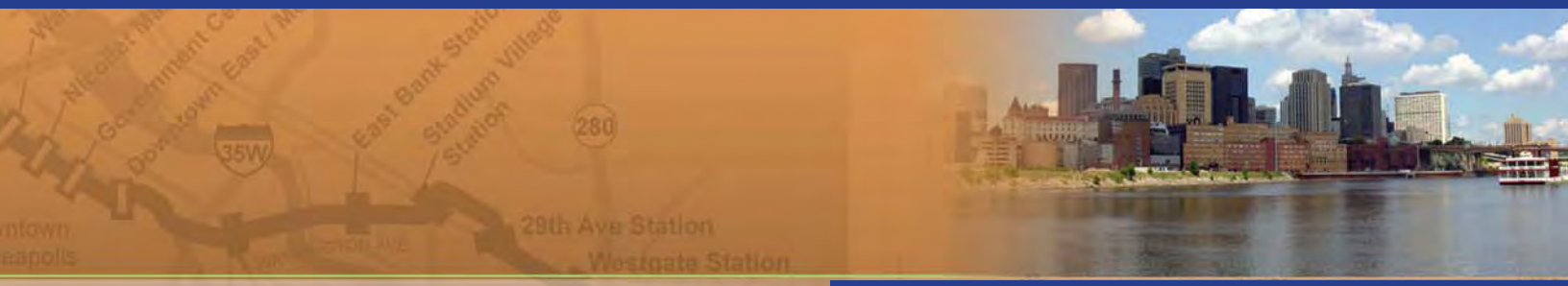
Central Corridor
Light Rail Transit

Metropolitan Council

Draft Supplemental Environmental Assessment
Construction - Related Potential Impacts on Business Revenues



March 2011

CENTRAL CORRIDOR LIGHT RAIL TRANSIT PROJECT

SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT
CONSTRUCTION-RELATED POTENTIAL IMPACTS ON BUSINESS REVENUES

Prepared by:
Federal Transit Administration (FTA)
Metropolitan Council

Pursuant to:

National Environmental Policy Act of 1969, Section 102(2)(c), 42,U.S.C. 4332(2)(c);
National Historic Preservation Act of 1966, Section 106, 16 U.S.C. 470f, et seq.;
Federal Transit Act, 53 U.S.C. 5323(b), Section 5309(e)(2) – (7), 5301(e), and 5324(b)(1) – (3);
Title 49 U.S.C. Section 303, formerly Department of Transportation Act of 1966, Section 4(f);
Executive Order 11990 (Protection of Wetlands);
Executive Order 12898 (Environmental Justice);
Executive Order 13045 (Protection of Children from Environmental Health and Safety Risks);
Executive Order 13166 (Improving Access to Services for Persons with Limited English Proficiency).

2-28-2011
Date of Approval

Marisol Simon, Region V
Regional Administrator
Federal Transit

Administration

2.28.11
Date of Approval

Mark Fuhrmann
New Starts Program Director
Metropolitan Council

ABSTRACT

The Metropolitan Council and the Federal Transit Administration (FTA), the lead federal agency, have prepared this Construction-related Potential Impacts on Business Revenues Supplemental Environmental Assessment (EA) for the Central Corridor Light Rail Transit Project (the Project) pursuant to 23 CFR 771.130(c). The Project is 10.9 miles long (9.7 miles of new alignment, 1.2 miles on shared alignment) and consists of 23 Central Corridor Light Rail Transit (LRT) stations – 18 new stations and five shared with the Hiawatha LRT. On January 26, 2011, the U.S. District Court for the District of Minnesota in the case *NAACP, et. al. v. US Department of Transportation, et. al.*, CIV 10-147 held that the Final Environmental Impact Statement ("FEIS"), prepared in June 2009, did not evaluate potential impacts on the loss of business revenue during construction and that it should have been evaluated during the National Environmental Policy Act ("NEPA") process. This supplemental EA analyzes the potential average loss of revenue by local businesses during the construction period for the Project.

A public comment period has been established for this document. Comments may be submitted in writing or in person at public hearings scheduled for Wednesday, March 16, 2011. Two hearings will be held that day, one starting at 8:00 am at the Lao Family Community of Minnesota (second-floor conference room, 320 University Ave. W., St. Paul, MN, 55103) and one starting at 6:00 pm at Goodwill / Easter Seals (553 Fairview Ave. N., St. Paul, MN, 55104).

Written comments should be submitted directly to Ms. Kathryn L. O'Brien by March 31, 2011 at the address below or by email to centralcorridor@metc.state.mn.us.

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Central Corridor
Light Rail Transit

Draft Supplemental Environmental Assessment
Construction-Related Potential Impacts on Business Revenues

Federal Transit Administration
Metropolitan Council
March 2011

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ES 1.0 EXECUTIVE SUMMARY

The Metropolitan Council and Federal Transit Administration (FTA), the lead federal agency, has prepared this supplemental environmental assessment (EA) of the potential impacts on business revenues due to construction of the Central Corridor Light Rail Transit (LRT) Project pursuant to 23 CFR 771.130(c). The Project is 10.9 miles long (9.7 miles of new alignment, 1.2 miles on shared alignment) and consists of 23 Central Corridor LRT stations – 18 new stations and five shared with the Hiawatha LRT.

ES 1.1 Basis for this Environmental Assessment

Following the June 2009 Final Environmental Impact Statement ("FEIS") and the August 2009 Record of Decision ("ROD"), a lawsuit was filed against the U.S. Department of Transportation, the Federal Transit Administration ("FTA") and the Metropolitan Council by a coalition of local businesses, residents and non-profit organizations. One of the four claims made in the lawsuit was that the environmental review of the Project violated the National Environmental Policy Act ("NEPA") by failing to adequately analyze potential loss of business revenues caused during construction of the Project. The Court held that the FEIS prepared in June 2009, had failed to evaluate potential impacts on the loss of business revenue during construction and that it should have been evaluated during the NEPA process. The Court ordered the Metropolitan Council and FTA to supplement the FEIS for this issue and to address any loss of business revenues as an adverse impact of the construction of the Central Corridor LRT. The results of this analysis, as required by the January 26, 2011 Court order, are documented in this supplemental Environmental Assessment (EA).

ES 1.2 Description of Construction Activities

For the purposes of this EA, construction of the Project is being addressed in two general sections: Civil West and Civil East. The Civil West construction comprises the western three miles of the Project within the City of Minneapolis. The Civil East Construction comprises the eastern seven miles of the Project within the City of St. Paul. The western one-mile segment of the Project along the Hiawatha LRT in downtown Minneapolis will not be affected by project construction and therefore is not included in this EA.

Civil West and Civil East Construction (Section 2.1)

Civil West and Civil East construction includes utility relocations, LRT construction and related activities, bridge construction, and roadway construction and related activities (e.g., new roadway pavements, sidewalks, curb and gutter, street lighting, above and below-grade traffic signal facilities, etc.). Other activities that would occur during project construction include Operations and Maintenance Facility (OMF) construction, LRT systems construction, fare collection installation, and station artwork. The following activities have already been completed: 4th Street advanced utility construction in downtown St. Paul, advanced traffic improvements to streets at the University of Minnesota, and OMF yard site preparations.

Construction Schedule and Segments (Section 2.2)

Construction of the Central Corridor LRT began in late 2009. Final completion of all Civil West and Civil East construction work is anticipated by the end of 2013, with system operation anticipated in 2014. Civil West construction and Civil East construction are each divided into five

segments. Detailed work-specific construction plans will be developed to establish the estimated schedule and staging of construction phases for all project segments, consistent with the constraints and sequencing limitations identified in the construction contract documents.

