arterial and collector streets within a “Planned Unit Development” (PUD). Regional corporate offices for State Farm Insurance and JBS, a meat packing company, are located in this area.

Between the Promontory area and 83rd Avenue, there are several properties still being farmed. Development plans have been prepared for several of these and some of them were large enough to have required proposals for new street networks. The “Holding Agriculture” (H-A) zoning shown in **Figure 2.3** is associated with these properties if they are within the Greeley City Limits.

Between 83rd and 71st Avenues, zoning is designated for high intensity commercial (C-H) and high density residential developments (R-H). Adjacent to the highway on the south side, but gaining access via either 77th or 71st Avenues on each side of it, is an older “Residential Estate” (R-E) development. A low density residential area (R-L) has been developed between the commercial area and this residential estate neighborhood.

A supermarket (King Soopers) is located in the southeast quadrant of the 71st Avenue intersection, having “C-H” zoning, and this is a noteworthy traffic generator. Other recent developments in this same vicinity have included a fast food restaurant (Burger King), a car wash facility, and dry cleaners. Directly north, across the US 34 Business Route, is a large building with a large surrounding campus that was originally the Greeley production facility for the Hewlett Packard Corporation. Redevelopment of this site for new uses is anticipated, which may change some internal driveways into public streets.

East of Sheep Draw, an older area of Commercial High Intensity borders both sides of the highway all the way to 59th Avenue. The properties in this area tend to be large, deep, rectangular lots with their shortest sides adjacent to the US 34 Business route.

Between 59th and 50th Avenues, newer commercial and office complexes have been developed whose primary accesses are oriented toward streets running perpendicular or parallel to the US 34 Business Route. A large apartment complex between 54th and 50th Avenues is located in an “R-H” zone on the south side of the highway and does not have any direct access to the US 34 Business route. A neighborhood

Figure 2.2 State Highway Access Category Assignments in Greeley and the Surrounding Area

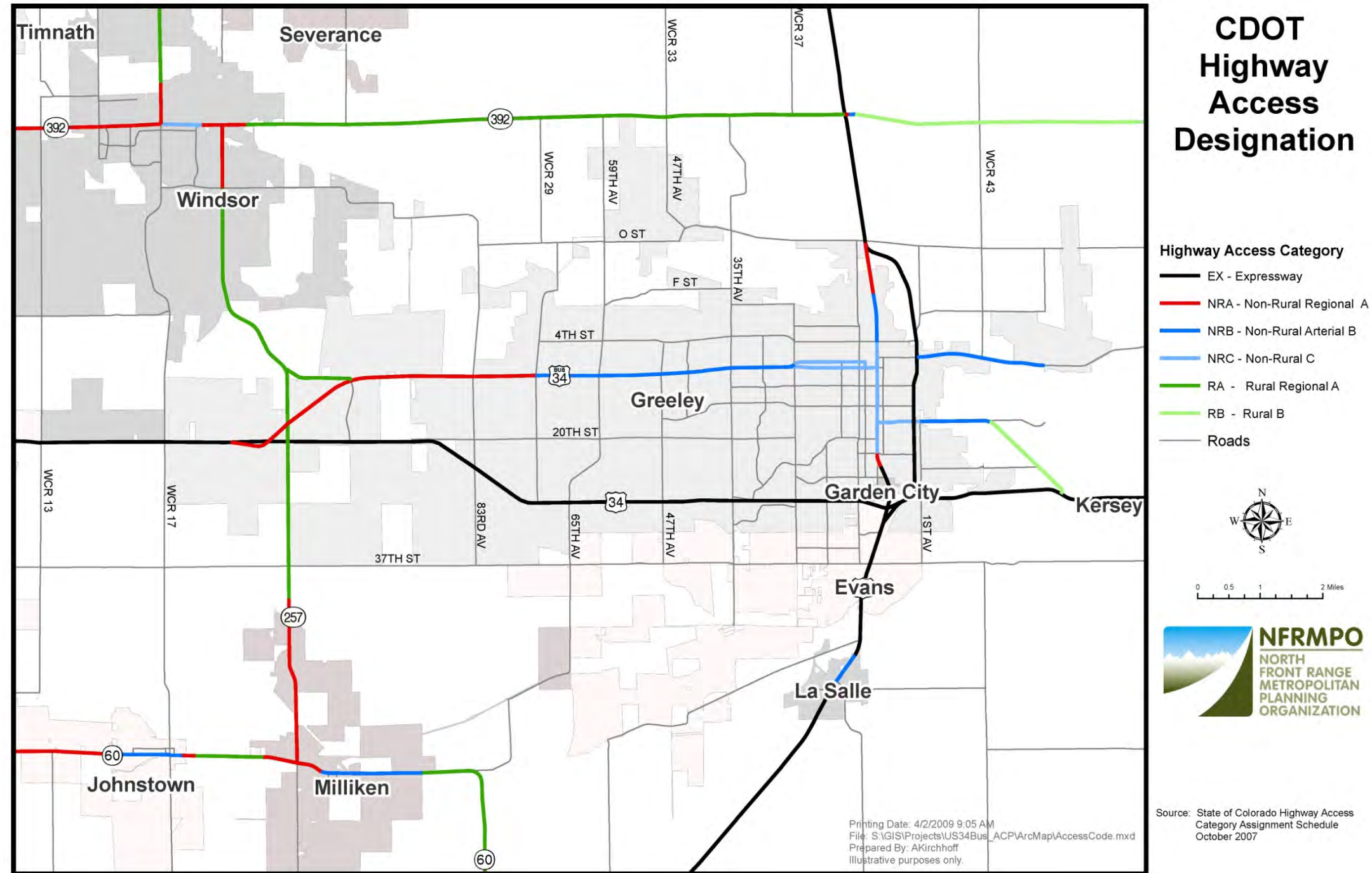
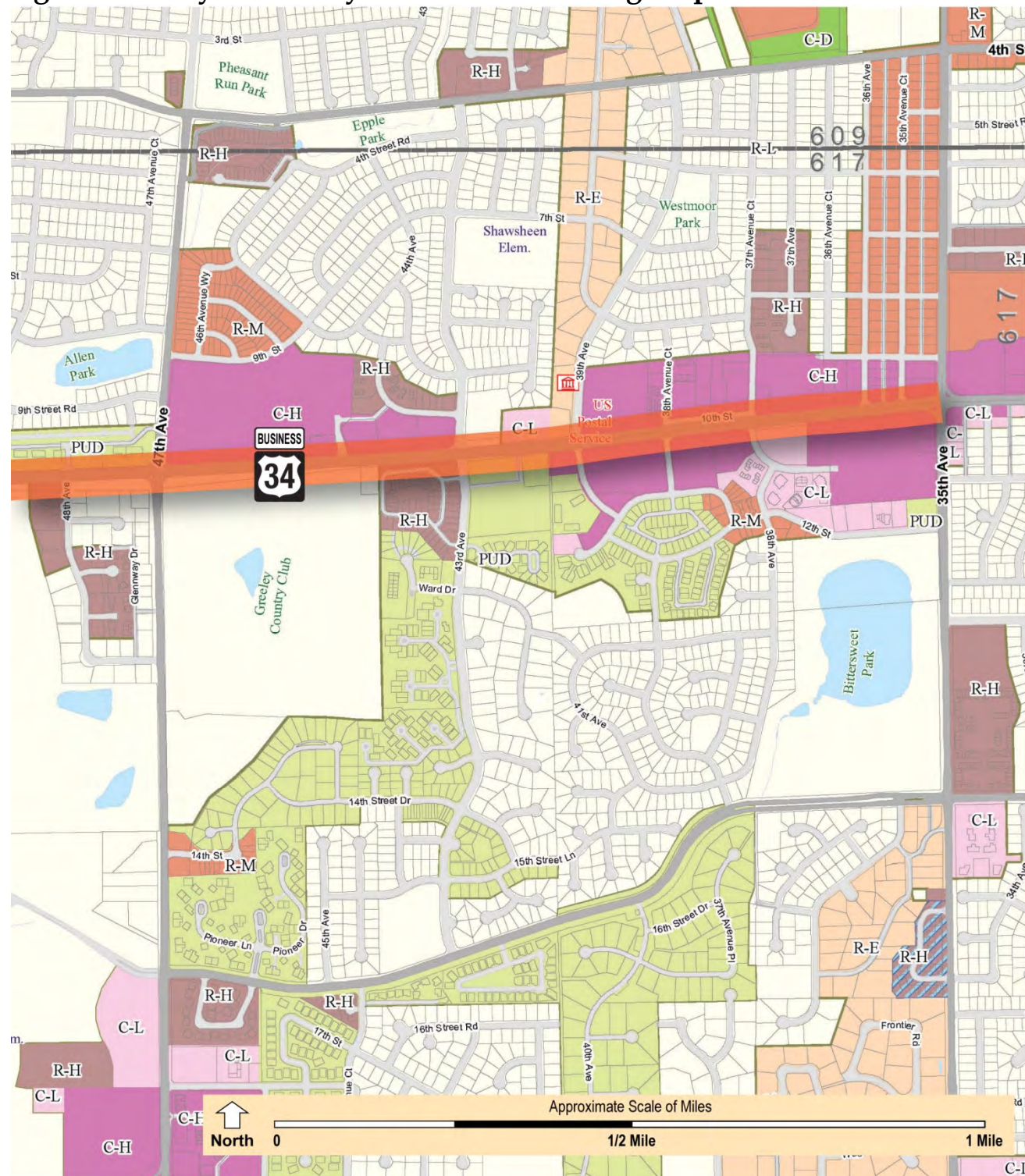


Figure 2.3 City of Greeley Official 2012 Zoning Map - Part 3



shopping center in a Planned Unit Development (PUD) zone is located on the north side of the highway, across from these apartments. Another shopping center of this kind is located on the north side of the highway immediately west of 47th Avenue.

Additional commercial buildings in a C-H zone, including a superstore (Walmart), are located on the north side of the highway between 47th and 43rd Avenues. The Greeley Country Club and a large proportion of its golf course is located on the south side of the 47th Avenue intersection. An area of Residential High Density (R-H) zoning is located between the Country Club and 43rd Avenue.

There are either Planned Unit Developments or Low Intensity Commercial zones between 43rd and 39th Avenues. Between 39th and 35th Avenues, nearly everything on both sides of the highway has been developed a C-H Zone, with an exception in the southeast quadrant of the 37th Avenue Court intersection where there is Low Intensity Commercial zoning. One of the highest traffic generators is the Bittersweet Shopping Center in the southwest quadrant of the 35th Avenue intersection, where there is a large supermarket (Safeway), a hardware store (Ace), many smaller stores and shops, as well as a restaurant (Kenny's Steak House). On the north side, there are also a supermarket (Avanza), various shops and businesses (e.g. FedEx) and restaurants (including fast food restaurants) between 37th Avenue Court and 35th Avenue.

As the Technical Advisory Committee for this ACP studied optional strategies and then arrived at the planned treatment for each access point, it took into consideration the current zoning, the Transportation Master Plan of the City of Greeley, past approvals of access permits, crash history, public input from outreach activities, and recent development activities and reviews.



2.3 Corridor Accesses

The US 34 Business Route has both public and private accesses serving various land uses. At the west end of the ACP, there are still large areas farm fields and the spacing between intersections of public roads and streets is much greater than that at the east end where practically all the land adjacent to US 34 Business has been developed into urban uses. Overall, the corridor has 89 accesses comprised of public road intersections, private driveways and one alley. For the purposes of this ACP, all accesses were grouped into the following categories:

- ▶ **Public Road Signalized Intersection** - Public road signalized intersections are at-grade, full movement intersections with a traffic signal. These may or may not currently have acceleration / deceleration lanes and the plan sometimes notes where changes to, or additions of, auxiliary lanes are expected to be needed.
- ▶ **Public Road Unsignalized Intersection** – Public road unsignalized intersections are typically full movement, at-grade intersections controlled with stop signs. Similar to intersections that are signalized, these may or may not currently have acceleration / deceleration lanes and the plan notes which ones are planned for signalization once warrants would be met.
- ▶ **Private Access** – Along the corridor these types of accesses serve many uses. Most private accesses provide direct highway access to businesses, industries, private residences, agricultural land, and utilities. There are a few instances where publicly owned facilities are served by access points that are not addressed in the same way as public road intersections. For example, there is an access point for Greeley’s Fire Station No. X. It is controlled by an “Emergency Signal.”
- ▶ **Alley** – Alleys and public intersections that are full movement and unsignalized intersections. These intersections provide direct access to the back of parcels located along public streets.

Based on the above definitions, the 89 access points along US 34 Business are categorized as follows:

- ▶ 13 Signalized Intersections (*including 2 below*)
 - 1 Private Access Signalized Intersection
 - 1 Emergency Signal
- ▶ 13 Public Unsignalized Intersections
- ▶ 63 Private Access Points; 2 of which are for CDOT
- ▶ 1 Alley

Appendix A has an inventory of, and the access control plan for all existing accesses. This information includes the approximate mile post, access type and land use served by each access. It also lists allowable new access points. Section 3 of this report gives the mile post location and provides details on the access category and land use served of each existing access point along the corridor. **Appendix B** contains aerial maps showing the locations and graphic representations of the access management plan for each public road intersection, alley and private access point.

2.4 Current and Future Traffic Volumes and Operations

2.4.1 Existing Traffic Conditions

Daily and peak hour traffic volumes were collected for the US 34 Business corridor in 2010 and 2011. The City of Greeley provided count information at the signalized intersection which they collected in April 2010. Additional count data at the non-signalized public intersections were collected in August 2011. The count data are shown in **Figure 2.4**. Volumes in the corridor between State Highway 257 and 35th Avenue vary from 16,000 vehicles per day (vpd) at the west end to over 30,000 vpd in the vicinity of 47th Avenue. The traffic volumes increase west of SH 257 to 14,000 vpd, and are approximately 26,000 vpd east of 35th Avenue. Based on data from CDOT’s website, between three and four percent of the daily traffic is comprised of trucks.

Figure 2.5 provides the existing laneages and levels of service (LOS) at intersections along the US 34 Business corridor. All the signalized intersections operate at LOS D or better during both the AM and PM peak hour. The 35th Avenue intersection is one exception in which the PM peak hour operation is current at LOS E.

The yielding turning movements at most of the unsignalized intersections throughout the corridor mostly operate at LOS D or better, with a few movements operating at LOS E. One unsignalized intersection of interest is 50th Avenue in which the side-street approaches are estimated to function at LOS F today. As is shown later in this report, the plan recommends that the north and south legs of this intersection eventually be restricted to “3/4” movements—that is, allowing for right-in/right-out/left-in movements but not left-out or through movements. The recommendation is based on the low projection of traffic that would pass through the intersection from north to south or vice versa. The traffic projected to be turning left from 50th Avenue in either direction was also low and could be expected to divert to other intersections where these turning movements would be facilitated with signalization.

Nearby, the 48th Avenue intersection is also shown to have a side-street approach operating at LOS F, but this is a “tee” intersection and there is a paved harbor area in the center of US 34 Business allowing the side-street left turn movements to conduct their maneuver in two stages; one to turn into the center lane and then the second to merge into eastbound traffic. As such, the side-street left turn delay is not as bad as the LOS calculations might make it out to be when conducting the two-stage maneuver.

Figure 2.4 Existing Traffic Volumes

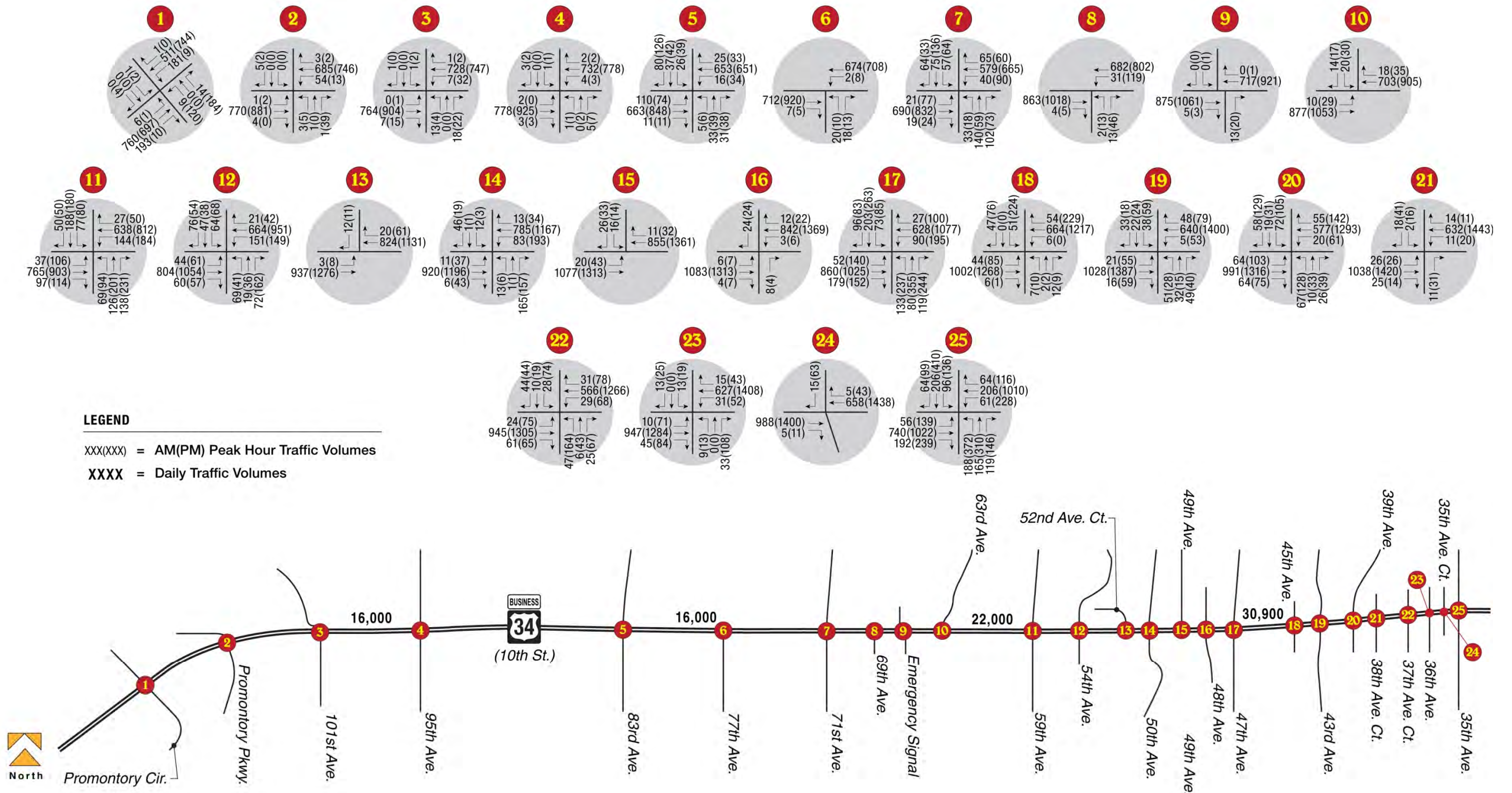
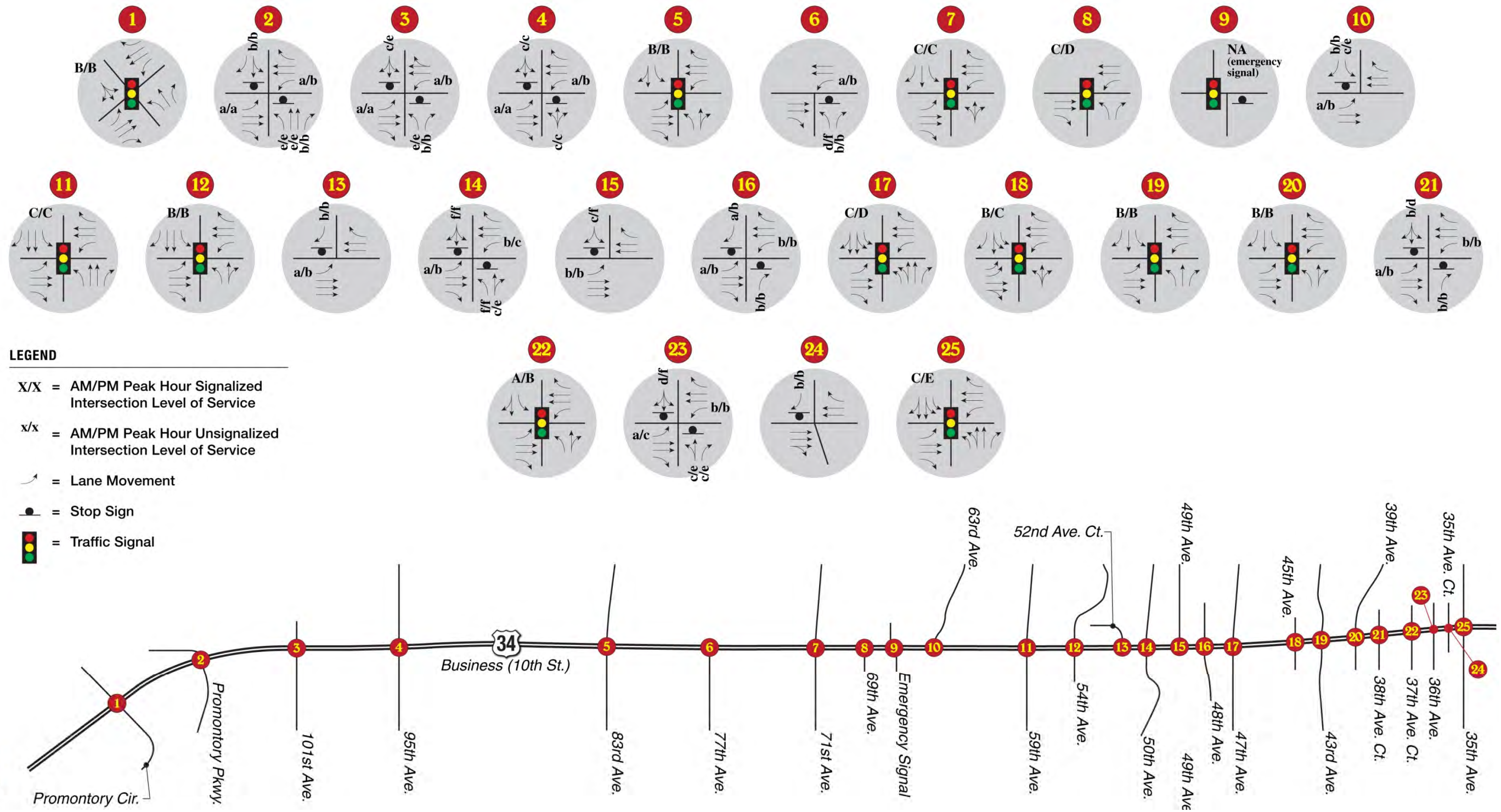


