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APPENDIX A motion by steering committee

Motion to recommend approval/adoption of the Central Ave Corridor Study final document, including all maps, diagrams, and tables included within; as well as, the following changes: 1) updating the total project costs for street/R-O-W improvements, 2) melding the phasing plan with the cost estimates, 3) showing additional funding options 4) adding figures showing the intersections with crash rates greater than the average critical crash rates. 5) Blunge pg 33 & 34

Motion by Coery Christensen
2nd Tom Skene

6) Add "Discussions concerning maintenance shall be considered as a part of a project construction cost & life cycle cost."

1/30/08

Mike Laverdure M.L.H.

Nancy Ellis

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APPENDIX B urban design memorandum

CENTRAL AVENUE CORRIDOR STUDY

Urban Design Memorandum

Prepared For:

JLG Architects, Inc.

By

SRF Consulting Group, Inc.

December 2007

SRF No. 0076150

I. INTRODUCTION

The Grand Forks – East Grand Forks Metropolitan Planning Organization has retained JLG Architects (JLG) to prepare a framework plan for improvements along Central Avenue in East Grand Forks from 10th Street NE/NW to the flood protection levee one mile north of the City limits. The framework plan will address such topics as land use, traffic operations, and urban design. SRF Consulting Group, Inc. (SRF) has been retained by JLG to perform a traffic analysis and to assist in the development of urban design concepts for the framework plan. This memorandum covers issues associated with the urban design component of the plan.

Study Objectives

The urban design portion of the framework plan will present improvement recommendations for the purpose of enhancing the aesthetics of Central Avenue and creating a vibrant commercial corridor. Central Avenue is a primary entrance into the community with a mixture of commercial, industrial and civic institutions located along it. Improving the corridor's visual quality and providing pedestrian and bicycle facilities along the corridor will create an improved business environment, express community pride and strengthen the corridor's identity.

Existing Conditions

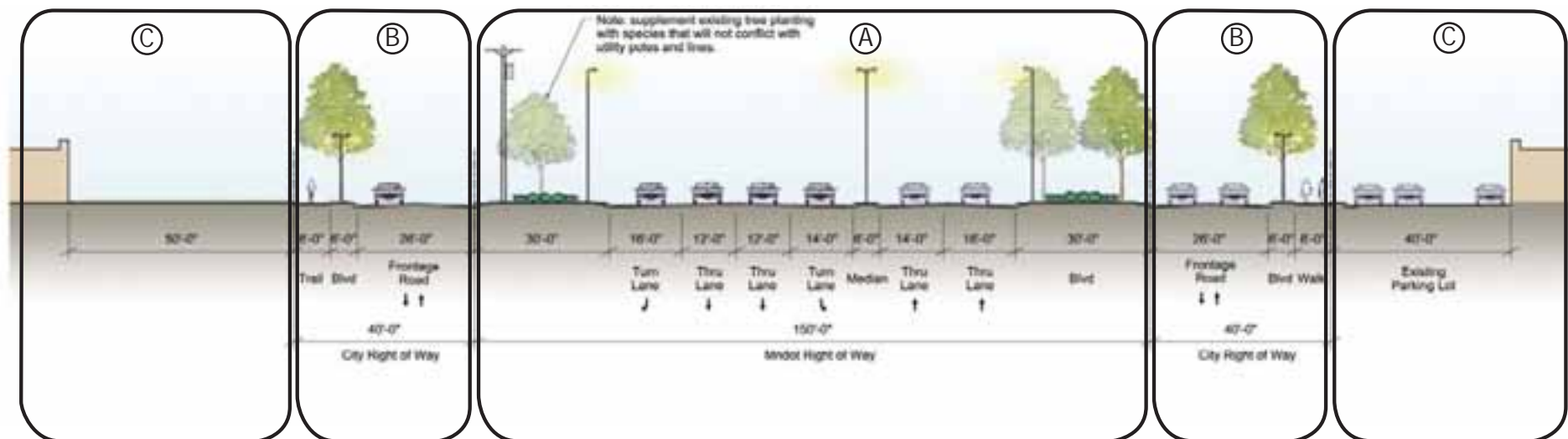
The urban design recommendations included in this memorandum are based upon a visual quality analysis that was performed by JLG. Several of the major issues that were highlighted include:

- Current violations of the City's sign maintenance, merchandise storage and parking codes
- Several of the frontage roads are in need of maintenance
- The corridor lack pedestrian and bicycle facilities
- Industrial uses are moving into the corridor
- Pedestrians are crossing the roadway at midblock locations

The roadway corridor can be broken into the following three sub areas, each of which contributes to the corridor's visual quality:

- Mainline Highway – Minnesota Department of Transportation Right of Way
- Frontage Road – City Right of Way
- Private Sector – Private Property

Figure 1 highlights some of the existing condition issues broken out by each of the roadway sub areas. It also summarizes some of the urban design opportunities that exist along the corridor, which will be covered in more depth later in this memorandum.



(A) Mainline Highway

Issues

- Dominant visual presence of overhead power lines
- Utilitarian lighting
- Minimal landscape plantings

Opportunities

Enhance and unify corridor with streetscape features.

- Bury overhead power lines or utilize less visually dominant poles
- Decorative lighting and banners
- Landscaped boulevards
- Gateway treatments
- Enhanced pedestrian crossings

(B) Frontage Road

Issues

- Excessive pavement width
- Lack of bicycle and pedestrian facilities
- Utilitarian lighting
- Used by adjacent property owners for storage or display of merchandise
- Lack of landscape plantings

Opportunities

Reinforce mainline character and increase comfort for bicyclists and pedestrians.

- Reduce frontage road width and reallocate space for pedestrians and bicycles
- Decorative lighting
- Improve transit stops
- Street trees

(C) Private Sector

Issues

- Divergent land uses next to each other
- Lack of adequate screening of storage areas and parking lots
- Industrial uses and building materials
- Non-uniform signs (free-standing and on building facades)
- Lack of architectural standards

Opportunities

Support enhanced corridor image by screening objectionable views. Enhance appearance of individual parcels.

- Screening of storage areas and parking lots
- Uniform, low monument signs
- Architectural and landscaping requirements

II. CENTRAL AVENUE URBAN DESIGN CONCEPTS

Urban Design Guidelines

The following urban design guidelines should direct future corridor improvements in order to achieve the desired vision for the corridor.

1. Develop a unifying theme to create a distinct identity for Central Avenue.
2. Promote public and private realm improvements that mutually reinforce the visual quality of the corridor.
3. Emphasize vertical elements for visual impact, district identity, and to break the corridor width into smaller sub areas.
4. Promote high quality design and materials in the built environment.
5. Install streetscape elements that are low maintenance, resistant to vandalism, accommodate snow storage, and are drought and salt tolerant.
6. Integrate multiple modes of transportation into the corridor and provide greater connectivity.

Opportunity for Greatest Change within the Public Realm

The area within the public realm that presents the largest opportunity for change is the frontage road area located within the city right of way. This area contains a wide frontage road that is currently under utilized as space for on-street parking. The frontage road area is the recommended location for new pedestrian and bicycle facilities as it is directly adjacent to corridor businesses that people want to reach.

Early in the design process, SRF and JLG jointly developed the following two frontage road modification concepts:

Reduced Frontage Road

In this concept, the frontage road width would be reduced from its current 40-foot estimated width down to a 26-foot width (see Figure 2). The new roadway width would allow for two travel lanes in each direction and would eliminate on-street parking. All parking associated with the adjacent land uses would have to be accommodated on each parcel. The additional 14 feet of space gained from the reduction in roadway width would be reallocated to either a sidewalk or multi-use trail and turf boulevard. On the east side of the corridor an eight foot concrete sidewalk and a six-foot turf boulevard is proposed, which matched the 14 feet of space gained by the frontage road width reduction. On the west side of the corridor, an eight-foot multi-use bituminous trail and six-foot turf boulevard is proposed.

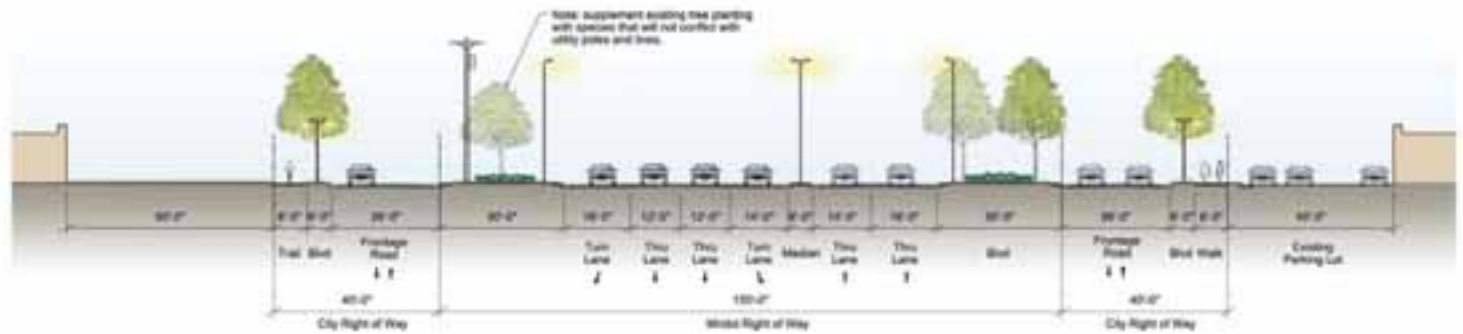
CROSS SECTION A-A'
Central Avenue North
Existing Condition
View North

Note: all dimensions
are approximate



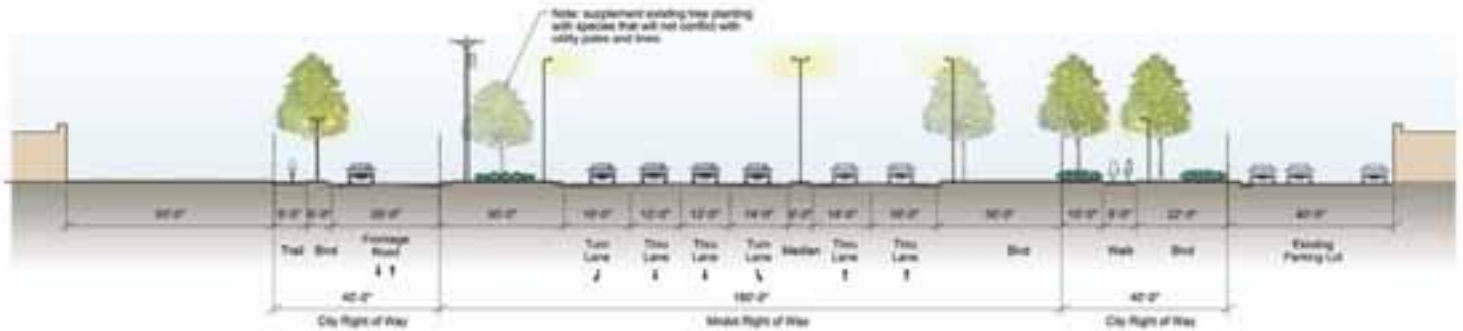
CROSS SECTION A-A'
Central Avenue North
Reduced Width Frontage Road Concept
View North

Note: all dimensions
are approximate



CROSS SECTION A-A'
Central Avenue North
Backage Road Concept
View North

Note: all dimensions
are approximate



Backage Road

In this concept, the frontage road on the east side of the corridor was eliminated and replaced with a new backage road, which would improve roadway safety by shifting the connection to the cross streets back from the Central Avenue intersections (see Figure 2). It appeared feasible to reconfigure parcel access from the existing frontage road to a backage road for the east side of the corridor. The 40 feet of space recovered by the relocation of the frontage road to a backage road would be reallocated to a concrete sidewalk, a 22-foot wide landscaped boulevard and ten additional feet would be added to the Mn/DOT boulevard. Creating a backage road on the west side of the corridor was not deemed feasible. Therefore, a reduced frontage road was proposed for the west side of the corridor. The backage road concept did not received community support and therefore was not brought forward to the final recommendations.

Corridor Design Components

The physical elements within the sub areas of the roadway corridor play a critical role in the aesthetics of the corridor. Many of these elements are necessary components of a roadway corridor such as street lights, signs and buildings. If implemented thoughtfully, these functional elements, combined with other aesthetic elements, can provide a unified and distinct identity for the corridor, improve corridor user comfort, and enhance community pride, thereby creating an environment that is beneficial to existing and future businesses along the corridor. Specific corridor design elements will be presented based on their location within the roadway corridor. Supporting representative imagery can be found on Figures 3 through 5.

Mainline Roadway

1. *Mn/DOT Boulevard and Median Plantings*

Boulevard - The incorporation of trees, shrubs and perennial plants on Mn/DOT boulevards provide an opportunity to soften the corridor environment, break the corridor width into smaller sub areas and provide seasonal color and interest. Perennial plantings provide the most visual impact at the noses of the boulevards. These areas may also be supplemented with enhanced pavement treatments to further visually punctuate these highly visible areas. Streetscapes can be harsh environments. Therefore, all plant materials should be drought and salt tolerant. Irrigation of perennial plants may be necessary to enhance their vitality.

Due to the fact that overhead power transmission lines exist within the westerly Mn/DOT boulevard, care must be taken to plant tree species that will not interfere with the overhead transmission lines when the trees mature. When planting trees near the transmission lines, Xcel Energy requires a 12' horizontal clearance and a 15' vertical clearance from the lines to the edge of tree canopy. The poles carrying the lines require a 10' radius clear zone free of all vegetation. Ornamental tree species that do not exceed a 15 foot height are the most favorable species for this situation. There is a small chance that pyramidal shaped overstory tree species may also work. Xcel will prune all vegetation within 25 feet of their poles and lines.



Street trees located in boulevard



Street trees form an alley



Parking lot screening with ornamental railing and columns



Parking lot screening with ornamental railing and plantings



Crosswalk detailing



Crosswalk delineated with contrasting pavement type, color and pattern



Transit stop shelter



Transit stop shelter with streetscape furnishings and plantings



Transit stop shelter with exterior seating



Banners show community identity and public art



Banners in series as streetscape ornamentation



Roadway and pedestrian scale lighting



Ornamental street lighting with banners. Double headed lights in median, single lights in boulevards. Accent banners.



Trails with accent edges



Median island with overstory trees, turf and shrubs



Median island with overstory trees, turf and colored concrete maintenance edge



Median island with overstory trees, turf, annual flowers and colored pavers maintenance edge



Roundabout with sculpture and landscape plantings



Roundabout with artistic landscaping



Roundabout with landscape plantings



Town entrance gateway pillar and monument



Town entrance gateway pillars



Town entrance gateway signage and plantings



Town entrance gateway treatment with pillars and signage



Key intersection treatment with signage and plantings



Key intersection treatment: stone pillars and plantings



Key intersection treatment as architectural feature

When Central Avenue streetscaping moves into detailed design, the City or their designers should contact Brad Weidenfeller (telephone number: 763-271-6419, bradley.m.weidenfeller@xcelenergy.com.) in the Vegetation Management Department of Xcel Energy, who will prepare a plan and profile of the corridor with exact transmission line locations to arrive at the required setbacks for tree planting along Central Avenue.

Median - Currently, the Mn/DOT median islands are surfaced with concrete. Should some intersections be converted to right-in/right-out in the future, there may be sufficient area within the median to consider converting them from a paved surface to a planted median that would further break down the corridor into smaller spaces and enhance the character of the corridor.

2. *Lighting and Banners*

Decorative lighting can visually unify a corridor while also providing necessary roadway safety. The style and color of the lighting can help establish a unique identity for the corridor. Lights can be further supplemented with banners that provide additional color and seasonal interest.

While replacing the existing street lights with ornamental lights may not be financially feasible in the short term, it may be feasible to affix banner poles to the existing street lights, which will support the objective of strengthening corridor identity and creating seasonal interest.

3. *Gateway Features*

Two gateway features are proposed for Central Avenue, each of which provides a distinct role within the corridor:

Community Entrance – These elements announce arrival to the community and start to convey community identity and pride. The location of the community entrance should be determined based upon expectations of future community expansion along the corridor. If significant business expansion and annexation is expected north of 23rd Street, the community may consider locating the entrance feature north of 23rd Street. Typical community entrances include vegetation, pillars and/or sign monuments and lighting. The community entrance should tie with the existing community entrance at the river to create unified community-wide gateways that can be replicated at other entrances to East Grand Forks. The gateway along Central Avenue doesn't need to be an exact duplicate of the gateway at the river, but they should read as a family.

As part of the transportation component of this study, roundabouts are being considered for possible implementation. These traffic control devices can also double as community entrances. The roundabout central island provides a prime opportunity to integrate sign monuments, vegetation or public art.

Key Intersections – Gateway treatments at key intersections are used to signify important cross streets along a corridor. They are also important repetitive elements that unify and enhance the character of the corridor. Gateways can take the form of structural elements, such as pillars, monuments and fencing, architectural features, or can consist primarily of vegetation. While they are at a smaller scale than community entrances, they should use common forms and materials as the community entrances.

4. *Roadway Crossing Improvements*

The following measures can be taken to improve the safety for pedestrians as they cross Central Avenue:

Crosswalks – Pedestrian safety and comfort can be enhanced by the incorporation of crosswalks. Crosswalks should be located at all signalized intersections and should stand out from the adjacent pavement to increase their visibility for vehicle drivers. Visual contrast is typically achieved through either a change in pavement material or through the use of painted markings on the roadway. When considering a change in pavement material, careful consideration must be given to the potential for pavement failure where the two pavement materials abut due to differing expansion and contraction rates of the materials. Painted crosswalks on highways should use bold forms (i.e. zebra stripes) versus thin lines to improve visibility. Painted crosswalks require on-going maintenance to replace worn off paint.

Several new crosswalk technologies are available that would provide custom crosswalk designs, which could further provide a distinct character for the corridor. These technologies should be studied carefully during design development for their applicability with East Grand Fork's climate and the estimated traffic volume. Due to the fact that Central Avenue is a state highway, proposed crosswalk designs and materials will need to be reviewed and approved by Mn/DOT.

Pedestrian Count Down Timers – The City should consider the addition of pedestrian crossing count down timers on traffic signals. These tell pedestrians how much time is left of the pedestrian crossing phase to help them make a better decision regarding whether to cross now or wait for the next pedestrian signal phase.

Direct Pedestrians to Desired Crossing Locations – Pedestrians have a strong propensity to walk to their destination using the shortest route possible, especially young students moving between the high school and food establishments along the corridor. Given the open nature of the corridor today, it is very difficult to direct students to intersection crossings where drivers are expecting pedestrian crossing activity. Strategically placed plant massings in the Mn/DOT boulevards may discourage some pedestrians from crossing through them, but they are not effective until the plants have matured and they will not deter a determined pedestrian.

The best way to deter midblock crossings by students is to not allow them multiple routes off of the school property. Instead, through the use of strategically placed fencing, students are directed to a sidewalk as they leave the school property. Once they are started on a sidewalk that provides a comfortable and direct path to the intersection, there is higher likelihood they will stay on the sidewalk. The boulevard noses and key intersection gateway designs could also help to restrict or deter jaywalking movements.

5. *Overhead Utility Lines*

The existing overhead power transmission lines and poles provide a utilitarian appearance to the roadway. The aesthetics of the corridor would be improved if this utility were buried. Understanding that this may be cost prohibitive, the City may want to initiate discussions with the utility company to determine the feasibility of changing the poles to a style that has less visual impact.

With the addition of more vegetation in the Mn/DOT boulevards, the visual dominance of these poles should subside as the vegetation matures.

Frontage Roads

1. *Bituminous Multi-use Trails*

An eight-foot wide bituminous trail is proposed along the west side of corridor for use by both bicyclists and pedestrians. The incorporation of a trail within the corridor will allow community residents to reach corridor destinations, such as the technical college and corridor businesses, using alternative modes of transportation. The trail is proposed to be located in the most westerly portion of the city right of way, directly abutting private parcels. This will allow convenient access to corridor businesses by people using the trail. If the trail is constructed with Mn/DOT or federal funding, a two-foot clear zone easement will be required from the adjacent property owners in order to be in compliance with Mn/DOT's trail design standards.

The trail is proposed for the west side of corridor to facilitate future connections to the high school and to existing trails along the river. As the trail approaches Gateway Drive, careful consideration should be given as to the appropriate approach for crossing trail users over the west frontage road to access the crosswalks located at the intersection of Gateway Drive and Central Avenue. One alternative is to cross the trail over to the east side of the frontage road at 14th Street, which would eliminate the crossing of the frontage road near Gateway Drive. A second alternative consists of providing a signed and striped crossing of the frontage road at the point where the frontage road bends to the west. This approach assumes that traffic volumes and speeds are low along the frontage road. A raised crosswalk could also be considered at this location if it works with roadway drainage patterns. SRF recommends the second alternative provided traffic volumes and speeds are low along the frontage road.

2. *Concrete Sidewalks*

An eight foot wide concrete sidewalk is proposed along the east side of the corridor for use by pedestrians. This sidewalk is intended to be used exclusively by pedestrians who are not comfortable sharing the multi-use trail with bicyclists. The sidewalk is proposed to be located in the most easterly portion of the city right of way, directly abutting private parcels. This will allow convenient access to corridor businesses by people using the sidewalk.

3. *Turf Boulevards with Street Trees*

Both the multi-use trail and the sidewalk are proposed to be separated from the frontage road by a six-foot turf boulevard. This will increase the safety and comfort of the non-motorized users of the corridor. Street trees are also proposed within the city boulevards. Street trees can soften the roadway character and provide environmental benefits such as shading of paved surfaces, carbon dioxide reduction, rainfall interception and evotranspiration. They also aid in breaking the corridor into smaller sub areas. These trees will not interfere with the overhead power transmission lines, which allows for the use of larger tree species. As with the trees in the Mn/DOT boulevards, these tree species should be both salt and drought tolerant to enhance their vitality. Street trees are typically spaced 30 to 40 feet apart. The actual spacing will depend on the species selected and the spacing rhythm that works best with the proposed pedestrian level lighting discussed below.

4. *Pedestrian Scaled Lights with Banners*

Pedestrian scaled lighting is proposed within the city boulevards. These lights will enhance pedestrian safety and comfort along the corridor, thus encouraging travel along the corridor using alternative transportation modes. The style of the pedestrian scaled lights should complement the lighting style along the mainline highway. To further enhance and unify the corridor, banners should be affixed to the pedestrian lighting. These banners could match the banners used on the mainline highway lighting or could be a complementary variation on the theme.

5. *Transit Stops*

Pedestrian safety and comfort can be further enhanced by the incorporation of transit facilities. Transit shelters also function as aesthetic components of the corridor. Standard shelters can be modified, such as adding a custom roof, to enhance their appearance and also to better integrate their design with other corridor elements. Transit facilities are recommended to be located in the city right of way, adjacent to the sidewalks or trails.



Low profile monument signage



Small scale monument signage



Monument signage reinforces architectural character



Monument signage compatible with building materials



Brick is a common material in East Grand Forks



Brick facades & architectural ornamentation



Less expensive materials with architectural accents



Precast panels



Quality materials on front



Less expensive materials on sides and back



Precast panels with brick base



Brick with architectural accents



Berms



Vegetation



Ornamental fence with shrubs



Parking on side of building instead of front of building



Walled Enclosure



Wooden fencing

Screen: parking lots, outdoor storage areas, dumpsters,
service docks and outdoor industrial operations areas

Private Parcels

Landscape treatments on private parcels highly impact the visual character of the corridor and are key indicators of community pride. Below are several key landscape treatments that private property owners should comply with through either code enforcement or incentives. Supporting representative imagery can be found on Figures 6 and 7.

1. Low Monument Signs

The consistent use of low monument signs helps to unify a corridor and reduces visual clutter in the landscape through the elimination of multiple sign types and heights. The material and style of a sign should be complementary with the architectural character of the adjacent building.

2. Quality Building Materials

Buildings abutting the roadway corridor are prime visual elements within the corridor. The materials used on these buildings are key indicators of care and quality within the corridor. Brick is a very common building material within the community and its continued use on structures within the corridor should be encouraged. As a way to minimize costs, buildings can place high quality building materials on the front facades and then transition to less expensive materials around the side and back. Existing buildings can be enhanced by the incorporation of awnings, windows, new siding materials, architectural accents and foundation plantings.