Construction Sequencing and Utilities (Section 2.3)

The overall construction period for each segment will include a period of localized utility work, site preparation and mobilization, heavy construction, and construction completion and clean up. Utility relocations may result in temporary, short-term disruptions to utility services; however, utility service will be maintained throughout project construction. After the final completion of all construction activities, there will be a shorter period of integration and system testing prior to full operation of the Central Corridor LRT system.

ES 1.3 Inventory of Businesses

There are 947 business establishments located adjacent to the project alignment for which there is current North American Industry Classification System (NAICS) information and annual revenue data.[1] Based on an evaluation of available business revenue data, 798 businesses (84%) along the Central Corridor LRT would be considered small businesses with revenues less than $2 million per year.

ES 1.4 Summary of Construction-Related Impacts on Business Revenues

Construction-Related Potential Impacts to Business Revenues Technical Study (Section 4.1)

The Technical Report prepared by the Volpe Institute identifies seven impact categories based on previous studies. The Technical Report anticipates that construction activities will temporarily impede access by pedestrians and vehicles; temporarily consume space for parking; lead to temporary utility shutoffs; result in nuisance impacts such as noise, vibration, and dust; and temporarily impede business visibility. Over the course of project, most of the businesses along the corridor are likely to experience potential impacts from project construction, including issues associated with those factors identified above.

The Technical Report notes that no studies have directly connected potential construction-related impacts to quantitative estimates of business revenue losses during construction. While any individual business has the potential to experience the loss of business revenues during the construction period, past studies indicate that four business types (general merchandise, food stores, automotive retail and home furnishings) are more likely to experience greater sales revenue losses due to construction, as well as other economic factors.

The Technical Report notes that this estimate of impacts is subject to significant uncertainty, and given this uncertainty, it is likely that there will be businesses with sales revenue losses other than those business types identified above. The Technical Report analysis provides estimates of average effects for broad categories of businesses to the small businesses in the project corridor to yield a range of average impacts on the small businesses from no impact to 2.5% loss of revenue during the construction period.

[1] This number does not include business located in downtown St. Paul and downtown Minneapolis.

Mitigation Program Overview (Section 4.2)

While many of the factors that contribute to potential loss of business revenue cannot be avoided during construction activity, studies referenced in the *Technical Report* identify a number of suggested mitigation measures to counteract loss of business revenue. These include business counseling, adjustments to construction phasing, traffic management and public relations and marketing activity. Furthermore, as required by Minnesota legislation, the Minnesota Department of Transportation (Mn/DOT) concluded a study that reviewed the impacts to businesses due to construction and recommended a series of mitigation measures as best practices for transportation projects.

Based on the "best practices" currently available to alleviate construction impacts to businesses and the recommendations made in the Mn/DOT study, proposed mitigation for the Central Corridor LRT Project focuses on: (1)minimizing the unavoidable impacts of construction activities; (2) proactive communications with both corridor businesses and the community to minimize confusion and uncertainty regarding the timing and duration of construction activities; (3) promotional and marketing activities to encourage patronage of businesses during construction; (4) technical assistance to business during the construction period to improve business management and customer communication skills; (5) financial assistance to businesses losing nearby on-street parking, and; (6) general financial assistance to small businesses affected by construction activities.

ES 1.5 Public Coordination

Two public open house meetings were held on Thursday, February 17, 2011 as part of the development of this EA. The purpose of these town hall meetings was to have an open forum discussion with citizens and businesses regarding potential impacts to businesses during project construction, including the potential loss of business revenue during the construction period.

ES 1.6 Conclusions and Summary of Commitments

The Technical Report prepared by the Volpe Institute states that while any individual business has the potential to experience loss of business revenues during the construction period, previous studies indicate that businesses that include general merchandise, food stores, automotive retail, and furniture stores are more likely to experience greater sales revenue losses due to construction. These studies also recognize that there are many factors unrelated to construction activity that may also impact business revenues, including external economic factors, unemployment rates, and world events. If construction impacts to businesses are sufficiently adverse, then businesses may close or relocate. Less severely impacted businesses would likely experience short-term declines in revenues due to reduced business activity. Construction activity also has the potential to increase revenues of some business types as a result of construction spending during the project.

While many of these factors cannot be avoided during construction activity, a number of mitigation measures have been identified to minimize the negative impact of construction activities, improve communications and provide assistance to businesses to counteract loss of business revenue. Direct financial commitments to mitigation measures total over $8.7 million. In addition, substantial staffing, communication and contractual commitments are provided to implement mitigation measures and assure contractor compliance.

1.0 BASIS FOR THIS ENVIRONMENTAL ASSESSMENT

The content of a traditional Environmental Assessment (EA) document includes a discussion of the following elements: purpose and need for the proposed action; alternatives to the proposed action, including the no-build alternative; evaluation of the social, economic and environmental (SEE) impacts of the project; identification of mitigation measures; and a description of public involvement/agency coordination activities. These elements were previously addressed in the June 2009 FEIS and August 2009 ROD for the Central Corridor LRT and therefore are not included in this EA. The basis for this EA is described below.

Following the June 2009 FEIS and the August 2009 ROD, a lawsuit was filed against the US Department of Transportation (DOT), the FTA, and the Metropolitan Council by a coalition of local businesses, residents, and non-profit organizations. One of the four claims made in this lawsuit was that the environmental review of the Project violated the National Environmental Policy Act (NEPA) by failing to adequately analyze the impact on business revenues potentially caused by construction of the Project. The Court directed the FTA, and the Metropolitan Council to supplement the FEIS to address the potential loss of business revenues as an adverse impact of the construction of the Central Corridor LRT.