Figure 2.5 Existing Intersection Laneage, Traffic Control and Levels of Service





2.4.2 2035 Traffic Conditions

The basis for 2035 traffic forecasts came from a combination of the regional North Front Range Travel Demand Model and projections shown in the Greeley 2035 Comprehensive Transportation Plan (and the tailored travel demand model used to prepare it). Procedures outlined in NCHRP 255 were used in developing long term peak hour turning movement forecasts.

Figure 2.6 shows 2035 projected daily and PM peak hour volumes for the major public road intersections along the us 34 Business corridor. Table 2.4 gives a comparison of 2035 projections to existing daily volumes. This reveals that the western portion of the corridor is expected to have a much higher growth rate than the western portion. West of 71st Avenue, the roadway is forecasted to experience more than a doubling of traffic by 2035, while at the other end of the corridor near 35th Avenue, the roadway's traffic demand is forecasted to increase by approximately 50% or less. This is a function, in part, of the eastern end surroundings being built out, and the western end carrying lower traffic volumes to begin with, so increases in trips traveling the full length of the corridor will cause a higher percentage increase on the western end.

Table 2.4 Projected Traffic Volume Growth

Location	Average Two-Way Daily Peak Hour Volume		Percentage Increase
	Existing	2035 Projected	
West of Promontory Cir.	17,000	42,000	147%
Promontory Cir. to 83 rd Ave.	16,000	43,000	169%
83 rd Ave. to 71 st Ave.	16,000	35,000	119%
71 st Ave. to 59 th Ave.	22,000	31,000	41%
59 th Ave. to 47 th Ave.	25,500	39,000	53%
47 th Ave. to 35 th Ave.	30,900	40,000	29%

Using the PM peak hour forecasts shown in Figure 2.6, traffic operations were evaluated at the major public road intersections. The results of the traffic operations analysis, along with the existing LOS conditions for comparison, for major intersections are shown in Table 2.5.

Table 2.5 Major Intersection Peak Hour LOS's and Improvement Recommendations ¹

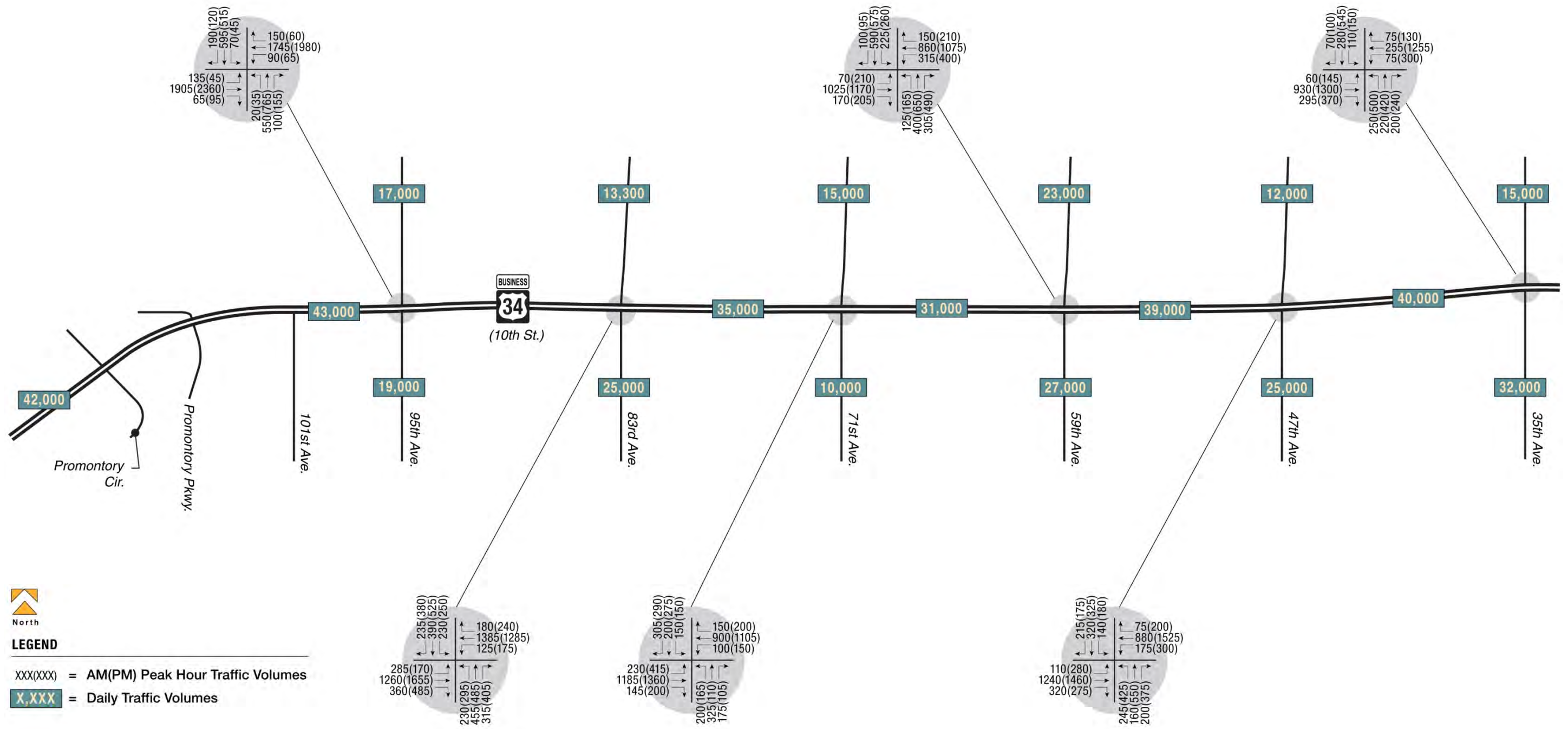
Business 34 Cross-street	Existing		2035 (Existing Geometry, Optimized Timing)		2035 (Proposed Geometry, Optimized Timing)		Proposed Improvements
	AM	PM	AM	PM	AM	PM	
83rd Avenue	B (14.3)	B (16.5)	F (225.8)	F (307.1)	F (106.3)	F (115)	Reconstruct intersection
71st Avenue	C (22.4)	C (23.9)	E (66.6)	F (88.7)	E (58.7)	D (54.5)	EB dual left
59th Avenue	C (21.7)	C (28.2)	D (50.2)	E (59.5)	D (40)	D (42.2)	WB dual left
47th Avenue	C (28.8)	D (42.1)	E (66.2)	F (137.3)	C (30.3)	D (52)	EB, WB & NB dual lefts. SB right turn lane. All free rights. Remove split phasing
35th Avenue	C (28.6)	E (57.3)	C (32.4)	F (123.2)	C (27.5)	E (68.7)	Free EB right. NB & WB dual left. Remove split phasing

¹ Values in parenthesis represent the average vehicular delay in seconds.

Table 2.5 also shows the needed improvement to achieve improved LOS's. Intersections in which significant lane improvements will be needed include 83rd Avenue, 47th Avenue, and 35th Avenue. While not specifically analyzed in Table 2.5, a few of the other signalized intersections along the corridor should be considered for improvements as follows:

- ▶ The 54th Avenue intersection should be improved to include a separate northbound right turn lane.
- ▶ The 37th Avenue Court intersection traffic signal should be phased to allow permitted and protected left turns along the eastbound and westbound approaches. In addition, the frontage road's eastern end along the north realigned north to gain distance between its intersection with 37th Avenue Court and US 34 Business.

Figure 2.6 Year 2035 Traffic Projections



2.5 Traffic Safety

To identify high crash locations and segments along US 34 Business, and to better understand the corridor crash patterns, five years of crash records (2005-2009) were collected from the CDOT Transportation Safety and Traffic Engineering Branch. These statistics and characteristics are summarized in **Table 2.6**.

The most basic analysis of crash records is reporting of crash frequency and severity. As shown on **Table 2.6**, there were a total of 606 crashes on US 34 Business (SH 257 to 35th Avenue) in the five-year reporting period.

The severity of a crash is categorized in reports as involving either Property Damage Only, Injury, or a Fatality. The most minor of the crash types, Property Damage Only, was the predominant crash type on US 34 Business during the 2005-2009 reporting period. Approximately 96% of all the crashes were Property Damage Only with most of the remaining ones categorized as Injury crashes. There were not any Fatal crashes in the corridor during the study period.

Table 2.6 US 34 Business Route Crash Totals

Year	Property Damage Only	Injury	TOTAL
2005	115	14	129
2006	87	9	96
2007	135	11	146
2008	125	4	129
2009	101	5	106
Total	583	43	606

Identifying the locations of reported crashes can help determine crash problem areas. **Figure 2.7** shows the number of crashes in each of the three severity categories and the total crashes as well as the location where they occurred along the US 34 Business corridor for the 2005-2009 reporting period. As indicated, the locations with the highest number of crashes were primarily at or near intersections.

Figure 2.7 Number of Crashes by Category Along US 34 Business Route

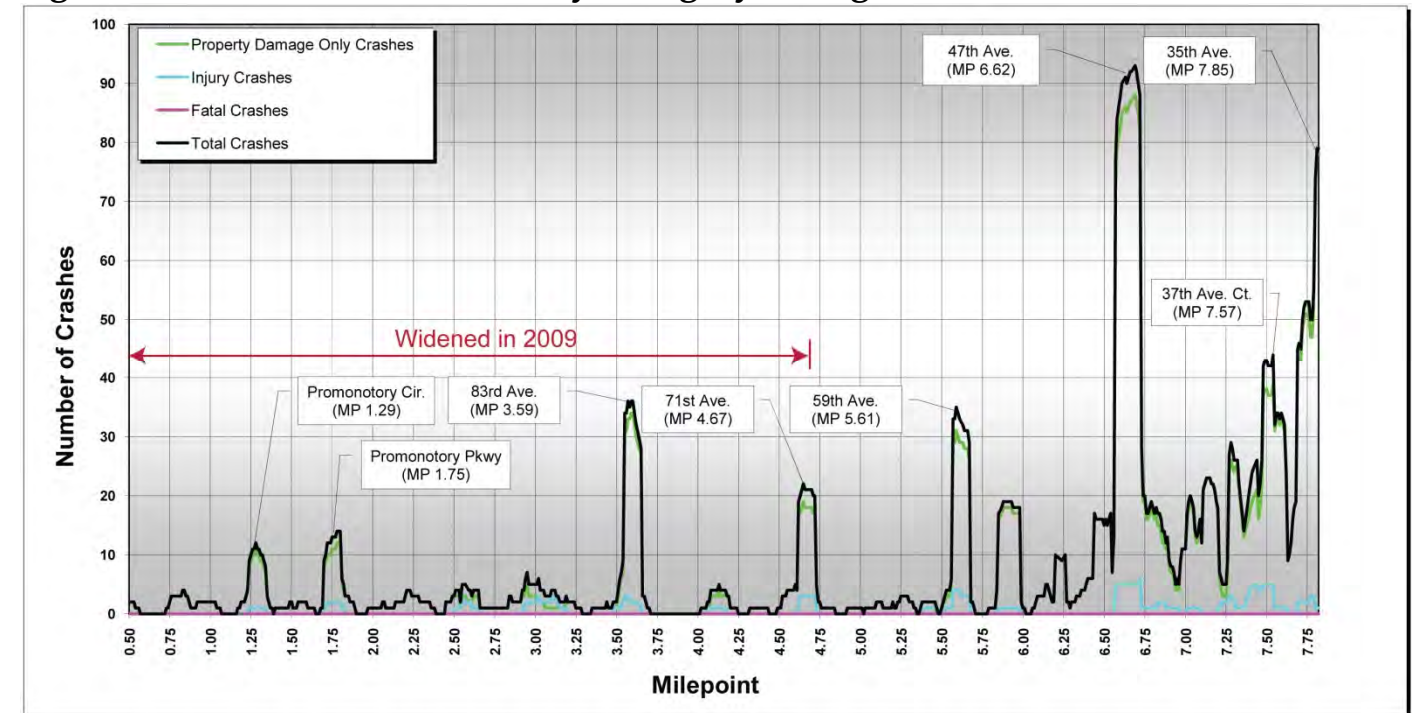
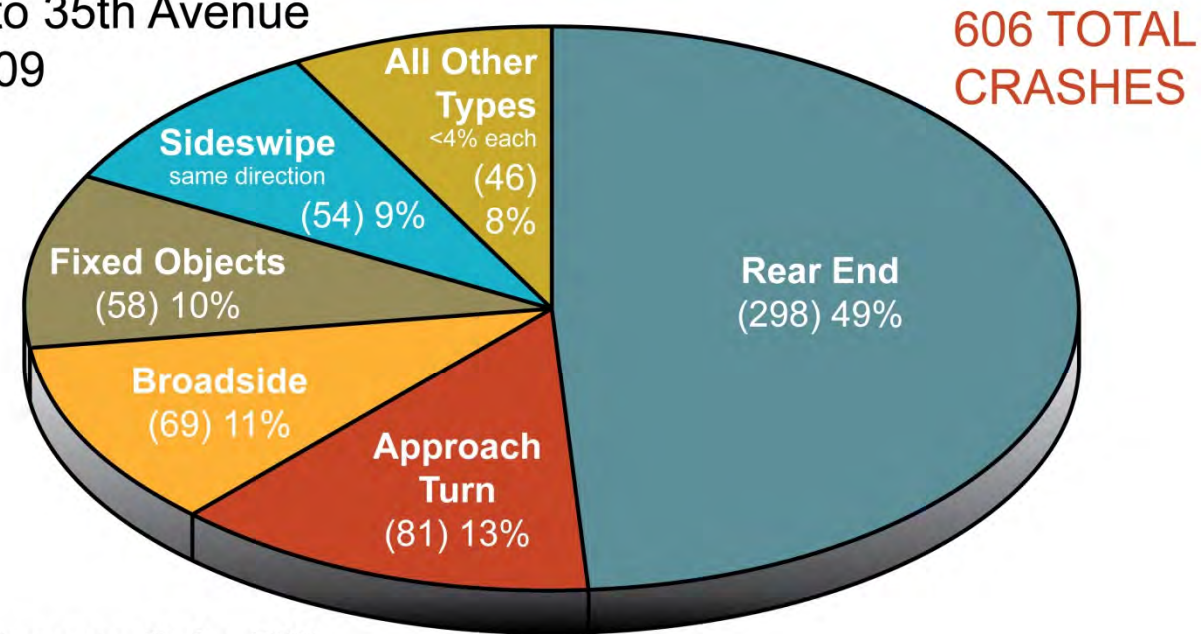


Figure 2.8 provides details of the types of crashes that occurred along the corridor. As shown, of the 606 crashes, the most prominent type was “rear-end” with 298 crashes, followed by “approach turn” with 81 accidents and broadsides with 69 crashes.

Most of the crash counts reflected in **Table 2.6** and in **Figure 2.7** occurred prior to major widening of US 34 Business between State Highway 257 and 71st Avenue, which was completed in 2009. With such a substantial change to the physical characteristics of the roadway on that portion of US 34 Business, the annual characteristics and rates of crashes subsequent to 2009 can be expected to be different than they were prior to 2009. Also, some of the crash history between 2007 and 2009 may have been affected by roadway construction activities on that section of the highway and, therefore, not indicative of typical conditions prior to the start of construction

Figure 2.8 Crash Types on US 34 Business Route

SH 257 to 35th Avenue
2005-2009



Property Damage Only: 563
Injury: 43
Fatal: 0

Proper access management and proper access control are important for keeping crash rates down. Any location that has conflicting turning movements is more likely to have crashes, so every access point and intersection on a corridor creates a safety hazard. Access points located too close together increase the safety hazard further, as does improper intersection control. Introducing traffic signals that are unnecessary for traffic operation or safety can actually increase the crash *rate* at an intersection because the more often traffic is forced to stop, the more often rear-end type crashes occur. A traffic signal would force the main street traffic to stop, whereas a two-way, stop-controlled intersection would only stop side street traffic. However, locations that experience poor traffic operations or a high crash rate without a signal may benefit from having a traffic signal despite the potential increase in rear-end type crashes. This is of particular interest if signalization can be expected to reduce the *severity* of crashes, even if the total *number* of crashes might increase.

An access control plan establishes a list of all allowed accesses as well as details about each access point including location, control type, and turning restrictions. Adherence to an access control plan prevents unnecessary accesses from being developed over time, avoids having accesses be located too close together, and minimizes improper traffic control and undesirable turning restrictions. All of these things help to improve the safety on a corridor.