3. Parking Lot Screening

Parking lots need to accompany nearly all of the existing land uses along the corridor. In addition, several businesses along the corridor display or store merchandise on large parking lots. The visual impact of parking lots can be minimized by screening the parking areas through the use of low ornamental fencing, low shrubs or berms. Screening of parking lots also assists in breaking up the corridor into smaller sub areas. Placing parking lots on the side of buildings instead of in front of buildings also minimizes their visual impact.

4. Storage and Equipment Screening

Several businesses along the corridor store equipment without it being screened from public view. To enhance the character of the corridor, these areas should be screened through the use of tall coniferous vegetation, berms, opaque fencing or a combination of these elements. Finally, all businesses need space for mechanical equipment and trash storage. These elements should be located away from the corridor and appropriately screened from view.

III. IMPLEMENTATION

Plant Installation

Mn/DOT's Community Roadside Landscaping Partnership Program is a potential source of funding for landscape materials located within highway right of way. This program provides up to \$20,000 on an annual basis to communities who can demonstrate that their project meets one of the program's goals (roadside beautification, community improvement and environmental stewardship). As part of the program, the community will be required to enter into a Cooperative Agreement with Mn/DOT to install and maintain the landscape improvements.

Phasing and Incremental Approach

The framework plan that is being developed is a long term vision for Central Avenue. In order to build momentum towards the implementation of larger and more costly components of the plan, several smaller less-expensive improvement initiatives should be under taken by the City. The following is a list of potential short term projects that the City should consider for implementation in the next several years:

1. Supplement street trees within the mainline boulevards through the Mn/DOT Community Roadside Landscaping Partnership program.
2. Plant shrubs/perennial grasses in the mainline boulevards and annuals/perennials at noses of mainline boulevards. The City could apply to the Mn/DOT Community Roadside Landscaping Partnership Program to received funds. The City will need to first establish an approach for on-going maintenance.
3. Install banners on existing street lights.
4. Stripe crosswalks at signalized intersections.
5. Install pedestrian count down timers at signalized intersections.
6. The City should vigorously enforce its existing code to bring private parcels into compliance.
7. While it may take longer for other public and private improvements to occur, the City should review and revise the city code in the short term so that it provides the tools needed by the City to help realize its desired vision for this corridor. For example, the city code may need to be revised to address desired screening of parking lots and outdoor storage areas that faces onto roadway corridors. It now appears that the screening is only required when areas face onto residential property.
8. Construct a community entrance on the north end of the corridor.

Should additional funding sources become available, the following corridor improvements should be considered for short term implementation as they will provide significant benefits to the corridor:

1. Narrow Frontage road and use recaptured space for new trail (west side)/sidewalk (east side).
2. Plant street trees in newly created frontage road boulevards.
3. Install pedestrian scaled lighting in newly created frontage road boulevards.

Long term improvements will likely include:

1. Transit shelters with custom roofs.
2. Ornamental lighting along the mainline roadway.
3. Gateway treatments at significant intersections
4. Upgrades to private buildings.

Maintenance

All of the corridor improvements proposed here will require some level of maintenance. Long term maintenance costs should be taken into consideration during the selection of streetscape elements to ensure that materials are durable and vandal resistant. Final mature plant sizes should be understood during plant selection to minimize pruning. Plant species should be salt and drought tolerant. The long term success of corridor improvements is intrinsically linked to the long term maintenance that it receives. Mn/DOT and the City have limited resources and likely will not be able to provide maintenance at the desired level. The City and business owners along the corridor may want to consider creating a special service district to provide consistent and uniform maintenance of the corridor.

While it is the responsibility of private property owners to keep their parcels maintained, the City should full use of its ability to develop and enforce regulations that define minimum levels of care to help protect the health, safety and welfare of community residents.

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APPENDIX C traffic operations & access management

CENTRAL AVENUE CORRIDOR STUDY

Traffic Operations and Access Management

FINAL REPORT

Prepared For:

**Grand Forks – East Grand Forks
Metropolitan Planning Organization**

By

SRF Consulting Group, Inc.

December 2007

SRF No. 0076150

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I. INTRODUCTION

Central Avenue serves as a primary conduit between the East Grand Forks downtown area and the northern section of town. The corridor is a State Trunk Highway (TH 220), controlled by the Minnesota Department of Transportation (Mn/DOT). As shown in Figure 1, the project study area spans approximately two miles of Central Avenue from 9th Street on the south to Section Line Road (approximately one mile north of 23rd Street). The Central Avenue corridor serves a wide variety of land uses, including the East Grand Forks High School, Northwest Technical College, heritage village, single-family residential, and commercial and industrial developments. It is important to note that in addition to standard passenger vehicle traffic, the corridor also services heavy commercial vehicles due to the adjacent industrial and agricultural properties .

The majority of the corridor has the potential for redevelopment into the future, especially the agricultural land north of 23rd Street to Section Line Road. This area currently is used for agricultural purposes and sporadic single-family housing; however, it is currently undergoing rezoning and annexation to the City. As many communities have grown, changing land use and development patterns have resulted in roadways serving a mix of functions. Presently, Central Avenue faces the challenge of providing the safe movement of traffic, including pedestrians and bicycles, while balancing the need for mobility and access for current businesses and adjacent industries. As growth and development occur, it is imperative that local and regional agencies prepare for the long-term operational, safety, and access needs along the corridor.

Study Objectives

The Central Avenue Corridor Study was undertaken to identify and evaluate safety and operations issues, as well as to determine what role this roadway should play in the overall regional and local transportation system. In addition, adjacent parcel land use planning and overall streetscape design was included in the corridor study review process. These last two items will be discussed and documented in separate technical memoranda. The primary study objectives discussed herein are to:

- Evaluate existing intersection/roadway operations, safety and access
- Evaluate future intersection/roadway operations in order to determine the future roadway design needs
- Identify staged improvements that could take place along the corridor
- Develop an access management plan for the corridor

As a result of this study, a long-term corridor plan will be developed to provide the framework for how Central Avenue will need to change over time to safely and efficiently accommodate growth in the area.



II. EXISTING CONDITIONS

Analyzing and assessing existing conditions in the study area establishes a baseline to project future traffic and development trends. In doing so, existing issues and conditions can be placed in context with future needs. The evaluation of existing conditions includes the following:

- Major concerns and issues
- Intersection operations analysis
- Daily traffic volumes
- Heavy commercial traffic
- Crash analysis
- Access
- Design characteristics

Study Issues

Public and agency participation are central to developing transportation solutions that are supported by stakeholders with potentially different interests. During the study process, three Steering Committee meetings and two Open Houses were held. The open house meetings were integrated into our study process to solicit input from the public on study area issues, needs, and transportation alternatives. The role of the Steering Committee was to guide and direct the study process and review all study information.

The first Steering Committee meeting and Open House identified the following issues:

- Substandard pedestrian access along the corridor
- Perceived safety issues near 9th and 10th Streets
- Access for businesses along the corridor
- Significant truck traffic during harvest season
- Heavy traffic volumes at Central Avenue and 14th Street junction

The issues identified above represent a cross section of those that were shared by most people present at either the Steering Committee meeting or the Open House. Additional comments were gathered throughout this process and are documented in the appendices.

Existing Roadway Configuration

Central Avenue is a four-lane facility between Gateway Drive (US 2) and 17th Street. It is a three-lane urban facility between 9th Street and Gateway Drive and between 17th Street and 23rd Street (two-lane divided, with turn lanes at each of the respective intersections). Gateway Drive (US 2) is a four-lane facility with turn lanes at its intersection with Central Avenue. All other side-street connections are two-lane streets with enough room to accommodate right-turn movements at Central Avenue.

Frontage roads run parallel to Central Avenue on both sides of the corridor from Gateway Drive (US 2) to 23rd Street. The frontage roads are approximately 50 feet setback from Central Avenue and provide access to all developments immediately adjacent.

Intersection Operations

The MPO provided 12-hour turning movement counts for each of the key intersections listed below. All count data was collected in May 2007. The morning and afternoon peak hours were extracted for analysis purposes to represent peak traffic conditions.

- Central Avenue and 23rd Street
- Central Avenue and 20th Street
- Central Avenue and 17th Street
- Central Avenue and 15th Street
- Central Avenue and 14th Street
- Central Avenue and Gateway Drive (US 2)
- Central Avenue and 10th Street
- Central Avenue and 9th Street

An operations analysis was conducted for the morning and afternoon peak hours at the key intersections, assuming existing traffic control, signal timing, and geometric layout, to determine how traffic currently operates in the study area. All signalized intersections were analyzed using the Synchro/SimTraffic simulation model. The unsignalized intersections were analyzed using the Synchro model with the Highway Capacity Manual output reported. Capacity analysis results identify a Level of Service (LOS), which indicates how well an intersection is operating. The LOS results are based on average delay per vehicle. Intersections are given a ranking from LOS A through LOS F. LOS A indicates the best traffic operation and LOS F indicates an intersection where demand exceeds capacity. Typically, LOS A through C is considered acceptable by drivers in this area.

For side-street stop controlled intersections, special emphasis is given to providing an estimate for the level of service of the minor approach. The traffic operations at an unsignalized intersection with side-street stop control can be described in two ways. First, consideration is given to the overall intersection level of service. This takes into account the total number of vehicles entering the intersection and the capability of the intersection to support those volumes. Second, it is important to consider the delay on the minor approach. Since the mainline does not have to stop, the majority of delay is attributed to the side-street approaches.

Results of the operations analysis indicate that all key intersections currently operate at an acceptable overall LOS C or better, with all of the individual movements operating at an acceptable LOS D or better during the morning and afternoon peak hours. Existing geometrics, traffic control, peak hour traffic volumes and level of service results for the key intersections are shown in Figures 2 and 3.

No significant queuing issues were identified from the operations analysis along the corridor. The longest queues identified were at the intersection of Central Avenue and 14th Street. In the morning peak hour, the maximum queue identified was the northbound left-turn queue at approximately 300 feet. In the afternoon peak hour, the maximum queue identified was the northbound through queue at approximately 300 feet.

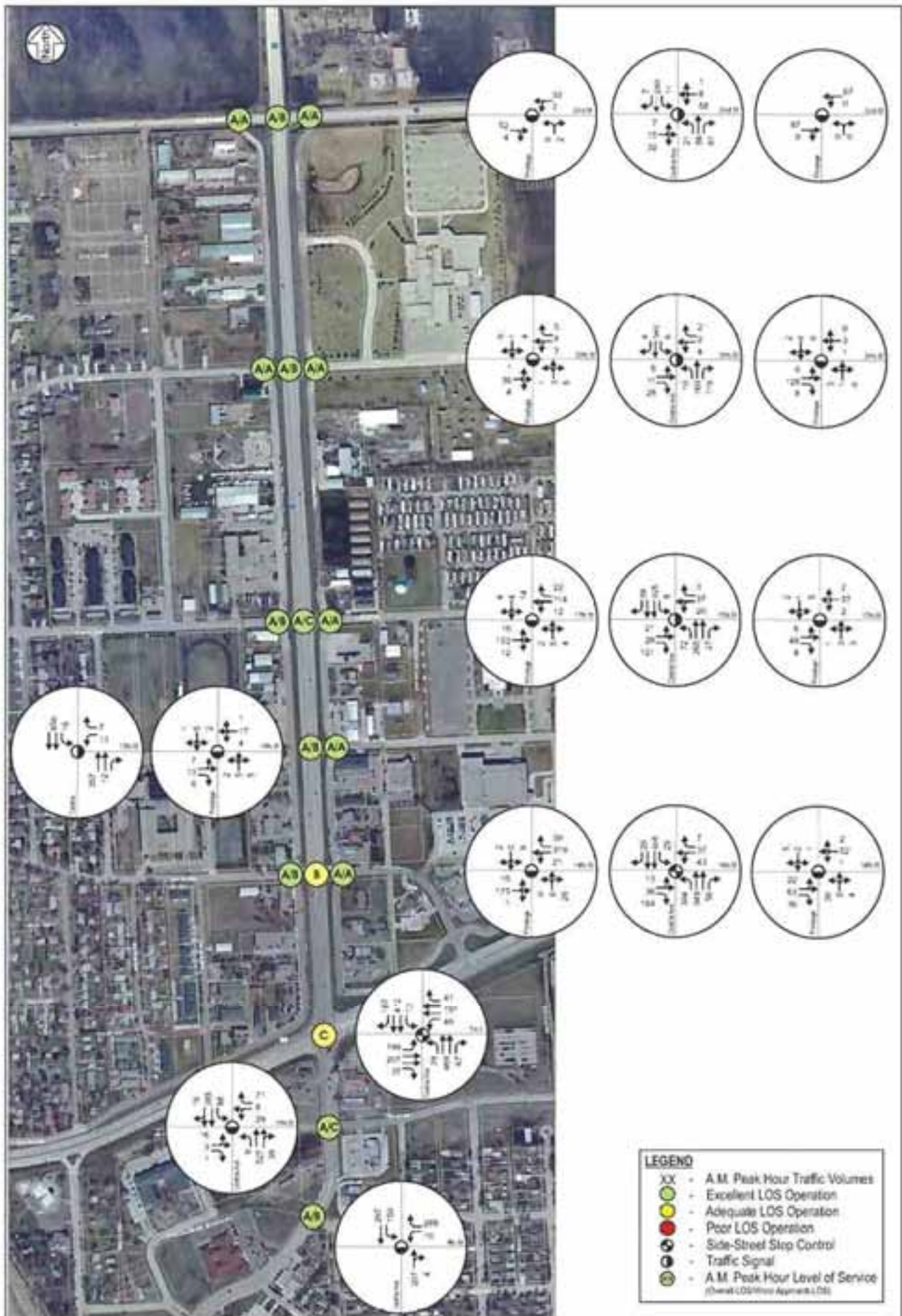
Daily Traffic Volumes

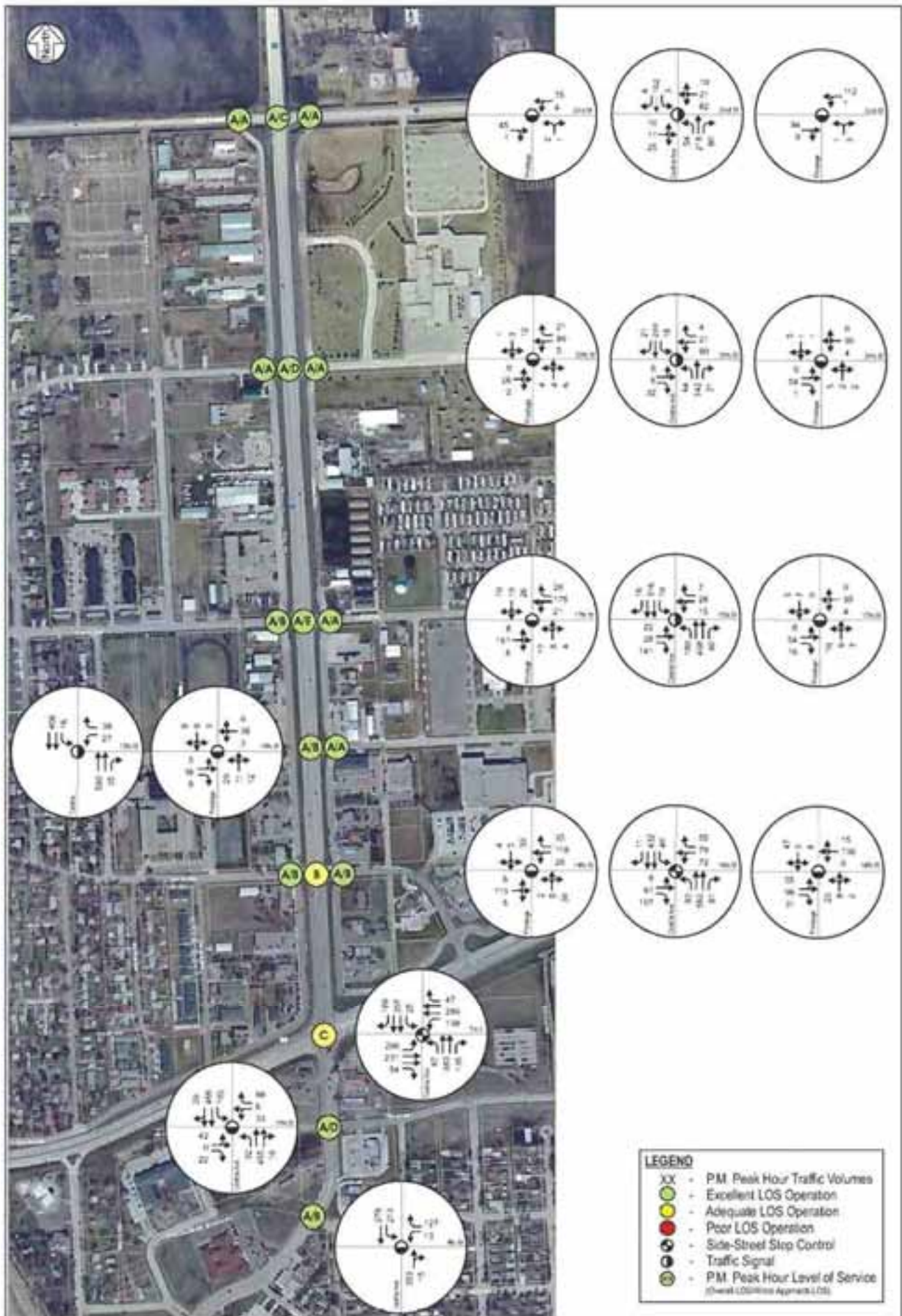
Average daily traffic (ADT) volumes were reviewed along the corridor at various locations in order to assess to what extent the existing roadway capacity is being used on a daily basis. In addition to Central Avenue itself, the side-street ADT volumes were reviewed. The majority of the Central Avenue ADT values were obtained from the Mn/DOT Year 2006 flow maps. All side-street ADT volumes and select corridor ADTs were estimated and extrapolated from the May 2007 turning movement count data.

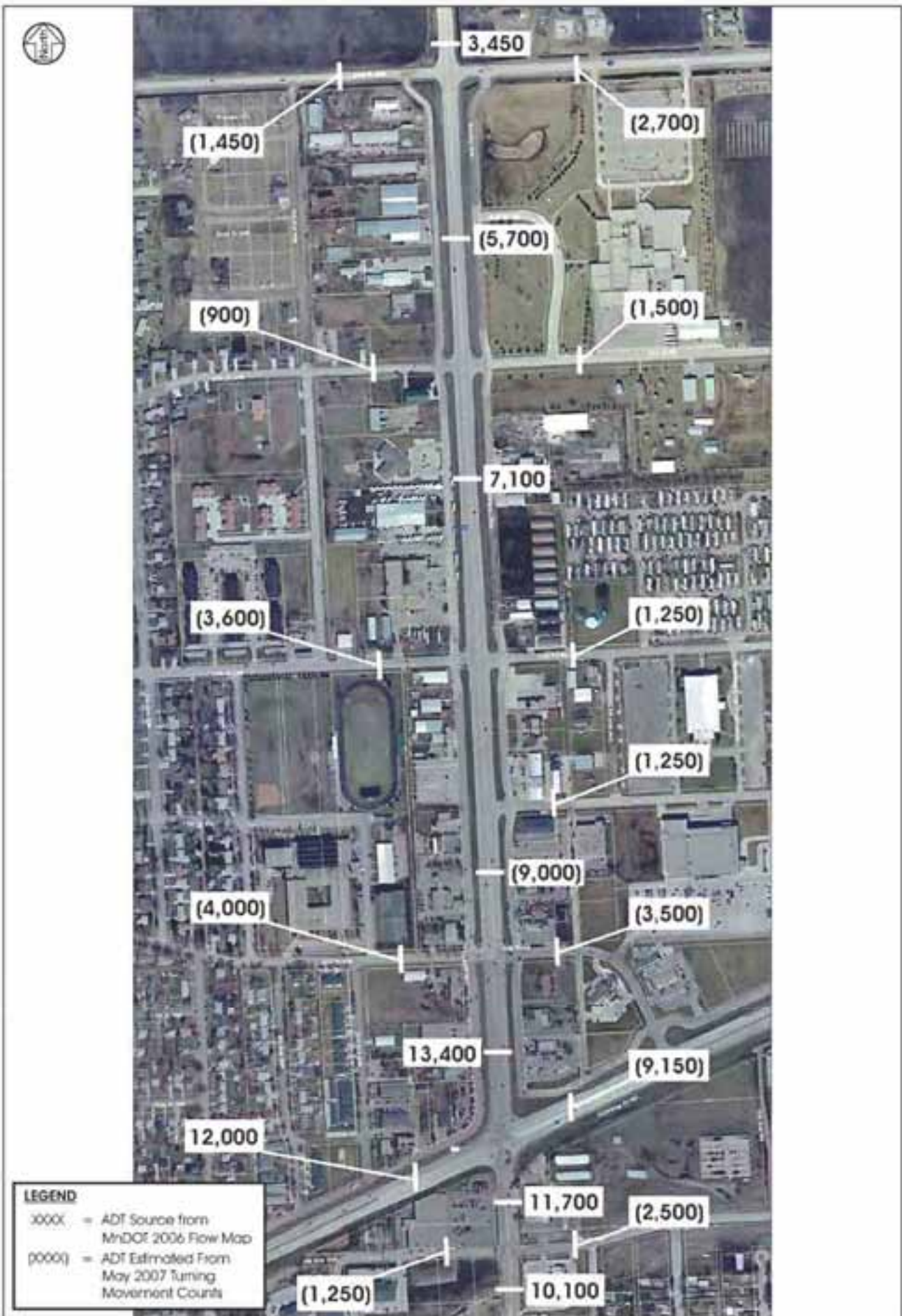
As shown in Figure 4, daily traffic volumes along the Central Avenue corridor range from approximately 3,450 to 13,400 vehicles per day. The heaviest volumes are south of 15th Street to 9th Street. A review of the current daily traffic volumes can identify capacity deficiencies in the corridor. Based on the current volumes and planning-level capacities, all segments of Central Avenue are theoretically operating under capacity.

Heavy Commercial Traffic

Central Avenue serves as a key route for heavy commercial traffic. In addition to provided overall average annual daily traffic (AADT) volumes Mn/DOT also gathers data on heavy commercial vehicle roadway usage. According the Mn/DOT Year 2006 flow maps there is an approximate 380 heavy commercial average daily traffic (HCADT) volume along Central Avenue. This value is reported north of 23rd Street along Central Avenue. A 380 HCADT value at this point represents approximately 10 percent heavy commercial vehicle mix ($380 \text{ HCADT} / 3,450 \text{ AADT} = 10 \text{ percent}$). Data is not available further south of this point to provide input into how many additional heavy commercial vehicle trips are added between along Central Avenue between 23rd Street and Gateway Drive (US 2). There are a number trucking facilities located along Central Avenue between 23rd Street and Gateway Drive (US 2); however, they are not estimated to add a significant amount of additional daily traffic to Central Avenue above and beyond the 380 HCADT. To put this value into further perspective for the corridor, on the south end of our study boundary near Gateway Drive (US 2) the AADT value is 13,400, this then corresponds to approximately three percent HCADT.







Sugar beet transport is a significant contributor to the heavy commercial vehicle traffic along Central Avenue. The Crystal Sugar Beet plant is located southeast of the Central Avenue corridor along Business Highway 2. This facility has two typical trip types: seasonal harvest and TranSystem trips. Seasonal harvest typically runs for the first two to three weeks of October, where farmers/co-op members bring harvested beets to the plant. Based on information provided by the MPO, the Crystal Sugar facility receives approximately 4,000 trucks a day during the seasonal harvest. TranSystem's coordinates and delivers the sugar beet products from November to April, with approximately 330 trips per day during that time. Documentation of the heavy commercial traffic states that half of the stated volume travels through East Grand Forks via Central Avenue, Gateway Drive (US 2), 5th Avenue and Business Highway 2. Based on the overall HCADT value of 380 for the corridor, the Crystal Sugar plant contributes a significant amount to the overall heavy commercial traffic on the corridor.