2.0 DESCRIPTION OF CONSTRUCTION ACTIVITIES

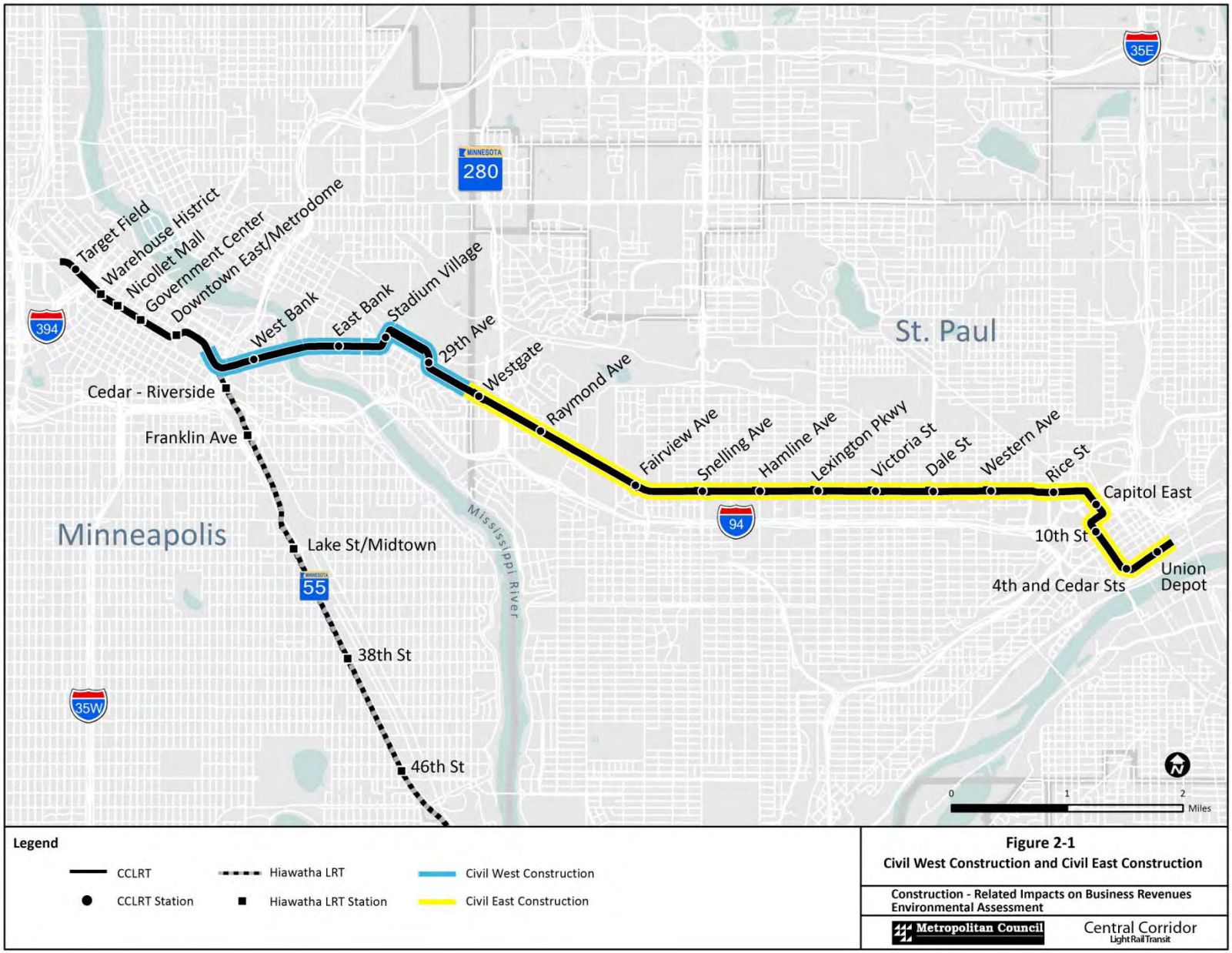
Chapter 2 presents several topics related to the construction of the Central Corridor LRT Project. Specifically, a summary of construction activities is provided, including information regarding construction schedule, construction segments, and sequencing of construction activities.

2.1 Construction Activities

This section identifies the construction activities associated with the Project. For the purposes of this Construction-related Business Impacts EA, construction of the Project is being addressed in two general sections: Civil West and Civil East. The Civil West construction comprises the western three miles of the Project within the City of Minneapolis. The Civil East Construction comprises the eastern seven miles of the Project within the City of St. Paul. The western one-mile segment of the Project along the Hiawatha LRT in downtown Minneapolis will not be affected by project construction because the Hiawatha LRT Project is already completed. The boundaries of the Civil West construction and Civil East construction are described below.

2.1.1 Civil West Construction

The Civil West segment extend generally from a connection to the existing Hiawatha LRT line near the Hubert H. Humphrey Metrodome, crossing over Interstate-35W (I-35W), continuing along Washington Avenue across the Mississippi River on the existing Washington Avenue Bridge and through the University of Minnesota campus, along the south side of the University of Minnesota Transitway, along 29th Avenue SE, and along University Avenue to the Saint Paul city limits near Emerald St SE. (See Figure 2-1.)


35E
MINNESOTA
280
394
Target Field
Warehouse Histrict
Nicollet Mall
Government Center
Downtown East/Metrodome
West Bank
East Bank
Stadium Village
29th Ave
Westgate
Raymond Ave
Fairview Ave
Snelling Ave
Hamline Ave
Lexington Pkwy
Victoria St
Dale St
Western Ave
Rice St
Capitol East
10th St
Union Depot
4th and Cedar Sts
St. Paul
Cedar - Riverside
Franklin Ave
Minneapolis
Lake St/Midtown
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38th St
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CCLRT
CCLRT Station
Hiawatha LRT
Hiawatha LRT Station
Civil West Construction
Civil East Construction
Figure 2-1
Civil West Construction and Civil East Construction
Construction - Related Impacts on Business Revenues
Environmental Assessment
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Light Rail Transit

The Civil West construction includes: demolition of existing underground utilities and roadway pavement; environmental remediation; construction of underground public utilities; areaways (underground building spaces); drainage; light rail track and stations; retaining wall structures; underground communication, signal, and traction power ducts; pull boxes; and catenary pole foundations. Construction also includes any work on and to off-site locations such as duct bank, utilities, and traction power substation sites. Associated roadway work includes construction of new roadway pavements, sidewalks, curb and gutter, street lighting, above and below-grade traffic signal facilities and other related improvements. Associated utility work includes relocation of private utilities by the utility owner and/or its contractor.

Civil West construction activities also include modifications to the Hiawatha LRT bridge over 3rd and 4th Streets (Bridge 27884); construction of a new bridge spanning Interstate 35W (I-35W) (Bridge 27B63); modifications to the Washington Avenue Bridge over the Mississippi River, West River Road and East River Road (Bridge 9360); and construction of a transit mall through the University of Minnesota campus. Washington Avenue Bridge work includes converting the interior lower deck roadway lanes to a light rail transit track, leaving one outer lane on each side of the bridge for vehicular traffic. Modification work will be performed on the existing Hiawatha LRT bridge (Bridge 27878), the existing Cedar Avenue Bridge (Bridge 27030), and the existing 19th Avenue South bridge (Bridge 27620) to accommodate future LRT operations. Transit mall work includes landscaping, street and sidewalk paving, lighting, signage, and a light rail station.

2.1.2 Civil East Construction

The Civil East construction limits extend generally from the Minneapolis City limits along University Avenue to the State Capitol, Robert Street to 12th Street, 12th Street to Cedar Street, Cedar Street to 4th Street and then 4th Street to Broadway Street. (See Figure 2-1.)

The Civil East construction activities include: demolition of existing structures, underground utilities, and roadway pavement; environmental remediation; underground public utilities; drainage; light rail track and stations; retaining wall structures; adjustments to areaways (below ground building spaces); underground communications, signal, and traction power ducts; pull boxes; and catenary pole foundations. Construction also includes any work on and to off-site locations such as duct bank, utilities, and traction power substation sites. Associated roadway work includes construction of new roadway pavements, sidewalks, curb and gutter, street lighting, above and below-grade traffic signal facilities and other related improvements. Associated utility work includes relocation of private utilities by the utility owner and/or its contractor.

Civil East construction also includes modifications to the University Avenue Bridge over State Highway 280 (Bridge 9472) and modifications to the Cedar Street Bridge over I-94/I-35E (Bridge 62889).

2.1.3 Other Construction Activities

Other activities that will occur during project construction are summarized below. These activities will occur concurrently or subsequent to the Civil West and Civil East construction.

- **Operations and Maintenance Facility (OMF):** Construction of the Central Corridor LRT maintenance facility at the eastern end of the Project on the east side of Broadway Street.
- **Systems:** Construction and testing of train control signals, overhead catenary system, traction power system, and communication facilities.
- **Fare Collection:** Installation of ticket vending machines and related equipment on station platforms.
- **Station Artwork:** Installation of artwork at all station locations.

Central Corridor LRT construction activities that have been completed include:

- **4th Street Advanced Utility Construction:** Construction of underground utilities in 4th Street in downtown Saint Paul (Minnesota Street to Broadway Street).
- **Advanced Traffic Improvements:** Street modifications to Pleasant Street, East River Parkway, Arlington Street, and other streets at the University of Minnesota as part of the Central Corridor LRT Project.
- **OMF Yard Site Preparation:** Placement of surcharge soils in OMF yard.