3.0 CORRIDOR ACCESS PLAN

3.1 Local Agency Access Management Goals and Objectives

Transportation-related goals and objectives for effective access management of the US 34 Business corridor were identified by technical staffs of Greeley, Weld County and the CDOT (Region 4). After being presented for public review and comment at two Open Houses, one held October 5, 2011 and another on January 25, 2012, the goals and objectives are:

- ▶ Fast, efficient, and safe connection between central Greeley and points west, particularly the SH 257 interchange, but also beyond, such as Loveland/Johnstown and I-25
- ▶ Convenient access for commercial and industrial activities occurring along the corridor and for residential neighborhoods
- ▶ Striking a reasonable balance between the desire for fast and efficient travel along US 34 Business and convenient access to adjacent properties
- ▶ Offering optional solutions for access where the numbers and the close spacing between existing access points might eventually pose safety hazards or congestion as traffic volumes increase; attention to the hierarchy of functional classifications associated with intersecting streets would affect the nature of such solutions, which may include new streets--both perpendicular to, and parallel to, US 34 Business—in areas that are transitioning from rural to urban

3.2 Traffic Signal Plan

A significant component of an Access Control Plan is a comprehensive plan for the location of existing and future traffic signals in the corridor. The Illustrative Access Control Plan sheets provided in **Appendix B** indicate with a colored signal head symbol where traffic signals currently exist or are anticipated to be installed in the near-term future. These sheets indicate with an uncolored signal head symbol where traffic signals *may* be allowed in the long-term future.

Specific criteria having to do with traffic volumes and safety conditions have to be met before CDOT will consider or fund the installation of signals at any intersection, including those locations planned for signals in this Access Control Plan. These warrants are defined in the *Manual on Uniform Traffic Control Devices* (MUTCD), which is published by the Federal Highway Administration (FHWA) under 23 Code of Federal Regulations (CFR), Part 655, Subpart F.

For an overview of planned signal locations, **Figure 3.1** is a map that shows:

- ▶ "Existing/Anticipated Traffic Signal Locations"
- ▶ "Other Potential Traffic Signal Locations"
- ▶ "Approximate Spacing" between the various signal locations

The desired signal spacing of both access categories is one-half mile and both access categories allow for closer signal spacing, dependent upon CDOT approval.

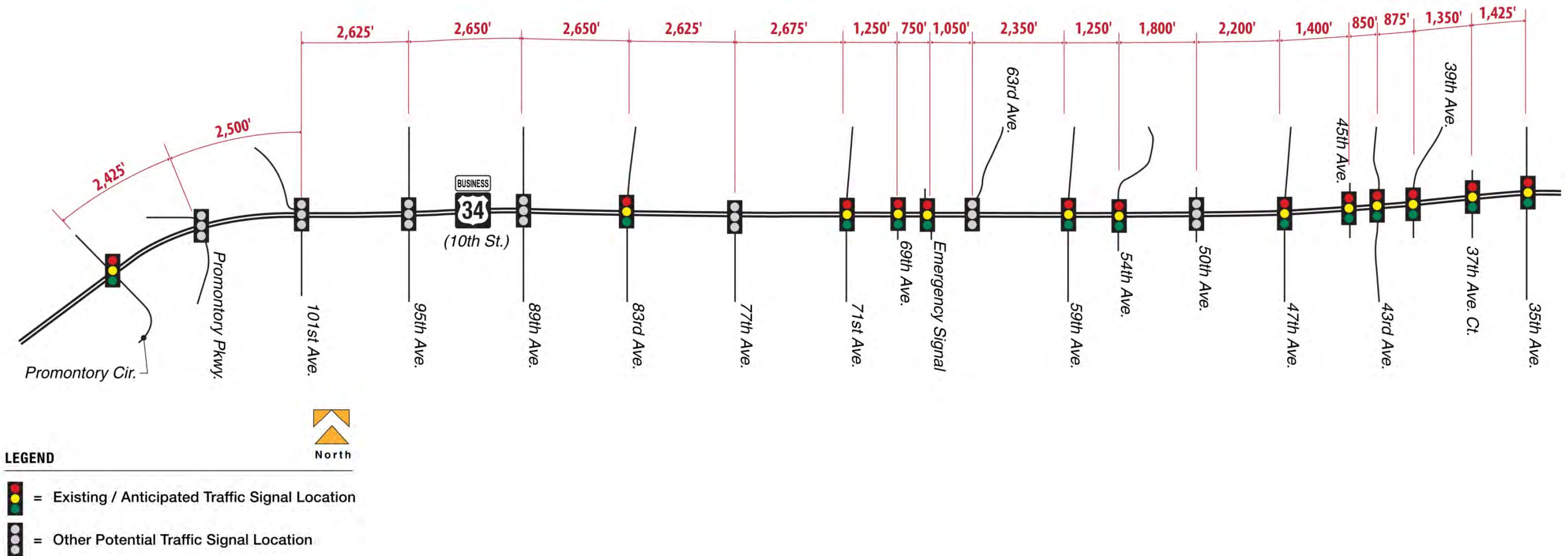
Currently along US 34 Business, thirteen signalized intersections exist at the locations noted in **Table 3.1**. In the future, additional traffic signals are likely to be installed at the locations noted under the heading, "Potential for Signalization":

Table 3.1 Current and Potential Signal Locations on US 34 Business Route

	Currently Signalized	Potential for Signalization
Promontory Circle	•	
Promontory Parkway/(Future) 107 th Avenue		•
101 st Avenue		•
95 th Avenue		•
(Future) 89 th Avenue		•
83 rd Avenue	•	
77 th Avenue		•
71 st Avenue	•	
69 th Avenue	•	
Fire Station 7 (Emergency Signal)	•	
63 rd Avenue		•
59 th Avenue	•	
54 th Avenue	•	
50 th Avenue		•
47 th Avenue	•	
Walmart & Greeley Country Club	•	
43 rd Avenue	•	
39 th Avenue	•	
37 th Avenue Court	•	
35 th Avenue	•	

Generally, the potential signal locations were spaced to meet the ½ mile minimum spacing criteria of the CDOT NRA and NRB access categories. It is uncertain when the future signal locations will meet MUTCD warrants, which is only one aspect of the decision to signalize an intersection. Other considerations are funding availability and alternative methods of addressing traffic and safety issues.

Figure 3.1 Existing and Allowed Traffic Signal Locations



3.3 Proposed Access Plan

Based on existing land use and transportation conditions, an access control plan was developed to address traffic operations and safety in the US 34 Business study corridor between State Highway 257 and 35th Avenue in Greeley. The plan considered community, regional, and CDOT goals and objectives for the study corridor, and the requirements of the State Highway Access Code. The access plan was formulated through input with the City of Greeley, Weld County, and CDOT.

► Grade Separated Interchanges

Given the designation of this route as the “US 34 Business Route” and the levels of traffic being forecasted in the future (2035), no additional grade separated interchanges have been planned. The integrity of the half-diamond interchange at State Highway 257 is to be protected.

► Typical Sections

Figure 3.2 shows the typical cross sections assumed for the corridor, the second of which illustrates extra width associated with left-turn auxiliary lanes. These cross sections are based on a four-lane arterial roadway, as shown in the City of Greeley’s 2035 Comprehensive Transportation Plan. Between intersections, the cross section consists of two travel lanes in each direction, a center left-turn or median, detached shared use paths and bike lanes adjacent to the gutter pan in each direction.

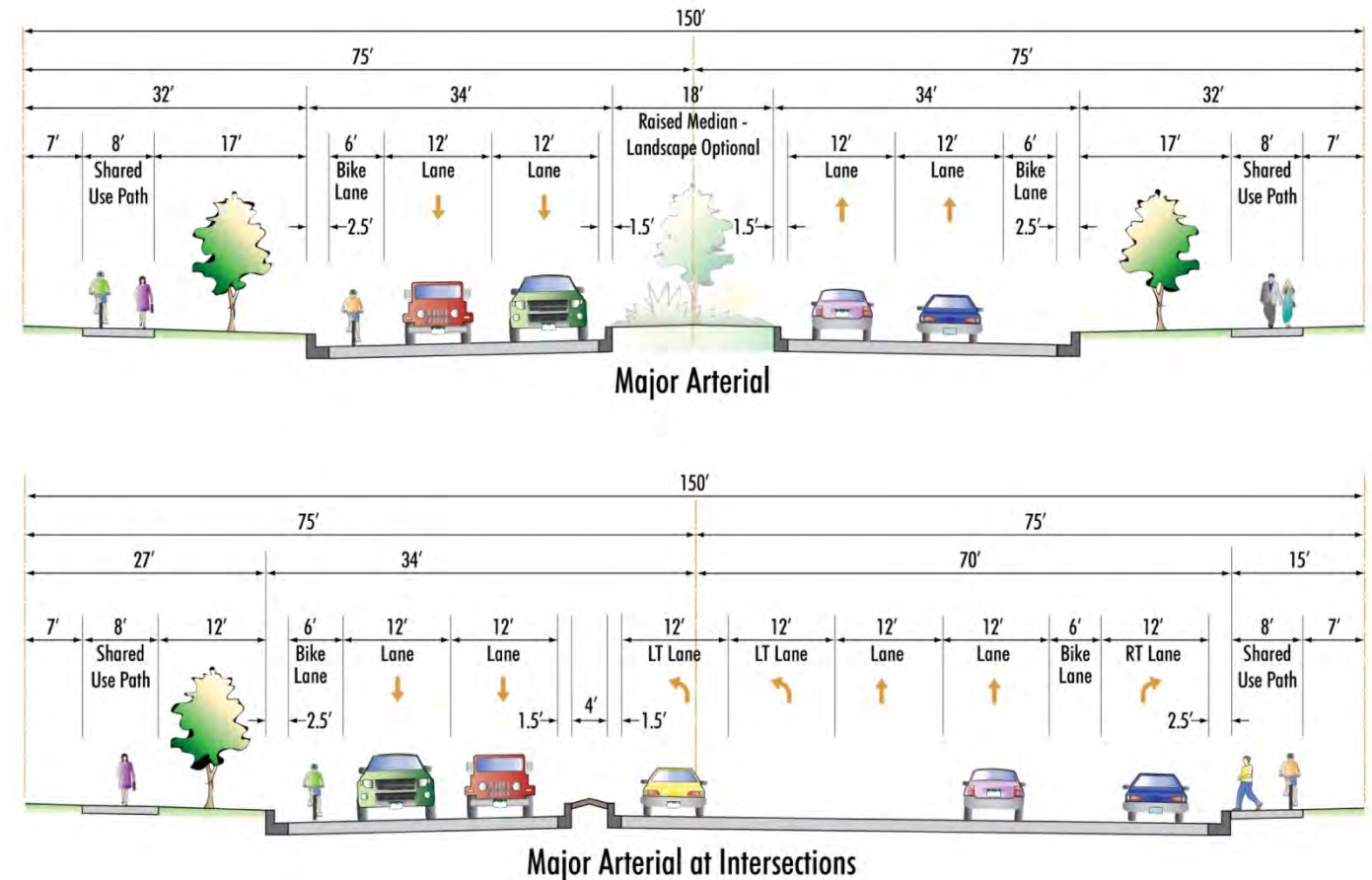
► Transit Considerations

Greeley’s Transit Development Plan shows enhanced service on the US 34 Business Route but specific stop locations are not indicated. Any stops would need to be pullouts with an acceleration lane, considering the high traffic speeds on this arterial. Obvious stops would be located at the “far side” of signalized intersections, convenient enough to pick up pedestrians who have crossed the highway, perhaps from a perpendicular road or street. Space for shelters needs to be anticipated.

► Bicycle and Pedestrian Considerations

As noted in the Typical Cross Sections (**Figure 3.2**), detached sidewalks are desired as the surrounding area transitions from rural to urban. Landscaped medians with trees or shrubs are an opportunity when the area develops and motorized vehicle speeds are decreased.

Figure 3.2 US 34 Business Route Typical Cross Sections



While raised medians already exist for short distances just west of 35th Avenue, most of the distance of US 34 Business addressed in this plan currently has a painted center median, which may need to remain in place for a number of years to provide safe access to field approaches and other existing driveways until more intensive urbanization occurs and, along with it, new, intersecting and parallel streets would be built.


The narrative in this section has been divided into four corridor segments with each division describing the objectives, strategies, typical section and cost estimate for improvements in the corridor segment. **Figure 3.3** illustrates the six corridor segments.

Figure 3.3 US 34 Business Route Corridor Segments





In the following sections a summary of existing and proposed accesses is provided for each corridor segment shown in **Figure 3.3**. Within each of these sections, a short description is given for each access and the proposed action of this Access Control Plan is also shown. The proposed action is identified by a symbol under the heading for each access. The symbols and their descriptions are as follows:


Access Locations


 **Access to remain:** This existing access may remain unless significant changes are made to the land uses served by this access, or safety problems develop that necessitate modifications, relocation, or closure of the access.

For purposes of this access control plan, a change of land use shall mean a use that substantially differs from the previous use of a building or land and which may affect such things as parking, drainage, vehicular or pedestrian circulation (especially if changes in such traffic volumes are expected), landscaping, building configuration, noise or lighting. A change of ownership which does not include any of the factors listed above shall not be considered a change of use.


 **Access to be closed:** This access may be closed, either as a stand-alone project or in conjunction with the reconstruction of this segment of SH 56.


 **Access to be improved:** This access should be reconstructed to current design standards, either as a stand-alone project or in conjunction with the reconstruction of this segment of SH 56.


 **Access to be consolidated:** This access should be consolidated with other nearby accesses, either as a stand-alone project or in conjunction with the reconstruction of this segment of SH 56.

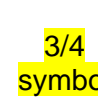
 **Future access:** This location may be considered for a future new access, either as a stand-alone project or in conjunction with the reconstruction of this segment of SH 56.


Access Operations

 **Existing or anticipated signal:** This access is either currently signalized or is planned to be signalized in the future.

 **Potential signal:** This location may be considered for future traffic signalization, should it meet warrants of the Manual on Uniform Traffic Control Devices.

 **Full movement access:** All turning movements (left, through, right) are allowed from all roadway approaches at this access.

 **3/4 access:** This access has restricted turning movements and they are limited to a three-quarter access meaning that no outbound left-turns or through movements are allowed. Right-in/right-out access is available.

 **Right-in/right-out access:** This access has turning movements restricted to only right-turns with no left turns on any approach; through traffic is not allowed and may, in some locations, be blocked by a raised, center median.

A tabular summary of the existing and proposed access plan is included in **Appendix A**. Aerial photo-based depictions, also known as the Illustrative Access Control Plan, are provided in **Appendix B**. Please note that each access point is numbered in the following pages so that the description for it can be correlated with the aerial photo-based depictions in Appendix B.

3.3.1 State Highway 257 to 83rd Avenue

This segment of the corridor from State Highway 257 to 83rd Avenue is illustrated in **Figure 3.4**. Currently, much of the land adjacent to this segment of the corridor is undeveloped but the prominent “Promontory” office park and some residential development is in place. Some access locations have been defined in this section by the existing locations of Weld County Road intersections and newer city streets that serve the existing developments.

Objectives:

- ▶ Preserve and protect the functionality of the US 34 Business half-diamond interchange with SH 257, which is a prominent gateway for eastbound travelers going into Greeley
- ▶ Maintain high speed while respecting safety on US 34 and the various street and county road intersections
- ▶ Locate future signals at intersections that are currently county roads, considering that they are already situated on one-mile intervals.

Strategies:

- ▶ Use existing accesses on the one side of US 34 Business to guide access planning for new development on the opposite side, especially where signals exist or there is the potential for a new signal.
- ▶ Avoid close proximity of access points in the vicinity of the currently signalized intersections and ones that will potentially be signalized in the future
- ▶ Encourage new developments to include new arterial and collector streets, both perpendicular to, and parallel to, US 34 Business. At a desirable spacing, typically one-half mile apart, these will have priority for access to US 34 Business over private driveways.
- ▶ No private driveway permits for direct access to US 34 Business will be issued in the future unless they are a modified permit for an existing access.
- ▶ The Access Control Plan generally is “grandfathering” existing driveways but in many instances a change in land use would discontinue the “grandfathered” status. The access points marked with a circled “R” are ones that might not be allowed to remain after a change in the land use being served.
- ▶ Weld County’s policy is to close “loop accesses” in accordance with S3.02-S3.09 of the County Code.
- ▶ As urbanization occurs along the State Highway 257 Spur, traffic will be expected to circulate via US 34 Business because the previously-closed SH 257 Spur intersection with State Highway 257 itself is not planned to be re-opened in the future. The SH 257 Spur is likely to be classified no higher than a “Collector.”
- ▶ Direct access to US 34 Business from private properties may be allowed to remain for a longer time if it would be limited to right-in/right-out movements, but as traffic volumes grow, crashes will need to be monitored.

Figure 3.4 State Highway 257 to 83rd Avenue Segment



South Side

North Side

N1.07 – Colorado Department of Transportation

This is an access provided during the recent major widening project to enable CDOT crews to maintain drainage and water quality facilities related to the U.S. 34 Business roadway. As such, it is not planned for turning movement restrictions but it is exclusively for vehicles authorized by CDOT, not for use by the general public or to access adjacent properties.



N1.29 – Future Extension of Promontory Circle

An existing driveway at this location currently provides access to a Colorado Department of Transportation maintenance facility where vehicles, equipment, spare parts, and sand/salt/deicers are stored. In the future, due to this driveway's alignment with the traffic signal at Promontory Circle, extension of a public street northward and eventually crossing the State Highway 257 Spur is planned as a more direct connection to Weld County's Missile Site Park (which is on the north side of the SH 257 Spur).



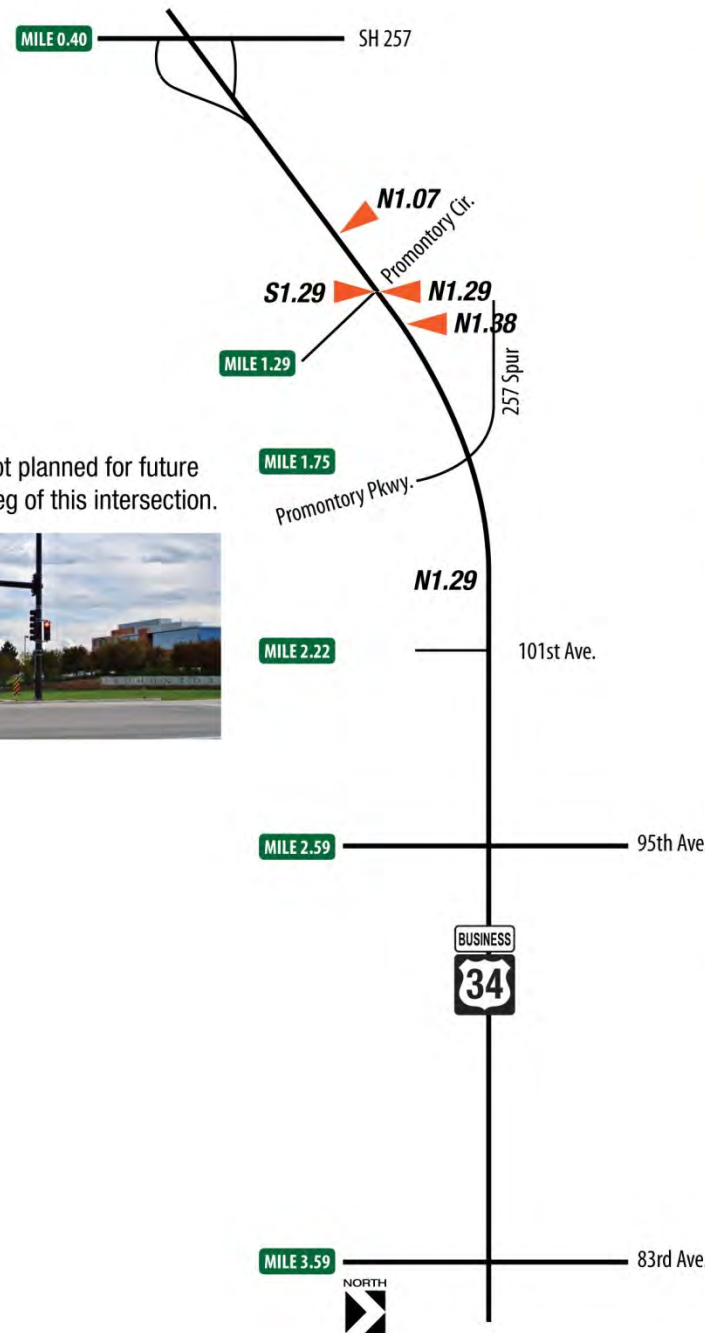
N1.38 – Private Access

An existing driveway at this location currently provides access to private property that extends northward to the State Highway 257 Spur. It is planned as an "Access to Remain until Land Use Changes." Upon a change in land use, access to the property is anticipated to be gained via either the future extension of Promontory Circle, the SH 257 Spur, or possibly both. The plan for this access took into consideration the future introduction of a public street extension northward from the Promontory Circle intersection (noted in the N1.29 description above), the relatively high traffic speeds on the US 34 Business Route in this vicinity, and this driveway's undesirably close proximity to the Promontory Circle signalized intersection.