Safety

Safety is important to both the general public and to those responsible for maintaining roadway facilities. To better understand the extent and severity of safety issues on Central Avenue, we performed an intersection crash analysis using crash records from January 1, 2002 through December 31, 2006. This analysis included all intersection crashes between 9th Street and 23rd Street. The study corridor includes two signalized intersections and six side-street stop controlled intersections.

Based on Mn/DOT crash data (MnCMAT – Mn/DOT-LRRB Crash Mapping Analysis Tool) for the study corridor, seven of the eight key intersections have above average crash rates during the five year period from 2002 through 2006 compared to the average crash rate for similar roadways in the Mn/DOT (Bemidji) District 2 area. However, the district area average crash rate does not account for variation in traffic volume among facilities or the random nature of crashes. Therefore, the critical crash rate was calculated to determine the statistical significance of the crash rate comparison.

The critical crash rate is often referred to as the quality control technique for identifying hazardous locations. This method only identifies those locations that have a crash rate statistically significantly higher than similar locations. It is thought to be the best, most accurate, and statistically reliable method available for determining hazards. It takes into account the traffic volumes of each intersection or segment and accounts for the random nature of crashes. For purposes of this calculation a 95th-percentile confidence interval was selected as the threshold. Meaning one can be 95 percent confident that the intersections with crash rates below the critical crash rate, but above the district average crash rate, are safe and that the higher than average crash rate is due to the random nature of crashes. Two of the eight key intersections have crash rates (crashes per million entering vehicles) greater than the critical crash rate. Table 1 displays the resultant crash rate calculations.

Table 1
Crash Rate Analysis

Key Intersection	Crashes	Crash Rate	District Crash Rate	Critical Crash Rate
Central Avenue (TH 220) and 23rd Street	8	0.66	0.20	0.88
Central Avenue (TH 220) and 20th Street	3	0.22	0.20	0.82
Central Avenue (TH 220) and 17th Street	18	0.94	0.20	0.71
Central Avenue (TH 220) and 15th Street	6	0.38	0.20	0.77
Central Avenue (TH 220) and 14th Street	25	0.92	0.50	1.09
Central Avenue and Gateway Drive (US 2)	68	1.61	0.50	0.96
Central Avenue and 10th Street	7	0.30	0.20	0.65
Central Avenue and 9th Street	2	0.10	0.20	0.69

The intersection with 17th Street has a high incidence of right-angle crashes between side-street vehicles and vehicles on Central Avenue (approximately 50 percent). In the southbound direction the roadway cross section has just transitioned from one lane to two lanes at this point and in the northbound direction the cross section is transitioning from two lanes to one lane. The posted speed limit through this area is 30 mph. The size of the roadway may cause a natural tendency to drive faster. This is a human factor occurrence more-so than there is data to support this point.

The intersection with Gateway Drive (US 2) has 65 percent crashes split between rear end and right-angle collisions. This intersection is controlled by a traffic signal. It is typical of signalized intersections to have a higher incidence of rear end collisions. This is sometimes caused by motorists not recognizing the back of the queue as they approach the signal or not identifying that vehicles are stopping in front of them at the signal. The right-angle collisions can be a result of non-compliance or insufficient timing (specifically the phase change interval, or yellow and all red time). It should be noted that while not highlighted above the crash rate at the intersection at 14th Street is nearly twice the average crash rate (with nearly 70 percent of its crashes being rear end and right-angle collisions).

Not all crashes can be mitigated in every circumstance. Often times there are other contributing factors that cannot be overcome (i.e., inattentive driving, driving under the influence, poor decision making, etc.). However, potential countermeasures can be considered to mitigate probable causes when patterns are identified. Table 2 identifies potential causes and possible countermeasures (not all causes are applicable to each intersection). It should be noted that in addition to the countermeasures shown below the “do-nothing” alternative should always be considered.

Sections that follow will outline potential access management strategies that recommend traffic control changes as well. Modifying the traffic control at some of these intersections will improve the safety for all motorists that travel the corridor.

Table 2
Crash Countermeasures

Crash Type	Potential Causal Factor	Possible Countermeasures
Right-angle crash at side-street stop control intersection	Excessive speed	Install/improve warning sign. Reduce speed limit with enforcement. Install rumble strips.
	In adequate advance warning sign	Install or improve warning sign.
	Restricted sight distance	Remove sight obstruction. Install/improve warning sign. Install stop line closer to cross road. Improve traffic control device (i.e., all-way stop, traffic signal, roundabout).
Run-off-the-road crash on two lane rural section	Excessive speed	Reduce speed limit with enforcement.
	Inadequate roadway lighting	Improve lighting.
Right-angle crash at signalized intersection	Excessive speed	Reduce speed limit with enforcement. Adjust phase change interval. Install rumble strips.
	Poor visibility of traffic signal	Install or improve warning sign. Install visors. Install back plates. Relocate/add signal heads.
	Inadequate signal timing	Re-time signal. Adjust phase change interval. Increase red clearance interval.
Rear end crash at signalized intersection	Large turning movement volumes	Provide left-turn phase. Prohibit turns. Provide turn lane.
	Poor visibility of traffic signal	Install or improve warning sign. Install visors. Install back plates. Relocate/add signal heads.
	Inadequate signal timing	Re-time signal. Adjust phase change interval. Increase red clearance interval.

Reference US Department of Transportation Federal Highway Administration, Report No. FHWA-SA-07-015,
 "Desktop Reference for Crash Reduction Factors"
 Institute of Transportation Engineers
 Modified by SRF Consulting Group, Inc.



- LEGEND**
- - Crash Rate Below District Average
 - - Crash Rate Above District Average, but Below Critical Crash Rate
 - - Crash Rate Above District Average and Above Critical Crash Rate
 - - - Potential Alignment

It is recommended that the following countermeasures be implemented at each of the intersections highlighted above. Please note that these countermeasures can be applied to other intersections along Central Avenue in order to mitigate their issues. We have identified those improvements that may be implemented with little effort, cost and within 1-2 years as short term; intermediate improvements may be more involved and require additional effort, cost and occur within 3-5 years; long term improvements are those improvements that are clearly vision goals for the corridor with extensive effort, cost and occur within 10-15 years (these improvements are more dependent on development progress in the area).

Central Avenue/23rd Street

- Review the placement of advance warning signage indicating side-street ahead, reduced speed limit ahead signage, etc. (short term improvement).
- Conduct speed limit enforcement sessions (post dynamic speed limit indicators, if available; or, physically enforce speed limit with law enforcement) – (short term improvement).
- Improve the roadway lighting in this area as development occurs (intermediate improvement).
- Improve traffic control (i.e., all-way stop, traffic signal, roundabout) – (long term improvement).

Central Avenue/17th Street

- Review the placement of additional side-street signage to indicate to motorists on the side-street that cross traffic does not stop (short term improvement).
- Conduct speed limit enforcement sessions (post dynamic speed limit indicators, if available; or, physically enforce speed limit with law enforcement) – (short term improvement).
- Improve the roadway lighting in this area as development/redevelopment occurs (intermediate improvement).
- Improve traffic control (i.e., all-way stop, traffic signal, roundabout) – (long term improvement).

Central Avenue/Gateway Drive (US 2)

- Review the traffic signal timing at this intersection to ensure that the phase change interval is long enough to clear the intersection (short term improvement).
- Review the traffic signal head placement to ensure that the signal indications are directed appropriately for approaching traffic (short term improvement).
- Review the condition of the visors and back plates to ensure that they have been installed properly and in good condition (short term improvement).

Access

Access along the Central Avenue corridor parties sufficient, providing seven full-access intersections with public streets and two restricted (right-in/right-out only) direct access points to private driveways south of Gateway Drive (US 2). This access density is in general compliance with the Minor Arterial Functional Class and Urbanizing Arterial Access Management Category 5B identified for the Central Avenue corridor. Access guidelines and practices will be discussed further in the Access Management Plan section.

III. FUTURE CONDITIONS

As indicated in the previous section, there are a number of factors that influence how a roadway and/or a system functions. Because these facilities take a long time to plan and construct, and are expected to serve future demands, it is important to evaluate them for future conditions (growth trends and other expected changes). Evaluating the corridor for these future conditions will enable the study partners to develop and work toward a plan that meets the long-term needs of the area. This section of the report highlights future conditions that will influence the function of Central Avenue.

Traffic Forecasts

In order to develop a long-term plan for the corridor, traffic forecasts for year 2035 were considered for the Central Avenue corridor. The MPO is currently working through a long-range transportation plan for the entire Grand Forks/East Grand Forks area. As part of this plan, year 2035 traffic forecasts have been developed. The daily traffic volumes shown in Figure 5 were used in conjunction with existing turning movement percentages to develop year 2035 morning and afternoon peak hour turning movement volumes. It should be noted that travel patterns are expected to shift under year 2035 conditions, due to the location of future developments in the area.

Future Roadway Configuration

As shown in Figure 5, daily traffic volumes along the Central Avenue corridor are estimated to range from approximately 8,900 to 16,500 vehicles per day. As discussed under the “Existing Roadway Configuration” section, Central Avenue is a four-lane facility between Gateway Drive (US 2) and 17th Street. It is a three-lane urban facility between 9th Street and Gateway Drive and between 17th Street and 23rd Street (two-lane divided, with turn lanes at each of the respective intersections). Gateway Drive (US 2) is a four-lane facility with turn lanes at its intersection with Central Avenue. All other side-street connections are two-lane streets with enough room to accommodate right-turn movements at Central Avenue. Prior to conducting a detailed operations analysis of the corridor, we reviewed the existing roadway configuration versus the forecast year 2035 traffic volumes in order to determine if this existing infrastructure can accommodate future volumes. Table 3 presents planning-level roadway capacities by facility type.



A planning-level roadway capacity analysis indicates that if the anticipated growth is realized over the next 25 years, the increase in traffic volume can be accommodated in the existing roadway cross section(s). However, the growth shown for the side-streets may hinder intersection operations.

The “Forks Long-Range Transportation Plan” has identified Central Avenue, between 17th Street and 23rd Street, be widened to a four-lane facility and that the section north of 23rd Street (to Dike or Section Line Road) be a three-lane roadway. Based on the forecast volume data this will provide additional capacity for vehicles traveling along this roadway. The analysis that follows is based on the minimum requirement and should not be considered an overriding factor in widening this roadway.

Table 3
Planning-Level Roadway Capacities by Facility Type

Facility Type	Planning Level Daily Capacity Ranges (ADT)	Recommended East Grand Forks Daily Capacity (ADT)
Two-lane undivided urban	8,000-10,000	9,000
Two-lane undivided rural	14,000-15,000	14,000
Three-lane urban (two-lane divided with turn lanes)	14,000-17,000	15,000
Four-lane undivided urban	18,000-22,000	20,000

Undivided – an undivided roadway does not have a raised median separating opposing traffic or left-turn lanes for turning traffic.

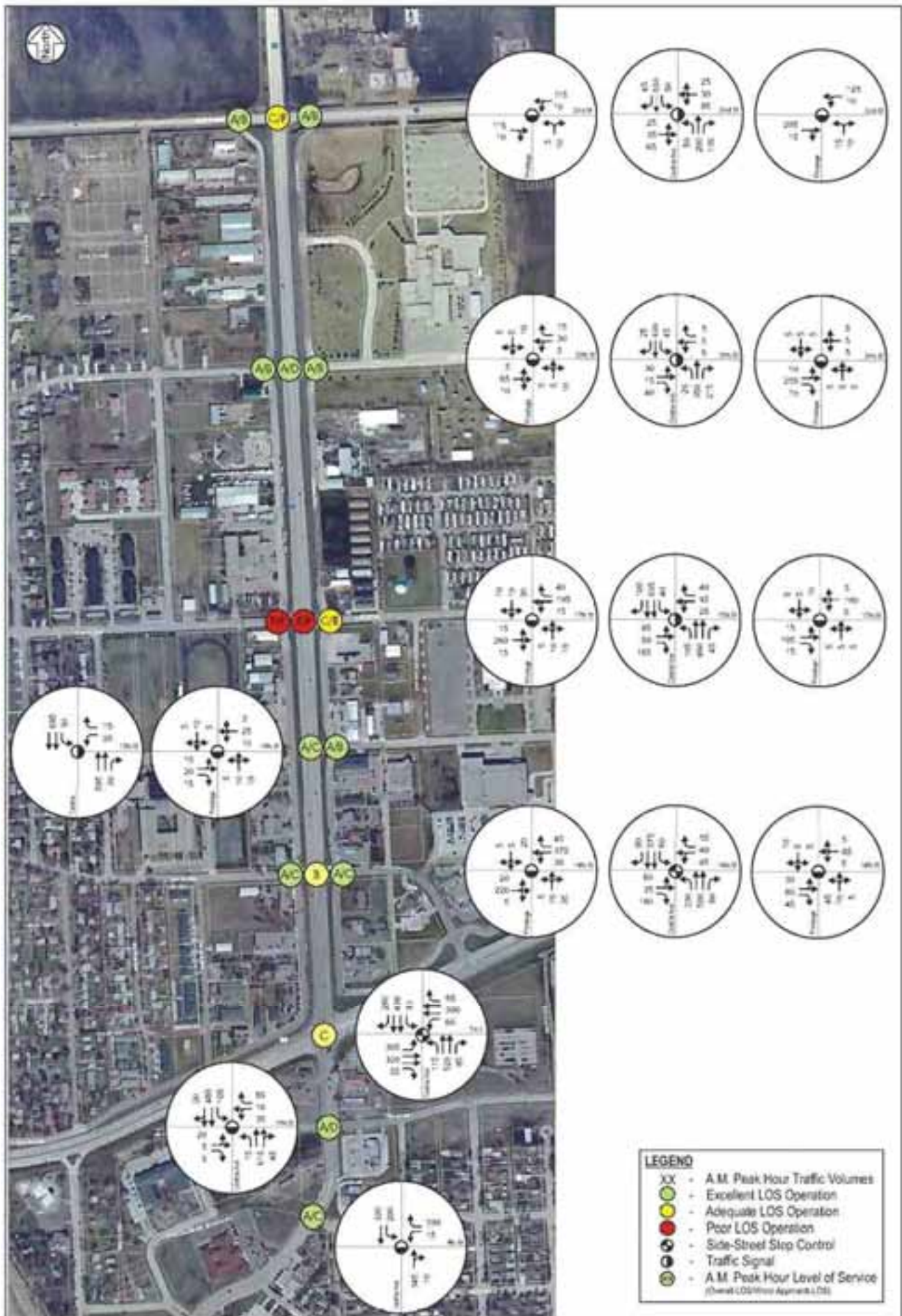
Divided – A divided roadway has a raised median separating opposing traffic, left-turn lanes and right-turn lanes.

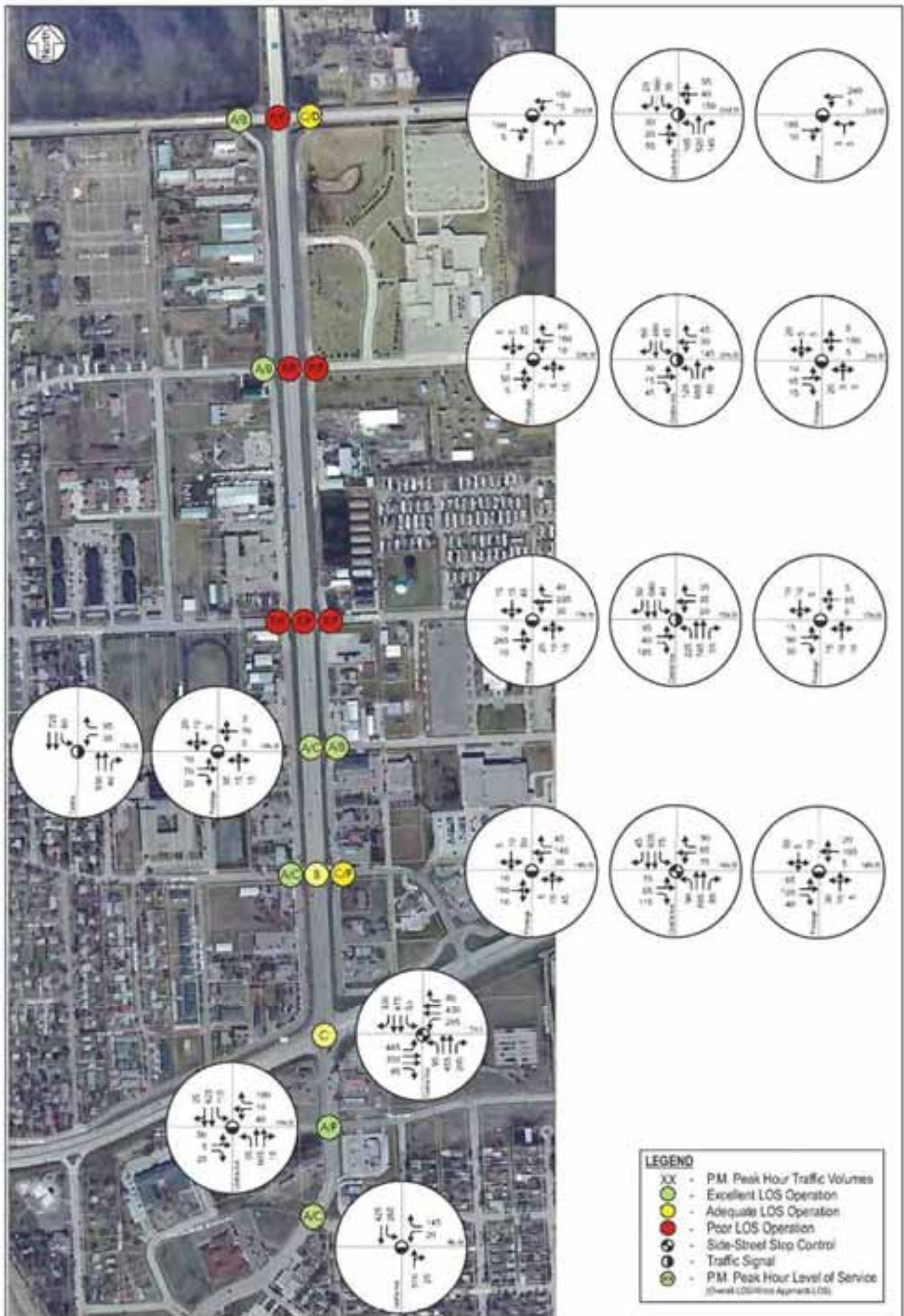
Rural – A rural design implies higher speeds, fewer cross streets/accesses and cross streets/accesses with lower volumes.

* Recommended daily capacity volumes represent volumes that can be expected operate acceptably.

Intersection Operations

In order to determine if the existing roadway infrastructure can accommodate year 2035 forecast volumes, an operations analysis was completed. All signalized intersections were analyzed using the Synchro/SimTraffic simulation model. The unsignalized intersections were analyzed using the Synchro model with the Highway Capacity Manual output reported. Results of the analysis indicate that all key intersections will operate at an acceptable LOS C or better under year 2035 morning peak hour conditions, with the exception of the intersection of Central Avenue and 17th Street. This intersection is expected to operate at LOS F. All key intersections are expected to operate at LOS C or better during the afternoon peak hour conditions, with the exception of the intersections along Central Avenue at 23rd Street, 20th Street, and 17th Street. Side-street approach delays will be significant at these intersections, resulting in queues blocking the adjacent frontage roads (preventing vehicles from entering off of the frontage roads to the side-streets). Analyzed geometrics, traffic controls, peak hour traffic volumes and level of service results under year 2035 conditions for the key intersections are shown in Figures 6 and 7.





IV. FUTURE CORRIDOR PLAN

The primary focus of the corridor study is to maintain the safe and efficient movement of people through the corridor, as well as to provide access to residents, businesses and other facilities. Limiting access has been demonstrated to have positive safety and traffic flow benefits. However, with the growth in traffic projected in the corridor, it should be recognized that access modifications alone will not provide the necessary benefits to achieve the desired levels of safety and function (mobility). As a result, access strategies should focus not only on mitigating current safety issues but also support the development of future roadway improvements that are necessary to adequately meet corridor mobility needs. In addition, mitigation strategies need to be developed in order for all key intersections to operate acceptably along the Central Avenue Corridor.

Access Management Plan

This section of the report identifies an access management plan for Central Avenue based on its intended function and anticipated volumes. The purpose of the access management plan is to provide guidance to the City of East Grand Forks, the MPO, landowners and developers with interests along the corridor. The Plan is intended as a long-term goal and should be used to guide new investments, development and planned transportation improvements. Over time the access management plan will increase, or maintain existing, mobility and enhance safety along the corridor, while uniformly addressing access. To increase mobility and safety, the access management plan recommends reducing the existing frontage road width, developing backage roads where feasible and proposes the conversion of some existing access points to right-in/right-out only. The timing of these changes will depend upon development along the corridor and availability of construction and/or right-of-way funds.

The desired level of access on a facility is related to its functional classification and traffic volumes. Roadways essentially serve two competing interests, mobility and access. For instance, freeways have access control and focus on mobility; whereas local cul-de-sac streets focus on access, without through traffic. Although Central Avenue is classified as a Minor Arterial, the focus of the roadway should be weighted towards mobility. Central Avenue is controlled by Mn/DOT and falls under their independent roadway classification and access management category guidelines. Central Avenue is assigned to access management category 5A and 5B. Category 5A is north of the City limits (23rd Street) and category 5B south of 23rd Street to Gateway Drive (US 2). Category 5A is defined as an urban mobility corridor on a minor arterial and 5B is defined as an urbanizing arterial on a minor arterial. Each carries along with it specific recommended access spacing guidelines. Table 4 provides this information.

Table 4
Mn/DOT Recommended Access Spacing Guidelines

Category	Intersection Spacing		Signal Spacing	Private Access
	Primary Full Access	Conditional Secondary		
5A	1/2 mile	1/4 mile	1/2 mile	Permitted
5B	1/4 mile	1/8 mile	1/4 mile	Exception only

Conditional Secondary – Public street access.

The implementation of the access management plan can be done through a number of different methods (e.g., land use regulations, subdivision regulations, access/transportation advisory committees, highway or street improvements). The following are best management practices that can help transition the corridor and provide guidance to staff as development occurs north of 23rd Street immediately adjacent to Central Avenue.

- **Encourage shared driveways and internal circulation plans:** If indirect access cannot be achieved during plat reviews, promote internal site circulation using shared access points.
- **Restrict turning movements to reduce conflicts:** If access points cannot be eliminated, consider turning movement restrictions (e.g., left-in only or right-in/right-out only) through installation of raised median or other channelization or signing. Eliminating a single turning movement can significantly reduce vehicle conflicts and potential crashes.
- **Develop proper setbacks for future backage roads:** If backage roads cannot be justified (benefits do not outweigh costs), make sure that proper building and parking lot setbacks are established so that future backage roads can be installed with minimal impacts. For side-street access points, adequate spacing from Central Avenue is 300 feet.
- **Develop proper secondary street spacing:** When reviewing plats and new development proposals, be sure that they provide proper intersection spacing for future signals. As a guideline, signalized intersections should be limited depending upon the type of street. Collector streets should provide some continuity and connectivity with other street systems.

Detailed Access Plan

To guide East Grand Forks in the implementation of the access management plan, a set of detailed maps was prepared to help communicate the proposed access changes along the corridor (Figures 8 and 9). The detailed maps show the location of potential full-access intersections, access restrictions and closures. In addition, the maps illustrate, on a conceptual basis, how backage roadways can be developed to reduce access immediately adjacent to Central Avenue. The frontage road that is maintained west of Central Avenue is proposed as a reduced width frontage road to discourage on-street parking and increase the pedestrian realm along Central Avenue.



14th Street

LEGEND

-  - Potential Access Closure
-  - Right-In/Right-Out
-  - Right-In/Right-Out or Full Access
-  - Right-In/Right-Out or Roundabout Full Access
-  - Signal/Roundabout Full Access
-  - Unsignalized Full Access
-  - Potential Alignments

Section Line Road

23rd Street

20th Street

17th Street

15th Street

Gateway Drive

10th Street

9th Street



14th Street

LEGEND

-  - Potential Access Closure
-  - Right-In/Right-Out
-  - Right-In/Right-Out or Full Access
-  - Right-In/Right-Out or Roundabout Full Access
-  - Signal/Roundabout Full Access
-  - Unsignalized Full Access
-  - Potential Alignments

Section Line Road

23rd Street

20th Street

17th Street

15th Street

Gateway Drive

10th Street

9th Street

This topic is discussed further as part of other technical memoranda associated with this project. It should be noted that although frontage roads are shown as being maintained west of Central Avenue and implemented north of 23rd Street, all efforts should be made to develop backage roads when possible. The frontage roads shown are being maintained due to existing uses or immediately planned uses in these areas.