2.2 Construction Schedule and Segments

This section describes the anticipated construction schedule for the Project and the construction segments along the project corridor.

2.2.1 Construction Schedule

Construction of the Central Corridor LRT began in late 2009. Final completion of all Civil West and Civil East construction work is anticipated by the end of 2013, with system operation anticipated in 2014. Under this schedule, project construction will take approximately four years, followed by a shorter period of integration, measurements and system testing.

2.2.2 Construction Segments

Construction of linear projects such as the Central Corridor LRT is typically divided into various segments. Civil West construction segments and Civil East construction segments are illustrated in Figures 2-2 through Figure 2-5.[2] Table 2-1 summarizes the Civil West and Civil East construction segments and the anticipated construction schedule associated with each segment from start of construction to substantial completion as identified in the construction documents. Civil West and Civil East construction work will occur concurrently, along with other construction activities described above. The duration of construction for individual segments will depend upon construction staging, construction methods and other constraints (e.g.,

[2] Figures 2-2 and 2-3 illustrate trackway construction from Emerald Street to Prior Avenue (Segment 1B) and from Prior Avenue to Hamline Avenue (Segment 1C). Heavy construction for the entire section from Emerald Street to Hamline Avenue (Segment 1) will occur in stages from March 2011 to November 2011.

maintenance of vehicular and pedestrian traffic and access, property access, street closures and detours, etc.).

Within each segment, construction will be staged to minimize impacts to adjacent properties. A sample illustration of construction staging on 4th Street in downtown St. Paul (Civil East Segment 5) is provided in the construction update news release in Appendix B. A sample illustration of construction staging on University Avenue between Emerald Street and Hamline Avenue is provided in the construction information packet in Appendix C. Construction staging on Emerald Street to Hamline Avenue (Civil East Segment 1) will occur in one-mile sections, beginning at Emerald Street and progressing to the east. Heavy construction will start on the south side of University Avenue first, followed by heavy construction on the north side of the roadway. One lane of through traffic will be maintained in each direction on University Avenue during this time. Station construction (Civil East Segment 1A) and trackway construction (Civil East Segments 1B and 1C) will continue within the middle of the street until construction is substantially complete.

Detailed, work-specific construction plans will be developed for all project segments. These construction plans will establish the estimated schedule and staging of construction phases within each segment, similar to the examples provided above, consistent with the constraints and sequencing limitations identified in the construction contract documents.

2.3 Construction Sequencing and Utilities

This section describes the general sequencing of construction activities and the duration of temporary utility disruptions during construction.

2.3.1 Construction Sequencing

The overall construction period for each segment will include a period of localized utility work and relocation, site preparation and mobilization, heavy construction, and finish construction and clean up. A general description of the activities associated with each of these construction periods is described below.

- **Localized Private Utility Work:** Prior to project construction, utilities such as electric, natural gas lines, phone and fiber optic communication cables may be relocated by the private utility owner or its contractors. The duration of utility relocation would depend upon the number of utilities within the corridor, and the extent to which the utilities would need to be relocated to accommodate the Project. When possible, relocation of private utilities will be incorporated into heavy construction to minimize the duration of construction activities.

- **Site Preparation and Mobilization:** Site preparation and initial mobilization will include preparation of staging areas, transporting and assembling necessary work materials and equipment to the project site, and installation of security measures (e.g., barriers or fencing enclosing work areas). Traffic control measures, including barricades, signage, temporary traffic signalization and temporary accesses will also be installed during site preparation activities.

- **Heavy Construction:** Heavy construction activities include relocating existing public utilities, such as water, storm sewer, and sanitary sewer. All existing surface features

within the right of way, including the street surface, sidewalks, curbs and gutters, medians, trees and other vegetation would be removed. Excavation for the light rail track and stations would be completed, along with station foundation work. The final stages of heavy construction include curb and gutter and median construction, planting of boulevard trees, asphalt paving of roadways, and construction of sidewalks.

Once the roadway is removed adjacent to an existing property, contractors will have a maximum of 150 days to restore the roadway directly adjacent to the property. Once sidewalks are removed, contractors will have a maximum of 15 days to restore sidewalk areas.[3] At least four feet of sidewalk width would be maintained, except when the new sidewalk is being constructed. Contractors will be required to maintain access at all times and provide Americans with Disabilities Act (ADA)-compliant temporary walkways over construction areas. Traffic and pedestrian access will be restored to its final condition by the end of heavy construction activities.

- **Finish Construction and Clean Up:** Finish construction and clean-up activities include construction of the trackway, above-ground station work and welding of the embedded track. This stage would also include the systems construction (installation of overhead wires and associated communication systems). This work will occur within the middle of the roadway. Following the completion of station, track and systems construction, final construction and site clean-up will be completed and remaining construction areas would be restored to their final condition.

After the final completion of all construction activities summarized above, there will be a shorter period (approximately six months) of integration and system testing prior to full operation of the Central Corridor LRT system.

2.3.2 Utility Disruptions During Construction

Examples of public and private utilities within the project corridor include: hot water, cooling water, municipal water and sewer, electric, natural gas, phone and fiber optic communication cables. Private utility relocations may be undertaken by the utility owner in advance of heavy construction; however, private utility relocations will be incorporated into heavy construction activities when possible The Metropolitan Council will coordinate with utility owners to coordinate construction activities and minimize the duration of private utility relocations. Relocation of public utilities generally will occur concurrent with heavy construction activities, although some minor work could also occur in advance of heavy construction. The timing of utility relocations will depend upon construction sequencing limitations and constraints.

[3] The 150 day limit for contractors to restore the roadway directly adjacent to an existing property applies to all construction segments except for Civil West, Segment 1 (Hiawatha LRT to I-35W) and Civil West, Segment 3 (Washington Avenue, Pleasant Street to Walnut Street). The 15-day limitation for restoring sidewalk areas adjacent to existing properties applies project-wide.

Table 2-1. Central Corridor LRT Construction Schedule Overview

Approximate Location			Construction Schedule [1]	
Segment	**From**	**To**	**Anticipated Start**	**Substantially Complete**
Civil West Construction				
Segment 1 [2]	Hiawatha LRT	I-35W	Dec. 2010	Nov. 2011
Segment 2 [3]	I-35W	Pleasant St	Sept. 2010	Nov. 2012
Segment 3	Pleasant St	Oak St	May 2011	August 2012
Segment 4	Oak St		May 2011	Nov. 2011
Segment 5	Oak St	Emerald St	March 2012	Nov. 2012
Segment 5A (U of M Transitway)	23rd Ave SE	29th Ave SE	May 2011	Aug. 2011
Civil East Construction				
Segment 1 (Heavy Construction)	Emerald St	Hamline Ave	March 2011	Nov. 2011
Segment 1A (Station Work)	Emerald St	Hamline Ave	March 2011	Dec. 2012
Segment 1B (Trackway)	Emerald St	Prior Ave	March 2011	Nov. 2011
Segment 1C (Trackway)	Prior Ave	Hamline Ave	March 2011	June 2012
Segment 2	Hamline Ave	Robert St	Nov. 2011	Nov. 2012
Segment 2A (Station Work)	Hamline Ave	Robert St	Nov. 2011	April 2013
Segment 3	University Ave	Cedar St	July 2010	Nov. 2011
Segment 4	12th St	Minnesota St	June 2011	Nov. 2012
Segment 4A [4]	Cedar St. and 5th St.		April 2011	Nov. 2011
Segment 5	Minnesota St	Broadway St	March 2011	Nov. 2011
Bridges	University Ave. over State Hwy 280		March 2011	Nov. 2011
	Cedar St over I-94/I-35E		March 2011	Nov. 2012

[1] Approximate construction duration from start of construction to substantial completion as identified in the construction documents. The anticipated final completion date for all work for both Civil West and Civil East is December 2013.