S1.29 – Promontory Circle – Public Street

The Promontory Circle intersection is currently signalized as a full-movement access and is not planned for future restrictions in access. See explanation about N1.29 regarding planned changes to the north leg of this intersection.



South Side



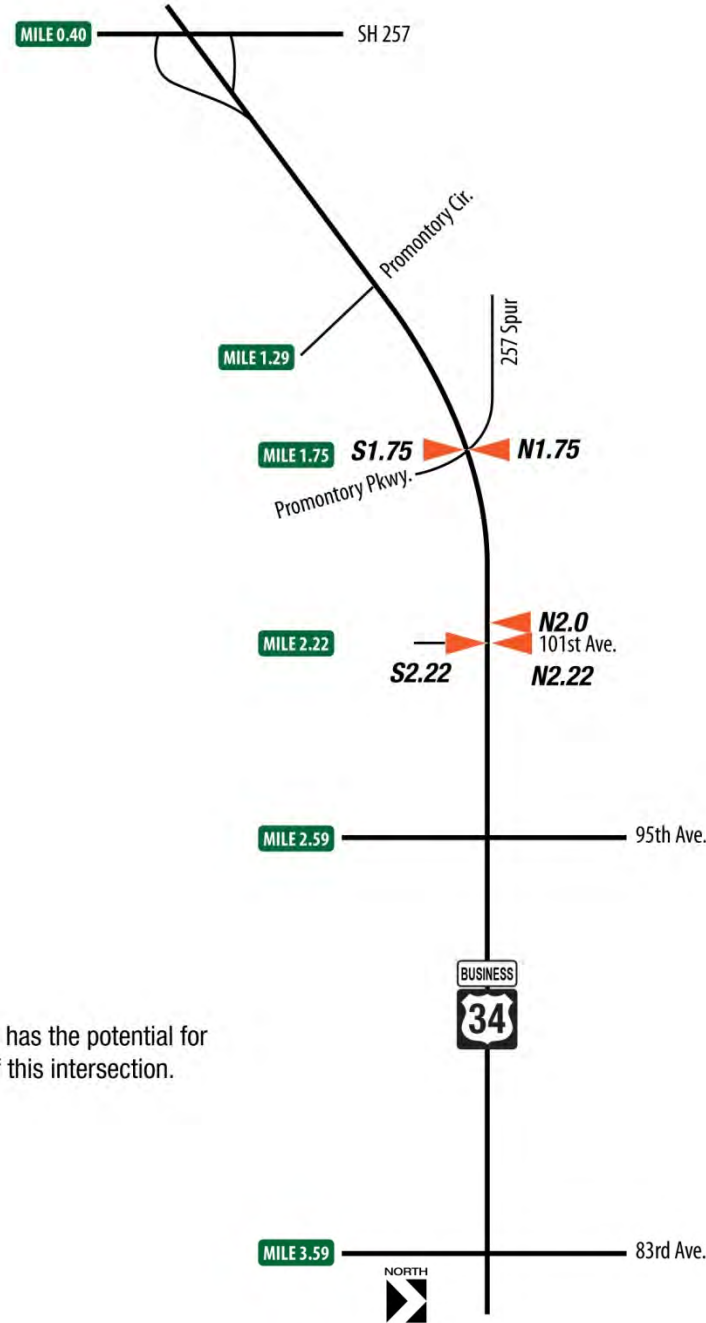
S1.75 – Promontory Parkway – Public Street

The Promontory Parkway intersection is planned for continuance as a full-movement access and has the potential for signalization. See explanation about N1.75 regarding planned changes to the north leg of this intersection.



S2.22 – 101st Avenue – Public Street

The 101st Avenue intersection is planned for continuance as a full-movement access and has the potential for signalization. See explanation about N2.22 regarding planned changes to the north leg of this intersection.



North Side



N1.75 – State Highway 257 Spur/Future 107th Avenue – Public Street

The State Highway 257 Spur intersection (directly connecting to Promontory Parkway) is planned for continuance as a full movement intersection and has the potential for signalization. Leaving US 34 Business, the SH 257 Spur curves sharply to the west. An existing access point along that curve is used by the general public to reach an historical marker and gateway pillars that commemorate a World War II camp for prisoners of war. In anticipation of future development, the SH 257 Spur intersection is planned for modifications such that a new north-south street, "107th Avenue," would extend northward from the signal. In conjunction, the east-west alignment of the State Highway 257 Spur - in terms of coming from the west - would be curved and shifted northward so that it would intersect 107th Avenue at a reasonable distance from 107th Avenue's intersection with the US 34 Business Route. An "Allowable New Access" on 107th Avenue would replace the existing one that serves the historical marker and gateway pillars; in anticipation of higher traffic volumes using 107th Avenue, this new access point would need to be located a greater distance from the US 34 Business intersection than the current one.



N2.0 (Approximate Location) – Allowable New Access

An "Allowable New Access" restricted to right-in/right-out turning movements is planned approximately half-way between Promontory Parkway (N1.75) and 101st Avenue (N2.22) in anticipation of serving future urban development.



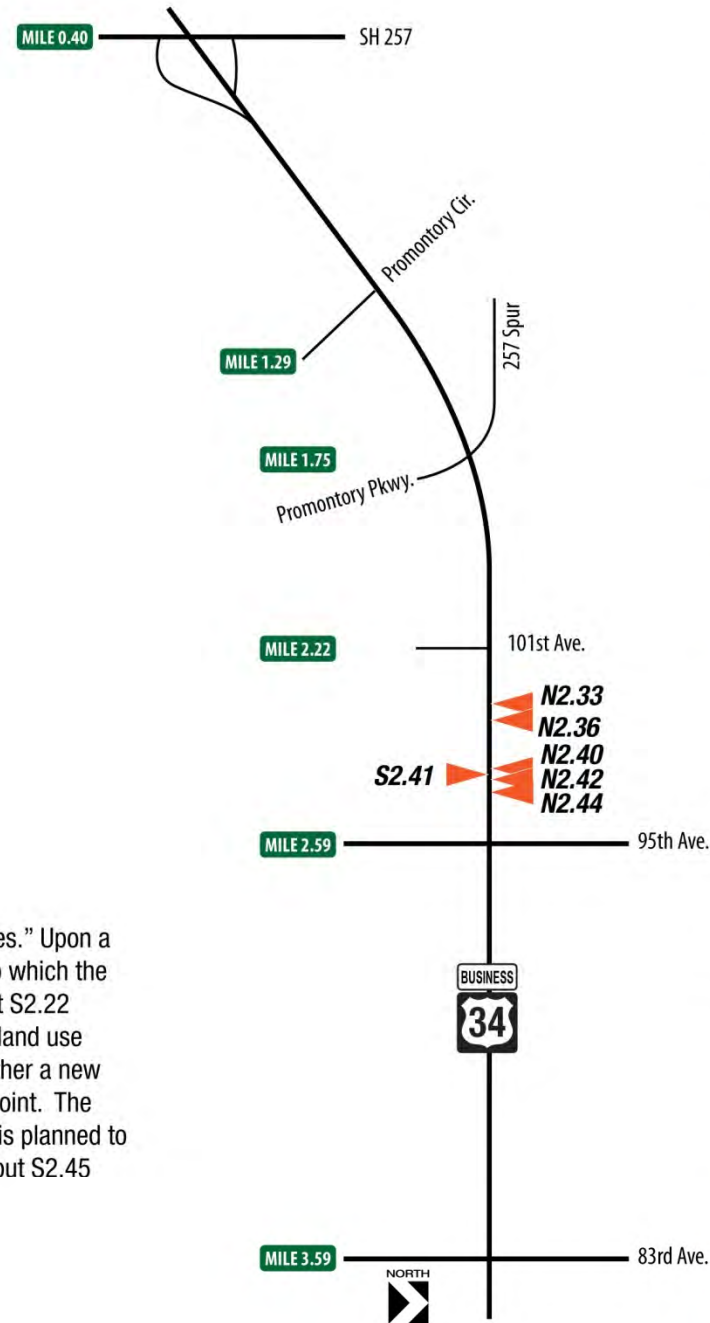
N2.22 – Future 101st Avenue

An existing driveway at this location currently provides access to two adjacent private properties, straddling their common boundary. Due to its alignment with the potential traffic signal at 101st Avenue, extension of a public street northward is planned at this existing access point in anticipation of serving future urban development. It is planned to have full-movement access.



South Side

North Side



N2.33, N2.36, N2.40 – Private Accesses

Existing driveways at these locations currently provide access to rural estate residences and their outbuildings on two separate properties. Each of these is planned as an “Access to Remain Until Land Use Changes.” Depending on the extent of other urban development in the vicinity whenever the land use would change, access to these properties might be reoriented and connected to a new public street instead of the US 34 Business Route.



N2.33 – Private Access



N2.36 – Private Access



N2.40 – Private Access



N2.42, N2.44 – Private Accesses

Existing driveways at these locations currently provide access to one rural estate residence and its outbuildings on the same property. Each of these is planned as an “Access to Remain Until Land Use Changes” with one of them designated to be consolidated with the other. Depending on the extent of other urban development in the vicinity whenever the land use would change, access to these properties might be reoriented and connected to a new public street instead of the US 34 Business Route.



N2.42 – Private Access



N2.44 – Private Access



S2.41 – Private Access

This is a farm field access and is planned as an “Access to Remain Until Land Use Changes.” Upon a change in land use, the preferred access to this parcel would come from 101st Avenue, to which the parcel is also adjacent (instead of from the US 34 Business Route). See explanation about S2.22 above. Depending on the extent of other urban development in the vicinity whenever the land use would change, access to this property might otherwise be reoriented and connected to either a new public street or to the “Allowable New Access” shown to the east of this existing access point. The “Allowable New Access” would be restricted to right-in/right-out turning movements and is planned to be located approximately half-way between 101st and 95th Avenues. See explanation about S2.45 below.



South Side

North Side



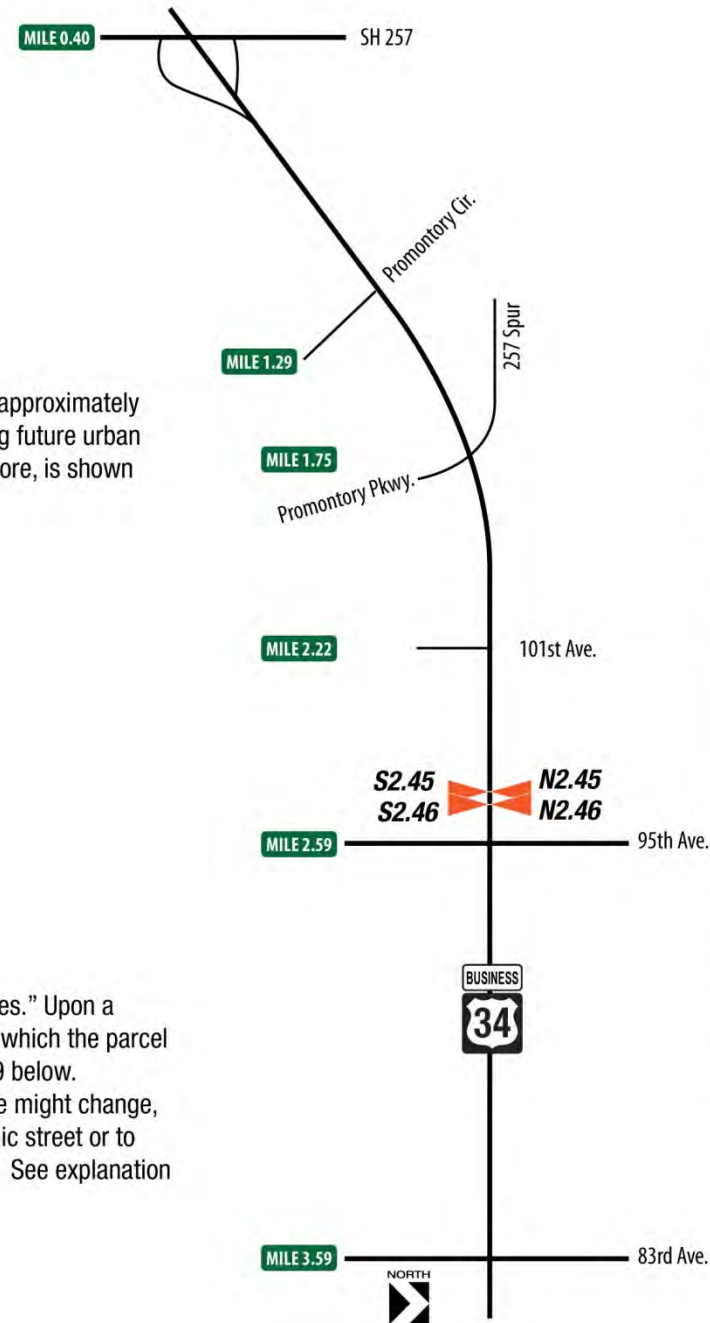
S2.45 (Approximate Location) – Allowable New Access

An “Allowable New Access” restricted to right-in/right-out turning movements is planned approximately half-way between 101st Avenue (S2.22) and 95th Avenue (S2.59) in anticipation of serving future urban development. It is planned to potentially be shared by two adjacent properties and, therefore, is shown straddling their common boundary.



S2.46 – Private Access

This is a farm field access and is planned as an “Access to Remain Until Land Use Changes.” Upon a change in land use, the preferred access to this parcel would come from 95th Avenue, to which the parcel is also adjacent (instead of from the US 34 Business Route). See explanation about S2.59 below. Depending on the extent of other urban development in the vicinity whenever the land use might change, access to this property might otherwise be reoriented and connected to either a new public street or to the “Allowable New Access” shown immediately to the west of this existing access point. See explanation about S2.45 above.



N2.45 – Private Access

Existing driveways at these locations currently provide access to two rural estate residences and outbuildings on separate properties. Each of these is planned as an “Access to Remain Until Land Use Changes.” Depending on the extent of other urban development in the vicinity whenever the land use would change, access to these properties might be reoriented and connected to a new public street instead of the US 34 Business Route. The one identified as N2.45 might otherwise be reoriented and connected to the “Allowable New Access” shown immediately to the east, which is planned to potentially be shared with a larger, adjacent property to the east. See explanation about N2.46 below.

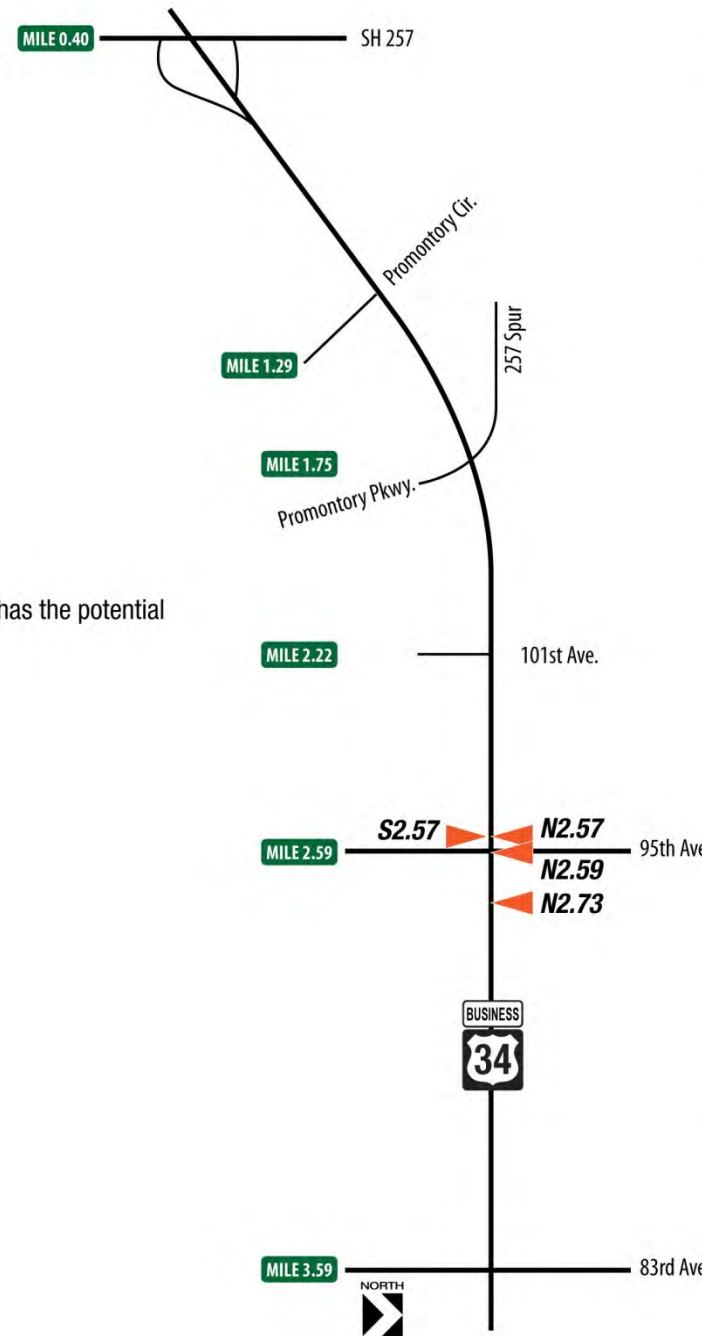


N2.46 (Approximate Location) – Allowable New Access

An “Allowable New Access” restricted to right-in/right-out turning movements is planned approximately half-way between 101st Avenue (N2.22) and 95th Avenue (N2.59) in anticipation of serving future urban development. It is planned to potentially be shared by two adjacent properties and, therefore, is shown straddling their common boundary.

South Side

North Side



S2.59 – 95th Avenue – Public Street

The 95th Avenue intersection is planned for continuance as a full-movement access and has the potential for signalization.



N2.57 – Private Access

This is a farm field access and is planned as an “Access to Remain Until Land Use Changes.” It is located very close to the full-movement intersection at 95th Avenue and would probably become unsafe for serving higher volumes of traffic upon a change in land use. Upon a change in land use, the preferred access to this property would come from 95th Avenue/Weld CR 25, to which the property is also adjacent (instead of from the US 34 Business Route). See explanation about N2.59 below. Depending on the extent of other urban development in the vicinity whenever the land use would change, access to this property might otherwise be reoriented and connected to either a new public street or to the “Allowable New Access” shown to the west of this existing access point. See explanation about N2.46 above.



N2.59 – 95th Avenue/Weld CR 25 – Public Street

The 95th Avenue (Weld County Road 25) intersection is planned for continuance as a full-movement access and has the potential for signalization.