Access Management Plan – Option A represents reduced width frontage roads on both sides of Central Avenue up to 23rd Street, offset frontage roads north of 23rd Street on both sides for a half-mile, then frontage road west and backage road east of Central Avenue to Section Line Road. The frontage roads are being maintained north of 23rd Street in order to accommodate the existing single-family residential use east of Central Avenue and a proposed development west of Central Avenue. From Section Line Road to 17th Street full-access spacing is recommended at half-mile increments (Section Line Road, Half-Mile North of 23rd Street, 23rd Street, and 17th Street), with restricted right-in/right-out access in between (quarter-mile south of Section Line Road, quarter-mile north of 23rd Street, and 20th Street). The two restricted right-in/right-out accesses north of 23rd Street may, if warranted or decided in the future, be full-access intersections. Mn/DOT has existing access rights along the corridor north of 23rd Street. As such Mn/DOT will need to be consulted in any and all decisions regarding access through this area.

Additional full-access intersections are shown at 14th Street, Gateway Drive (US 2), 10th Street, and 9th Street. 15th Street is recommended for restricted right-in/right-out access. Access Management Plan – Option B differs from Option A in that a backage road is recommended east of Central Avenue between Gateway Drive (US 2) and 23rd Street.

Implementing this access management plan will help to control the way people access the corridor, reducing the amount of conflict along the corridor by introducing restricted right-in/right-out accesses and increasing the traffic control at the full-access intersections (with either a traffic signal or roundabout). To implement these access changes both “passive” and “active” strategies will need to be used. These strategies are outlined below.

Passive Strategies

Passive strategies promote access changes as opportunities arise through new plats, subdivisions, access requests and reconstruction projects. Access changes can be promoted through improved direction to local agencies, public officials, landowners and developers. Having established corridor objectives, a long-term vision and detailed access management plan will increase the ability of agencies to respond in a unified manner to access requests.

An example of this strategy is for the City and MPO to educate the landowners and developers about access requirements at early stages in the planning process. These early interventions reduce the confusion, frustration and disagreements between agencies, developers and property owners. Another example of this strategy is related to future traffic control. Full-access intersections were identified to provide better spacing of major intersections along the corridor to accommodate future growth in the study area.

As development and/or redevelopment occur in the area, traffic volumes should be monitored at these intersections to determine when these intersections meet warrants for modified traffic control. With the modification of traffic control, the closure or restriction of adjacent direct access locations should be done.

Because the passive strategies rely on property owners requesting changes to their property, the changes will be primarily focused toward future development and redevelopment areas. Areas that have existing safety and/or access problems will be difficult to address through this process and may need to be addressed through more active management strategies.

Active Strategies

In areas where existing safety problems are present and existing access does not conform to the identified Plan, active management strategies will likely need to be employed. The City and MPO should pursue the following active access management strategies in the corridor:

- Adopt the Central Avenue Corridor Study, including the access management plan, to ensure that access changes for the corridor are implemented in a uniform manner
- Pursue roadway improvement projects that focus on achieving long-term safety and mobility goals through implementation of the corridor design and access management plan (i.e., backage road east of Central Avenue and frontage/backage road development north of 23rd Street).
- Meet periodically to identify the most important access issues and potential funding sources for addressing safety, traffic and access issues in the corridor

Intersection Mitigation

Based on the intersection operations analysis conducted with the existing roadway conditions the key intersections at 23rd, 20th and 17th Streets will operate unacceptably (LOS E or lower) during peak hour conditions. The previous section outlined how access management practices can contribute to mitigating safety and potential operational issues along the corridor, and mentioned modifying traffic control in order to appropriately manage the full-access intersection nodes. Currently along Central Avenue, full-access is provided at all of the key intersections. As traffic volumes begin to increase, mobility and safety through the corridor are expected to degrade.

One way to improve mobility is to manage access. Managing access can also improve safety by eliminating the most difficult movements and improve operations by shifting traffic to intersections with more capacity and upgraded traffic controls.

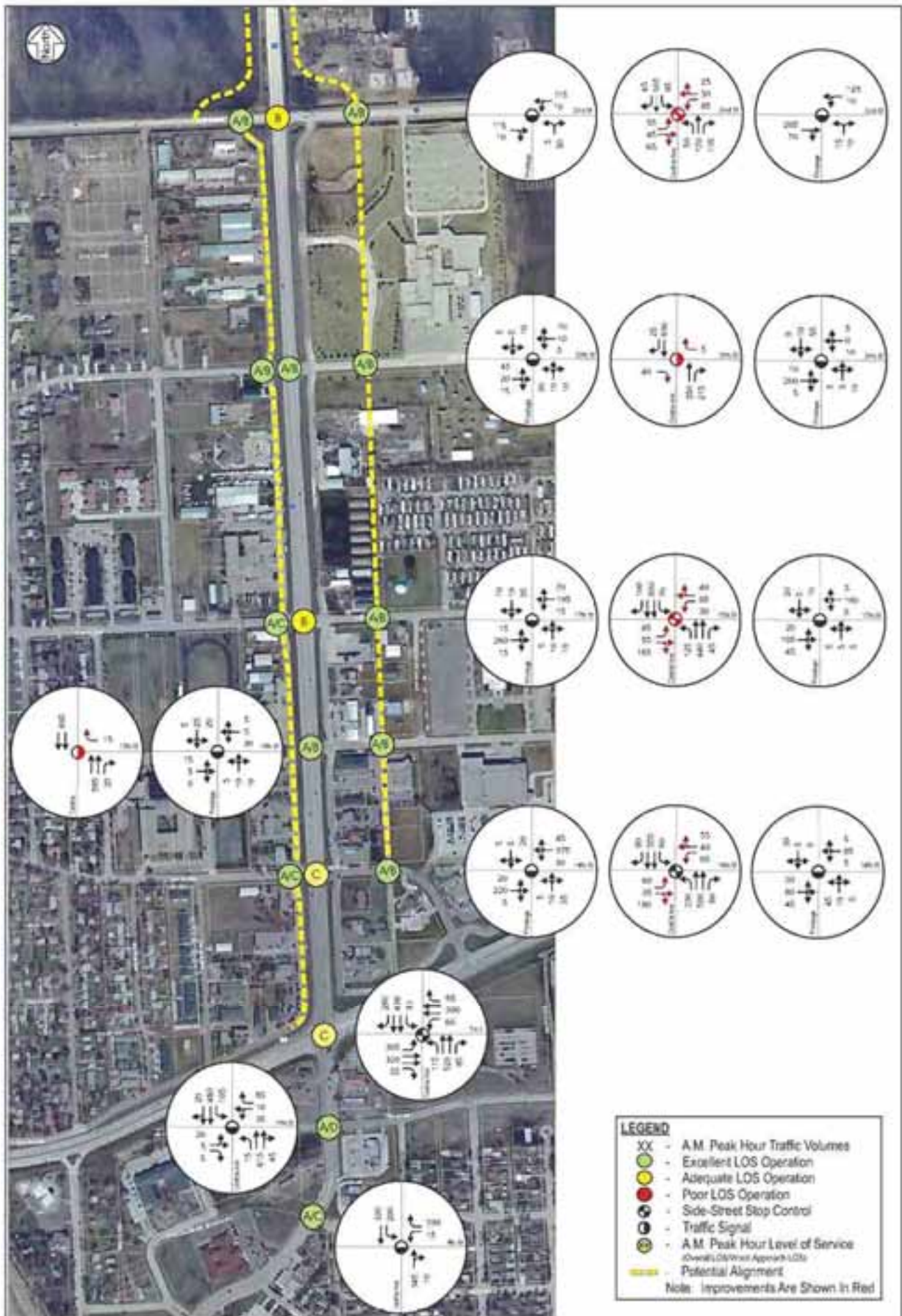
The access management plan outlined in the previous section identified two intersections that can be modified to improve mobility, safety, and overall traffic operations. The access modifications include creating restricted right-in/right-out intersections along Central Avenue at 20th Street and 15th Street. In addition to managing access, relocation of the existing frontage road(s) should be considered. The existing frontage roads are immediately adjacent to Central Avenue. This situation does not provide adequate spacing for vehicles entering/exiting the frontage roads to maneuver safely to the adjacent roadway network. Queues along the side-streets from Central Avenue often block movement to and from the frontage roads. Therefore, it is recommended to close the existing frontage road(s) and provide backage roads where possible. This will create sufficient storage and improve safety for vehicles entering Central Avenue via side-streets.

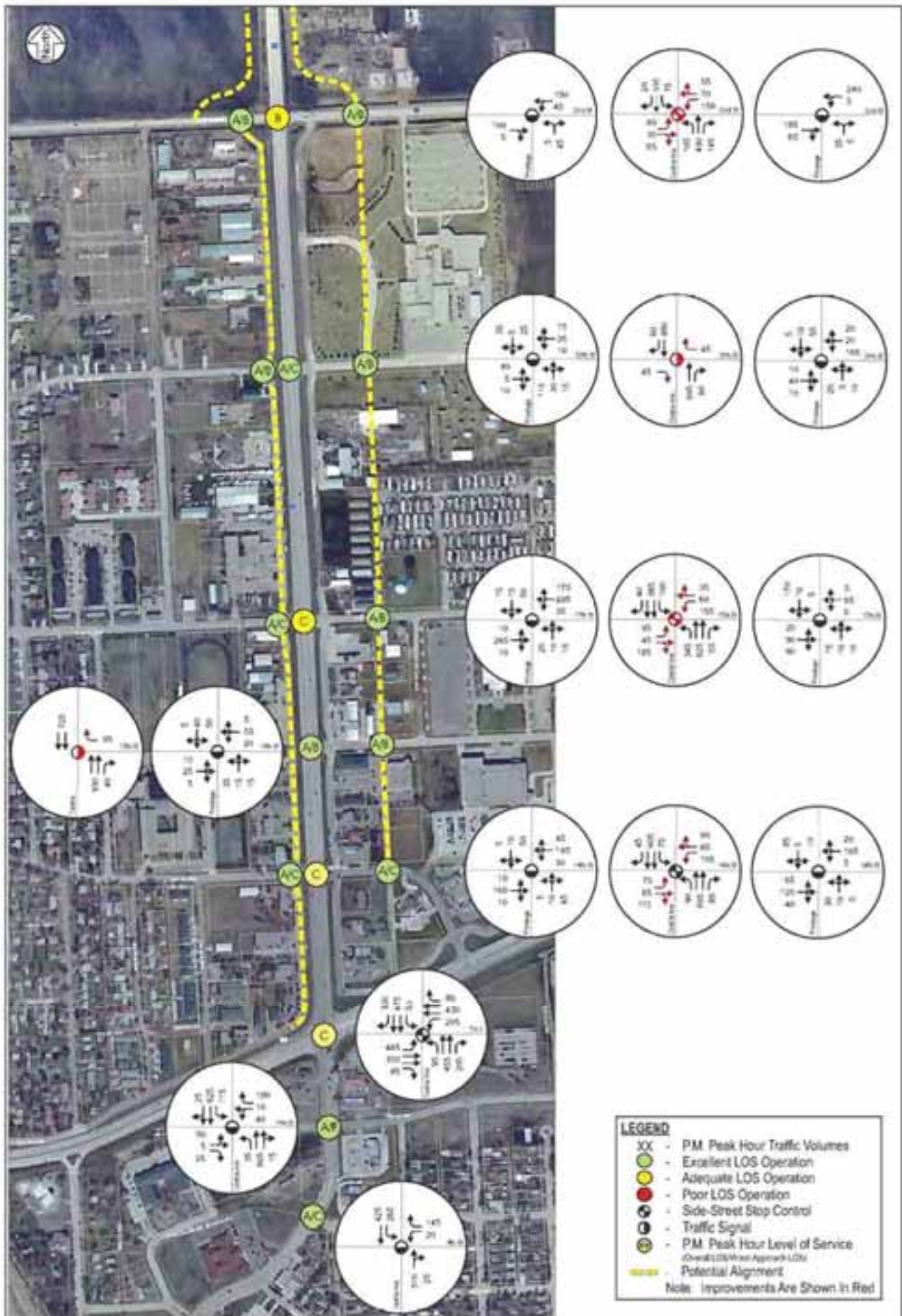
An operations analysis was completed for future year 2035 conditions with the access modifications discussed above and traffic signal control at each of the full-access locations. It should be noted that traffic signal control is not a defined recommendation of this plan. The traffic control device or strategy for the corridor should be determined outside of this plan as the corridor matures and traffic volumes increase. Solely for purposes of the operations analysis were traffic signals reviewed.

Results of the operations analysis indicate that all key intersections are expected to operate at an acceptable LOS C or better under year 2035 morning and afternoon peak hour conditions, with improved safety (see Figure 10 and 11). The improvements will also reduce queues on the side streets at these locations and improve operations of the frontage roads immediately adjacent (in the event they remain in-place).

Roundabout Review

Various factors must be considered when implementing roundabouts as a traffic control device or strategy. Central Avenue services a significant amount of heavy commercial truck traffic and is a Mn/DOT facility that is categorized as an urban mobility and urbanizing corridor with mobility as its focus. A key function of roundabouts is speed reduction as vehicles pass through the intersection (typically, 9-12 miles per hour entering and 15 miles per hour circulating). All vehicles that pass through the intersection are required to reduce their speed at all times of the day regardless of side-street volume. Whereas, signalized intersections may require mainline traffic to only stop when vehicles are present on the side-street approach “requesting” the right-of-way to pass through the intersection.





Based on the existing crash history of the corridor, specifically intersection crashes, the potential to reduce speeds along the corridor or calm traffic is attractive. Many of the crashes that occur along Central Avenue may be attributable to excessive speeds due to the expansive roadway. As was discussed in earlier sections of this document, the expansive roadway causes the natural tendency to drive faster than the posted speed. Implementing roundabouts as a traffic control strategy would serve to reduce speeds along the corridor and thus improve safety. This however is counterintuitive to having a roadway with mobility as a high priority. Traffic signal control at the same intersections would provide more of the desired mobility (maintaining a more steady speed across the traffic stream), while accomplishing the needed safety improvement.

A planning level roundabout analysis was conducted at each of the intersections identified as operating with unacceptable levels of service and recommended for modified traffic control. The planning level analysis reviews the entering and circulatory volume at the intersection. Roundabouts are typically single-lane or two-lane roundabouts, each with their own respective capacity threshold for conflicting volume (circulatory and entering volume). Central Avenue is a two-lane roadway at 23rd and 20th Streets and thus potentially single-lane roundabouts. Central Avenue is a four-lane roadway at 17th Street and potentially a two-lane roundabout. The intersection of Central Avenue/23rd Street would operate under capacity as a single-lane roundabout; the intersection of Central Avenue/20th Street would operate near capacity as a single-lane roundabout and would be recommended as a two-lane roundabout, the intersection of Central Avenue/17th Street would operate under capacity as a two-lane roundabout.

It should be noted that roundabouts along Central Avenue may require the closure of close access points at the frontage roads immediately adjacent in order to accommodate the approach island medians east and west of each intersection. Prior to determining which traffic control device or strategy to implement along the corridor, further discussion is needed amongst the decision makers to determine the contributing factors and their impact on the overall character of Central Avenue. In addition, a more formal intersection control evaluation (ICE) will be needed to determine the feasibility, need and operational impacts of various traffic control devices along Central Avenue. The ICE review is a Mn/DOT mandated process for determining the appropriate traffic control on State Trunk Highways. This will include the review of side-street stop control, four-way stop control, roundabout and signalization, as well as access modifications.

V. FINDINGS AND RECOMMENDATIONS

The Central Avenue Corridor Study was undertaken to evaluate existing and future transportation and access needs along the corridor and to develop a plan that addresses those needs. This plan will also prepare for long-term growth and development that will continue to occur. The study findings and recommendations are summarized below.

Study Findings

1. Central Avenue is an important north-south transportation facility within the City of East Grand Forks. The majority of the corridor has the potential for redevelopment into the future, especially the agricultural land north of 23rd Street to Section Line Road. Central Avenue faces the challenge of safely providing for the movement of traffic, including pedestrians and bicycles, while balancing the need for mobility and access for current businesses and adjacent industries.
2. The frontage roads that run parallel to Central Avenue currently provide adequate access for businesses. However, these roadways are located too close to Central Avenue as side-street access points.
3. Traffic volumes on Central Avenue are currently 3,450 to 13,400 vehicles per day. The heaviest volumes are south of 15th Street to 9th Street. Based on the current volumes and planning-level capacities, all segments of Central Avenue are operating under capacity. Daily traffic volumes for year 2035 are expected to increase to 8,900 to 16,500 vehicles per day. Based on future growth projections the amount of traffic using this facility will continue to increase. However, the existing four-lane and two-lane roadway cross sections will adequately manage this increase in volume while continuing to operate under capacity.
4. Central Avenue serves as a key route for heavy commercial traffic, specifically sugar beet transport. According the Mn/DOT Year 2006 flow maps there is an approximate 380 heavy commercial average daily traffic (HCADT) volume along Central Avenue. The Crystal Sugar facility receives approximately 4,000 trucks a day during the seasonal harvest. TranSystem's coordinates and delivers approximately 330 trips per day during November to April. Half of the stated volume travels through East Grand Forks via Central Avenue, Gateway Drive (US 2), 5th Avenue and Business Highway 2. Based on the overall HCADT value of 380 for the corridor, the Crystal Sugar plant contributes a significant amount to the overall heavy commercial traffic on the corridor.
5. Based on an operational analysis, all key intersections currently operate at an acceptable overall LOS C or better with all of the individual movements operating at an acceptable LOS D or better during the morning and afternoon peak hours.
6. Based on Mn/DOT crash data (MnCMAT – Mn/DOT-LRRB Crash Mapping Analysis Tool) for the study corridor, for the five year period from 2002 through 2006, seven of the eight primary key intersections have above average crash rates compared to the average crash rate for similar roadways in the Mn/DOT (Bemidji) District 2 area. The critical crash rate was calculated to determine the statistical significance of the crash rate comparison. Two of the eight key intersections have crash rates (crashes per million entering vehicles) greater than the critical crash rate.

7. Under year 2035 conditions several key intersections will experience operational failure with the existing roadway infrastructure in place. Side-street approach delays will be significant at these intersections, resulting in queues blocking the adjacent frontage roads (preventing vehicles from entering off of the frontage roads to the side-streets).

Study Recommendations

1. A planning-level roadway capacity analysis indicates that if the anticipated growth is realized over the next 25 years, the increase in traffic volume that is projected to use the corridor can be accommodated in the existing roadway cross section(s). The growth shown for the side-streets may hinder intersection operations. The Forks Long-Range Transportation Plan has identified Central Avenue, between 17th Street and 23rd Street, be widened to a four-lane facility; and that the section north of 23rd Street (to Dike or Section Line Road) be a three-lane roadway. Based on the forecast volume data this will provide additional capacity for vehicles traveling along this roadway. The analysis presented in this document is based on the minimum requirement and should not be considered an overriding factor in widening this roadway.
2. The City and MPO will need to review the access management plans outlined in this documentation and determine which frontage/backage road scenario to adopt. It is recommended that the City and MPO adopt the recommended access spacing and control strategies outlined in this documentation in order to guide future development/redevelopment along the corridor.
3. As traffic control modification needs along the corridor near, the City, MPO and Mn/DOT should discuss their intentions for this section of Central Avenue, in order to better guide the decision of traffic control.
4. The City and MPO should continue to define the alignment and right-of-way needed north of 23rd Street adjacent to Central Avenue to accommodate future frontage and/or backage roads east and west. This will enable them to be more proactive in obtaining future right-of-way easements as future development occurs.

8

APPENDIX D meetings



East Grand Forks Highway 220 Study

June 28, 2007

Kickoff Meeting Agenda

- 1) Sign In, Introductions**
- 2) Roles and Responsibilities**
 - a. MPO
 - b. JLG
 - c. SRF
 - d. Steering Committee
 - e. Public
- 3) Baseline Information**
 - a. Existing Zoning and Subdivision Regulations
 - b. Existing City Traffic Codes
 - c. Long Range Transportation Plan
 - d. 2007 Traffic Counts
 - e. 1998 Urban Design Plan
 - f. 2025 Comprehensive Plan
 - g. Plan of Action for Design and Development of EGF
 - h. Base Drawings
 - i. .ADF Files? – unreadable by JLG
 - i. Can these be translated?
 - ii. Aerial Photos?
- 4) Schedule**
 - a. 2nd Steering Committee Meeting (Late July)
 - i. Discuss Site Issues
 - ii. Steering Committee Input
 - b. 1st Open House (Early August)
 - i. Baseline Information Sharing
 - ii. Solicit Challenges/Goals/Issues
 - c. 3rd Steering Committee (Early September)
 - i. Discuss Alternatives and Options
 - ii. Steering Committee Input
 - d. 2nd Open House (Late October)
 - i. Present Preferred Design Recommendations
 - ii. Seek Public Response
 - e. 4th Steering Committee Meeting (Mid November)
 - i. Input for Final Design Recommendations
 - f. Present Final Document (End of December)
- 5) Project Goals**
 - a. Issues
 - b. Opportunities
- 6) Steering Committee Expectations**





East Grand Forks Central Avenue Study Agenda

Date: July 26, 2007

Time: 10:00 a.m.

- A. Introductions**
- B. Review of Work Plan and Schedule**
- C. Review of Information gathering process**
 - Site plan
 - Corridor Character
 - Land use ordinance
 - Traffic Study (SRF)
 - a. Review Background Data
 - b. AM and PM Peak Periods
 - c. Crash Analysis
- D. Open House Format**
 - Date
 - Location
 - Format
 - a. List of Stations
 - b. Refreshments
- E. Issues Discussion**
 - a. Walkable Corridor
 - b. Traffic
 - c. Sign ordinance & Inventory
 - d. Buildings
 - e. Vacancies



Steering Committee Meeting #1

Date: June 28, 2007

Location: East Grand Forks City Hall; City Council Chambers

Project: East Grand Forks Highway 220 Study

Attendees:	James Bittman	MNDOT
	Karl Lindquist	EGF
	Jerry Skyberg	EGF Building Inspections
	Brad Bail	Floan and Sanders
	Troy Pecka	Pecka Trucking
	Craig Buckalew	Hardware Hank
	Gary Christianson	Planning Commision
	James Ritcher	EDHA
	Oscar Sutherland	Community Bank of R.R.V.
Members Absent:	John Wachter	EGF Public Works
	Chief Lealos	Police Department
	Dave Akers	EGF Parks and Rec.
	Kent Hanson	Northwest Community Technical College
	Tom Stennes	Stennes Funeral
	Renee Twite	Sun N Things
	Mike Pierce	Peirce Investments

A kickoff meeting agenda was held on June 28, 2007 at 3:00 PM at East Grand Forks City Hall to discuss the East Grand Forks Highway 220 Study. The purpose of this meeting was to introduce all the steering board members to the purpose of the study, schedule meetings for the future and project goals for the study.

Steering Committee Meeting #1

Recording of Proceedings

1. Sign In, Introductions

Nancy Ellis who represents the MPO as the East Grand Forks Senior City Planner welcomed the 9 steering board committee members to the meeting. Steve Shaw handed out the agenda and passed a contact sheet out for all the member of the steering board in attendance to sign. Then the meeting was turned over to SRF who participated via teleconference. Representative by phone was Berry Warner. SRF asked all steering board members to introduce themselves and who they represent.