[2] Civil West, Segment 1 includes Central Corridor LRT Bridge over I-35W.

[3] Civil West, Segment 2 includes Washington Avenue Bridge over the Mississippi River, West River Road and East River Road.

[4] Civil East, Segment 4A includes demolition of former Bremer Bank building and replacement of skyway.

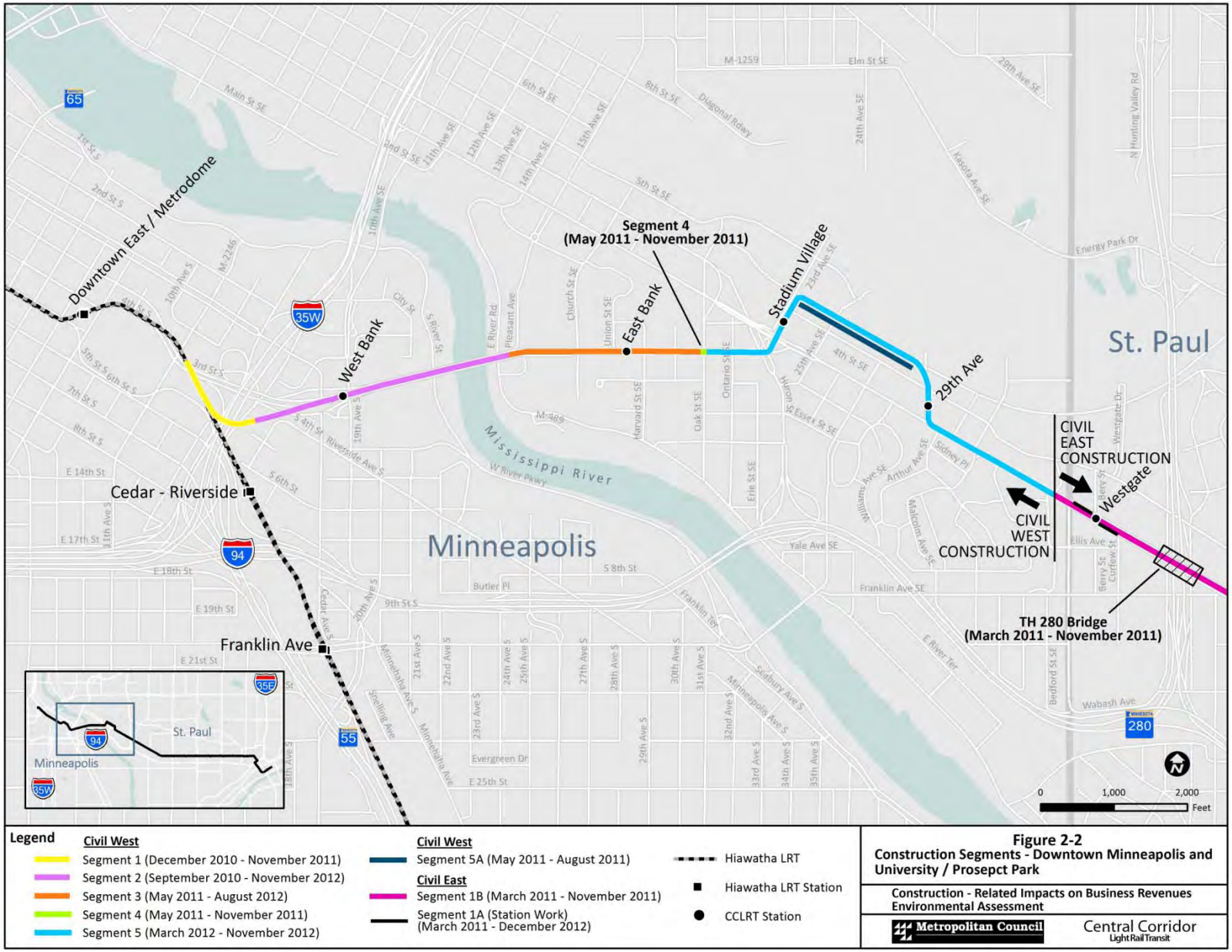
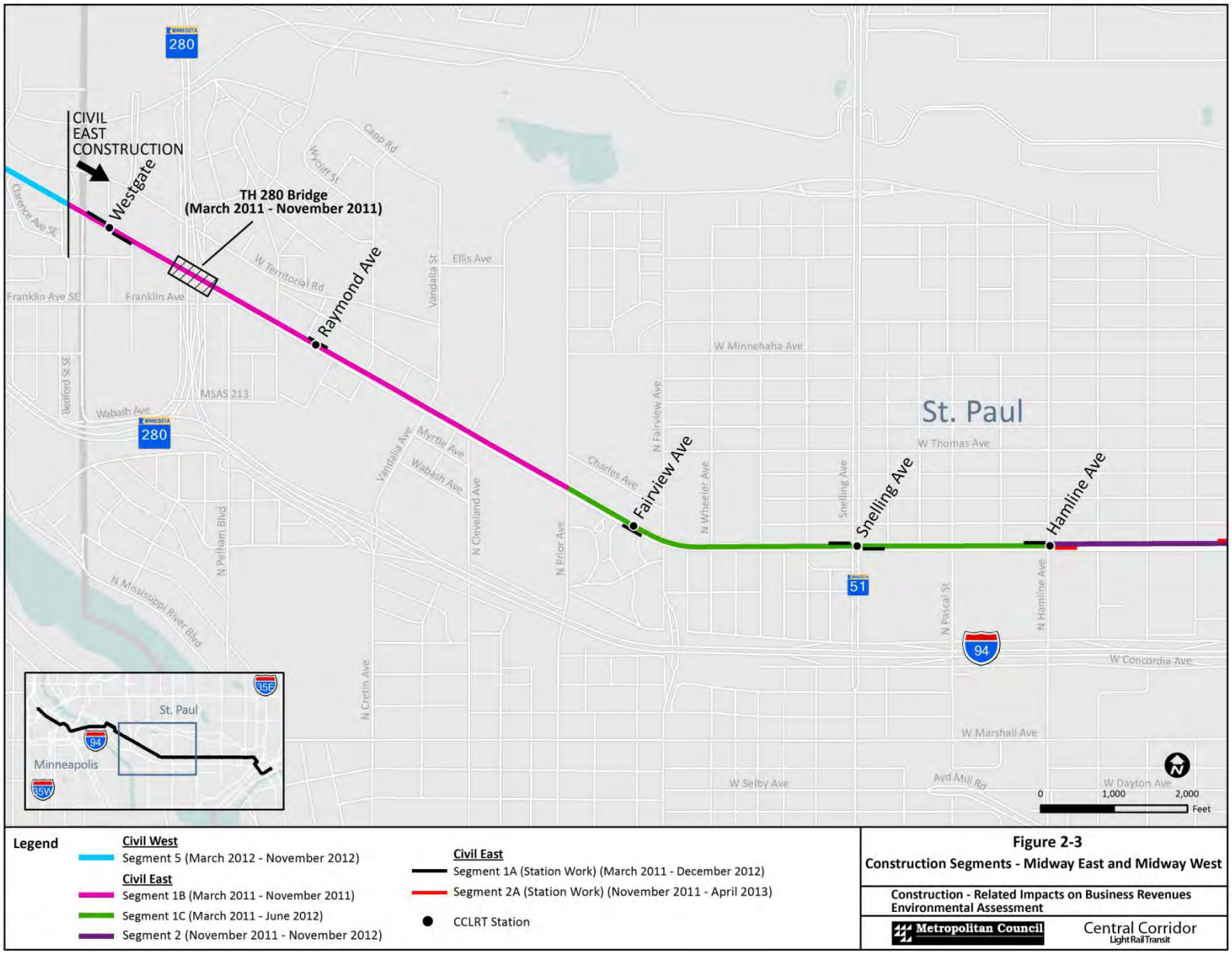