N2.73 – Private Access

This access serves a farmstead. It is planned as an “Access to Remain Until Land Use Changes.” Upon a change in land use, the preferred access to this parcel would come from 95th Avenue/Weld CR 25, to which the parcel is also adjacent (instead of from the US 34 Business Route). See explanation about N2.59 above. Depending on the extent of other urban development in the vicinity whenever the land use would change, access to this property might otherwise be reoriented and connected to a new public street.



South Side

North Side



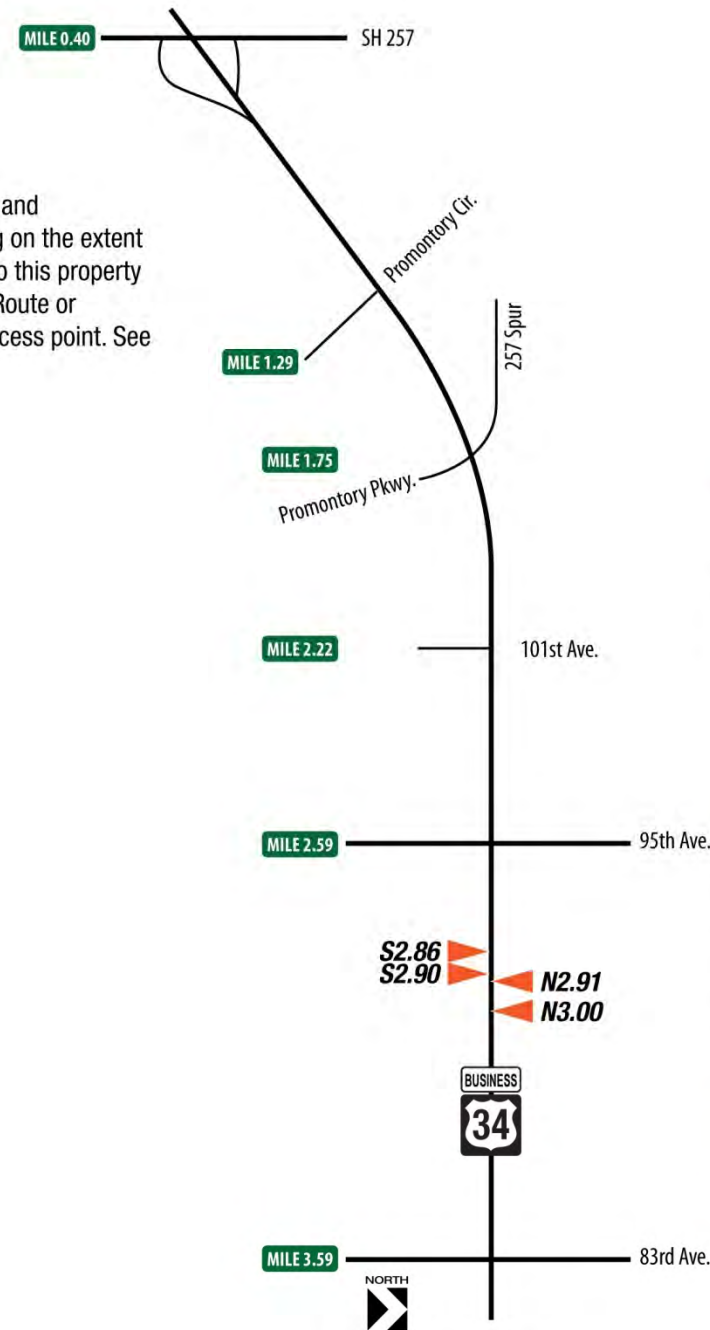
S2.86 (Approximate Location) – Allowable New Access

An “Allowable New Access” restricted to right-in/right-out turning movements is planned approximately half-way between 95th Avenue (S2.59) and (the future) 89th Avenue (S3.09) in anticipation of serving future urban development.



S2.90 – Private Access

An existing driveway at this location currently provides access to a rural estate residence and outbuildings. It is planned as an “Access to Remain Until Land Use Changes.” Depending on the extent of other urban development in the vicinity whenever the land use would change, access to this property might be reoriented and connected to a new public street instead of the US 34 Business Route or consolidated with the “Allowable New Access” point shown to the west of this existing access point. See explanation about S2.86 above.



N2.91 (Approximate Location) – Allowable New Access

An “Allowable New Access” restricted to right-in/right-out turning movements is planned approximately half-way between 95th Avenue (N2.59) and (the future) 89th Avenue (N3.09) in anticipation of serving future urban development. It is planned to potentially be shared by two adjacent properties and, therefore, is shown adjacent to their common boundary.



N3.00 – Private Access

This is a farm field access and is planned as an “Access to Remain Until Land Use Changes.” Upon a change in land use, the preferred access to this parcel would come from (the future) 89th Avenue, to which the parcel would also be adjacent (instead of from the US 34 Business Route). See explanation about N3.08 below. Depending on the extent of other urban development in the vicinity whenever the land use would change, access to this property might otherwise be reoriented and connected to either a new public street or to the “Allowable New Access” point shown to the west of this existing access point. See explanation about N2.91 above.



South Side

North Side

S3.02, and S3.07 – Private Accesses

These two accesses both serve a farmstead. They are each planned as an “Access to Remain Until Land Use Changes.” Upon a change in land use, the preferred access to this parcel would come from (the future) 89th Avenue, to which the parcel would also be adjacent (instead of from the US 34 Business Route). See explanation about S3.08 below. Depending on extent of other urban development in the vicinity whenever the land use would change, access to this property might otherwise be reoriented and connected to a new public street.

R S3.02 – Private Access



R S3.07 – Private Access

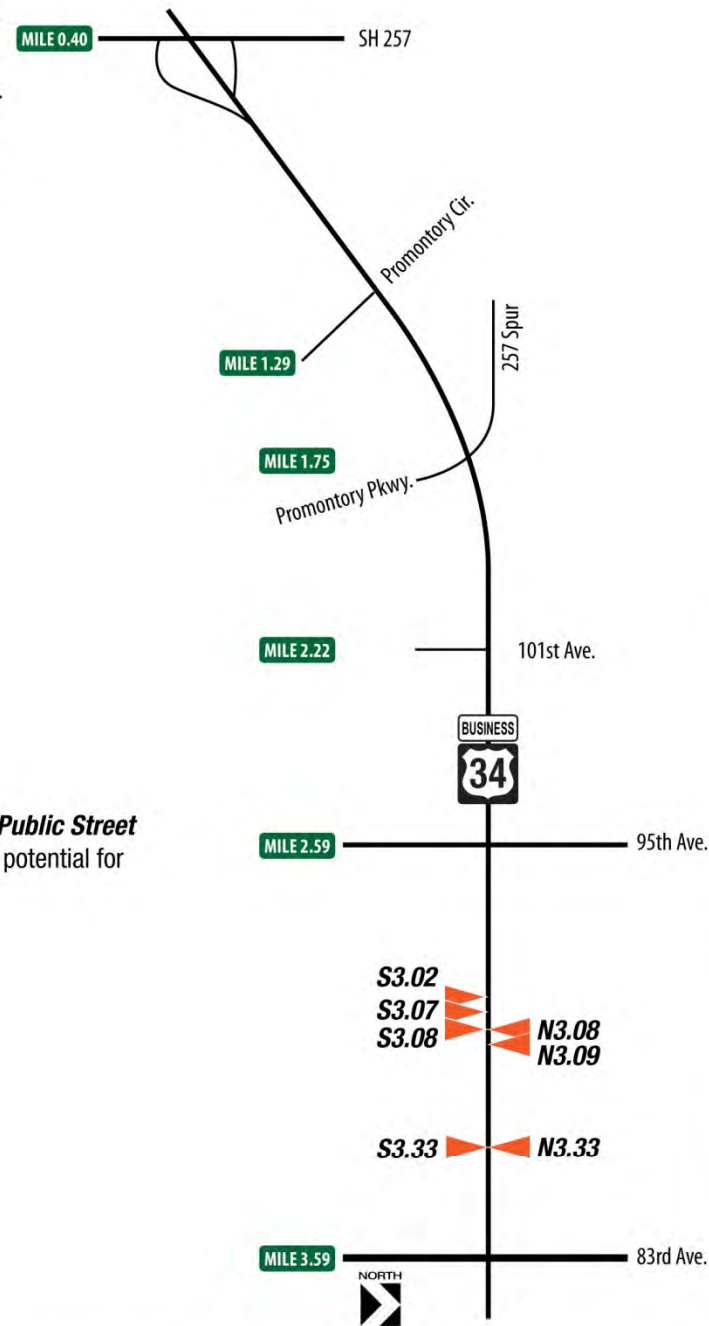


FULL S3.08 (Approximate Location) – Allowable New Access – Future Public Street

The future 89th Avenue intersection is planned to be a full-movement access and has the potential for signalization.

RI/RO **LTBD** S3.33 (Approximate Location) – Allowable New Access

An “Allowable New Access” restricted to right-in/right-out turning movements is planned approximately half-way between (the future) 89th Avenue (N3.08) and 83rd Avenue (N3.59) in anticipation of serving future urban development.



FULL N3.08 (Approximate Location) – Allowable New Access – Future Public Street

The future 89th Avenue intersection is planned to be a full-movement access and has the potential for signalization.

R N3.09 – Private Access

This is a farm field access and is planned as an “Access to Remain Until Land Use Changes.” Upon a change in land use, the preferred access to this parcel would come from (the future) 89th Avenue, to which the parcel would also be adjacent (instead of from the US 34 Business Route). See explanation about N3.08 above. Depending on the extent of other urban development in the vicinity whenever the land use would change, access to this property might otherwise be reoriented and connected to a new public street.



RI/RO **LTBD** N3.33 (Approximate Location) – Allowable New Access

An “Allowable New Access” restricted to right-in/right-out turning movements is planned approximately half-way between (the future) 89th Avenue (N3.08) and 83rd Avenue (N3.59) in anticipation of serving future urban development.

South Side

North Side



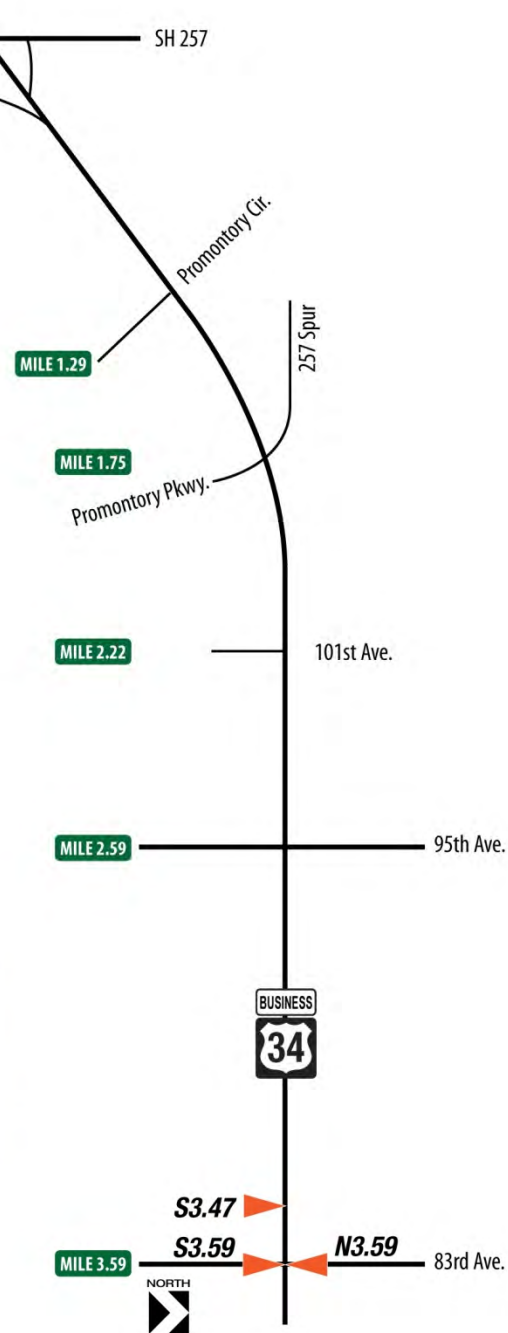
S3.47 – Private Access

This is a farm field access and is planned as an “Access to Remain Until Land Use Changes.” Upon a change in land use, the preferred access to this parcel would come from (the future) 89th Avenue and/or 83rd Avenue, to which the parcel would also be adjacent (instead of from the US 34 Business Route). See explanation about S3.08 above. Depending on the extent of other urban development in the vicinity whenever the land use would change, access to this property might otherwise be reoriented and connected to a different new public street or consolidated with the “Allowable New Access” point shown to the west of this existing access point. See explanation about S3.33 above.



S3.59 – 83rd Avenue – Public Street

The 83rd Avenue intersection is currently signalized as a full-movement access and is not planned for future restrictions in access.



N3.59 – 83rd Avenue – Public Street

The 83rd Avenue intersection is currently signalized as a full-movement access and is not planned for future restrictions in access.



3.3.2 83rd Avenue to Sheep Draw

This segment of the corridor from the 83rd Avenue intersection to Sheep Draw is illustrated in **Figure 3.5**. It serves developing and undeveloped portions of the corridor. On the north side it appears land has been platted and will eventually develop into commercial and residential uses. On the south side, substantial new commercial activity is in place with some additional growth occurring between 71st Avenue and Sheep Draw. To some extent, access has been defined in this section due to re-development plans on the north side of the roadway.

Objectives:

- ▶ Maintain high speed while respecting safety on US 34 and the various street and county road intersections: This segment of the corridor is currently a transitional one between high-speed rural conditions to the west and suburban conditions to the east.
- ▶ Locate future signals at intersections of existing public streets and roads but maintain spacing between them that can optimize signal timing for east-west traffic.

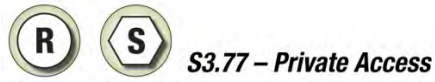
Strategies:

- ▶ Use existing accesses on the one side of US 34 Business to guide access planning for new development on the opposite side, especially where signals exist or there is the potential for a new signal.
- ▶ Avoid close proximity of access points in the vicinity of the currently signalized intersections and ones that will potentially be signalized in the future
- ▶ Encourage new developments to include new arterial and collector streets, both perpendicular to, and parallel to, US 34 Business. At a desirable spacing, typically one-half mile apart, these will have priority for access to US 34 Business over private driveways.
- ▶ No private driveway permits for direct access to US 34 Business will be issued in the future unless they are a modified permit for an existing access.
- ▶ The Access Control Plan generally is “grandfathering” the few private driveways that exist but changes in land uses being served would discontinue the “grandfathered” status. The access points marked with a circled “R” are ones that might not be allowed to remain after a change in the land use being served. Some are marked for consolidation with another access after a change in land use.
- ▶ During development/redevelopment of properties adjacent to one another, explore ways to consolidate accesses for adjacent properties or make plans to enable this in the future.

Figure 3.5 83rd Avenue to Sheep Draw



South Side



S3.77 – Private Access

This is a farm field access and is planned as an “Access to Remain Until Land Use Changes.” Upon a change in land use, the preferred access to this parcel would come from the future extension of 11th Street, to which the parcel would also be adjacent (instead of from the US 34 Business Route). Depending on the extent of other urban development in the vicinity whenever the land use would change, access to this property might otherwise be reoriented and connected to a different new public street or consolidated with the “Allowable New Access” point shown to the east of this existing access point. See explanation about S3.86 below.



S3.86 (Approximate Location) – Allowable New Access

An “Allowable New Access” restricted to right-in/right-out/left-in turning movements is planned approximately half-way between 83rd (S3.59) and 77th (S4.13) Avenues in anticipation of serving future urban development.



S4.13 – 77th Avenue – Public Street

The 77th Avenue intersection is planned for continuance as a full-movement access and has the potential for signalization.



North Side



N3.76 – Private Access



N3.82 – Private Access

These two farm field accesses are situated on either side of a waterway and are each planned as an “Access to Remain Until Land Use Changes.” Depending on the extent of other urban development in the vicinity whenever the land use would change, access to this property might otherwise be reoriented and connected to a new public street or consolidated with the “Allowable New Access” point shown to the east of these existing access points. See explanation about S3.86 below.



N3.86 (Approximate Location) – Allowable New Access

An “Allowable New Access” restricted to right-in/right-out turning movements is planned approximately half-way between 83rd (N3.59) and 77th (S4.13) Avenues in anticipation of serving future urban development.



N4.11 – Private Access

This is a farm field access that formerly served a house and outbuildings. It has been closed and access to the property is planned via the “Allowable New Access” shown across from the 77th Avenue intersection. See explanation about N4.13 below. Depending on the extent of other urban development in the vicinity whenever the land use would change, access to this property might otherwise be reoriented and connected to a new public street.



South Side

 **S4.67 – 71st Avenue – Public Street**

The 71st Avenue intersection is currently signalized as a full-movement access and is not planned for future restrictions in access



 **S4.79 – Private Access**

This is a relatively new access that was built to serve several “Northgate Village” (shopping center) commercial properties including the customer parking lot of a major supermarket on the south side of the US 34 Business Route. It is planned for continuance as a “Right-In/Right-Out” access. The parking lot also has direct access to 71st Avenue.



 **FULL S4.91 – 69th Avenue – Public Street**

This is a relatively new public street that serves several “Northgate Village” (shopping center) commercial properties and it has a connection to a major supermarket’s customer parking lot on the south side of the US 34 Business Route. It is currently signalized as a full-movement access and is not planned for future restrictions in access.



North Side

 **N4.13 (Approximate Location) – Allowable New Access**

The 77th Avenue intersection is planned for continuance as a full-movement access and has the potential for signalization. It is uncertain whether this “Allowable New Access” that would become the fourth leg of the intersection will be a public street (extension of 77th Avenue) or a private access on the north side of the US 34 Business Route.

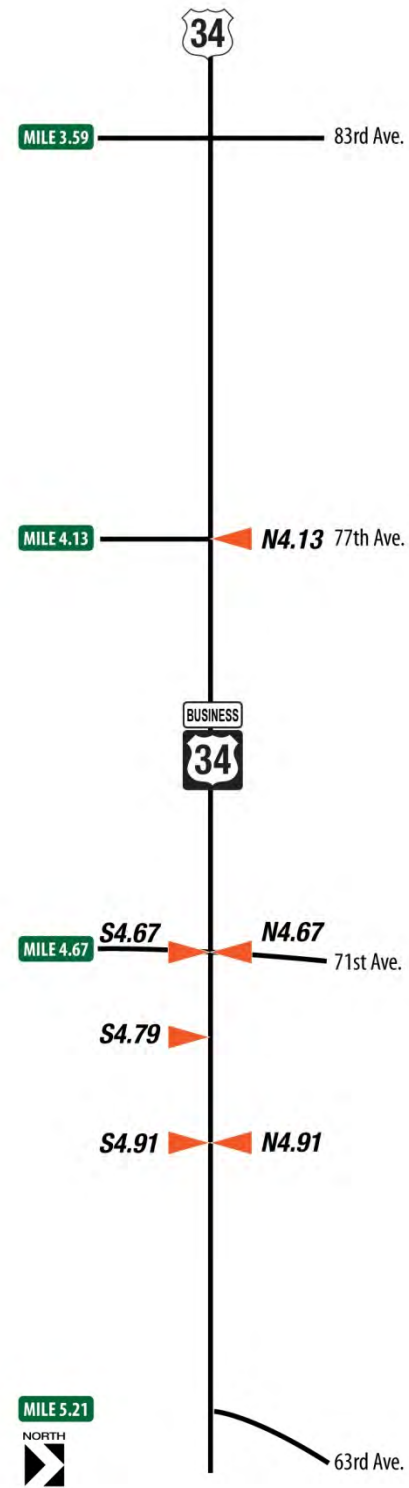
 **N4.67 – 71st Avenue – Public Street**

The 71st Avenue intersection is currently signalized as a full-movement access and is not planned for future restrictions in access.