2. Roles and Representatives

- SRF asked Nancy to give a brief introduction on the role of the MPO to the community and the study?
 - Nancy Ellis: The MPO works with transportation planning and East Grand Forks City planning. The MPO's role is to perform the study and hire the consultants. I will be collecting the information and making sure the consultants are staying within the time line. My focus is to manage the study and make sure it stays on track.
- SRF asked JLG to explain what their role is in the study?
 - Steve Shaw: As the local architects it is our role to facilitate architectural language in any design development that we propose and criteria we develop along with being the local liaison and facilitate the production of the documents.
- SRF explained their role in the study.
 - SRF: SRF is a sub-consultant to JLG. Our role is couple fold. We will be conducting a transportation analysis of the corridor and taking a lead on

urban design. We will be assisting JLG with stakeholder involvement, community open-houses meetings, work sessions with the steering committee and a summary document. We want the team to be as collaborative as possible.

➤ SRF Question: Nancy Ellis could you explain the purpose of the Steering Board Committee?

- Nancy Ellis: The Steering Committee wanted to be a diverse group that would have their hands on the ideas for the study. This Steering Committee has a number of different owners along the corridor and staff that will influence the implementation of ideas presented in this corridor. A majority of the Steering Committee members have occupations which affect the development and implementation of ideas for this study. We want to see what their ideas are on the corridor. It is important that we hear the Steering Committee's ideas from looking at it as what can be done and is it possible to implement it. The committee has to be based on people who own property on the corridor whom would have to put the money into making changes, the people that would have to maintain and enforce new ideas, and the people who have the final say of implementation for ideas in the corridor.
- SRF: The Steering Committee serves as a sounding board to identify the possible challenges and opportunity that the corridor presents today to the landowners, community, and policy makers. The Steering Committee should help the consulting team with alternatives and help weight whether certain alternatives will work within the corridor. The last purpose for the committee is to serve as an effective liaison with the community to advertise open-houses and inform the consultants about public opinions and comments.
- Nancy: One of the members works for the paper and could be a good source to inform the public on the progress of the study.

3. Baseline Information

- SRF: The MPO has offered a disc with an abundant amount of information for the corridor. We have done an initial search on the disc and think information will help us step in immediately and make some progress.
- SRF Question: Is there some more data that they could attain?
- SRF Question: Is there an Arial Photo?
 - Steve Shaw: There was an Arial Photo on the disc, but it was in an unreadable format. He received a high resolution Arial Photo this afternoon and he will send it to SRF as soon as he can.
- SFR Question: This question is related to a traffic element?
 - SRF: The only hole in the baseline information is information showing the right of way line, where the curb edges are, location of turn lanes and intersection nodes. We think this would make a better base map compared to just the parcel locations.
 - Steve Shaw: I could work on sending some CAD files or 3-D files with all these geography features.
 - SRF: SRF expressed that CAD files would be perfect.
 - Nancy Ellis: The city engineer should also be able to supply them with that type of information.
 - SRF: The information could be in CAD or Micro Station. The other type of information that was very useful was the 2025 Comprehensive Plan. From the traffic and transportation perspective they will use the transportation plan update made by URS and HRW updated in 2004 and that information will be the base information for the 2030 horizon year.
 - Nancy Ellis: The Long Range Transportation Plan is being updated as we speak and the base horizon year should be 2035 for this study. I think that the Long Range Transportation Plan should be done by July. I do not

think there will be much of a change to East Grand Forks other than estimated traffic volumes.

- SRF Question: Nancy is there any new development planned on the north part of the corridor with conversions of two lanes to four lanes as they were implemented in the new Long Range Transportation Plan?
 - Nancy: Yes
- SRF Question: Is land ownership included with the base information?
 - Nancy: There are parcels with a PIN number which can be matched to the landowners from the tax database, but they are not directly linked. We can send you a list from property assessments with the PIN numbers and property owners.

4. Schedule

- SRF: The proposal we submitted has along with many other things had the kickoff meeting date changed. With the kickoff meeting held today it is about four weeks later than what we had assumed being the kickoff date with the proposal. From this we have two proposals to offer. Either we slide the schedule six weeks which indicates that it will be completed sometime in January 2008 or alternatively we try to collapse the schedule and still try to finish it by early to middle part of December 2007.
- SRF Question: Maybe the Steering Committee could speak as to their preference there?
 - SRF: There may be a reason to a desire to finish this by the end of the calendar year for elective official reason or a number of other things.
 - Nancy Ellis: I know from an MPO stand point we need the approval from the Executive Board to allow for this budget wise to go into January, but if the steering committee wants to go at a pace that is comfortable for everyone and not have meetings on top of meetings if we would rather spread it out that is something I will present to the Executive Board. You

do not want have too many meeting so close together that people lose their interests because they have other commitments. I do not want to make this something more than it is because it is all voluntary and I do not want to constantly interrupt the business owners who have their own daily schedules.

- Steve Shaw: I agree with all of that however if you look at the schedule the preliminary, the proposed schedule that I present here seems to fit within our timeline. It is roughly a meeting every month or six weeks.

➤ SRF Question: Do you want to review to the committee the revision of the schedule that was discussed to see how that feels to them?

- Steve Shaw: We are planning on having the 2nd Steering Committee Meeting in late July at that point the two design teams will have enough information that we can proposal base level information that we already digested. We will talk about some sight issues and get some of your inputs. By the 1st Open House suggested in early August we will share all of our digested information. We will have it streamlined in a method that is easily understandable by the public, and we will try to get some of their inputs. We want to listen to the public on what they think is the problems, challenges and the ideas they may want to share. Really it is just a gathering process with them. The 3rd Steering Committee meeting in early September we will begin to be getting into some proposal and possible design solutions. We will get some input from you on which direction you think we should move. The 2nd Open House in late October we will present preferred design recommendations. We will seek public response to see how they feel with the direction we are moving. The 4th Steering Committee Meeting which is in the middle of November you will give your input for our final design recommendations before we prepare a final design document. We are proposing three Steering Committee meetings after today and two Open House meetings.
- SRF: It is our understanding that the process will cumulate with the documents being received by the East Grand Forks Planning Commission,

City Council and MPO. It is very likely that they will see this in at least in a draft form in the month of December, and it will be their leisure whether they want to approve it at that point or take action or for some reason delay it until January.

- SRF Question: Does the Steering Committee have any comments about that schedule?
 - Nancy Ellis: I think once the MPO receives the final document it puts it back in the hands of the MPO with the consultants and the Steering Committee is done at that point, so they will not go into the Christmas season. We would be pretty close to our deadline and only concerned with staff budget hours.
 - Steve Shaw: I would like to get some fixed dates for those issues so we have some milestones sets and timeframes to be working with.
- Steve Shaw Question: Is everybody comfortable with having the meeting on Thursday?
 - Steve Shaw: I would like all the meetings to be consistent with a on a fixed day so there is no confusion.
 - Steering Board Committee Member: You are looking at July 26th as the last Thursday. Preferable AM.
 - SRF: We can do it teleconference in the morning.
 - Steve Shaw: The next Steering Committee meeting will be Thursday the 26th at 10:00 AM.
 - Steve Shaw: The first open house August.
 - SRF: How about Thursday night August 16th.
 - Steering Committee member: The main thing is to get all the consultant together; set the dates and send them to us. We are not going to get all the Steering Committee members to reach an agreement on days that work.
- Steering Committee member Question: Will all the meeting be held by teleconference?
 - Nancy Ellis: That is another thing I wanted to address. You are going to attend the other meetings correct.

- SRF: We will be attending the two Open House meeting that is correct.
- Nancy Ellis Question: Are we going to have consultants at the Steering Committee meetings? It would be helpful.
 - SRF: JLG is scoped to be at all three Steering Committee meeting.
 - Steve Shaw: We will be at all of them.
 - Nancy Ellis: But no presence by SRF; just by phone.
 - SRF: Correct, this is what our scope reads, but we would have products sent in advance so the committee could review them or we could do a web link.
 - Steering Board Committee: It is hard to stay on track when you are talking to a device on counter top and you don't know who is on the other end. That is not to say that might not be in your contract, but I would rather have people or read about them in the bulletin.
 - Nancy Ellis: It is very difficult conduct a meeting when you are trying to talk into a speaker rather than physically seeing someone.
 - SRF: I agree with you 100%. Maybe Nancy that is something we should speak about separately to see if there should be an adjustment made to the scope or something of that nature.
 - Nancy Ellis: I would like to do that and as well have Lonnie. I did not really realize that we were not going to have anyone who presented themselves as a consultant. I knew Steve was going to help, but again this meeting threw me for a loop. I expected Lonnie or someone else from SRF, and we do not have either. That is something I would like to discuss with you outside of the Steering Committee meeting.
 - SRF: Definitely; we'll certainly do that. Let's continue and set the rest of the dates. There is a Steering Committee set for the morning July 26th and tentatively the night of August 16th.
 - Steve Shaw: Correct. The 3rd Steering Committee meeting for early September I am looking at the 6th or the 13th.
 - SRF: Either works but maybe the 13th because that is after Labor Day weekend.

- Nancy Ellis: We have a planning board committee meeting at noon.
- SRF: How about late afternoon
- Nancy Ellis: How about 3:00 PM again.
- SRF: We have 3:00 on September 13th.
- Steve Shaw: For the 2nd Open House in late October I am thinking the 18th or 25th.
- SRF: From our standpoint either one works.
- Steve Shaw: I am going to write down the 25th in the evening.
- Steve Shaw: The last Steering Committee meeting in mid November on the 15th or the 22nd.
- SRF: The 22nd is Thanksgiving
- Steve Shaw: Then we will go with the 29th of November at 10:00 AM.
- Steering Committee Member Question: Is it possible to have any kind of final document by early December with these kinds of dates?
 - SRF: I don't know that the final document will be generated. The team intent is to provide incremental draft products, so you will see a series of draft memorandums that will become the recommendations.
- SRF Question: If the Steering Committee desire the final meeting could be pushed to early December so a draft document could be assembled by that time?
- SRF Question: Maybe we should keep that as a tentative date depending upon the progress that is made at the 2nd Open House?
 - Nancy Ellis: I agree; you do not want to rush a product just to try to get it completed and out. If there are changes that are needed to be made then we get the best product coming forward.
 - SRF: It would be our intent that before the Steering Committee meeting we will send you a draft product in advance of the meetings, so you have time to digest the information and put forward your opinions. This will make our time as constructive as possible.

5. Project Goals

- SRF: Let's move on and discuss the project goals and expectations of the study.
- Steve Shaw: We want to get some of the inputs from the Steering Committee for what your inputs are for the study and where you want to see it go.
- SRF: We have broken the study into three different topic areas which are Land Use; Traffic, along with Transportation; and Urban Design. We should talk about topic and see from the committee what they think the primary issues and challenges for each topic area.
- SRF Question: Does that work as a tool to organize our thoughts?
 - Nancy Ellis: Yes.
 - SRF: Let's start with Land Use. Please committee step in and give us your thoughts. It is our understanding that one of the challenges and strength of the corridor is the wide variety of land uses that exist along the corridor.
- SRF Question: Could you explain to us why there is such a variety of land uses along the corridor?
 - Nancy Ellis: One of the strengths is that many of the business along this corridor have been there for many years. They are strong community businesses well known by people in the community. This is a strength that they are local and people go there because they are local. One of the weaknesses could be the large combination of different uses and not all uses are compatible which makes a land use pattern that goes from trucking to funeral homes to tattoo parlor to flower shop and nothing seems to match up. When you have land use with a number of different commercial uses you can not coordinate them together.
- SRF Question: Do you think the problem resides from the zoning and land use guidelines which accommodate a wide variety of different uses or do you think it

is because some of these uses have been grandfather in and have not been kept pace with the evolving corridor?

- Nancy Ellis: Has the corridor really evolved?
 - Nancy Ellis: It seems like it has been the same for a number of years.
 - Steering Committee Member: From what I have heard from other people it sounds like it has always been like that as long as they can remember. It has been a whole bunch of different things along the same street.
- SRF Question: Has this corridor been neglected compared to other corridors?
 - Steering Committee Member: I think you might be partially correct; the riverfront was affected by the flood of 1997 and has since received many upgrades. Now along the riverfront there are environmental parks and many thriving restaurants.
 - Nancy Ellis: If you are not aware there was a major flood in 1997 that affected most of the city. The one area that was not affected was the study. We did not see a lot of losses in the study area and a lot of money went into areas that did see a lot of losses because you want to bring these areas back into the city. Being a bedroom community to a large city also makes a difference as well.
- SRF Question: For the Steering Committee members that own a business along this corridor does the land use pose issues for that lack of economic vitality?
 - Steering Committee member: One kind of brings the other. The people that are on that frontage are established businesses. They can hold their own in their category, but the problem is that we have all kinds of different categories. Growth of the city from a residential area is to the south, and there has been nothing following the residential growth to the south other than a bank branch. Usually your retail will follow your housing and we are not even getting that, so I don't know if you want to call it economic deficiency. We are competing with a Grand Forks and to attract retail business has been very challenging at best. I think the high traffic on the Grand Forks side attracts the other retailers that want to be on a high traffic area. I think the traffic on highway 220 North is

significant traffic but does not measure up to the what the economic challenges there would be for the cost of land and the cost it would be to bring that customer from across the river to there destination.

- SRF Question: How much of an issue along the corridor is code enforcement? To keep the building in a good state of repair, preventing unsightly exterior storage, or abandoned vehicles or vehicles that are being stored in an unsightly or inappropriate manner?

- Steering Committee Member: We do not have any codes that would cover the vicinity around of the building unless it has to do with structural integrity or water proofing. We do have public nuisance codes that would cover abandoned vehicles and junk in the yard. I am not sure where we could go with some of that. We provide the option for the owners to do what they want to as long as they are within zoning codes, but there is not a lot of push to get things changed.

- SRF Question to Economic Developer: How much of a priority for the EDHA has been the economic vitality of the corridor?

- Steering Committee Member: I think there have been changes that have gone on over the years from retail to service orientation. There is a certain demarcation point along 17th where some of the changes seem more industrial. There are a few buildings out there have been around a long time which have changed hands. The community has changed from an agricultural to other things. The potato and grain industries have changes and some of their structures are from past eras and are still standing. Some are reutilized in a commercial fashion while some are not. We have not focus any major initiative to come up with new ideas and plans for that area. We started in 1989 with the development of the Gateway East area which is the TIF district. I recommend you take a tour of the City to see how things have evolved. To see the players involved with the evolution of the city and the struggles and evolution. The struggles are still here today. Recently, the interruption of the 1997 flood has changed the

dynamics of the city since we put energy towards fixing much of the area affected by the flood.

- SRF Question: Is the corridor in a designated TIF area ?
 - Steering Committee Member: No; the TIF is on the east side and north of Highway 2. It was put together in 1989.
- SRF Question: Is there anything being done with the comprehensive plan update to rezone or look at the zoning of the corridor?
- SRF Question: Maybe moving, shifting or reprioritizing the land use along the corridor may help to redeveloping and revitalizing the corridor?
 - Nancy Ellis: We are not updating the Comprehensive plan just the Transportation Plan. Rezoning is an option but that is something the Steering Committee would have to review along with the citizens.
 - SRF: Any significant departure in land use guiding towards something else has not only affects the corridor but it also affects the community. I think that is a discussion item for when JLG makes land use recommendations.
 - Nancy Ellis: The business owners in this community all live within the city. Most of the businesses are not large corporations which are located in another part of the country. These owners live in a house inside East Grand Forks, so I think a citizen or the community as a whole wants to keep all the family owned businesses around. I do not think the city council wants to get rid of these owners if they do not meet the new standards made for the corridor. I'm not sure that is the direction that we want to go.
 - Steering Committee Member: Some of the regulations ideas have to be brought up from someone on the outside because people within the community are afraid they might upset their neighbor.
- SRF Question: Should we move on to transportation?
 - SRF: There is some discussion that needs to take place about the balance of accommodating vehicles and pedestrian or bicycles.

- How much of an issue is it for a pedestrian or bicycle to cross or run parallel to the corridor?
 - Nancy Ellis: We do not have any facilities that help pedestrians and bicyclist cross or move along the corridor. It is an issue that we do not have bicycle paths or sidewalks along this corridor.
- SRF Question: Is it an issue because the corridor is a barrier so that neighborhoods are separated by the corridor and people do not feel comfortable to cross it or is there no desire to cross the corridor?
- SRF Question: If there were accommodations would people use them?
 - Steering Committee Member: If they were to strategically place. With the traffic during the warmer parts of the school year and all the kids crossing the streets between the high school and the Dairy Queen, I am surprise that no one has been hurt yet. There are kids crossing the corridor all the time.
- Steve Shaw Question: What about the Technical School?
 - Steering Committee Member: No; they use their cars.
- Steve Shaw: Do you think they would use a bicycle path or sidewalk if it was there?
 - Steering Committee Member: I think most of them are driving from a further distance. Sixty percent are from North Dakota.
 - Steering Committee Member: I think we want some pedestrian right of ways from the downtown area to Highway 2, so the housing units with senior citizens and people with disabilities that could really use the sidewalks have them accessible. It is important to make the corridor environment friendly to all types of people that may need to use sidewalks or bike paths.
 - SRF: Let's talk about access control or lack of access control.
- SRF Question: Are turning movements to and from parcels an issue causing safety problems or capacity problem?
 - Nancy Ellis: No, none of the business has access to 220; they are all off of service roads.
 - Steve Shaw: There are side streets that parallel 220.

- Nancy Ellis: So access control is not a problem in that sense.
- Steering Committee Member: Speed limits could go up to 40 mph.
- Steering Committee Member: MNDOT addressed that 12 years ago.
- Nancy Ellis: South of Highway 2 by Craig Buckalew's business (Hardware Hank) it can get kind of confusing.
- Steering Committee Member: The road is inconsistent in the number of lanes and the way that they are going.
- SRF Question: How about the intersection configuration of where the frontage road intersects with a cross street. Is there any an issue with stack distances or turning movements?
 - Nancy Ellis: No
 - Steve Shaw: There is only one intersection that had any stacking room at all, and it was enough for maybe two cars.
- SRF Question: Are you guys pleased with the function of the frontage roads along this corridor?
- SRF Question: Would you want that operation of frontage roads be carried through farther north along the corridor or do you want to look at other option?
 - Nancy Ellis: It should be looked at; there are several rural houses with driveway access which will become an issue if they become inside city limits.
 - SRF: How about the percentage of truck movements along the corridor.
- SRF Question: Does any body see the number of trucks along the corridor as an issue?
 - Nancy Ellis: We do not think of it as an issue. We are use to it being that way.
- SRF Question: Do you feel the trucks bring up any safety issue to pedestrian, kids, residents, business or anything of that nature?
 - Nancy Ellis: That has been brought up as an issue in the new Long Range Transportation Plan. There are suggestions that there should be a truck bypass that sends the trucks around the city instead of sending them down

the center of the city. Some of the general public do have a problem with the number of trucks on the corridor.

- Steering Committee: There is a suggestion to send all the trucks up on 5th Ave NE until they hit 23rd St. NE and then head towards 220.

➤ SRF Question: Do you have any traffic or transportation issues that we should be aware of?

- Nancy Ellis: You were told of the possibility of the parallel corridor on 5th Ave NW. This might detour people from Highway 220 and lower the concern of trucks on Highway 220.
- SRF Question: Do you see in the future that transit ridership could increase as a positive thing or accommodation for transit ridership could be improved?
- Nancy Ellis: The ridership is fairly low even with the increase of gas prices, and I think our largest users are the students going out to the Technical College.
- Steering Committee Member: There is a conflict with lowering the traffic along the corridor and diverting the traffic to other intersection and roads. This lowers the amount of traffic along the Central corridor which hurts the businesses in that corridor and the attraction for new development along the corridor. We have a problem with trying to balance both of them.
- SRF: It is our understanding that the corridors appearance could be improved. It might be a more attractive if there was some landscaping or a common scheme or lighting that would make the corridor look better.
- Nancy Ellis: The lighting is not an issue.
- Steering Committee Member: It is just the structures and usage that are issues.

➤ SRF Question: From a visual quality standpoint what are any issues that the study should be attentive to?

- Steering Committee Member: I think the maintenance of the green aspect of the corridor is a major problem. There are things that could be done for

the summer months. Right now you have the state that controls the corridor but does not have the money to maintain it. This causes someone else to maintain it that does not have the funding to maintain it. Maybe we have to do a tax district, so the grass mowed, the weeds get killed and flower pots get put out.

- Nancy Ellis: The flood fits with that because when you look at the Park and Recreation doing the maintenance there is not enough support with all they have to do for the dikes and parks. It is better to have no landscaping than to have it but not have it kept up.
- Steering Committee Member: Or reduce the maintenance aspect of it all together to make it is more maintenance friendly.

➤ SRF Question: What level of commitment with maintenance of mowing does MNDOT have with the corridor?

- Steering Committee Member: If we do any mowing it is more likely with a ditch type mower. We do not own any other kind of equipment. We could work out an agreement with the city to help pay or support the maintenance along the corridor.
- Steering Committee Member: MNDOT come through a couple times a year.
- SRF: Is it fair to say MNDOT does limited mowing once a summer, and if there is more needed to be done, it is done by the adjacent property owner.
- SRF: In the 2025 comprehensive plan there is a map that shows the corridors was picked out as being a green corridor.
- Nancy Ellis: That was part of the 1998 Urban Design done by the University of Minnesota. After the flood they picked out corridors that should have more green space with trees and give it a more landscape feel.

➤ SRF: Has that gone anyplace?

➤ SRF Question: Were the property owner receptive to that or not?

➤ SRF Question: If nothing moved ahead was it because of lack of money or did someone not take the lead?

- Nancy Ellis: There was not an ordinance to reflect the recommendation.

- Steering Committee Member: There wasn't any budgeting done to reflect the plans.
- Steering Committee Member: Too many ideas at the same time.
- Steering Committee Member: There were other problems at the time that needed a lot more attention.
- Steering Committee Member: I believe that was an exercise that we did as a community to give confidence to the people that live here to reinvest in the community. It was an elaborate study that was well done and it worked. We have to continue to work with these things off the shelf and work with them.

6. Steering Committee Expectations

- SRF Question: As a rap up exercise I would like to see each Steering Committee member express what is the number one issue being resolved as part of the study?
 - Steve Shaw: I think going around and expressing your opinion verbally would be good and might spark up an idea for someone else.
 - Participant: Why are you asking the Steering Committee to tell you what they want, it seems like you have the cart before the horse. I thought you would come in and tell us the problem and solution which we would comment on. What is that exact issue we are trying to confront?
 - Nancy Ellis: We were asked by the city council to address the three issues that have been mentioned in this meeting. They were hoping that we could make one of the main corridors coming into town an attractive site which might cause people to want to stay in East Grand Forks for a little bit before they go to Grand Forks or at least think it would be a nice community to live in.
 - Steering Committee Member: Clearly, there isn't any zoning that suggest doing that. There isn't anything that indicates where the first two blocks should be retail and there isn't anything that indicates a way to get rid of those huge metal building stuck around the road. We need something that

suggests how we could get rid of these things without forcing people to leave and engage certain kinds of improvements in some coordinated fashion. We had some experience with that after the flood with the downtown area with the signage. Whether there can be metal building or does there need to be brick buildings. Those are some of the thing we need with some flexibility.

- Nancy Ellis: Maybe define the land use a little more.
- Steering Committee Member: Without it we tend to operate from a sense of desperation that we will let anything come into the corridor.
- Steve Shaw: Without kicking anyone out.
- Steering Committee Member: This leads to a catch 22.
- Steering Committee Member: MNDOT would be interested in the city but also outside of the city that the township and counties encourage alternate access controls.
- Nancy Ellis: I am meeting tomorrow with the County in regards to the zoning issues in and around city limits and with the flood control project as to how we can work together with them. I will tell you if we come up with any significant ideas with access for the area a mile north.
- SRF: I would like to apologize for Lonnie not attending the meeting. If no one has any other comments to say, we will be kicking off our work now that we have the contract and some of the baseline information on hand. We will start with the transportation work. JLG will start with the physical inventory and analysis of the corridor which will be the focus of the next steering board committee meeting.
- Steve Shaw: Thanks for coming and your input is really important. I am pleased that our schedule is laid out and we have baseline information.
- SFR: Thanks everyone for you time. Nancy I think we should schedule a meeting with Lonnie to discuss a few thing.
- Nancy Ellis: We expect that next time you will have some information. We are ready to review some stuff.