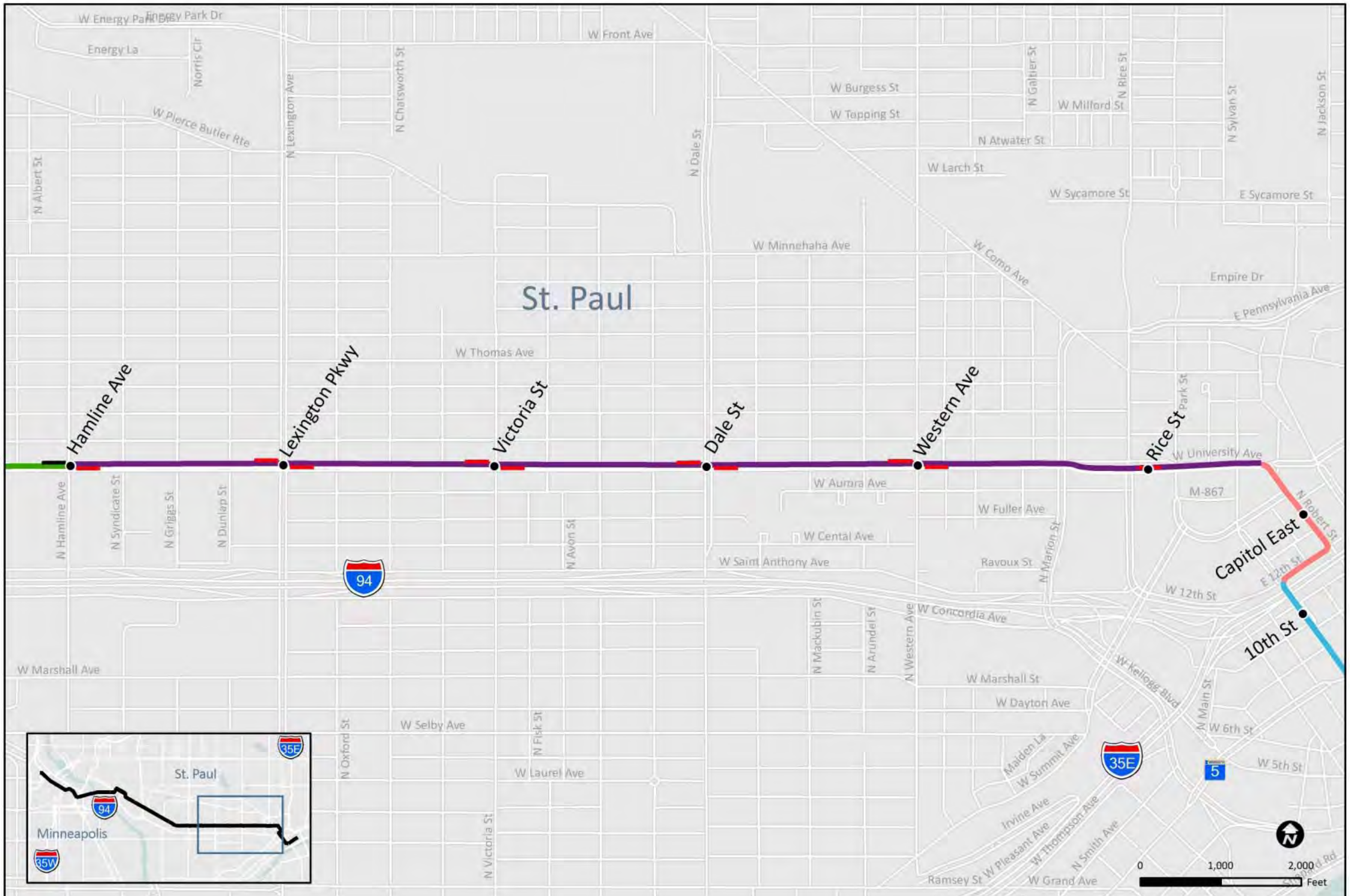
Figure 2-2
Construction Segments - Downtown Minneapolis and University / Prosepct Park

Construction - Related Impacts on Business Revenues Environmental Assessment

Metropolitan Council — Central Corridor Light Rail Transit



Note: Figure 2-3 illustrates Segment 1B and Segment 1C trackway construction. Civil East Segment 1 (Emerald to Hamline) heavy construction is scheduled from March 2011 to November 2011. (See Table 2-1.)



Legend

Civil East

- Segment 1C (March 2011 - June 2012)
- Segment 2 (November 2011 - November 2012)
- Segment 3 (July 2010 - November 2011)
- Segment 4 (June 2011 - November 2012)
- Segment 2A (Station Work) (November 2011 - April 2013)
- CCLRT Station