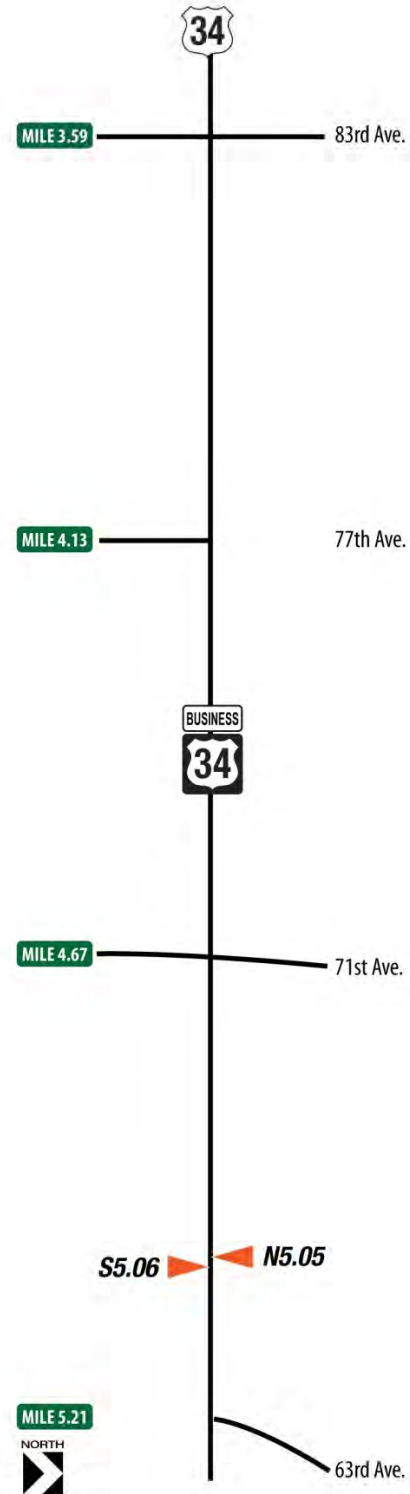
 **FULL N4.91 – Allowable New Access – Future Public Roadway**

An “Allowable New Access” is planned as the fourth leg of the currently signalized “T” intersection (69th Avenue on the south side of the US 34 Business Route). It planned for full-movement access.



South Side

North Side



RI/RO

S5.06 – Private Access

This is a relatively new access that was built to serve several “Northgate Village” (shopping center) commercial properties on the south side of the US 34 Business Route. It is planned for continuance as a “Right-In/Right-Out” access.



N5.05 – Fire Station Access

This access serves Greeley Fire Station 7 and the intersection is controlled by an emergency traffic signal. As such, it is a full-movement access. It is planned as an “Access to Remain until Land Use Changes.” In the event this fire station would be decommissioned, and depending on the extent of other urban development in the vicinity whenever that might occur, the preferred access to this parcel would come from a connection to a public street northwest of the property rather than through a continuance of direct access to the US 34 Business Route.



S5.06 N5.05

MILE 5.21
NORTH

3.3.3 Sheep Draw to 59th Avenue

This segment of the corridor from Sheep Draw to 59th Avenue is illustrated in **Figure 3.6**. It serves developed commercial and industrial land uses whose access patterns were established many years ago (in many instances pre-dating the assignment of access categories to US 34 Business through the State Highway Access Code). While some redevelopment opportunities within this segment exist, it is uncertain when, if any, changes to access patterns would be requested or required.

Objectives:

- ▶ Preserve and protect the safe and free-flowing traffic characteristics on US 34 Business between signalized intersections
- ▶ Minimize congestion and conflict points on US 34 Business but balance that with maintaining its character as a commerce-friendly arterial
- ▶ Due to the close proximity to the highway of business establishments and other facilities, avoid future widening of US 34 Business unless it is related to safety and/or the encouragement of travel via alternative modes (such as walking, bicycling, and riding transit)

Strategies:

- ▶ Avoid close proximity of access points in the vicinity of the currently signalized intersections and ones that will potentially be signalized in the future
- ▶ The Access Control Plan generally is “grandfathering” the numerous private driveways that exist but changes in land uses being served would discontinue the “grandfathered” status. The access points marked with a circled “R” are ones that might not be allowed to remain after a change in the land use being served. Some are marked for consolidation with another access upon a change in land use.
- ▶ Encourage new developments or redevelopment to include new arterial or collector streets, both perpendicular to, and parallel to, US 34 Business as illustrated in Inset 1 of **Appendix B**. Providing these new streets parallel to US 34 Business is perceived as a pre-requisite for the installation sometime in the future of a raised, center median on US 34 Business. These new streets would also help support changing some existing access points from full movement to only right-in/right-out status, even before the installation of a raised, center median on US 34 Business.
- ▶ No private driveway permits for direct access to US 34 Business will be issued in the future unless they are a modified permit for an existing access.
- ▶ During development/redevelopment of properties adjacent to one another:
 - explore and initiate ways to consolidate accesses for separate, adjacent properties or make plans to enable this in the future
 - plan for the existing, attached sidewalks along US 34 Business to be replaced with detached ones, in accordance with the City of Greeley’s typical arterial street cross-section shown in **Figure 3.3**.

Figure 3.6 Sheep Draw to 59th Avenue

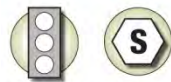


Cost Estimate:

The cost to provide the new 9th and 11th Streets and related perpendicular connecting streets shown in Inset 1 of **Appendix B** is approximately \$2.8 million in 2011 dollars. This estimate is in 2011 dollars and is based on a local street cross-section per Greeley’ street standards (38 foot-wide road within a 60-foot right-of-way, 5-foot sidewalks along both sides). It includes the extension of 63rd Avenue between Business 34 and 11th Street as well as the future 61st Avenue from Business 34 to 9th Avenue. Approximately 55 percent of this cost estimate is associated with 11th Avenue and 63rd Street; the other 45 percent is associated with 9th Avenue and 61st Street. A breakdown of the costs is available in **Appendix D**.

South Side

Please refer to Appendix B, Inset Map 1 titled "63rd Avenue to 59th Avenue" for aerial map sketches of future streets planned for this area. These would offer optional access points for a series of commercial and light industrial properties on both sides of US 34 Business Route.



S5.21 – Private Access

This access serves a commercial property. This access point is planned to be reoriented onto the future extension of 63rd Avenue to the south of the US 34 Business Route whenever that extension might be constructed; and there would appear to be a need for a second access point connecting to the west side of the "Future 63rd Avenue" for a parcel of property that otherwise would be severed from access to the US 34 Business Route.



S5.25 – Private Access



S5.28 – Private Access

Existing driveways at these locations currently provide access to commercial facilities on two separate properties. The S5.25 access serves an assortment of businesses that are all housed in the same building (in a condominium arrangement in terms of ownership). Unless modifications could be made to the existing building so that access could be gained to the "Future 11th Street," the access to these businesses is to remain available from US 34 Business indefinitely, without restrictions on turning movements unless safety issues would arise in the future. Reorienting the access for the property served by the S5.28 access by way of a connection to "Future 11th Street" would not appear to be a viable option unless there would be some substantial changes in property boundaries because the "Future 11th Street" alignment is not immediately adjacent to the property.

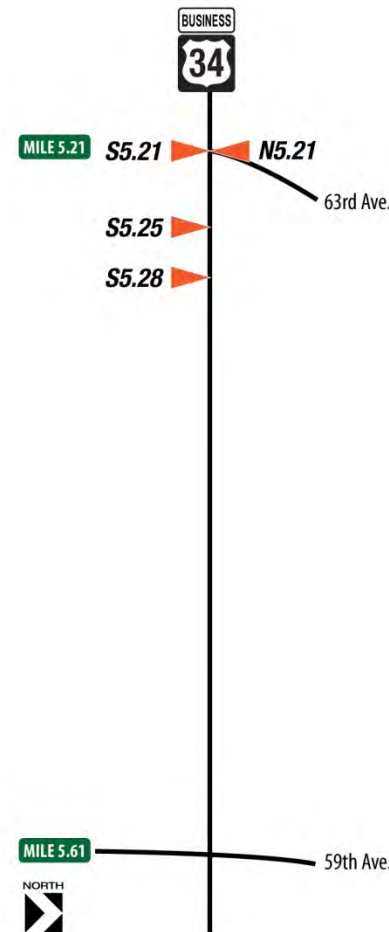


North Side



N5.21 – 63rd Avenue – Public Street

The 63rd Avenue intersection is planned for continuance as a full-movement access and has the potential for signalization.



South Side

North Side

S5.30, and S5.31 – Private Accesses

Existing driveways at these locations currently provide access to a single commercial property. Consequently, in the interest of reducing the number of conflict points along the highway, the S5.30 access is to remain only until the land use changes and at that point, the access at S5.31 would be expected to become the sole access to the property. Depending on the extent of other urban development in the vicinity whenever the land use on this property would change, preference should be given to reorienting this property's access by providing a connection to "Future 11th Street," which would enable the S5.31 access to be restricted to right-in/right-out turning movements.

R S5.30 – Private Access

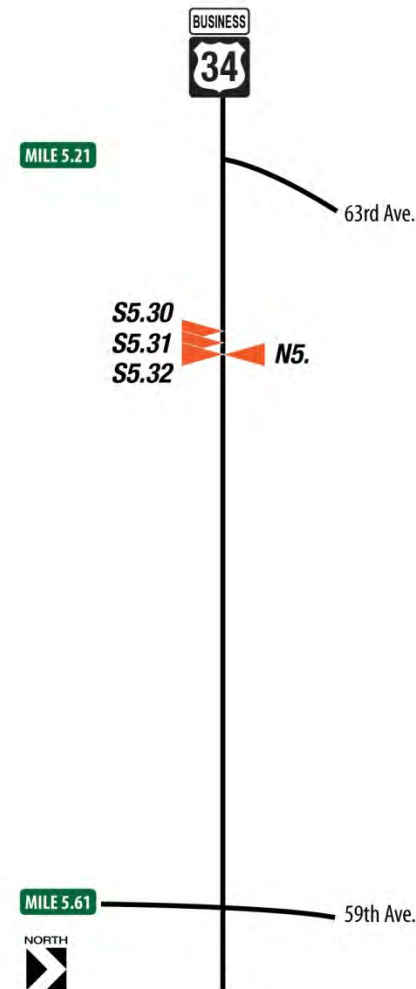


RI/RO S5.31 – Private Access



S5.32 – Private Access

An existing driveway at this location currently provides the sole access to a commercial property and, as such, is planned for continuance of full-movement access. However, depending on the extent of other urban development in the vicinity whenever the land use on this property would change, preference should be given to reorienting this property's access by providing a connection to "Future 11th Street," which would enable the S5.32 access to be restricted to right-in/right-out turning movements.



RI/RO N5.32 – Private Access

An existing driveway at this location currently provides the sole access to a single commercial property. As such, the access is planned to remain in place but eventually be restricted to right-in/right-out turning movements. However, depending on the extent of other urban development in the vicinity whenever the land use on this property would change, preference should be given to reorienting this property's access by providing a connection to "Future 9th Street."



South Side

S5.33 – Private Access

An existing driveway at this location currently provides the sole access to one large commercial property and an assortment of businesses that are all housed in the same building (in a condominium arrangement in terms of ownership) there. As such, the access is planned to remain in place but eventually be restricted to right-in/right-out turning movements. Depending on the extent of other urban development in the vicinity whenever the land uses on these properties would change, preference should be given to reorienting this property's (and the condominiums') access by providing a connection to "Future 11th Street." The provision of "Future 11th Street" would offer an alternative means of access and prompt the S5.33 access to be restricted to right-in/right-out turning movements if it has not already been restricted by that time due to safety concerns.



RI/RO S5.37 – Private Access

An existing driveway at this location currently provides the sole access to one large commercial property. As such, the access is planned to remain in place but eventually be restricted to right-in/right-out turning movements. Depending on the extent of other urban development in the vicinity whenever the land use on this property would change, preference should be given to reorienting this property's access by providing a connection to "Future 11th Street." The provision of "Future 11th Street" would offer an alternative means of access and prompt the S5.37 access to be restricted to right-in/right-out turning movements if it has not already been restricted by that time due to safety concerns.



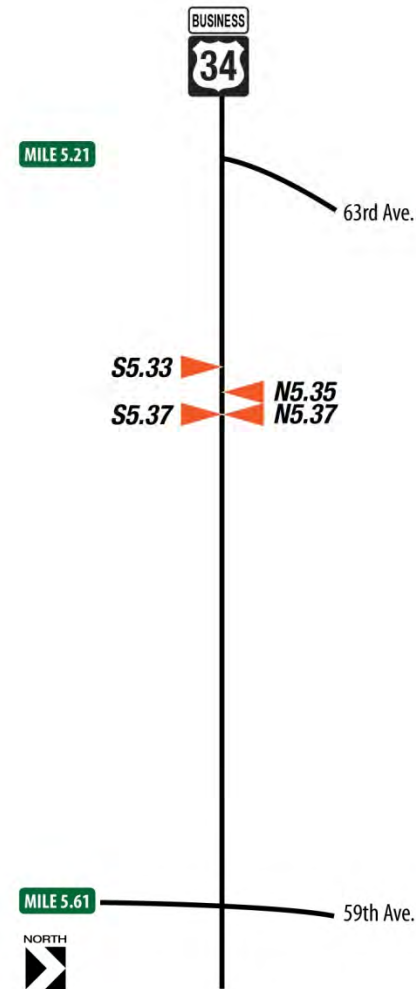
North Side

RI/RO N5.35 – Private Access



R N5.37 – Private Access

Existing driveways at these locations currently provide access to a single rural estate property. Consequently, in the interest of reducing the number of conflict points along the highway, the N5.37 access is to remain only until the land use changes and at that point, the access at N5.35 would be expected to become the sole access to the property. Depending on the extent of other urban development in the vicinity whenever the land use on this property would change, preference should be given to reorienting this property's access by providing a connection to "Future 9th Street," which would enable the N5.35 access to be restricted to right-in/right-out turning movements if it has not already been restricted by that time due to safety concerns.



South Side

S5.40 – Private Access

An existing driveway at this location currently provides the sole access to a single commercial property. Given the nature of the business, which is currently for self-storage and vehicle rentals, and the way buildings are arranged on the lot, this access is planned for continuance of full-movement access. (Note the lack of a “R-I/R-O” designation.) However, depending on the extent of other urban development in the vicinity whenever the land use on this property would change, preference should be given to reorienting this property’s access by providing a connection to “Future 11th Street,” which might then enable the S5.40 access to be restricted to right-in/right-out turning movements.



S5.41 – Private Access

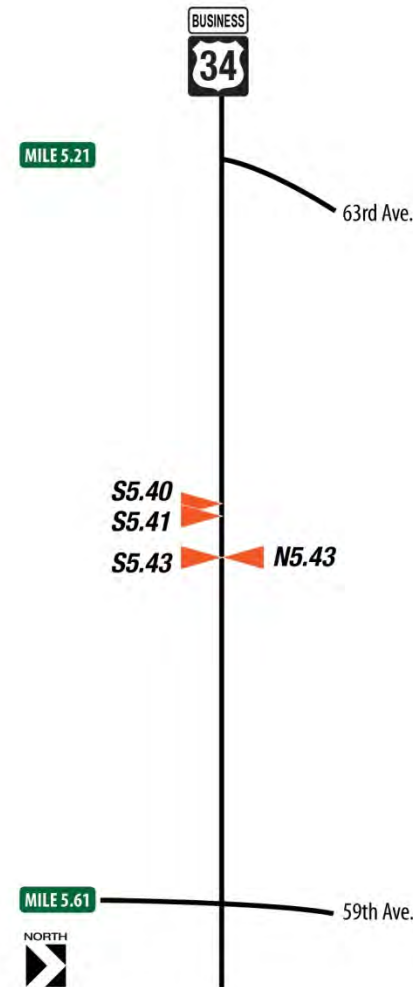
An existing driveway at this location currently provides the sole access to a single commercial/light industrial property but this is one of three adjacent properties under the same ownership. The use of these three properties appears to have been consolidated. Consequently, S5.41 is planned as an “Access to Remain until Land Use Changes.” Depending on the extent of other urban development in the vicinity whenever the land use on this property would change and the status of ownership for the two parcels immediately to the east, preference should be given to reorienting this property’s access by providing a connection to “Future 11th Street.”



S5.43 – Private Access



North Side



N5.43 – Private Access

An existing driveway at this location currently provides the access to both a large church property and a commercial property immediately to the west of it. As such, the access is planned to remain in place but eventually be restricted to right-in/right-out turning movements. Depending on the extent of other urban development in the vicinity whenever the land use on this property would change, preference should be given to reorienting this property’s access by providing a connection to “Future 9th Street” and possibly to “Future 61st Avenue” as depicted in Figure X.X, Page XX The provision of “Future 9th Street” and/or “Future 61st Avenue” would offer an alternative means of access and prompt the N5.43 access to be restricted to right-in/right-out turning movements if it has not already been restricted by that time due to safety concerns.



RI/RO **South Side**
S5.46 – Private Access

These two existing driveways currently provide access to three, adjacent commercial/light industrial properties under what appears to be the same or similar ownership. The S5.43 access can also be used to reach a third property to the west under the same ownership, which is also served by S5.41. See explanation about S5.41 above. The S5.43 and S5.46 access points are planned to remain in place but eventually each would be restricted to right-in/right-out turning movements. Depending on the extent of other urban development in the vicinity whenever the land use on these properties would change, preference should be given to reorienting their accesses by connecting them to “Future 11th Street.” The introduction of “Future 11th Street” would offer an alternative means of access and prompt both the S5.43 and S5.46 accesses to be restricted to right-in/right-out turning movements if their use has not already been restricted by that time due to safety concerns.



R *S5.47 – Private Access*

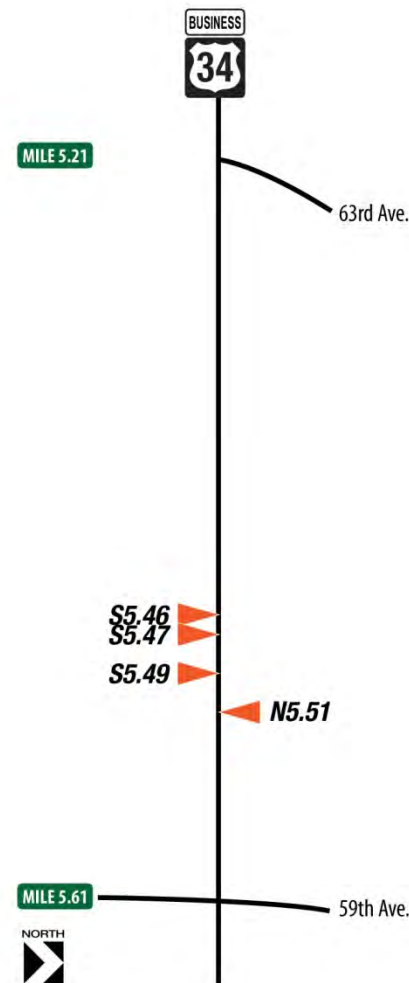
An existing driveway at this location currently provides shared access to two commercial properties whose ownerships are described differently from one another. It is planned as an “Access to Remain until Land Use Changes.” Depending on the extent of other urban development in the vicinity whenever the land use on either of these properties would change, preference should be given to reorienting their access by providing a connection to “Future 11th Street.”



RI/RO *S5.49 – Private Access*



North Side



FULL *N5.51 – Future 61st Ave – Public Street*

Currently serving as the sole means of access to private property, an existing driveway at this location is planned to eventually be changed into a public street. This would become the “Future 61st Avenue” intersection and it is planned as a full-movement access. It would connect the US 34 Business Route to the “Future 9th Street,” as depicted in Appendix B.