East Grand Forks Central Avenue Study Work Plan and Schedule

- A. Kickoff Meeting - Complete**
- B. Steering Committee Meeting – July 26th 10:00am (EGF City Hall)**
 - **Visual Impact Analysis - JLG**
 - i. Signage Inventory
 - ii. Building Vacancies
 - iii. General Streetscape/Landscape Condition
 - iv. Noticeable Code Violations
 - v. General Land Use Patterns
 - vi. Open or Vacant Lots
 - **Traffic Study - SRF**
 - i. Review Background Data
 - ii. Traffic Model for am and pm peak periods
 - iii. Crash Analysis
 - iv. Review Existing Roadway
 - v. Identify Pedestrian/bicycle needs
 - vi. Traffic Projections for 2030
 - vii. Recommend road sections for 2030 traffic
- C. Open House – August 16th 6:00pm (Location TBD)**
 - **Check-In Table**
 - **Study Purpose**
 - **Past Work On Corridor**
 - **Central Avenue Today**
 - **Destination Central Avenue**
 - **Central Avenue Brainstorm**
- D. Steering Committee Meeting – September 13th 3pm (EGF City Hall)**
 - **Land Use Concepts/Redevelopment – JLG/SRF**
 - i. Identify Parcels of land subject to change near and long term
 - ii. Two Alternative Land Use Schemes
 - iii. Identify Catalyst Properties



- **Streetscape/Landscape Plan - SRF**
 - i. Review of previous Studies
 - ii. Draft illustrative Streetscape Plan and Section
 - iii. Level of magnitude cost estimate
 - iv. Steering Committee Input
- **Corridor Maintenance - JLG**
 - i. Options to improve property maintenance

E. Open House – Oct 25th 6:00pm (Location TBD)

F. Steering Committee Meeting – Nov 29th 10am (EGF City Hall)

- **Summary Document – JLG/SRF**
- **Input for Final Design Recommendations**

G. Present Final Document

- End of December



East Grand Forks Central Avenue Study Work Plan and Schedule

- ~~A. Kickoff Meeting~~
- ~~B. Steering Committee Meeting – July 26th 10:00am (EGF City Hall)~~
 - ~~• Visual Impact Analysis – JLG~~
 - ~~• Traffic Study – SRF~~
- ~~C. Open House – August 16th 6:00pm~~
- ~~D. Steering Committee Meeting – September 24th 3pm (EGF City Hall)~~
 - ~~• Land Use Concepts/Redevelopment – JLG/SRF~~
 - ~~i. Identify potential Parcels of land subject to change near and long term~~
 - ~~ii. Two Alternative Land Use Schemes~~
 - ~~iii. Identify Catalyst Properties~~
 - ~~• Streetscape/Landscape Plan - SRF~~
 - ~~i. Review of previous Studies~~
 - ~~ii. Draft illustrative Streetscape Plan and Section~~
 - ~~iii. Steering Committee Input~~
- ~~E. Open House – Oct 29th 6:00pm (Location TBD)~~
- ~~F. Steering Committee Meeting – Nov 29th 10am (EGF City Hall)~~
 - ~~• Corridor Maintenance - JLG~~
 - ~~i. Options to improve property maintenance~~
 - ~~• Summary Document – JLG/SRF~~
 - ~~• Input for Final Design Recommendations~~
- ~~G. Present Final Document~~
 - ~~• End of December~~

**East Grand Forks – Central Avenue Corridor
Framework Plan Outline
November 26th, 2007**

Introduction

During our presentation today, we will discuss a framework plan, this memorandum provides the outline for the recommendations applicable to Central Avenue.

Framework Plan

- I. Frontage Roads
 - I.1. Reduce frontage road width and reallocate space for pedestrians and bicycles
 - Reduce the width of the frontage roads from 40 feet to 26 feet
 - Increase landscaping
 - Increase pedestrian / bicycle opportunities
 - I.2. Create Boulevards and introduce new plants
 - Landscaping along the boulevard reinforces separation of vehicular and pedestrian/bicycle traffic, enhancing safety
 - Improve aesthetic of corridor by introducing landscape elements, lighting and street trees
 - I.3. Incorporate improved pedestrian walkways and bike paths
 - An improved walking environment will encourage pedestrian traffic
 - Improved pedestrian traffic / bicycle traffic will be good for the corridor
 - Connect to the Greenway
 - 10 foot bike trail on the West side
 - 8 foot walking trail on the East side
 - I.4. Pedestrian scaled lighting
 - Install new lighting that is scaled for pedestrian use
 - Set a standard for a typical style that will be used throughout the corridor as a unifying element
 - I.5. Transit Stops
 - Provide transit stops at 14th, 17th & 23rd
 - Transit stops at these development nodes are vital for the development of the area
 - Pick “Architectural” transit stops that can add to the character of the corridor
 - Place along the main corridor on the boulevards between the mainline and the frontage road
 - Location of transit stops need to be coordinated with Transit Authority
 - I.6. Street Trees
 - Trees can soften the roadway character and provide a more comfortable environment for pedestrians
 - Smaller scale trees should be planted every 15-20 feet along the newly created boulevards
2. Private Sector
 - 2.1. Screening of storage areas and parking lots
 - Minimize the visual impact of parking lots by implementing low ornamental fencing, low shrubs or berms

- Screening will provide a buffer or separation between parking lots/storage areas and the boulevard
- Current ordinance requires screening of storage areas, needs to be enforced
- Add requirements to ordinance for additional screening

2.2. Signage Requirements

- Establish signage requirements to get some consistency along the corridor
- Low monument signage will unify the visual character of the corridor and reduce visual clutter
- Add language to the ordinance to implement new signage requirements

2.3. Architectural and landscaping requirements

- Buildings along the corridor are prime visual element and their building materials and upkeep are a key indicator of care and quality along the corridor
- Brick is a common building material and its continued use should be encouraged
- As a cost factor, new construction/renovations may use brick, etc. on the façade facing the mainline
- Existing buildings can be enhanced by the incorporation of awnings, windows, new materials and foundation plantings.
- Add language to the ordinance to implement new building requirements
- Landscaping is an integral part of the character and appearance of the corridor
- Add language to the ordinance to implement new landscaping requirements
- Revisit the city ordinance and make changes and recommendations for a new district , C3

2.4. Land use

- Limit future industrial uses along the corridor
- Set moratorium on future industrial uses, any future construction or renovations must meet the new C3 ordinance
- Establish a parcel of land along the corridor to be a prototype for the future of the corridor, provide a 'screening' use on the corridor side of the property
- Rezone 'future' on West edge of Quonset property to a Mixed Use
- Partner with Northland and encourage them to build toward the corridor with any new construction and limit any future parking in that direction also

3. Mainline Highway

3.1. Improve traffic conditions

- Evaluate existing intersection/roadway operations, safety and access
- Identify staged improvements that could take place along the corridor
- Develop an access management plan for the corridor
- With the growth in traffic projected in the corridor, it should be recognized that access modifications alone will not provide the necessary benefits to achieve the desired levels of safety and function (mobility).
- May need to introduce restricted right-in/right-out accesses and increase the traffic control at the full-access intersections (with either a traffic signal or roundabout).

3.2. Enhanced pedestrian crossings

- Increased activity of pedestrian and bicyclists will create awareness of vehicular traffic
- Improve pedestrian crossings at Hwy 2 and Hwy 220, provide crosswalks and add sidewalks South of Hwy 2 to connect to downtown
- Add paving patterns and signs at crosswalks to further identify their use. Final crosswalk materials, color and design will need to be coordinated with Mn/DOT.
- Consider the addition of pedestrian crossing count down timers on traffic signals. These tell pedestrians how much time is left of the pedestrian crossing phase to help them make a better decision regarding whether to cross now or wait for the next pedestrian signal phase.
- Enhance pedestrian crossings at Gateway Drive, 14th, 17th and 23rd

3.3. Gateway treatments

- Construct gateway treatments at town entrances and key intersections
- Gateway treatments could include monuments, architectural features, signage and landscape plantings
- First phase of change along the corridor should include construction of a city gateway at 23rd or potentially further North in the future
- Roundabouts are a potential gateway / intersection treatment that would resolve many of the issues as well as provide an opportunity for a gateway / intersection treatment

3.4. Landscape medians

- Supplement trees along the mainline
- Trees will create visual interest
- Introduce shrubs, perennial grasses and flowers at medians
- Perennial plantings provide the most visual impact at the noses of the median islands
- Coordinate types of landscaping allowed with the Authority Having Jurisdiction
- Coordinate maintenance between city and AHJ

3.5. Decorative lighting and banners

- Install new ornamental roadway lighting along the mainline
- Follow a set standard so that roadway and the new boulevard lighting styles complement each other
- Add decorative banners to existing mainline light poles (this contradicts first bullet)
- Add new banners along the mainline and boulevard

3.6. Screen or relocate overhead utilities

- Exposed overhead electrical utilities should be relocated below ground

Sincerely,

Michael RL Laverdure

Dist: All Steering Committee Members, File

File ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6

8

APPENDIX E open houses

Public Notice

Central Avenue Corridor Study

Open House 6:00 pm, August 16
Northland Community and Technical College

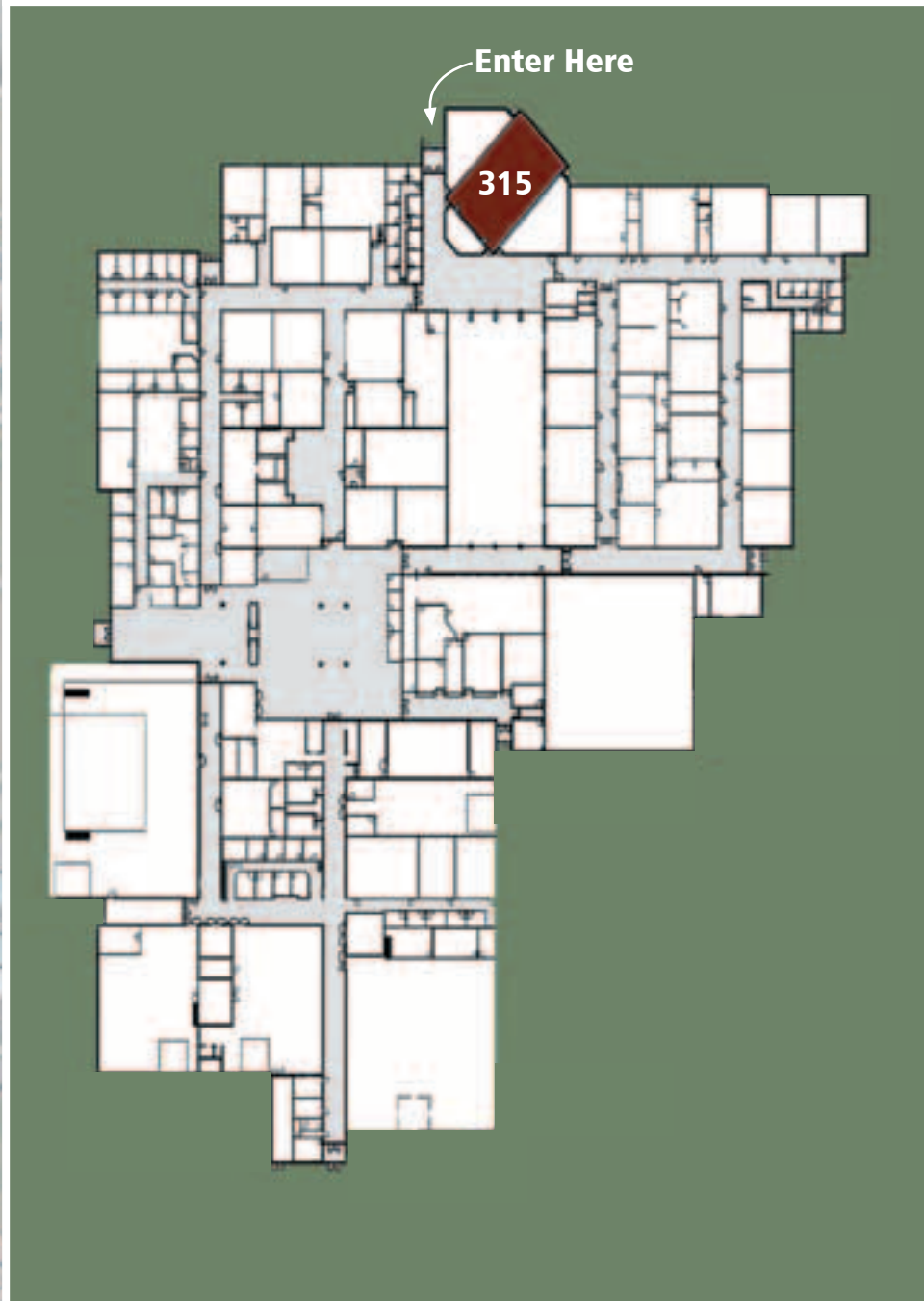
The Grand Forks - East Grand Forks Metropolitan Planning Organization (MPO) has begun a Central Avenue Corridor Study for Central Avenue or State Highway #220 through East Grand Forks. The first open house for the study will be held on August 16, 2007 at Northland Community and Technical College, 2022 Central Ave NE, Room 315 beginning at 6:00 pm. The Study looks at the Central Avenue Corridor starting at the intersection of Central Ave and 9th Street NE on the south and travels along Central Avenue (Hwy 220 North) to the north end flood control project just one mile beyond the city limits.

The purpose of the open house is to gather input from the public regarding land use, landscaping or streetscaping along the corridor, as well as, any transportation or pedestrian/bike crossing issues the public may have. The open house will consist of separate work stations that discuss the study's purpose, past work on the corridor, Central Avenue as it appears today and what it might be in the future.



For further information contact
Nancy Ellis at (218) 773-0124.

**Northland Community and Technical College
2022 Central Ave NE, Room 315**



Central Avenue Corridor.

On a scale from 1 (disagree) through 10 (agree) - please indicate your opinions about various issues relating to the corridor. **Please circle your top three issues.**

Character 2

disagree

agree

1. The corridor's character is vibrant and alive 1 2 3 4 5 6 7 8 9 10
2. A place I'd like to come to shop or do business 1 2 3 4 5 6 7 8 9 10
3. The corridor feels friendly and inviting 1 2 3 4 5 6 7 8 9 10
4. Feels more like a highway than a business district 1 2 3 4 5 6 7 8 9 10

Business 0

5. The corridor has the right group of businesses 1 2 3 4 5 6 7 8 9 10
6. Businesses along the corridor are successful 1 2 3 4 5 6 7 8 9 10
7. The businesses need building improvements 1 2 3 4 5 6 7 8 9 10
8. The roadway system hinders business climate 1 2 3 4 5 6 7 8 9 10

Traffic 1

9. Traffic flows smoothly along the corridor 1 2 3 4 5 6 7 8 9 10
10. It is difficult to cross Central Avenue 1 2 3 4 5 6 7 8 9 10
11. There are no issues with safety along the corridor 1 2 3 4 5 6 7 8 9 10
12. The roadway is much too big 1 2 3 4 5 6 7 8 9 10

Pedestrian/Bicyclist 4

13. The corridor is an inviting place to walk 1 2 3 4 5 6 7 8 9 10
14. I'd use a trail along this corridor if one existed 1 2 3 4 5 6 7 8 9 10
15. I feel safe walking in this corridor 1 2 3 4 5 6 7 8 9 10
16. It is easy to walk across the highway 1 2 3 4 5 6 7 8 9 10
17. I'd trust my children to navigate this corridor 1 2 3 4 5 6 7 8 9 10
18. The current pedestrian/bicyclist elements are enough ... 1 2 3 4 5 6 7 8 9 10

Landscaping 4

19. The street system needs better landscaping 1 2 3 4 5 6 7 8 9 10
20. The businesses are well landscaped 1 2 3 4 5 6 7 8 9 10
21. What landscaping? 1 2 3 4 5 6 7 8 9 10
22. Gravel parking lots are a problem 1 2 3 4 5 6 7 8 9 10

Signage 0

23. The corridor lacks a unified signage plan 1 2 3 4 5 6 7 8 9 10
24. Business and building signage is good 1 2 3 4 5 6 7 8 9 10

City Entry 2

25. This corridor presents an excellent entry image for our community 1 2 3 4 5 6 7 8 9 10

Code/Nuisance 3

26. The corridor has problems with:
 - Weeds & landscape maintenance 1 2 3 4 5 6 7 8 9 10
 - Abandoned or stored vehicles 1 2 3 4 5 6 7 8 9 10
 - Code violations 1 2 3 4 5 6 7 8 9 10

Other

A. _____

B. _____

C. _____

* Don't forget to circle your **top three**
Thank you for your participation!

Public Notice

East Grand Forks Central Avenue Corridor Study

**Open House 6:30 pm, October 29th
Eagles Club, East Grand Forks**

The Grand Forks - East Grand Forks Metropolitan Planning Organization (MPO) is in the process of conducting a Central Avenue Corridor Study for Central Avenue or State Highway #220 through East Grand Forks. The second open house will be on October 29, 2007 at the Eagles Club, 227 10th St. NW in East Grand Forks. The study looks at the Central Avenue Corridor starting at the intersection of Central Ave and 9th Street NE on the south and travels along Central Avenue (Hwy 220 North) to the north end flood control project just one mile beyond the city limits.

The purpose of the open house is to gather input from the public regarding several potential options for land use along the corridor. The open house will consist of separate work stations that discuss the corridor. refreshments will be served.



**For further information contact
Nancy Ellis at (218) 773-0124.**



OPEN HOUSE #2

EAST GRAND FORKS CENTRAL AVENUE CORRIDOR STUDY

WELCOME PACKET

M.P.O.

M.P.O.

M.P.O.

SRF
CONSULTING GROUP, INC.

JLG
architects



EAST GRAND FORKS

CENTRAL AVENUE CORRIDOR STUDY

Station 1.

Welcome & Check-in

Station 2.

The Need - Why are we assessing the corridor?

Station 3.

The Process - Here we will describe the process we will follow.

Station 4.

Traffic Conditions - The purpose of this station is to provide the public with an overview of existing traffic/transportation conditions. Capacity analysis results identify a Level of Service (LOS), which indicates how well an intersection is operating. The LOS results are based on an average delay per vehicle.

Station 5.

The Corridor Tomorrow - M.P.O., SRF Consulting, and JLG Architects have developed several options and concepts for the corridor. These recommendations for urban revitalization and land use are listed and described at this station. We would appreciate your input regarding the options and concepts at this station. Please offer or write down any ideas or thoughts you may have.





EAST GRAND FORKS
CENTRAL AVENUE CORRIDOR STUDY

STEERING COMMITTEE MEMBERS

**MPO - Nancy Ellis
Earl Haugen**

EDHA - Jim Richter

MNDOT - Jim Bittman

City Council - Craig Buckalew

City Planning - Gary Christianson

City of East Grand Forks Staff

City Inspections - Jerry Skyberg

City Engineer - Floan Sanders rep, Greg Boppre

City Public Works - John Wachter or rep

City Police Dept. - Chief Lealos or rep

City Parks and Rec. Dept - Dave Aker or rep

Northwest Community Technical College - Bob Gooden

Central Avenue Businesses

Tom Stennes, Stennes Funeral

Oscar Sutherland, Community National Bank

Renee Twite, Sun N Things

Mike Pierce, Pierce Investments

Troy Pecka, Troy Pecka Trucking Inc.

JLG Architects and SRF Consulting





EAST GRAND FORKS

CENTRAL AVENUE CORRIDOR STUDY

TIMELINE

Data Collection

Review and Analyze

Communittee Input

Review and Analyze

Planning Committee

Review and Analyze

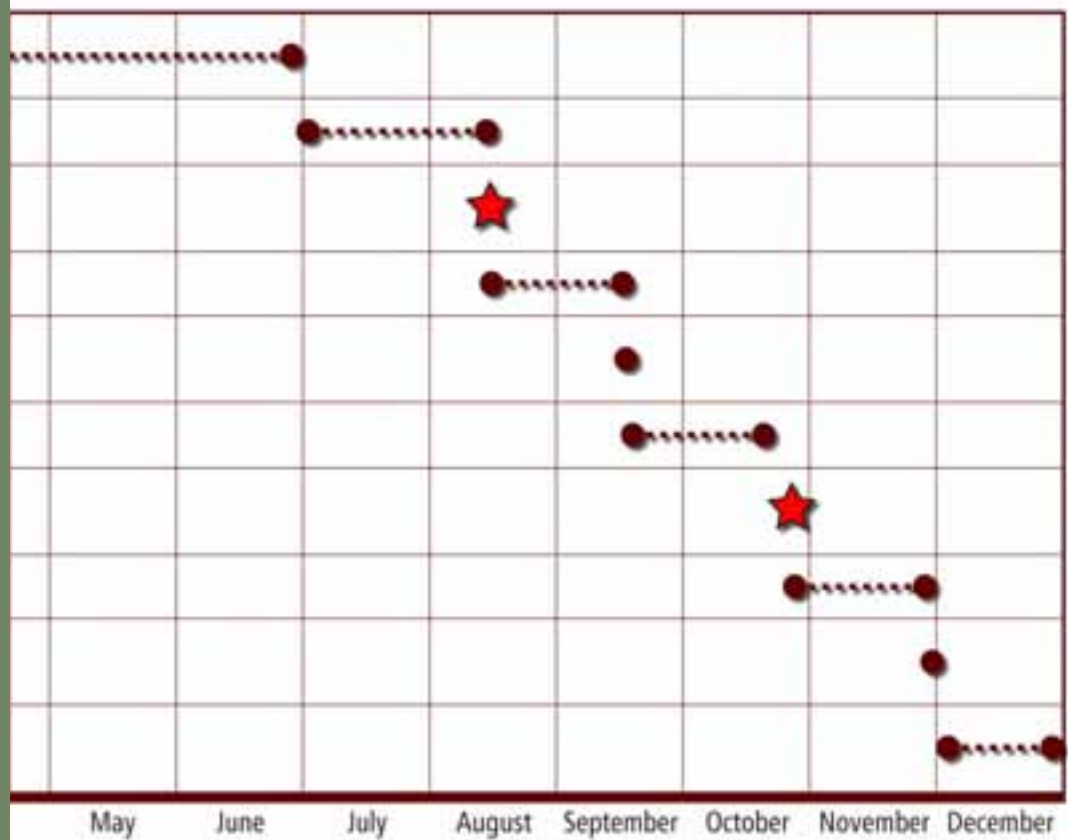
Communittee Input

October 29th

Review and Analyze

Planning Committee

Final Report





EAST GRAND FORKS

CENTRAL AVENUE CORRIDOR STUDY

Key Issues

Listed below are the key issues as discovered from studies, previous open houses & meetings with the Central Avenue Corridor steering committee.

Both options, including urban revitalization recommendations, address the issues below:

- I. Frontage Roads**
 - a. Reduced Frontage Roads**
 - i. Reduce the frontage roads to decrease hard surfaces while increasing landscaping & pedestrian/bicycle opportunities**
 - ii. Reduction of hard space becomes a “boulevard”, which includes more landscaping, pedestrian walkways & bike paths**
 - b. Backage Roads**
 - i. Reduce the frontage road on the West side of Central Avenue similar to I.a.i. above & eliminate the frontage road along the East side. Also introduce a backage road along 2nd Avenue & turn the old frontage road area into green-space including pedestrian opportunities.**
 - ii. Reduction of hard space becomes a “boulevard”, which includes more landscaping, pedestrian walkways & bike paths**



EAST GRAND FORKS

CENTRAL AVENUE CORRIDOR STUDY

2.

Landscaping

- a. **Supplement street trees along mainline**
- b. **Plant shrubs/perennial grasses in mainline boulevards and annuals/perennials at noses of mainline boulevards**
- c. **Introduce plantings, trees, shrubberies, etc., along the newly created boulevards to bring down the scale of the corridor**
- d. **Provide a buffer between the business along the corridor and the hardscape of the corridor itself**

3.

Pedestrian/Bicycle

- a. **Incorporate improved pedestrian walkways along the corridor to encourage pedestrian traffic**
- b. **Incorporate bike trails along the corridor that tie into the bike trails along the Greenway**
- c. **Provide safer pedestrian & bicycle crossings of Central Avenue**

4.

Land Use

- a. **Limit future Industrial uses along the corridor**
- b. **Identify one parcel of land along the corridor to concentrate focused redevelopment to re-energize the corridor**
- c. **Encourage uses that will revitalize the corridor**

5.