Figure 2-4
Construction Segments - Midway East and Capitol Area

Construction - Related Impacts on Business Revenues Environmental Assessment

Metropolitan Council

Central Corridor Light Rail Transit

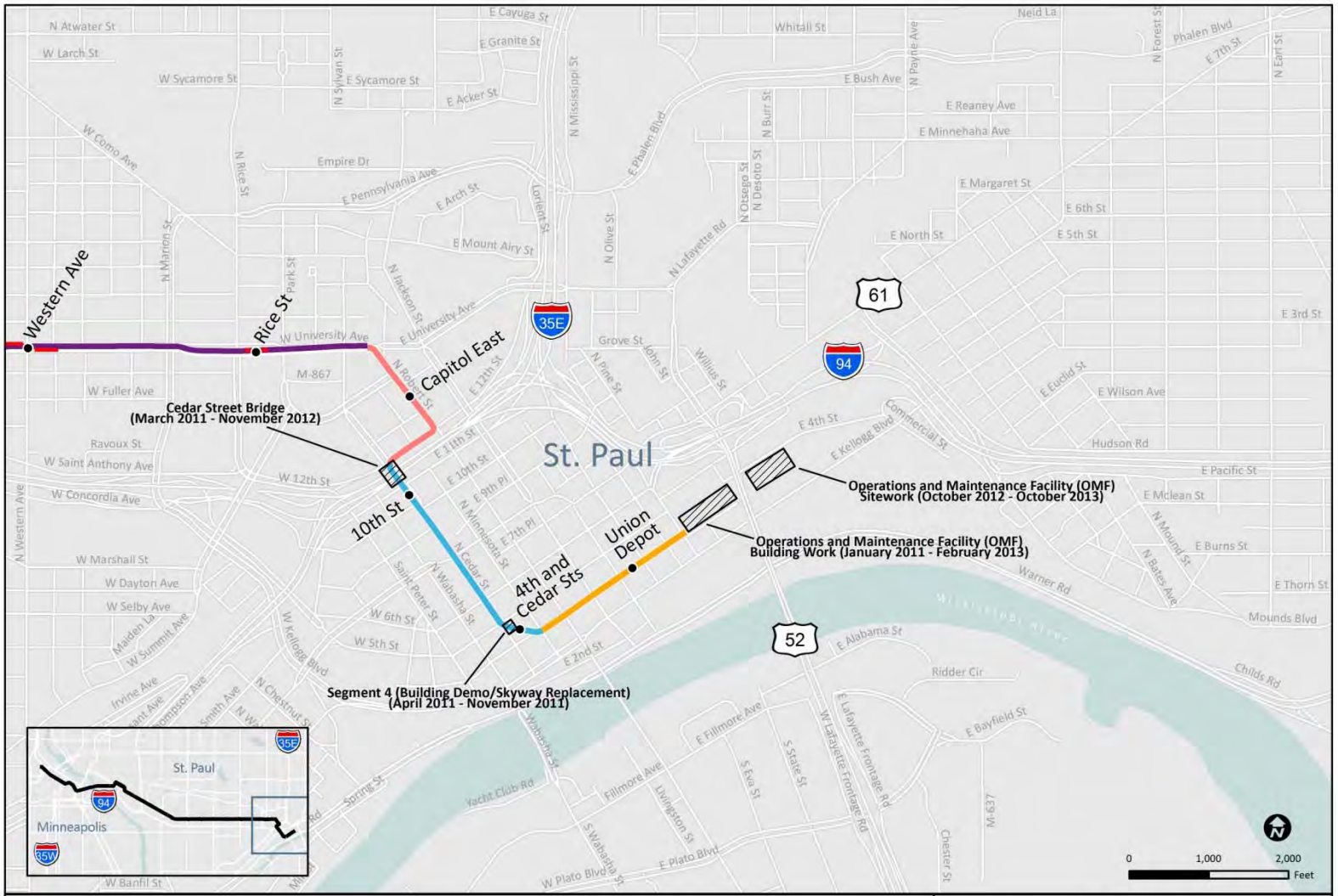


Figure 2-5
Construction Segments - Capitol Area and Downtown St. Paul

Construction - Related Impacts on Business Revenues Environmental Assessment

Metropolitan Council — Central Corridor Light Rail Transit

3.0 INVENTORY OF BUSINESSES

Chapter 3 presents the business types found along the project corridor using North American Industry Classification System (NAICS) codes and business categories corresponding to a classification system identified in previous studies, as reported in the *Technical Report on the Potential Impacts on Business Revenues During Construction of the Central Corridor Light Rail Project* ("Technical Report"). (See Appendix A.)

Business Classification

The Technical Report, prepared by the Volpe Institute, completed a comprehensive literature review to identify past studies regarding methodologies for quantifying potential losses on business revenue caused by construction of a project like the Central Corridor LRT. Only four studies since 1990 were identified that used objective data to attempt to quantify the construction impacts on businesses that abut the construction of transportation alignments. One of these four studies, De Solminihac and Harrison (1993),[4] was used to estimate the upper bound of effects on revenues of potentially impacted businesses because its context was most analogous to the Central Corridor LRT. De Solminihac and Harrison (1993) identified four business categories that were most sensitive to factors that may affect business revenues due to construction – food stores, general merchandise, furniture stores, and automotive retail.

Business types along the project corridor were identified using the dataset described below along with NAICS codes. The NAICS is a system for classifying individual business locations by type of economic activity. The NAICS includes a hierarchical classification system that identifies businesses by sectors, with each subsequent sub-sector including progressively narrower business types.

The Technical Report utilized the U-Plan dataset to identify business types and small businesses along the project corridor.[5] The U-Plan dataset initially contained more than 1,400 business listings as of July 2010. The U-Plan dataset was validated against information from project area business associations, resulting in 1,272 business listings as of December 2010. This dataset was next compiled with available annual revenue data and current NAICS information. There were 947 businesses along the project alignment with revenue data and current NAICS information. Using this dataset, businesses were then sorted by the four categories used in De Solminihac and Harrison (1993). All other businesses were aggregated into a fifth category ("All Other Businesses").

[4] De Solminihac, Hernan E. and Robert Harrison, "Analyzing Effects of Highway Rehabilitation on Businesses" Transportation Research Record 1395, Transportation Research Board of the National Academies, Washington, D.C., 1993, pp 137-143.

[5] The U-Plan dataset includes business listings outside of the project corridor, but does not include business listings within downtown St. Paul and downtown Minneapolis.

Table 3-1 shows the business types represented along the project corridor corresponding to the four categories used in De Solminihac and Harrison (1993).

Table 3-1. Overview of Business Types Represented along the Central Corridor LRT

Business Type	Number of Businesses	Percent With Annual Revenue Less than $2 million	Number of Businesses with Revenue Less than $2 million
Food Stores	25	76%	19
General Merchandise	6	33%	2
Furniture Stores	3	100%	3
Automotive Retail	53	81%	43
All Other Businesses	860	85%	731
Total # of Businesses	947	84%	798

Does not include businesses located in downtown St. Paul and downtown Minneapolis (shared segment of the Hiawatha LRT which has already been completed).

As shown in Table 3-1, the four business categories used in De Solminihac and Harrison (1993) represent 87 businesses, or approximately 9% of the businesses along the project corridor. All other businesses, such as manufacturing establishments, specialty stores, restaurants, personal care services, and professional services represent 860 businesses, or approximately 91% of the businesses along the project corridor. (See the *Technical Report* in Appendix A.)

The project corridor includes a mixture of large, national retail chains, small businesses, non-profit and government organizations. Overall, a majority of the businesses are small businesses with revenues less than $2 million per year. Based on a year 2010 database of business revenue data, 798 businesses along the Central Corridor LRT would be considered small businesses, of which 67 businesses represent the four business categories used in De Solminihac and Harrison (1993) study.

4.0 CONSTRUCTION-RELATED IMPACTS ON BUSINESS REVENUES AND MITIGATION

Chapter 4 summarizes potential, short-term impacts to business revenues during construction of the Project, and describes mitigation measures to help reduce impacts to affected businesses during project construction.

4.1 Construction-Related Potential Impacts on Business Revenues Technical Study

This section summarizes the results of the Technical Report, which can be found in Appendix A.

4.1.1 Potential Impacts

Project construction activities can result in short-term, temporary impacts to businesses. The Technical Report, prepared by the Volpe Institute, identifies seven impact categories: temporary impediments to access by pedestrians and vehicular traffic; temporary loss of parking; utility shut-offs; increases in noise levels and vibrations; increases in dust and dirt; and temporary visual impacts. These short-term, construction-related impacts are qualitatively described below as reported in the Technical Report. (See also Appendix A.)

- **Impacts to Pedestrian Access:** Impediments to pedestrian access will occur mainly at the beginning of the construction period within each phase, when one side of the road is demolished to build new sidewalks and roadway. During this period, pedestrians will need to access the building from side streets or use temporary sidewalks created by the contractor.

- **Impacts to Vehicle Access:** Restrictions to vehicle access will also occur mainly at the beginning of the construction period within each phase, when one side of the road is demolished to build new sidewalks and roadway. Construction can impact vehicular access to businesses in two ways: it can increase congestion on the roadway and block access to entryways. Increased congestion on the roadway can lead to potential customers avoiding the location, effectively reducing traffic to the business, and congestion can also serve to block access, as it becomes difficult to turn in or out of the building's parking lot. Access can also be blocked if roadways or intersections are closed for a length of time. These effects can be more severe if the customers are uninformed of the situation and unexpectedly find themselves unable to access a business from the direction they are approaching, potentially causing them to turn around and take their business elsewhere.

  In addition to the impact to customers, constraints on vehicle access also hinder delivery of goods to the stores and restaurants, which can be further hampered by roadway congestion. Impacts to vehicle access may cause businesses to reduce or relocate services during the period of roadway reconstruction. Businesses which rely on pick-ups and deliveries at specific times, may be affected by traffic conditions along the roadway. Most office buildings along the Central Corridor LRT corridor have parking lots accessible by side streets and can alert their employees and clients to the need to change their route to work for the construction period.