South Side



S5.52 – Private Access

These two existing driveways currently provide access to adjacent commercial properties under the same ownership. As such, these accesses are each planned to remain in place but eventually be restricted to right-in/right-out turning movements. Depending on the extent of other urban development in the vicinity whenever the land use on these properties would change, preference should be given to reorienting their access by providing a connection to “Future 11th Street.”



S5.54 – Private Access



S5.56 – Private Access

These two existing driveways currently provide access to same commercial property. As such, these are each planned to remain in place but eventually S5.56 would be restricted to right-in/right-out turning movements.

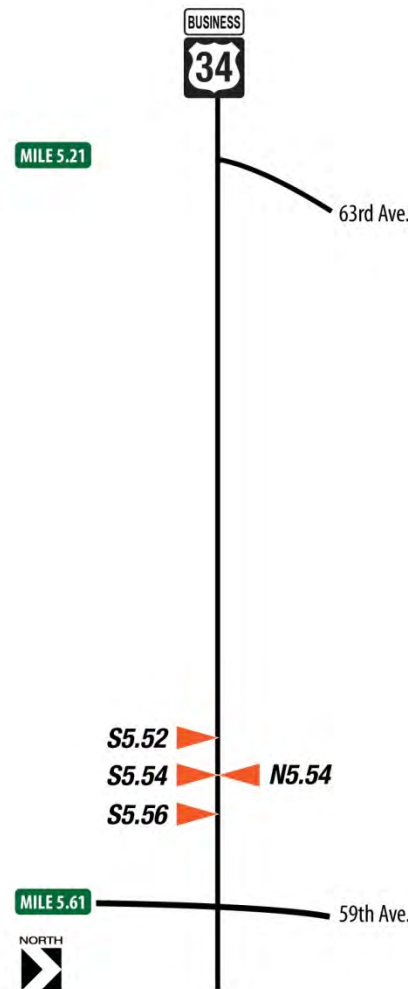


North Side



N5.54 – Private Access

An existing driveway at this location currently provides the access to two commercial properties that are adjacent to one another. The access is planned to remain in place but eventually be restricted to right-in/right-out turning movements. Depending on the extent of other urban development in the vicinity whenever the land use on either of these properties would change, preference should be given to reorienting their access by providing a connection to “Future 9th Street” and possibly to “Future 61st Avenue” as depicted in Appendix B. The provision of “Future 9th Street” and/or “Future 61st Avenue” might offer an alternative means of access and prompt the N5.54 access to be restricted to right-in/right-out turning movements if it has not already been restricted by that time due to safety concerns.





South Side

S5.59 – Private Access

An existing access at this location currently accommodates right-in (only) turning movements from the US 34 Business Route leading into three properties that are adjacent to one another. These are located in the southwest quadrant of the 59th Avenue intersection. (One of the three properties is not directly adjacent to the US 34 Business Route.) A drive-in restaurant can be entered from this access. The roadway serves all three properties and also connects to 59th Avenue at an intersection that is over 600 feet south of the US 34 Business Route. The 59th Avenue access is planned to become the primary way of reaching and exiting these three properties and this access is planned to be extended farther to the west in the future, eventually becoming “11th Street.” See Appendix B.



S5.61 – 59th Avenue – Public Street

The 59th Avenue intersection is currently signalized as a full-movement access and is not planned for future restrictions in access.

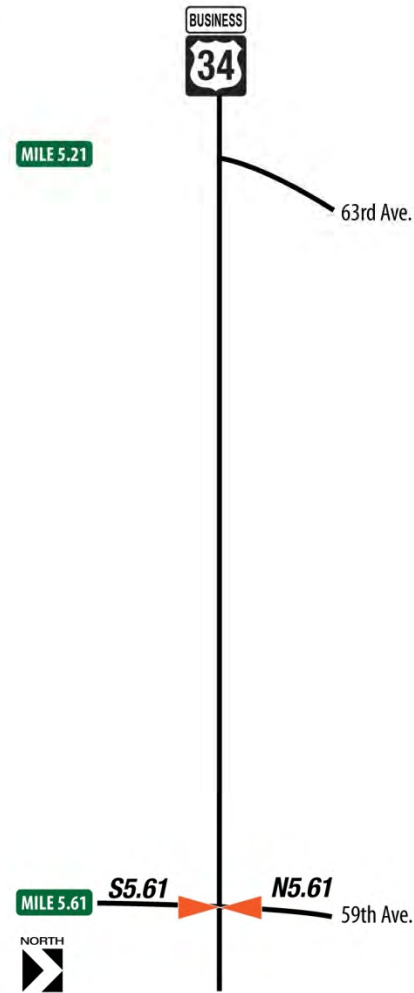


North Side



N5.61 – 59th Avenue – Public Street

The 59th Avenue intersection is currently signalized as a full-movement access and is not planned for future restrictions in access.



3.3.4 59th Avenue to 35th Avenue

This segment of the corridor from 59th Avenue to 35th Avenue is illustrated in **Figure 3.7**. Most of the property along this segment has already been developed and, therefore, it is unlikely that access patterns will change significantly. In the event several properties might ever be brought under a single ownership and then redeveloped or redevelopment would occur through coordinated efforts between owners, more dramatic changes in access might become feasible. There are relatively few instances where driveways serve private properties directly from US 34 Business. Most access points along this segment are either public streets or ones that are shared by multiple business establishments.

Objectives:

- ▶ Preserve and protect the safe and free-flowing traffic characteristics on US 34 Business between signalized intersections
- ▶ Minimize congestion and conflict points on US 34 Business but balance that with maintaining its character as a commerce-friendly arterial
- ▶ Due to the close proximity to the highway of business establishments and other facilities, avoid future widening of US 34 Business unless it is related to safety and/or the encouragement of travel via alternative modes (such as walking, bicycling, and riding transit)

Strategies:

- ▶ Limit the number of conflict points in the future as safety and mobility dictate:
 - At the 36th Avenue intersection, restrict it to ¾ movements on the north side and to right-in/right-out on the south side (which is the entrance to the Bittersweet Shopping center).
 - The Access Control Plan generally is “grandfathering” some private driveways that exist but changes in land uses being served would discontinue the “grandfathered” status. The access points marked with a circled “R” are ones that might not be allowed to remain after a change in the land use being served. One is marked for consolidation with an alley upon a change in land use.
- ▶ No private driveway permits for direct access to US 34 Business will be issued in the future unless they are a modified permit for an existing access.
- ▶ Avoid close proximity of access points in the vicinity of the currently signalized intersections.
- ▶ Continue to monitor traffic conditions at the 50th Avenue intersection, recognizing that it has the potential to be signalized in the future. If and when signalization would be warranted in accordance with the Manual on Uniform Traffic Control Devices (MUTCD), place the location on appropriate local, regional and state funding priority lists.
- ▶ Encourage changes to the north frontage road between 38th Avenue Court and 37th Avenue Court in the future if safety or mobility dictate or if redevelopment of the adjacent properties is proposed. Options are illustrated in Inset 2 of **Appendix B**.
- ▶ During development/redevelopment of properties adjacent to one another:
 - explore and initiate ways to consolidate accesses for separate, adjacent properties or make plans to enable this in the future
 - plan for the existing, attached sidewalks along US 34 Business to be replaced with detached ones, in accordance with the City of Greeley’s typical arterial street cross-section shown in **Figure 3.2**.

- ▶ Remove turning vehicles from through traffic lanes by making improvements to lane geometry at the 47th Avenue intersection and adjusting signal timing to protect left turns sometime in the future. These are planned in consideration of generally increasing volumes of traffic and, in particular, the diversion of traffic from residential neighborhoods to this intersection that would occur upon imposing restrictions to ¾ movements at the 50th Avenue intersection due to safety concerns (noted above).

Figure 3.7 59th Avenue to 35th Avenue



South Side

S5.74 – Private Access

An existing access at this location currently accommodates right-in (only) turning movements from the US 34 Business Route leading into a small shopping center. The access is planned to remain in place.



S5.91 – 54th Avenue – Public Street

The 54th Avenue intersection is currently signalized as a full-movement access and is not planned for future restrictions in access.



North Side

N5.76 – Private Access

An existing access at this location currently accommodates right-in (only) turning movements from the US 34 Business Route leading into an office complex. The access is planned to remain in place.



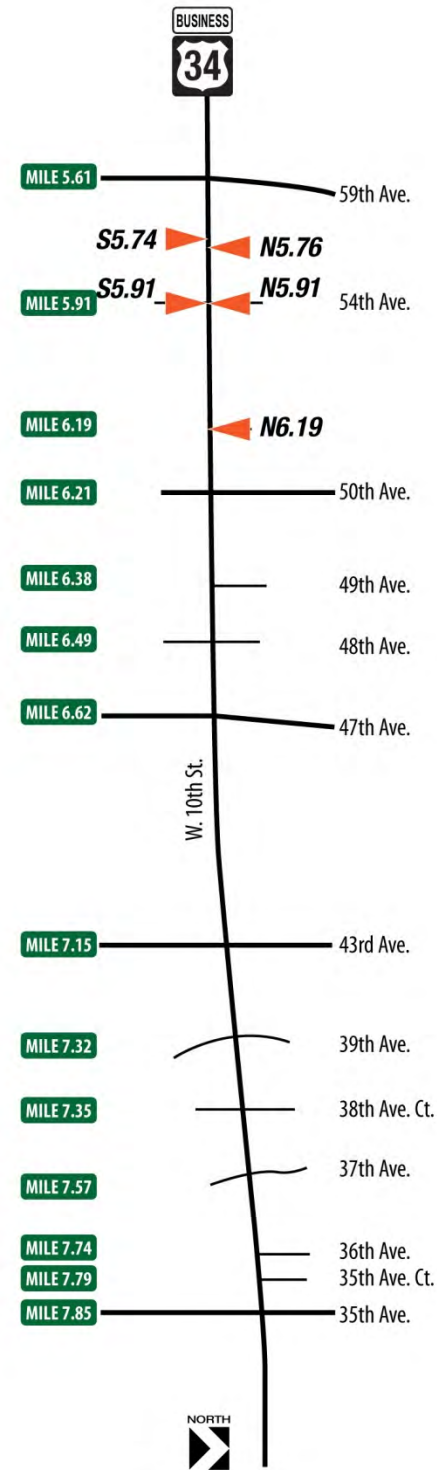
N5.91 – 54th Avenue – Public Street

The 54th Avenue intersection is currently signalized as a full-movement access and is not planned for future restrictions in access.



N6.19 – West 9th Street – Public Street

The 52nd Avenue Court intersection is planned to remain restricted to right-in/right-out/left-in turning movements.



South Side



S6.21 – 50th Avenue – Public Street

The 50th Avenue intersection is planned for continuance as a full-movement access and has the potential for signalization.



S6.40 – Private Access

An existing driveway at this location currently provides one of two accesses to a large portion of the Greeley Country Club's golf course. (The other access for this portion of the golf course is located on 47th Avenue.) S6.40 serves very low volumes of traffic and is planned as an "Access to Remain until Land Use Changes," but eventually would be restricted to right-in/right-out turning movements once it is determined to be unsafe for left turns.



S6.49 – 48th Avenue – Public Street

The 48th Avenue intersection is currently restricted to right-in/right-out/left-in turning movements. It is planned for continuance as a "3/4" access and for physical modifications to be made to the existing island that controls eastbound US 34 Business Route traffic. These proposed improvements would address applicable design standards. One of the issues observed at this location is the confusion and inconvenience eastbound drivers may experience when they intend to turn right onto southbound 47th Avenue. They sometimes enter the auxiliary right-turn lane for 48th Avenue mistakenly thinking that the lane will extend to 47th Avenue. The island then forces them to turn right one block sooner than they intend.

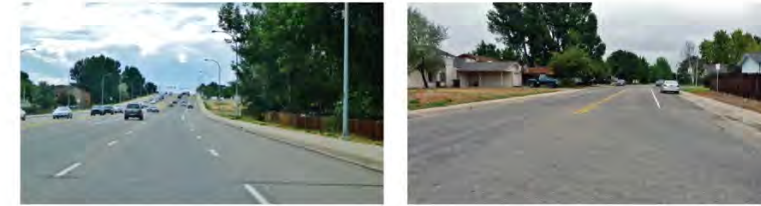


North Side



N6.21 – 50th Avenue – Public Street

The 50th Avenue intersection is planned for continuance as a full-movement access and has the potential for signalization.



N6.38 – 49th Avenue – Public Street

The 49th Avenue intersection is currently a full-movement access and is planned to become restricted to right-in/right-out turning movements in the future, once it is determined to be unsafe for left-turning traffic. The affected neighborhood traffic would then be diverted via West 9th Street to either the 50th Avenue (unsignalized) intersection for left-in turning movements or the 47th Avenue (signalized) intersection.



N6.49 – 48th Avenue – Public Street

The 48th Avenue intersection is currently restricted to right-in/right-out/left-in turning movements. It is planned for continuance as a "3/4" access.



South Side



S6.62 – 47th Avenue – Public Street

The 47th Avenue intersection is currently signalized as a full-movement access and is not planned for future restrictions in access. Modifications to lane geometry at this intersection are expected to be needed in the future as traffic volumes increase.



S6.88 – Private Access

An existing driveway at this location currently serves as the main access to the Greeley Country Club (clubhouse and golf course). The intersection is currently signalized as a full-movement access and is not planned for future restrictions in access.



North Side



N6.62 – 47th Avenue – Public Street

The 47th Avenue intersection is currently signalized as a full-movement access and is not planned for future restrictions in access. Modifications to lane geometry at this intersection are expected to be needed in the future as traffic volumes increase.



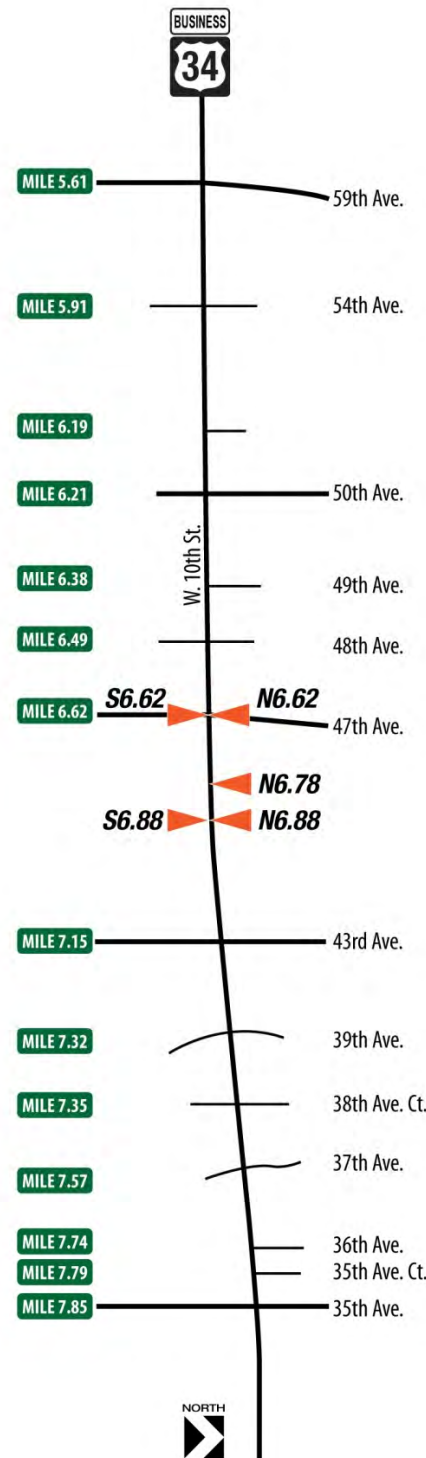
N6.78 – Private Access

An existing driveway at this location currently provides one of two primary accesses to the customer parking lot at a superstore. As such, this is planned for continuance as a “Right-In/Right-Out” access.



N6.88 – Private Access

An existing driveway at this location currently provides one of two primary accesses to the customer parking lot at a superstore and also serves a neighborhood shopping center east of it on the north side of the US 34 Business Route. The intersection is currently signalized as a full-movement access and is not planned for future restrictions in access.



South Side



S6.92 – Private Access

An existing driveway at this location currently provides the sole accesses to a large house. As such, S6.92 serves low volumes of traffic. It is planned as an “Access to Remain until Land Use Changes,” but eventually would be restricted to right-in/right-out turning movements once it is determined to be unsafe for left turns. (Note: although aerial photography indicates that the City of Greeley is the property owner, it was recently sold after being discontinued as a fire station.)



S7.15 – 43rd Avenue – Public Street

The 43rd Avenue intersection is currently signalized as a full-movement access and is not planned for future restrictions in access.



3/4 S7.23 – Private Access

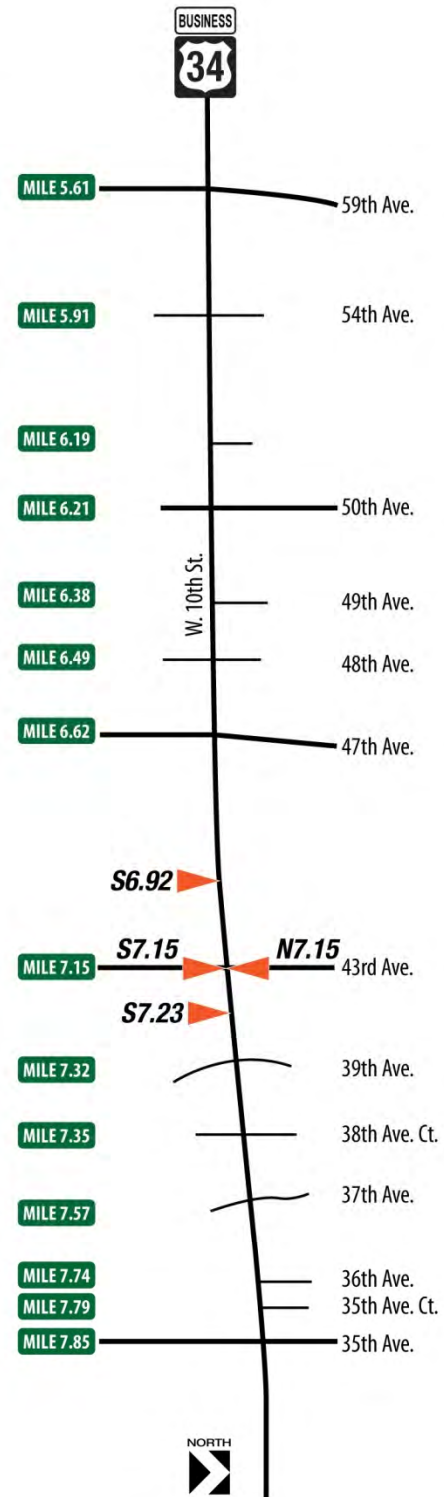
An existing driveway at this location currently provides access from the US 34 Business Route to both a bank and a restaurant. These properties also share a driveway with an access point to their west onto 43rd Avenue. S7.23 is planned for continuance as a “3/4” access, that is, being restricted to right-in/right-out/left-in turning movements.



North Side

N7.15 – 43rd Avenue – Public Street

The 43rd Avenue intersection is currently signalized as a full-movement access and is not planned for future restrictions in access.



South Side



S7.27 – Private Access

An existing driveway at this location currently provides access to a home located a considerable distance away from the US 34 Business Route. It is planned as an “Access to Remain until Land Use Changes,” but eventually would be restricted to right-in/right-out turning movements once it is determined to be unsafe for left turns.



S7.32 – 39th Avenue – Public Street

The 39th Avenue intersection is currently signalized as a full-movement access and is not planned for future restrictions in access.