Traffic

- a. **Improve traffic conditions per SRF study – Station 4**

6.

Streetscape & Site Design

- a. **Screen parking lots (private initiative/code enforcement)**





EAST GRAND FORKS

CENTRAL AVENUE CORRIDOR STUDY

7.

Corridor Entry

- a. **Construct gateway treatments at significant intersections**
- b. **Construct gateway/entrance monument on north end of corridor**

8.

Corridor Aesthetics

- a. **Install pedestrian scaled lighting along new trail and sidewalk**
- b. **Install ornamental lighting along mainline**
- c. **Install street 'banners' along the corridor**

9.

Vacant Buildings & Clutter

- a. **Screen outdoor storage areas (private initiative/code enforcement)**
- b. **Encourage re-use/renovation of vacant buildings into commercial use (possible city initiatives)**

10.

Signage

- a. **Establish signage requirements**

11.

Architectural Quality & Cohesiveness

- a. **Establish architectural requirements**
- b. **Revisit setbacks, required amount of greenspace vs hardscape**

12.

Spatial Enclosure

- a. **If suggested mainline improvements are made (i.e. limiting access at select intersections) and if City keeps roadway at the two lane configuration instead of a four lane north of 17th, the City should consider removing pavement from main line median islands that have sufficient width and installing vegetation on them**



Public Notice

East Grand Forks

Central Avenue Corridor Study

Open House 6:30 pm, January 24th
Polk County Human Service Ctr., East Grand Forks

The Grand Forks - East Grand Forks Metropolitan Planning Organization (MPO) is in the process of conducting a Central Avenue Corridor Study for Central Avenue or State Highway #220 through East Grand Forks. The third open house will be on January 24, 2008 at the Polk County Human Service Center, 1424 Central Avenue NE in East Grand Forks. The study looks at the Central Avenue Corridor starting at the intersection of Central Ave and 9th Street NE on the south and travels along Central Avenue (Hwy 220 North) to the north end flood control project just one mile beyond the city limits.

The purpose of the open house is to gather input from the public regarding several potential options for land use along the corridor. The open house will consist of a short presentation with an open discussion following.

An electronic draft copy of the final document will be available for review on the MPO website:
<http://www.theforksmmpo.org/>



For further information contact
Nancy Ellis at (218) 773-0124.

8

APPENDIX F press

Consultants complete 220 study

Karl Lindquist
Expert Freelance Writer

On November 27, Michael Laverdure of JLG Architects met with the Highway 220 North steering committee at City Hall. He opened the meeting by saying that he had been asked many times why his firm was studying the Highway 220 North corridor. He said his reply has always been the same.

"We are attempting to create a forward-looking vision for the corridor. Not necessarily for today, but certainly for tomorrow."

Last spring the City Council requested the

Grand Forks/East Grand Forks Metropolitan Planning Organization (MPO) to study the Highway 220 North corridor to see if the appearance and functionality of the corridor could be improved. The MPO retained the services of JLG Architects of Grand Forks and SRF Consulting Group, Inc., of Minneapolis to conduct the study. The MPO also appointed a 16-person steering committee to guide the consultants in their study of the corridor.

The consultants have been busy. They met with the steering committee three times and held two open houses to listen to the comments

of the general public concerning ways to improve the corridor. The consultants last met with the steering committee on November 27 at City Hall to discuss the results of the study and the recommendations to be presented to the City Council.

The two frontage roads situated on either side of Highway 220 North received the most scrutiny from the consultants. Initially the consultants suggested removing the frontage roads entirely. The plan was to replace the frontage roads with "backage" roads that would serve the businesses situated on Highway 220 North

from the rear. This approach would have opened up a considerable amount of land in the corridor for sidewalks and bike trails and trees and other landscaping.

Another plan was to reduce the width of each of the frontage roads from 40 feet to 26 feet, thereby freeing up 14 feet of frontage road right-of-way on each side of Highway 220 North for paths and trails and landscaping. A third proposed "combination" plan was to reduce the width of the frontage road situated to

220 study
— Continued page 14

220 Study — continued from page one

the west of Highway 220 North, and replace the frontage road situated to the east of the highway with a backage road.

After the first open house on August 16, it became abundantly clear to the consultants that corridor merchants were vehemently opposed to the full backage road concept, and it was dropped from further consideration. At the consultants' meeting with the steering committee on November 27, Lonnie Laffen of JLG Architects said area merchants perceived the backage road concept as an "expensive radical approach."

"Businesses didn't want to incur the expense of refiguring their buildings so customers could use the back door as the main entrance," Laffen said.

After the open house on October 29, the consultants concluded that the combination plan was also going to be a tough sell, leaving the reduced frontage road concept as the only viable alternative in improving the corridor.

Laverdure said the consultants were going to focus on reducing the width of the two frontage roads in an effort to address the problems in the corridor identified by the general public at the two open houses.

Laverdure said the issues most often raised by both merchants and private parties at the open houses were the lack of a good image for the City upon entering the corridor from the north, little or no landscaping, poor roadway and curb maintenance, and too many different types of business signage.

"The corridor is confusing and lacks vitality," Laverdure said. Laffen added that the corridor lacks "walkability." According to Laffen there are many destinations in the corridor, but the lack of sidewalks and pedestrians in crossings discourages walkers. Laffen said the corridor presents "opportunity, but no walkability" to pedestrians.

The timing of the implementation of the suggested improvements to the corridor was also discussed by the consultants and members of the steering committee.

Joscar Sutherland of Community Bank said, "It's unfortunate that people who attended the open houses were under the misconception that the changes would have to be made immediately. It could take 20 or 30 or even 40 years

to implement the long range plans."

Craig Buckalew, City Alderman and owner of Hardware Hank, asked what the City should do about needed maintenance to the frontage roads.

"If we defer maintenance until a plan can be implemented, the roads are going to get pretty tough," Buckalew said.

In response Laffen said that Buckalew's question illustrated the importance of good planning. If the consultants' recommendations are approved by the City Council, Laffen said, then reducing the width of the frontage roads in stages might be the way to go.

Laffen admitted that a frontage road that went from 40 feet in width to 26 feet in width for a block or so, and then back to 40 feet in width might look "funny." But, Laffen said, the opportunity to landscape even just a portion of a frontage road might get people excited and motivate them to push for a completion of the project.

During the meeting Laverdure handed out a three page "Framework Plan" containing the consultants' recommendations for changes to the frontage roads, for changes in the zoning ordinance, and for changes affecting the mainline highway.

After Laverdure had gone through the list, recommendation by recommendation, Laffen told the steering committee members, "This is the time to say no. If you don't want us to make any of these recommendations to the City Council, now is the time to speak up."

The members of the steering committee present appeared satisfied with the recommendations.

The next step for the consultants is to put their recommendations into the format of a report. A draft of the final report will be presented to the steering committee for final review and approval in December, with a goal of presenting the final report to the City Council sometime in January.

Nancy Ellis, Senior Planner on the MPO, said she would arrange for Laverdure's power point presentation, "East Grand Forks Corridor Study," to be available on the City's website. Check it out. It's interesting viewing.

220 North Committee rejects backage road concept

Information meeting Monday night

Karl Lindquist
Landscape Architect

Want to know what changes are in store for the Highway 220 North corridor? Then you better plan on attending the informational meeting to be held at 6:30 p.m. on Monday, October 29, at the Eagles Club.

On September 24 the citizen steering committee guiding the study of Highway 220 North met with its consultants, H.G. Architects of Grand Forks and SRF Consulting Group, Inc., of Minneapolis to hear an update on the consultants' progress in their study of how to beautify the City's Highway 220 North corridor.

The consultants posed the possibility of entirely eliminating the frontage roads that run parallel to Highway 220 North on both its east and west sides, thereby freeing up space for bike trails and walking paths and trees and other landscaping. Access to the businesses situated on Highway 220 North would be gained via new roads built behind the businesses, such roads being referred to

by the consultants as "backage roads." Another less aggressive way to make the Highway 220 North corridor more attractive, according to the consultants, was to reduce the width of the frontage roads from 40 feet to 26 feet, thereby providing a 14 foot corridor for trails and trees.

After discussing the "backage road" approach and the "reduced frontage road" approach at the September 24 meeting, the steering committee and the consultants decided there may be a third approach to the beautification of Highway 220 North. This third approach involved the construction of a backage road serving the businesses situated on the east side of the corridor, and the reduction in size of the frontage road serving the businesses situated on the west side of the corridor. This third approach was described as a "combination" approach.

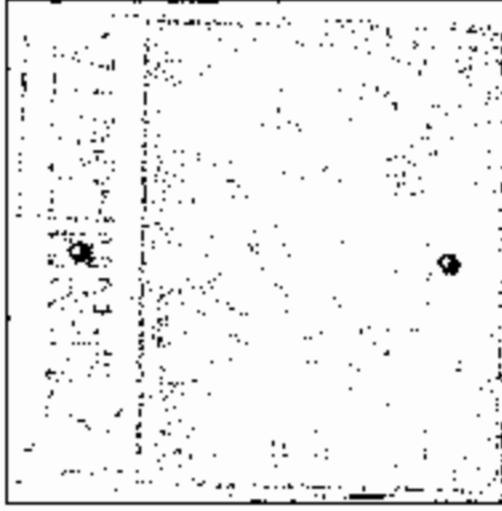
Monday afternoon Nancy Ellis, Senior Planner for the Grand Forks/East Grand Forks Metropolitan Planning Organization, stated that the steering committee had instructed the consultants to forget about the

"backage road" approach. According to Ellis, the members of the steering committee felt the "backage road" concept would be too disruptive and too expensive to implement.

However, the "reduced frontage road" and the "combination" approaches are still alive and well and on the drawing board. Ellis said these two approaches, including maps and charts, would be presented to the public by the consultants at an informal meeting to be held at 6:30 p.m. on Monday, October 29, at the Eagles Club located at 227 10th Street NW.

Ellis further stated that the construction of a "roundabout" at the intersection of Highway 220 North and 75th Street was still under consideration, and would also be discussed at the meeting.

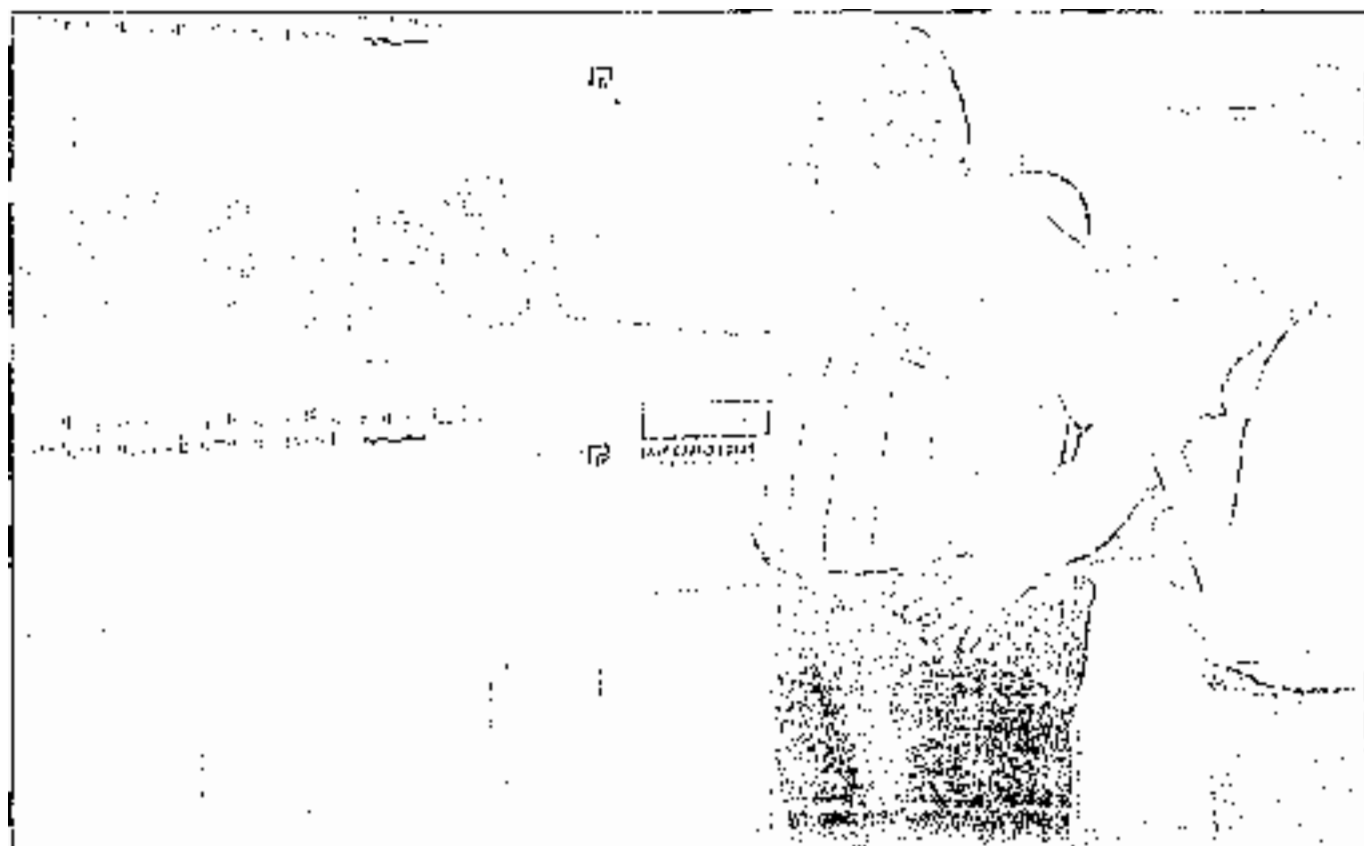
Mark your calendar. Attend the meeting. Your opinion is important to the consultants. Get involved and help shape the future appearance of your city.



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Oct. 24, 2007

Gov. Experiment



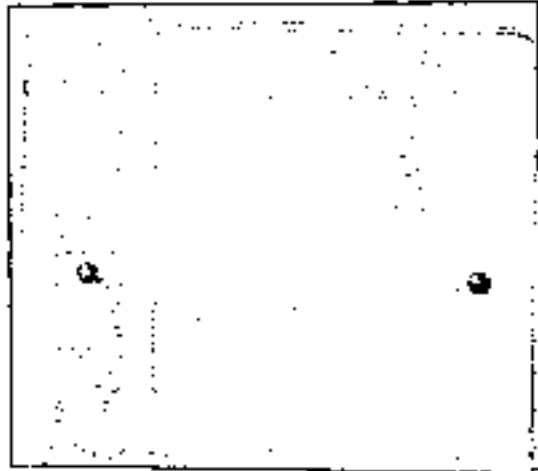
Mike Lavardero, from JLG Architects, explains one of the plans for the beautification of the Highway 220 North corridor in East Grand Forks. The Monday evening meeting, attended by about 20, was one of several held by the Citizen Steering Committee to gain public input on the proposed project.

20 North Committee rejects package road concept

Information

meeting

Monday night



By Karl Lindquist
Special Features Writer

Want to know what changes are in store for the Highway 220 North corridor? Then you better plan on attending the informational meeting to be held at 6:30 p.m. on Monday, October 29, at the Eagles Club.

On September 24 the citizen steering committee guiding the study of Highway 220 North met with its consultants, JLC Architects of Grand Forks and SRI Consulting Group, Inc., of Minneapolis to hear an update on the consultants' progress in their study of how to beautify the City's Highway 220 North corridor.

The consultants posed the possibility of entirely eliminating the frontage roads that run parallel to Highway 220 North on both its east and west sides, thereby freeing up space for bike trails and walking paths and trees and other landscaping. Access to the businesses situated on Highway 220 North would be gained via new roads built behind the businesses, such roads being referred to

as the consultants "backage roads."

Another less aggressive way to make the Highway 220 North corridor more attractive, according to the consultants, was to reduce the widths of the frontage roads from 40 feet to 26 feet thereby providing a 14 foot corridor for trails and trees.

After discussing the "backage road" approach and the "reduced frontage road" approach at the September 24 meeting, the steering committee and the consultants decided there may be a third approach to the beautification of Highway 220 North. This third approach involved the construction of a package road serving the businesses situated on the east side of the corridor, and the reduction in size of the frontage road serving the businesses situated on the west side of the corridor. This third approach was described as a "combination" approach.

Monday afternoon Nutsy Ellis, Senior Planner for the Grand Forks-East Grand Forks Metropolitan Planning Organization, stated that the steering committee had instructed the consultants to forget about the

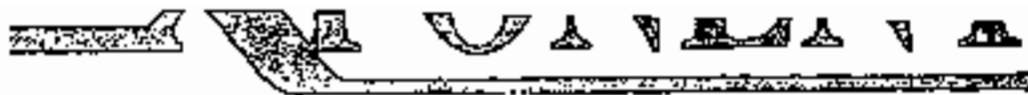
"backage road" approach. According to Ellis, the members of the steering committee felt the "backage road" concept would be too disruptive and too expensive to implement.

However, the "reduced frontage road" and the "combination" approaches are still alive and well and on the drawing board. Ellis said those two approaches, including maps and charts, would be presented to the public by the consultants at an informational meeting to be held at 6:30 p.m. on Monday, October 29, at the Eagles Club located at 227 1/2th Street NW.

Ellis further stated that the construction of a "roundabout" at the intersection of Highway 220 North and 23rd Street was still under consideration, and would also be discussed at the meeting.

Mark your calendar. Attend the meeting. Your opinion is important to the consultants. Get involved and help shape the future appearance of your city.

Continued on page 10, column 2, K122.

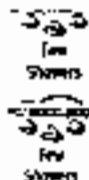


Wednesday, September 26, 2007

\$1.00

September 29
High 50 Low 16

Sunday,
September 30
High 50 Low 17



◦ Consultants proposal ◦

220 N frontage roads could go

Teri Lindquist
Exponent Publisher Writer

Should the frontage roads adjacent to Highway 220 North be eliminated and turned into green space? Monday afternoon the consultants studying Highway 220 North posed that question to the steering committee guiding the study.

Last summer, the City Council directed the Grand Forks/East Grand Forks Metropolitan Planning Organization (MPO) to study the Highway 220 North corridor to see whether the appearance and functionality of the corridor could be improved. The MPO retained JLG Architects of Grand Forks (JLG) and SRF Consulting Group, Inc., of Minneapolis (SRF) to study the corridor.

As part of the study, the consultants held an open house on August 16 for the purpose of gathering the general public's opinion about how the corridor could be improved. A problem brought up at the open house and confirmed by the consultants

was that the corridor was simply too wide.

Loonie Laffen of JLG informed the steering committee that the distance between store fronts on Columbia Road in Grand Forks was approximately 160 feet, and that the distance between store fronts on Washington Street in Grand Forks was approximately 250 feet. In contrast, Laffen said, the distance between store fronts on 220 North was approximately 330 feet. Laffen described the appearance of the 220 North corridor as, "Too much pavement. No sense of place."

According to the consultants, one of the ways the corridor could be improved would be to eliminate the frontage roads.

In a letter to the steering committee Michael Laverdure of JLG wrote, "The 'Backage Road' concept removes the frontage road and replaces it with green space, pedestrian & bike pathways. It also adds a 'backage' road behind most properties, to accommodate local traffic. Some re-organization of traffic flow onto Cen-

tral Avenue is recommended also. This option is the most aggressive."

Under the "Backage Road" concept, the frontage roads would be completely eliminated and replaced with green space and bike and foot trails. To access a business on 220 North, a customer would turn to the east or the west off of 220 North and then, rather than turning onto the frontage road, the customer would proceed past the business and then turn onto a new service access road (a "Backage Road") that accessed the business from what is currently the rear of the business.

According to the consultants, this would not only improve the appearance of the corridor but would also improve access onto Highway 220 North by reducing the congestion caused by the close proximity of the frontage roads to Highway 220 North.

Another way the corridor could be improved, according to the consultants,

Highway 220
— Continued page 16

Open House planned to discuss beautification of Highway 220 North

မြန်မာနိုင်ငံတော်

The study is being on the U.S. Highway 22 National Corridor, the important roadway, 202 miles with public use in the study by almost an open house scheduled for three days in October, a pre-Thursday, August 19 in Klamath Falls, 20-21 in Bend and Coquille, 22 in Medford, Coquille.

The authors also asked 100 young adults the final three questions listed in the questionnaire. The mean age of the 100 young adults was 20.6 years, and 49% of the 100 were male. The 100 young adults were asked the three questions in the questionnaire in a random order to determine the order of the questions that had the greatest effect on the young adults' responses.

Like Thandala's the Veterinary College is near the Panchayat Office, the nearest town with a post office, 22 km. South-west of Thandala. The college is a well-servicing institution for 150 students in MBBS. Hospital and community medicine, the Strong Community as a first step, the 4th year, and then a work at the college, and formed a number of sub-centers.

1. $\text{range}(\text{diff}(\text{fit}(\text{f}, \text{data})))$

says that it is "too much concern and too much guesswork" to even try adding the number of computers to traffic counts and devices. According to Little, the agency must make important decisions people have to live with. And that people have to agree on what kind of brand we want to continue with in the future.

As an example of problems in the research, offering a single example of lighting. Watts (1992) found that a larger number than there were killed in the 1980s in the London Tunnel and 'There is a strong tendency to regard the tunnel as a victim.'

Latter also, the better social location of Jews in New York is a problem for an emerging Jewish and the new culture that is still not modern, possibly keep the outside and thus perhaps the new religionism that is revealed in the new social structure in the city, possibly that the community is attracted to such human culture.

Strongy, Corbin also mentions *deus* [with a capital D] and *de* [with a small d] in his studies, and what would be the difference between *deus* and *de* in his study of the physical theory of the universe? (The answer: *deus* is God, *de* is the Greek word for "from" or "out of".)



the MHA responded that the issue of violent bullies should be addressed by the Ministry of Education and given no indication that such is the MHA's intention. The MHA provided the consultation on such and determine whether any further consultation were an adequate way to determine bullying connected with cyberbullying.

[illegible]

on North Main Street, and a Douglas County-owned North Dakota property and identified Highway 276 North intersection with that way (see Highway 276, 27th Street, and 2nd Street) to Young Park location (see).

Waggon informed the Accounting Committee that in any one day, the Page 1 of the first 20 minutes, he pays 5, usually 3 to 15, 15 trucks with 20 to 25 loads. But that the number jumps to about 40 to 60 trucks per day in 10 seconds as a result of the toll free toll station.

Vascular disease portends use of the coronary that while the whole of the highway could use the resurfacing power, and a lot of it is in the way of study, there were no vehicles and no marked emergency and roadway.

The Mexican government must be responsible to address the trade issues that the investment situation has created with German investors. Long-term problems must be resolved to differentiate the long-term market from a speculative situation. Second, China has real problems with the investment climate. Significant barriers must

Now we consider the following matrix

8

APPENDIX G miscellaneous

E.G.F. Planning Commission

E.G.F. Planning Commission

P.O. Box 373, East Grand Forks, Minnesota 56721 – Phone Number: (218) 773-0124

Memo

To: Planning Commission

From: Nancy Ellis, Senior Planner

Date: 2/5/2008

Re: Matter of Central Avenue Corridor Study for Central Avenue (State Highway #220) in East Grand Forks, MN.

GENERAL INFORMATION

Our first public meeting/open house for this project took place on August 16, 2007. Property owners, commercial business owners, and developers along the corridor attended the meeting. The meeting served a few purposes for the study. First it alerted property owners that a study was taking place regarding land use, transportation and aesthetic issues along the corridor. Second, the consulting group was able to explain the study area and its purpose to those in attendance. Third, those in attendance could provide input to the study team of their concerns about the corridor both in terms of traffic/pedestrian/bike operation and safety as well as any nuisance violations, landscaping issues, and incompatible uses/buildings located in the corridor.

The project team has taken these comments and has begun to develop two concept plans for the future look and operation of the corridor. One concept plan shows a reduced frontage road concept with sidewalks/trails and landscaping within a portion of the existing frontage road. This concept also shows land use changes and traffic/access changes. The second concept plan removes the frontage road and installs a backage road for business access along the corridor. This concept is the more aggressive plan or vision for the future of the corridor.