North Side



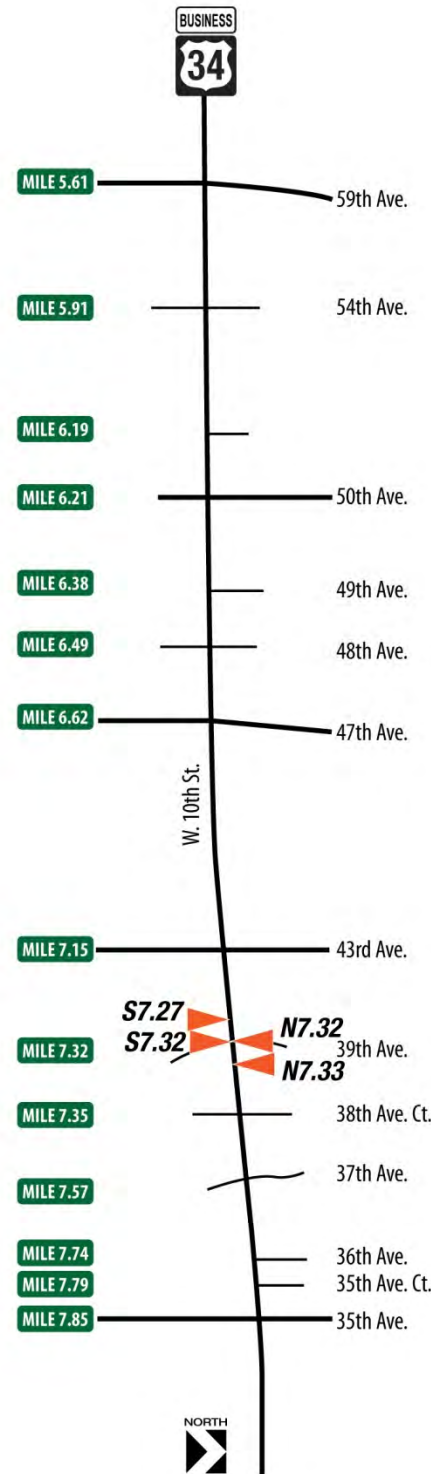
N7.32 – 39th Avenue – Public Street

The 39th Avenue intersection is currently signalized as a full-movement access and is not planned for future restrictions in access.



N7.33 – Private Access

An existing driveway at this location currently provides access to a commercial building (multiple offices). It is planned as an “Access to Remain until Land Use Changes” but eventually would be restricted to right-in/right-out turning movements once it is determined to be unsafe for left turns. This property’s parking lot also has direct access to 38th Avenue Court.



South Side

3/4

S7.35 – 38th Avenue Court – Public Street

The 38th Avenue Court intersection is currently restricted to right-in/right-out/left-in turning movements. It is planned for continuance as a “3/4” access. See explanation about the 38th Avenue Court intersection (N7.35) and the Frontage Road (North Side) between 38th Avenue Court and 37th Avenue Court regarding planned changes to those locations.

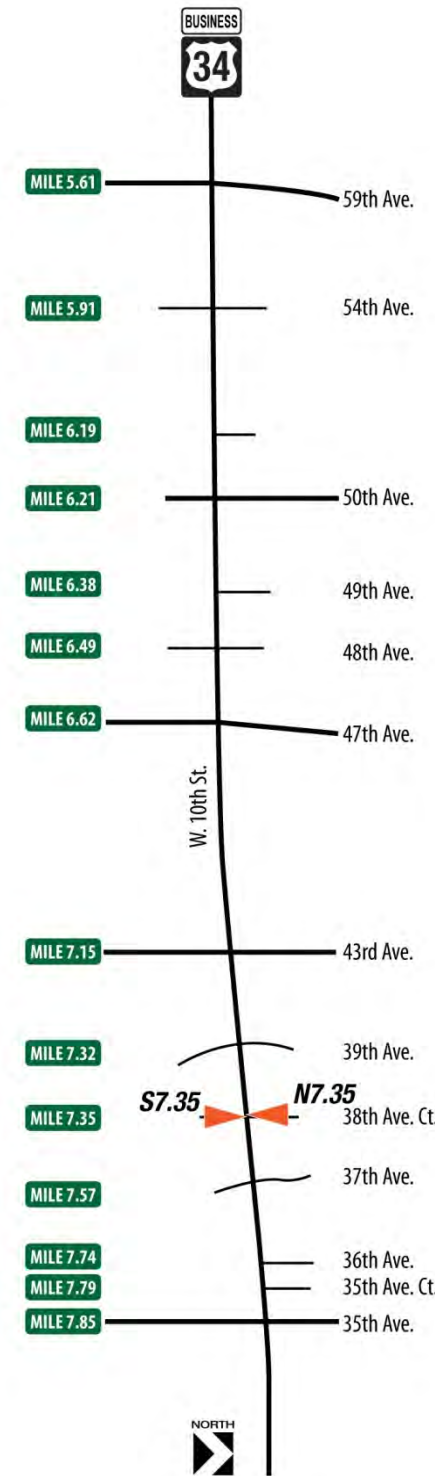


North Side

3/4

N7.35 – 38th Avenue Court – Public Street

At the 38th Avenue Court intersection an island restricts northbound traffic from coming through; otherwise all other movements are allowed. This intersection is planned to become restricted to right-in/right-out/left-in turning movements in the future, once it is determined to be unsafe for either southbound through traffic or left-out turning movements. The affected neighborhood traffic would then be diverted to either the 39th Avenue or 37th Avenue Court intersections, both of which are signalized. See a separate explanation below about optional plans for the frontage road that extends between 38th Avenue Court and 37th Avenue Court on the north side of the US 34 Business Route. Each option for the frontage road would affect the influence area of this intersection.



Frontage Road (North Side) between 38th Avenue Court and 37th Avenue Court

A frontage road currently serves commercial businesses located on the north side of the US 34 Business Route between 38th Avenue Court and 37th Avenue Court. To address safety concerns at each end of this frontage road, two optional conceptual designs have been developed for a future improvement project. See Appendix B. Both options address the somewhat hazardous conditions that exist at the 38th Avenue Court and 37th Avenue Court intersections on the US 34 Business Route because of the additional conflict points associated with the frontage road intersections that are in very close proximity. Considering that land use changes may occur in this vicinity, both of the following options would be revisited, and possibly new ones conceived, if and when funding would be identified for a project to be developed and built:

RI/RO

Cul-de-Sac Option [RI/RO icon]

N7.41 (Approximate Location) – Allowable New Access

This option would close the frontage road's intersections with both 38th Avenue Court and 37th Avenue Court, and would place a cul-de-sac at the east end of the frontage road near 37th Avenue Court. Traffic would then be able to access the US 34 Business Route at new access located approximately half-way between 38th Avenue Court and 37th Avenue Court. This new access would be restricted to right-in/right-out turning movements. To compensate for the loss of some on-street parking at the east end of the frontage road where there would be a new cul-de-sac, some off-street parking is proposed on what is currently the front or side yard of the Comcast cable television facility.

One-Way (Eastbound) Option

This option would convert the existing two-lane, two-way frontage road with parallel parking to a one-lane, one-way frontage road (eastbound). This would include a modification of the frontage road's 37th Avenue Court intersection to increase the spacing between it and the 37th Avenue Court signalized intersection on the US 34 Business Route. The intersection modification would require some right-of-way to be acquired from the Comcast cable television property. With only one lane serving traffic, adequate space would enable diagonal parking to be provided, resulting in an increase in the number of parking spaces on the frontage road.

South Side



S7.57 – 37th Avenue Court – Public Street

The 37th Avenue Court intersection is currently signalized as a full-movement access and is not planned for future restrictions in access. See explanation about the 37th Avenue Court intersection (N7.57) and the Frontage Road (North Side) between 38th Avenue Court and 37th Avenue Court regarding planned changes to those locations.



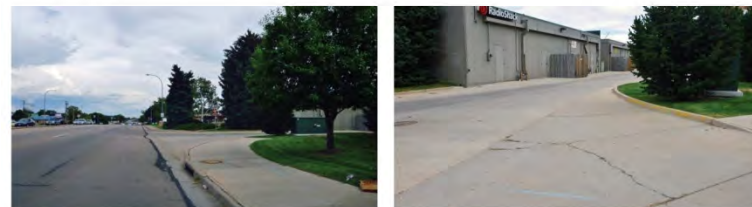
S7.65 – Private Access

An existing driveway at this location currently provides access from the US 34 Business Route to restaurants and commercial businesses. It is currently restricted to right-in/right-out turning movements, which is reinforced by a raised, landscaped center median on the US 34 Business Route and it is planned for continuance with this same restriction.



S7.68 – Private Access

An existing driveway at this location currently provides access to and from the US 34 Business Route for restaurants and the rear entrances to commercial businesses located in the Bittersweet Plaza shopping center. It is used like an alley. It is currently restricted to right-in/right-out/left-in turning movements, which is reinforced by a raised, landscaped center median on the US 34 Business Route and it is planned for continuance with this same restriction.



North Side



N7.57 – 37th Avenue Court – Public Street

The 37th Avenue Court intersection is currently signalized as a full-movement access and is not planned for future restrictions in access. See a separate explanation above about optional plans for the frontage road that extends between 38th Avenue Court and 37th Avenue Court on the north side of the US 34 Business Route. Each option for the frontage road would affect the influence area of this intersection.



N7.67 – Private Access

An existing driveway at this location currently provides access from the US 34 Business Route to commercial businesses located in a neighborhood shopping center. It is currently restricted to right-in/right-out turning movements, which is reinforced by a raised, landscaped, center median on the US 34 Business Route, and it is planned for continuance with this same restriction.



South Side

RI/RO
S7.74 – Private Access

An existing driveway at this location currently provides full movement access from the US 34 Business Route to the customer parking lot of the Bittersweet Plaza Shopping Center, which includes a major supermarket. It serves as one of the shopping center’s main entrances. It is aligned with the 36th Avenue intersection and due to its close proximity to the 35th Avenue intersection, which is signalized and has an eastbound, left-turn auxiliary lane, S7.74 is not planned for signalization. S7.74 is planned to be restricted to right-in/right-out turning movements once it is determined to be unsafe for left turns. The affected shopping center traffic would then be diverted to other entrances via 35th Avenue or 37th Avenue Court.



North Side

3/4
N7.74 – 36th Avenue – Public Street

The 36th Avenue intersection is currently a full-movement access and is planned to become restricted to right-in/right-out/left-in turning movements in the future, once it is determined to be unsafe for either through traffic or left-out turning movements.



RI/RO
N7.76 – Alley – Public Access

An existing alley at this location is currently restricted to right-in/right-out turning movements and serves commercial businesses. The restrictions are reinforced by a raised, center median on the US 34 Business Route. The raised median is planned to remain in place. The alley is planned as an “Access to Remain until Land Use Changes.”



R **S**
N7.77 – Private Access

An existing driveway at this location serves a fast food (pizza) restaurant and is currently restricted to right-in/right out turning movements. The left-turn restrictions are reinforced by a raised, center median on the US 34 Business Route. Physical obstructions between this driveway and the alley immediately to the west of it prevent restaurant traffic from using the alley. N7.77 is planned as an “Access to Remain until Land Use Changes.” Due to its close proximity to the alley and depending on the extent of other urban development or redevelopment in the vicinity whenever the land use on this property would change, preference should be given to consolidating its access by connecting it to the alley.





South Side



S7.79 – Private Access

An existing driveway at this location currently provides right-in only access from the US 34 Business Route to the Bittersweet Plaza Shopping Center for eastbound traffic and is planned as an “Access to Remain until Land Use Changes” for continuance as a right-in only access.



S7.85 – 35th Avenue – Public Street

The 35th Avenue intersection is currently signalized as a full-movement access and is not planned for future restrictions in access.



North Side

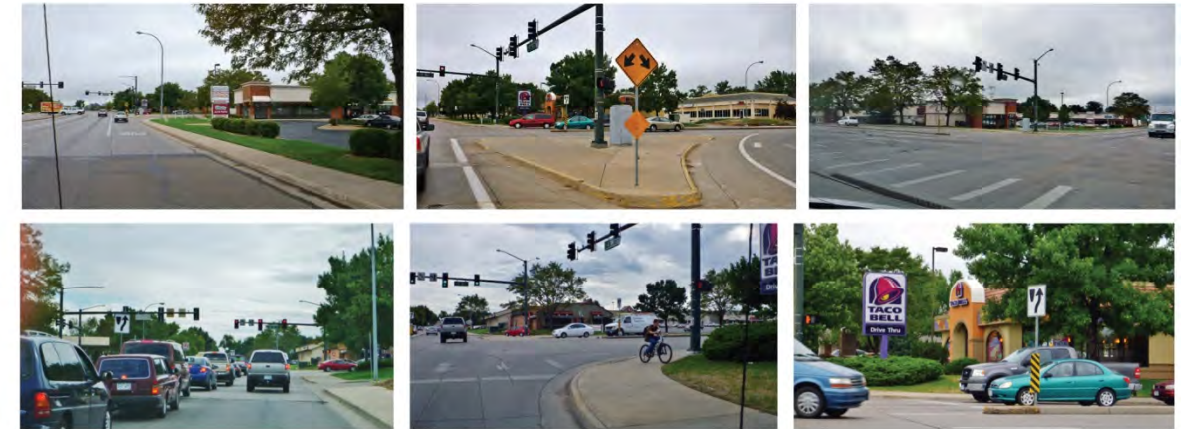
N7.79 – 35th Avenue Court – Public Street

The 35th Avenue Court intersection is currently restricted to right-in/right-out turning movements and serves commercial businesses near US 34 Business as well as a residential neighborhood farther north. The turning restrictions are reinforced by a raised, center median on the US 34 Business Route. It is planned for continuance with these same restrictions.



N7.85 – 35th Avenue – Public Street

The 35th Avenue intersection is currently signalized as a full-movement access and is not planned for future restrictions in access.





4.0 PUBLIC AND AGENCY PARTICIPATION PROCESS

4.1 Agency Coordination

The US 34 Business Access Control Plan’s study area included a short distance that is under Weld County’s jurisdiction with the rest being part of the City of Greeley. CDOT controls access along US 34 Business because it is a State Highway. Throughout the study, the North Front Range MPO staff maintained close coordination with local staff and CDOT personnel. A Technical Advisory Committee was assembled specifically for the purpose of guiding and overseeing the project that prepared this Access Control Plan. It was comprised of staff members from each of the local agencies and the state. (See List of Preparers in **Appendix G**)

This advisory committee assisted the North Front Range MPO staff and its engineering consultant during the development of objectives and strategies for each geographic segment of US 34 Business being addressed in the ACP and provided overall recommendations for the Access Control Plan. The committee members were asked frequently to provide knowledge and guidance regarding future planning efforts and local conditions, which was essential for developing a sense of changes in access which should occur over time along the corridor.

The Greeley City Council offered input that was focused on the intersection of 50th Avenue. Council members felt it appropriate to plan for a traffic signal at the 50th Avenue intersection (the draft plan having initially shown this to be reduced from full-movements to three-quarter movements only). The final plan reflects this input.

4.2 Public Outreach Process

Another critical element of the coordination effort was the public participation process. Public open houses were held at two key stages during the study process. At these open houses, exhibits showing the access control planning efforts were available. NFRMPO, CDOT, City of Greeley, Weld County and consultant representatives were in attendance to answer questions and to receive public comments, concerns and input. Two open houses were held, both occurring at the Greeley FunPlex (community recreation center), which is southwest of the 59th Avenue and US 34 Business intersection. This location was chosen because of its close proximity to the neighborhoods directly affected by the ACP. Attendance at both open houses ranged from 25 to 30 persons.

These open houses were advertised by mailing postcards to property owners, residents and other interested parties along the corridor. The mailing list was compiled from county assessor records, from driving through the corridor to record physical street addresses and by other interested parties who provided mailing addresses. Additional public advertisement occurred through press releases to area newspapers and radio stations, and through newspaper articles that appeared in local media before and after the public open houses. **Appendix C** contains examples of meeting invitations sent to those on the mailing list along with press releases and articles that appeared in area newspapers.

The most significant issue with the draft plan (shown at the second open hose) concerned the disposition of the 50th Avenue intersection and the desire for it to eventually be signalized. This, along with subsequent City Council input, has led to the final plan which shows this intersection’s eventual signalization once the appropriate warrants are satisfied.

5.0 COST ESTIMATES

Conceptual level cost estimates (Year 2011 dollars) have been prepared for the one area in which additional parallel roads are needed. Specifically, the segment from Sheep Draw to 59th Avenue is the focus in which the following would be constructed as part of this plan:

- ▶ 11th Street from 59th Avenue west to the future extension 63rd Avenue. Included in this cost estimate is the section of 63rd Avenue between US 34 Business and 11th Street.
- ▶ 9th Street from 63rd Avenue east to 59th Avenue. Included in this cost estimate is the future construction of 61st Avenue from US 34 Business to 9th Avenue.

Table 5.1 presents the estimated cost construct 9th and 11th Avenue as described. The conceptual alignments of these roadways is presented in **Appendix D**

Table 5.1 Conceptual Opinion of Probable Costs by Segment

Roadway Segments	Total Cost Estimate ¹
11 th Street; 59 th to 63 rd Avenues (and short segment of 63 rd Avenue from 11 th Street to US 34 Business)	\$1,560,000
9 th Street; 59 th to 63 rd Avenues (and short segment of 61st Avenue US 34 Business to 9 th Street)	\$1,2700,000
Total	\$2,830,000

¹ Cost Estimates do not include cost for right-of-way acquisitions or displacement/relocations. All cost estimates are Year 2011 dollars.

It is anticipated that other improvements along US 34 Business could be implement as traffic demands increase. Section 2.4.2 identified other intersection improvements that should be considered when needed. Because these improvements are not specifically access related, the development of their design and costs are beyond the scope of this plan.

One other notable improvement included in this plan is the shifting of the north frontage road just west of 37th Avenue Court. This improvement requires right –of-way from the corner parcel (currently being used by Comcast), and its implementation may best take place in conjunction with future redevelopment of that parcel. As such, a construction cost estimate was not prepared for this improvement at this time.



6.0 IMPLEMENTATION REQUIREMENTS

The improvements recommended in the Access Control Plan represent both short-term and long-range plans and, as such, will be implemented over time as traffic and safety needs arise, and as funding allows. The sources of funding for implementing the ultimate cross section and associated improvements are currently unknown.

Future funding for implementation is likely to require participation from both public and private sources. The designs shown in these plans are schematic concept alignments. Detailed engineering drawings of exact roadway alignments and other access related improvements will be conducted as project funding is identified and will consider constraints due to natural features, storm drainage, floodplain issues and other topographic features. The recommended improvements could be implemented by several means:

- ▶ **Re-development by Property Owner** – When a property re-develops to a new land use, or when an existing property owner wishes to modify access or the property frontage, the governing agency can require the property owner to implement the Access Control Plan recommendations.
- ▶ **City, County, or CDOT Capital Improvements Funds** – Larger scale projects could be constructed as capital improvement funds become available from the governing agencies.
- ▶ **Metropolitan Planning Organization** – In addition to funds that may be available from local or state agencies, monies could become available through the North Front Range Transportation & Air Quality Planning Council for larger scale construction projects; however, the fiscally constrained North Front Range Regional Transportation Plan for 2035, which is the currently adopted long-range plan, does not commit funding for a project or series of projects that would accomplish specific improvements to US 34 Business other than some high technology traffic signal control systems, as noted in Section 1.3.1 of this report.

In order to ensure that the improvements being proposed in the Access Control Plan 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 followed for all local and regional transportation and land use planning. Therefore, it is recommended that the US 34 Business Access Control Plan be adopted through an Intergovernmental Agreement (IGA) between CDOT, Weld County, and the City of Greeley.

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 typically calls for the creation of an Advisory Committee comprised of one representative from each of the signatories of the IGA. Access Control Plan 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 Plans and IGAs at least every three years for needed updates and will adjust project cost estimates periodically to address inflation. This process should ensure continuing coordination between the agencies in the corridor.

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