These concept plans were given to Steering Committee members in mid September and were then discussed and debated at a September 24th Steering Committee

meeting. Copies of these plans have been included with this Planning Commission report for your review. A presentation by the consultant, JLG Architects, will be given at the October 10, 2007 Planning Commission meeting.

FINDINGS AND ANALYSIS

- Central Avenue is a major transportation route in the City of East Grand Forks.
- The corridor needs beautification efforts due to the lack of code violations, landscaping/streetscaping, deteriorating buildings and vacancies, and incompatible land use arrangements.
- The first public meeting took place on August 16, 2007.
- A second public meeting will be held on October 29, 2007 to present one (or both) concept plan for the future look of the corridor
- Both the frontage road and backage road concept plans were discussed and debated at the Steering Committee meeting on September 24, 2007.

STAFF RECOMMENDATION

Staff has no recommendation, as this is information only.

SUPPORT MATERIALS (ENCLOSURES)

- Summary of August Open House
- Backage Concept Plan
- Frontage Concept Plan
- Traffic Memo and future accesses, peak hour traffic estimates



Grand Forks - East Grand Forks Metropolitan Planning Organization

Memo

To: Central Ave Corridor Study Steering Committee Members

From: Nancy Ellis, Senior Planner

Date: 1/7/2008

Re: Final Document review

I am sending this memo to let you know the progress of the Central Avenue Corridor Study. At this time, we do not have a final document for your review; however, we do expect to receive a final report for your review (and ours) in the near future. The MPO hopes to send out copies of the draft final document to each of you in the first weeks of January 2008. Once we receive this document, we will follow the procedures mentioned below to complete this study:

1. Please read the draft document (once you receive it by mail or email) and let me know if you have any comments, concerns or changes for the consultants to address in the document. I will then forward these items to the consultants, JLG Architects.
2. A final open house will be necessary. The final document should be presented to the public for their review and comments before presentation to the Steering Committee, EGF and MPO boards. This will provide each board with the final opinion from the public.

If we receive comments from some Steering Committee members that significantly change the study draft document, we will need the steering committee to guide us as to how to present the draft to the public. Therefore, a steering committee meeting will be needed before the open house

Date: January 24 Time: 6:30pm Location: TBA

3. The MPO with the consultants will hold one final meeting to review the final document, with the open house comments, and make a recommendation to the EGF Planning Commission and City Council, as well as, the MPO's Technical Advisory Committee and Executive Boards. I have listed a couple of days and times that would be available. We would like to have as many of you attend as possible. Please contact me by email, nancy.ellis@theforksmppc.org to let me know which day works best for you:

Dates January 29, 30, 31 Times 10am, NOON or 3pm

4. The final document, with Steering Committee recommendation and public comments and opinion, will be presented to the EGF Planning Commission and MPO TAC boards. After review by each board, they will forward their recommendations to the EGF City Council and MPO Executive Boards.

If you have any questions on the process or have any comments concerning the Study, please contact me at any time, 218.773.0124 or by email. Thank you again for participating in this study and taking the time to help plan the corridor's future.

PUBLIC NOTICE

The Grand Forks - East Grand Forks Metropolitan Planning Organization (MPO) is conducting a Central Avenue Corridor Study for Central Avenue or State Highway #220 through of East Grand Forks. The final open house for the study will be held on January 24, 2008 at the Polk County Human Service Center, 1424 Central Avenue NE, East Grand Forks beginning at 6:30 pm.

The study looks at the Central Avenue Corridor starting at the intersection of Central Ave and 9th Street NE on the south and travels along Central Avenue (Hwy 220 North) to the north end flood control project just one mile beyond the city limits.

The purpose of the open house is to present the final report of the Central Avenue Corridor Study including a concept framework plan with recommendations for future development and enhancements along the corridor. The open house hopes to gather input from the public regarding the final concept plan for future land use, landscaping or streetscaping, and the reduction of the frontage roads along the corridor. The open house will consist of a presentation and time for public comment.

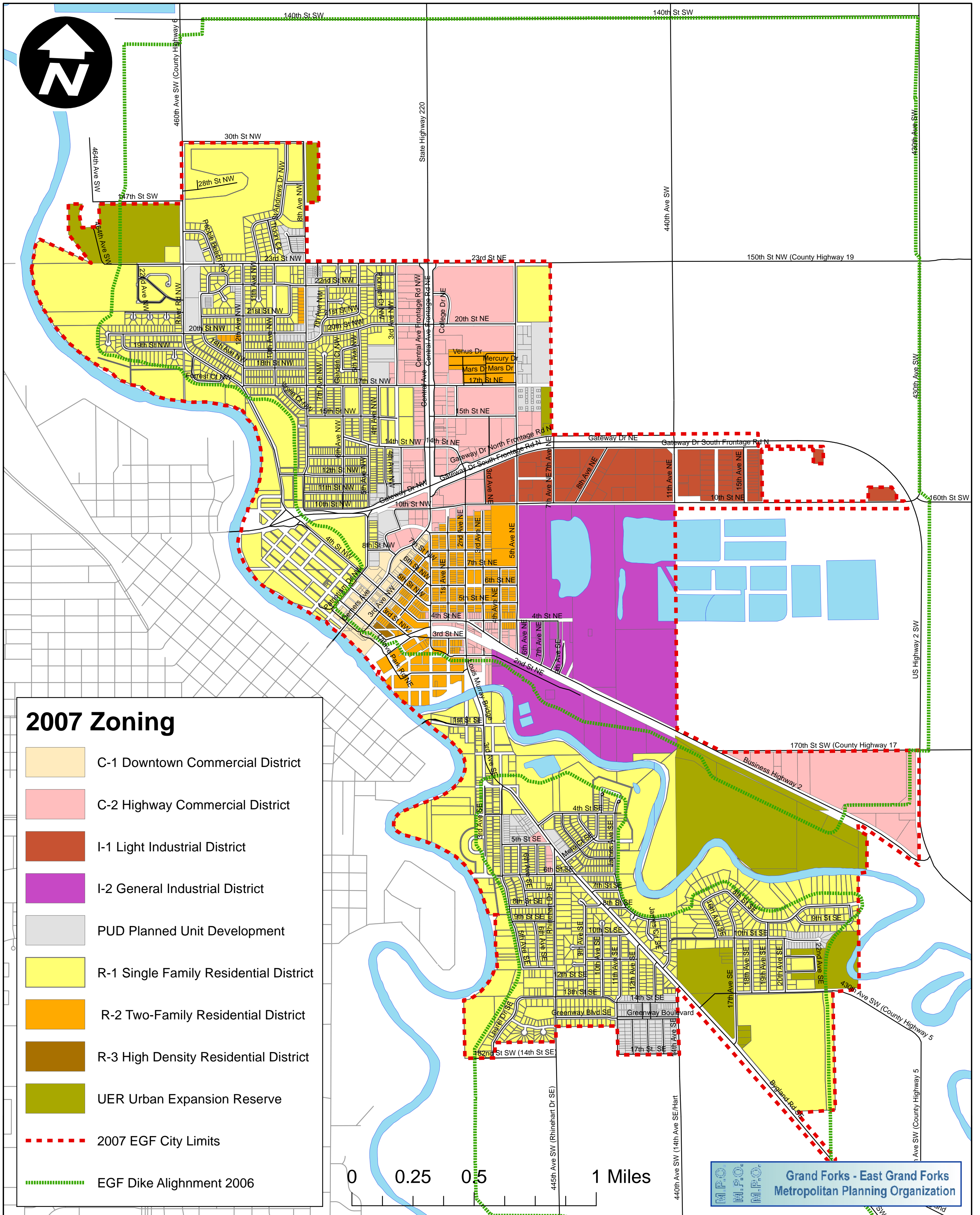
For further information, contact Nancy Ellis at (218) 773-0124.

(Please publish ASAP as a legal notice)

(Please submit bill to MPO 746-2660)

- Greenview & Engler Farm
- Planning to do with Skyline

2007 East Grand Forks Zoning



Metropolitan Planning Organization
CENTRAL AVENUE CORRIDOR
STUDY
East Grand Forks, MN

JLG
architects



AGENDA

- A. Introductions
- B. Progress Update
- C. Key Issues — Existing & Potential Solutions
- D. Preliminary Planning Concepts
- D. Discussion

EAST GRAND FORKS CENTRAL AVENUE CORRIDOR STUDY

JLG
architects



progress update

WORKPLAN

- Kickoff Meeting
- Steering Committee Meeting — July 26th 10:00am (EGF City Hall)
- Open House — August 16th 6:00pm
- Steering Committee Meeting — September 24th 3pm (EGF City Hall)
- Open House — Oct 29th 6:00pm (Location TBD)
- Steering Committee Meeting — Nov 29th 10am (EGF City Hall)
- Final Document

EAST GRAND FORKS CENTRAL AVENUE CORRIDOR STUDY

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SRF
CONSULTING GROUP, INC.



progress update

OPEN HOUSE — AUGUST 16TH

- Attendance
 - A more concerted effort to gain more community participation for the second Open House will need to be enacted
- Eight Stations presented by planning team
 - List stations

EAST GRAND FORKS CENTRAL AVENUE CORRIDOR STUDY

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progress update

OPEN HOUSE — AUGUST 16TH

THE NEED

- Property Clutter — 10 votes
- Vacant Buildings — 6 votes
- Highway Environment — 2 votes
- Pedestrian Crossing — 2 votes
- Lack of Landscaping — 1 vote
- Front Loading Docks — 1 vote
- Signage — 1 vote
- Well Maintained, Local Attractions, Corridor Median & Traffic Issues — 0 Votes

EAST GRAND FORKS CENTRAL AVENUE CORRIDOR STUDY

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CONSULTING GROUP, INC.



progress update

OPEN HOUSE — AUGUST 16TH

THE CORRIDOR YESTERDAY

- “I remember that this area was where ‘New’ business was developing.”
- “It was a clean looking, successful road.”
- “A place to shop and do business.”
- “It used to be a lot more ‘welcoming’. It seems more dingy today.”
- “Country Kitchen was a great restaurant.”
- “Turn off to the Civic Center for hockey.”
- “Great deals @ Archies/Bargains.”
- “Bowling Alley in Senior High Center. The Game Room.”

EAST GRAND FORKS CENTRAL AVENUE CORRIDOR STUDY

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SRF
CONSTRUCTION GROUP, INC.



progress update

OPEN HOUSE — AUGUST 16TH

THE CORRIDOR TODAY

- Pedestrian / Bicyclist — 4 Votes
- Landscaping — 4 Votes
- Code / Nuisance — 3 Votes
- Character — 2 Votes
- City Entry — 2 Votes
- Traffic — 1 Vote
- Business & Signage — 0 Votes

EAST GRAND FORKS CENTRAL AVENUE CORRIDOR STUDY

JLG
architects



progress update

OPEN HOUSE — AUGUST 16TH

THE CORRIDOR TODAY

- Pedestrian / Bicyclist
 - The corridor is not conducive to pedestrian & bicycle access
 - A trail is needed
- Landscaping
 - The corridor needs better landscaping
- Code / Nuisance
 - Maintenance of landscape items are needed
- Character — 2 Votes
- City Entry — 2 Votes
- Traffic — 1 Vote
- Business & Signage — 0 Votes

EAST GRAND FORKS CENTRAL AVENUE CORRIDOR STUDY

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architects

SRF
COMMUNITY GROUP, INC.



progress update

OPEN HOUSE — AUGUST 16TH

THE CORRIDOR TOMORROW

- “Work to improve parking on frontage roads. Semi-trucks. Out-of-town vehicles.”
- “Pedestrians.”
- “Clean up the town.”
- “The city needs to make the corridor less like an industrial park or otherwise determine identity.”
- “Make it easier to work with city to implement property improvements.”

EAST GRAND FORKS CENTRAL AVENUE CORRIDOR STUDY

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SRF
Consulting Group, Inc.



progress update

OPEN HOUSE — AUGUST 16TH

WHAT WE LEARNED

- Clutter, lack of landscaping, vacant buildings affect perceptions of the corridor
- In the past, this area was growing. People remembered the area as a good place to shop and eat. Not the case now.
- Pedestrian use of the corridor is very limited.
- Traffic can be an issue during peak times, especially during school.
- Frontage road use and maintenance need to be addressed.
- The corridor has become more industrial than commercial area.
- People want to improve the corridor, but are looking for the city to take the lead.

EAST GRAND FORKS CENTRAL AVENUE CORRIDOR STUDY

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Consulting Group, Inc.



key issues

EXISTING

LIST THE ISSUES HERE

1. Traffic — congestion at key intersections
2. Lack of Pedestrian/Bicycle amenities
3. Lack of Streetscape & Site Design
4. Awkward mix of incompatible uses
5. Current Corridor Aesthetics
6. Frontage Roads — Oversized & too close to main line
7. Vacant buildings & Clutter
8. Lack of Corridor Entry
9. Lack of Architectural Quality & Cohesiveness
10. Low Quality Signage
11. Spatial Enclosure
 - Highway 220 - 330 feet
 - Washington - 250 feet
 - Columbia - 160 feet

preliminary concepts

TRAFFIC SUMMARY

- Conducted existing condition analysis
 - Results indicate that all key intersections currently operate at acceptable LOS C or better
- Developed year 2035 daily and peak hour traffic volumes based on Long Range Transportation Plan
- Conducted year 2035 condition analysis
 - Results indicate that a number of key intersections will fail, operating at unacceptable LOS E or worse

preliminary concepts

TRAFFIC SUMMARY

- Reviewed two mitigation strategies:
 - Mitigate failures maintaining existing access configuration and frontage road design (i.e., modify traffic control at failing intersections with either signals or alternative controls)
 - Mitigate failures with an access management plan and roadway network modifications (supplemented by traffic control modifications where necessary)
- Either Mitigation strategy will result in the key intersections operating at acceptable LOS C or better

preliminary concepts

TWO CONCEPTS

Two preliminary concepts address the key issues:

1. Backage Road Concept
2. Reduced Frontage Road Concept

EAST GRAND FORKS CENTRAL AVENUE CORRIDOR STUDY

JLG
architects



preliminary concepts

BACKAGE ROAD

The 'Backage Road' concept removes the frontage road and replaces it with green space, pedestrian & bike pathways. It also adds a 'backage' road behind most properties, to accommodate local traffic. Some re-organization of traffic flow onto Central Avenue is recommended also. This option is the most aggressive.

EAST GRAND FORKS CENTRAL AVENUE CORRIDOR STUDY

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Consulting Group, Inc.



preliminary concepts

REDUCED WIDTH FRONTAGE ROAD

The 'Reduced Frontage Road' concept reduces the overall width to accommodate pedestrian & bike paths with a little added green space as a buffer to Central Avenue. Access to the Central Avenue 'side' of the businesses is still available via a reduced width frontage road, parking will need to be located off-street. This option is less aggressive, but enough would change that the dynamic of the corridor would change.

EAST GRAND FORKS CENTRAL AVENUE CORRIDOR STUDY

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Consulting Group, Inc.



preliminary concepts

URBAN DESIGN CONSIDERATIONS

- Issues and Opportunities:
 - Mainline Highway
 - Frontage Road
 - Private Sector

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architects



preliminary concepts

URBAN DESIGN COMPONENTS

- Streetscape Features
 - Median Islands
 - Gateways
 - Street Lights
 - Street Trees
 - Parking Lot Screening
 - Trails and Sidewalks
 - Crosswalks
 - Signs
 - Banners
 - Transit Stops

EAST GRAND FORKS CENTRAL AVENUE CORRIDOR STUDY

JLG
architects



preliminary concepts

URBAN DESIGN CONSIDERATIONS

- Building Materials
- Screening
 - Storage Areas
 - Parking Lots
 - Dumpsters and Mechanical
- Alternative Land Uses
 - Visibility vs. Screening

EAST GRAND FORKS CENTRAL AVENUE CORRIDOR STUDY

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major issues

EAST GRAND FORKS CORRIDOR STUDY



Walkability

Commercial district streets need to handle two duties - traffic and pedestrian movement. They are currently designed to handle large amounts of traffic with little consideration for pedestrians.

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architects

SRF
CONSULTING GROUP, INC.

M.P.O.
M.P.O.
M.P.O.

major issues

EAST GRAND FORKS CORRIDOR STUDY

Walk Score™ Find a great neighborhood.

Why Walking Matters | Walkable Neighborhoods | How It Works | How It Doesn't Work | Real Estate Tile | Blog

Please type an address
Address: 14th street and central avenue east grand forks minnesota Go United States

Walk Score: 68 out of 100 Worst Best What it means

Grocery Stores
Hugo's Store No 5 0.17 Mi

Restaurants
Mc Donald's 0.12 Mi

Coffee Shops
Urban Stampede 1.06 Mi

Bars
Blue Moose Bar & Gr 0.73 Mi

Movie Theaters
Carmike 10 Business 3.83 Mi

Schools
Area Special Ed Co- 0.13 Mi

Parks
East Grand Forks Ci 0.15 Mi

Libraries
East Grand Forks Pu 0.6 Mi

Bookstores
St Josephs Catholic 1.02 Mi

Fitness
Galstad Chiropracti 0.08 Mi

Drug Stores
Hugo's Family Pharm 0.1 Mi

Hardware Stores
Hardware Hank 0.13 Mi

Clothing & Music
All Pro Embroidery 0.04 Mi

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Walk Score: 78 - Very Walkable

Closest Businesses:

Business	Distance
Grocery: Dunn Good Groc	0.28 Mi
Restaurants: Rocking Wok	0.23 Mi
Coffee: Espresso Splendid	0.07 Mi
Bar: Buckard Tavern	0.38 Mi
Other: Guild 45th Theatre	0.55 Mi

Delight your visitors by adding the Walk Score tile to your site.

What is Walk Score? We help homebuyers, renters, and real estate agents find houses and apartments in great neighborhoods. Walk Score shows you a map of what's nearby and calculates a Walk Score for any property. Buying a house in a walkable neighborhood is good for your health and good for the environment.

Walkability

www.walkscore.com

Walk Score is a website that utilizes the Google Map engine to calculate the Walkability of a neighborhood.

As you can see on the following slides, the South edge of the corridor has a decent walk score and decreases as you progress North.

14th and Hwy 220 got a score of 68

major issues

EAST GRAND FORKS CORRIDOR STUDY

Walkability

17th and Hwy 220 got a score of 60

Walk Score™ Find a great neighborhood.

Why Walking Matters | Walkable Neighborhoods | How It Works | How It Doesn't Work | Real Estate Tile | Blog

Please type an address
Address: 17th street and central avenue east grand forks minnesota Go United States

Walk Score: 60 out of 100 Worst Best What it means

Grocery Stores
Hugo's; Store No 5 0.31 Mi

Restaurants
Red Pepper East 0.13 Mi

Coffee Shops
Urban Stampede 1.29 Mi

Bars
Blue Moose Bar & Gr 0.96 Mi

Movie Theaters
Carmike 10 Business 4.06 Mi

Schools
Area Special Ed Co- 0.12 Mi

Parks
East Grand Forks Ci 0.16 Mi

Libraries
East Grand Forks Pu 0.84 Mi

Bookstores
St Josephs Catholic 1.25 Mi

Fitness
Curves 0.06 Mi

Drug Stores
Hugo's Family Pharm 0.27 Mi

Hardware Stores
Hardware Hank 0.38 Mi

Clothing & Music
All Pro Embroidery 0.22 Mi

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Celebrity Locations
Check the walkability of these famous locations:
Choose a location

Luxury Rentals in Bradenton
www.YachtClubHartHouse.com

Get the Walk Score Tile
Walk Score: 78 - Very Walkable
Closest Businesses:
Grocery: Dunn Good Groc - 0.28 Mi
Bookstore: Rocking Wisk - 0.31 Mi
Coffee: Espresso Splendid - 0.07 Mi
Bar: Buckaroo Tavern - 0.38 Mi
Other: Guild 45th Theatre - 0.55 Mi

Delight your visitors by adding the Walk Score tile to your site.

major issues

EAST GRAND FORKS CORRIDOR STUDY

Walkability

20th and Hwy 220 got a score of 42

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Why Walking Matters | Walkable Neighborhoods | How It Works | How It Doesn't Work | Real Estate Tile | Blog

Please type an address
Address: 20th street and central avenue east grand forks minnesota Go United States

Walk Score: 42 out of 100 Worst Best What it means

Grocery Stores
Hugo's; Store No 5 0.54 Mi

Restaurants
Red Pepper East 0.38 Mi

Coffee Shops
Urban Stampede 1.53 Mi

Bars
Blue Moose Bar & Gr 1.19 Mi

Movie Theaters
Carmike 10 Business 4.27 Mi

Schools
Northland Community 0.04 Mi

Parks
East Grand Forks Ci 0.39 Mi

Libraries
East Grand Forks Pu 1.08 Mi

Bookstores
St Josephs Catholic 1.48 Mi

Fitness
Curves 0.31 Mi

Drug Stores
Hugo's Family Pharm 0.52 Mi

Hardware Stores
Hardware Hank 0.64 Mi

Clothing & Music
All Pro Embroidery 0.47 Mi

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Celebrity Locations
Check the walkability of these famous locations:
Choose a location

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Real Estate The Villages
See current Real Estate listings in The Villages, FL. Search now!

Get the Walk Score Tile
Walk Score: 78 - Very Walkable

Closest Businesses:
Grocery: Dunn Good Groc - 0.28 Mi
Bookstore: Rocking Wok - 0.23 Mi
Coffee: Espresso Splendid - 0.07 Mi
Bar: Buckard Tavern - 0.38 Mi
Other: Guild 45th Theatre - 0.55 Mi

Delight your visitors by adding the Walk Score tile to your site.

major issues

EAST GRAND FORKS CORRIDOR STUDY

Walk Score™ Find a great neighborhood.

Why Walking Matters | Walkable Neighborhoods | How It Works | How It Doesn't Work | Real Estate Tile | Blog

Please type an address
Address: 23rd street and central avenue east grand forks minnesota Go United States

Walk Score: 25 out of 100 Worst Best What it means

Grocery Stores
Hugo's Store No 5 0.78 Mi

Restaurants
Red Pepper East 0.63 Mi

Coffee Shops
Urban Stampede 1.76 Mi

Bars
Blue Moose Bar & Gr 1.43 Mi

Movie Theaters
Carmike 10 Business 4.5 Mi

Schools
Northland Community 0.24 Mi

Parks
East Grand Forks Ci 0.64 Mi

Libraries
East Grand Forks Pu 1.33 Mi

Bookstores
St Josephs Catholic 1.71 Mi

Fitness
Curves 0.56 Mi

Drug Stores
Hugo's Family Pharm 0.77 Mi

Hardware Stores
Hardware Hank 0.89 Mi

Clothing & Music
All Pro Embroidery 0.72 Mi

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Walkability

23rd and Hwy 220 got a score of 25

This should change if development occurs to the NW of this intersection

The point of this exercise is to illustrate that there is definite potential in making the corridor a walkable one, you just have to give community members the opportunity to do so.

major issues

EAST GRAND FORKS CORRIDOR STUDY

Why Walking Matters

Walkable neighborhoods offer surprising benefits to our health, the environment, and our communities.

Better health

-A study in Washington State found that the average resident of a pedestrian-friendly neighborhood weighs 7 pounds less than someone who lives in a sprawling neighborhood. Residents of walkable neighborhoods drive less and suffer fewer car accidents, a leading cause of death between the ages of 15 - 45.

Reduction in greenhouse gas

-Cars are a leading cause of global warming. Your feet are zero pollution transportation machines.

More transportation options

-Compact neighborhoods tend to have higher population density, which leads to more public transportation options and bicycle infrastructure. Not only is taking the bus cheaper than driving, but riding a bus is ten times safer than driving a car!

Increased social capital

-Walking increases social capital by promoting face-to-face interaction with your neighbors. Studies have shown that for each 10 minutes a person spends in a daily car commute, time spent in community activities falls by 10 percent.

Stronger local businesses

-Dense, walkable neighborhoods provide local businesses with the foot traffic they need to thrive. It's easier for pedestrians to shop at many stores on one trip, since they don't need to drive between destinations. *High walkability has also been found to have economic benefits for an area (Litman, Todd Alexander. "Economic Value of Walkability" (PDF), Victoria Transport Policy Institute, 2004-10-12)*

Walkability