- **Impacts on Parking:** Parking along the corridor alignment will be lost during construction due to roadway reconstruction, and side street parking may be impacted on days when intersections are closed for construction activities. The effects of this temporary loss of parking may impact smaller establishments without access to off-street parking more than businesses that have off-street parking lots.

- **Impacts due to Utility Shut-Offs:** Business impacts due to utility shutoffs usually have a fairly short duration and can be scheduled around business hours. Utilities located along the corridor include gas, water, electricity, and internet service, and all will need to be relocated during at least one phase of the project. There are approximately four hotels and bed and breakfasts adjacent to the alignment, all of which potentially need access to at least water and electricity 24 hours a day. Additionally, restaurants and food stores would need advanced warning of shutoffs to ensure adequate food storage and

safety measures are put in place, and the loss of power or water could impact personal care services and manufacturers. Professional services businesses tend to keep regular business hours, so that utility shutoffs could be adjusted to minimize impacts.

- **Impacts due to Noise and Vibrations:** Noise and vibrations from construction and truck traffic can create an unpleasant shopping environment during the duration of construction and could impact business revenues. These impacts likely will be more significant during the beginning of the construction phase, when dirt and debris from demolition are removed and replaced with new materials. Because University Avenue is a major truck route within St. Paul, the additional construction trucks will not have as great an impact as they would traveling on a residential street. Additionally, the noise from the construction site and from any traffic congestion resulting from the site can lead retail shoppers to go elsewhere until the construction is finished.

- **Impacts due to Dust and Dirt:** Reconstructing the road and sidewalks will generate a lot of dirt and dust, not all of which will stay inside the construction site. The need to clean this dust will negatively impact businesses, particularly car dealerships whose goods are stored out in the open. The dirt and dust may also necessitate more window cleaning and mopping or sweeping as it is tracked in by customers, and will impact possibilities for outdoor dining during the summer months. Because most dust is generated while construction work is actually occurring, it should be confined to daylight hours unless it is disturbed by the wind at night.

- **Visual Impacts:** Construction of temporary fencing and equipment movement and storage may obstruct business signage and may lead customers to believe that businesses have closed during the construction period, leading them to look elsewhere for their business. This problem would largely affect non-appointment based businesses, such as retail shops and many restaurants, as those businesses with appointments can assure their customers that they are operating. It would also reduce the likelihood of impulse decisions to stop in at a particular store or personal care service place, such as a nail salon.

4.1.2 Economic Impacts

The Technical Report reports that no previous studies have directly connected the potential impacts qualitatively described in Section 4.2.1 to quantitative estimates of business revenue losses during construction. In the absence of substantive data available to assess loss of revenue directly applicable to construction-related environmental impacts on a light rail transit project in an urban setting, the analysis described in the Technical Report utilized previously published studies as the framework for defining the potential loss of revenue for the corridor with an understanding that the assessment is an estimation at best.

The Technical Report estimates potential impacts to revenue for small businesses along the project corridor using information from previous studies on actual losses during construction projects. For small businesses under $2 million in annual sales revenues, the upper bound average percentage revenue loss is estimated to be 2.5%. The methodology for identifying this estimate is described in detail in the Technical Report in Appendix A. The Technical Report also estimates that the lower bound of average impacts is predicted to be no loss of revenues.

This range of potential average losses to small businesses of 0 to 2.5% of revenue adds up all of the losses and gains in revenues that might result from the construction disruption and spending. The Technical Report notes there is no way to predict what any one business will experience during project construction. Changes in sales revenues to individual businesses could fall above or below this range. Some businesses that sell to the construction workers and contractors will likely benefit with higher revenues during construction. However, some businesses that experience disruption but do not attract business from construction spending may see their revenues decline.

4.2 Mitigation Program Overview

This section discusses the mitigation approach and describes mitigation measures to help reduce short-term impacts to business revenues during project construction.

4.2.1 Mitigation Approach

As previously discussed, studies of construction-related impacts on business revenues have identified a number of factors that contribute to loss of business revenue during project construction including loss of access, loss of parking, and reduced traffic flow. These studies also recognize that there are many factors unrelated to construction activity that may also impact business revenues, including local and global economic factors, unemployment rates, seasonal businesses, etc. Indirectly, potential customers may also be discouraged from patronizing businesses due to both real and perceived inconvenience factors including congestion, confusion, safety concerns, noise, and dust.

While many of these factors cannot be avoided during construction activity, studies referenced in the Technical Report identify a number of suggested mitigation measures to counteract loss of business revenue. These include:

- Business counseling[6]
- Adjustments to construction phasing[6]
- Traffic management[6]
- Public relations and marketing activity[7]

In addition, the Minnesota Department of Transportation ("Mn/DOT") recommends the following mitigation measures as best practices for transportation projects:[8] [9]

[6] De Solminihac, Hernan E. and Robert Harrison, "Analyzing Effects of Highway Rehabilitation on Businesses" Transportation Research Record 1395, Transportation Research Board of the National Academies, Washington, D.C., 1993, pp 137-143.

[7] University of Wyoming, Department of Civil and Architectural Engineering. *Highway Construction Related Business Impacts: Phase 3 Effort for the Town of Debois.* U.S. Department of Transportation – Federal Highway Administration. March 2008.

[8] CH2MHill for the Minnesota Department of Transportation, "Report on Mitigation of Transportation Construction Impacts". Final Report. February 2009.

[9] Item 2 is not listed here as it pertains to a Mn/DOT specific program.

1. ***Small business outreach must be emphasized as an integral part of a broader public participation process.*** While greater emphasis on business outreach is necessary, the outreach must be conducted as part of an integrated public outreach program…

3. ***Important business issues need to be identified early in project development…***

    a. Consultation with local units of government and business community representatives to identify businesses surrounding the project, potential impacts to small businesses (e.g., parking, traffic, and access), and to discuss potential mitigation measures;
    b. Development of a packet for businesses that will include project information (e.g., nature, extent, and timing of construction and anticipated changes in parking, traffic, and public access), a transportation agency project contact; and
    c. Determine a list of project-specific area business development organizations that may offer support and resources to affected businesses. This determination will be completed with assistance from the Minnesota Department of Employment and Economic Development.

4. ***Identify opportunities for partnership with a greater depth of resources, including economic development offices, dynamic local business leaders, or local government agencies.*** Every project has unique technical issues but also unique human resources, personalities, and organizations. Taking advantage of the ideas, services, and relationships that these resources can offer will help businesses manage the challenges of construction. Besides offering greater knowledge of site-specific issues, their presence often serves as a moderating force in public outreach that enables a shared understanding of project impacts.

5. ***Enhance engagement of the construction contractor as an important resource for business communication and relationships.*** The construction contractor offers a tremendous resource that can positively or adversely affect the effectiveness of business outreach. As a result of their visibility in the construction area, contractors oftentimes become the face of a project in the eyes of the public... Transportation agency staff may consider including contract provisions related to contractor participation or communication in projects where small businesses will be impacted. This may include a requirement that the contractor provide a business liaison to communicate with business operators and resolve issues on a regular basis (e.g. weekly) or as need may arise.

6. ***Review policies for signing in construction zones…*** Appropriate signing can benefit businesses but, at the same time, good signing practices must be maintained (for example, drivers can be overwhelmed with information from too many signs, spaced frequently). Signing practices that can be considered should be documented as well as those that should not be used. ...

7. ***Evaluate the effectiveness of small business outreach activities.*** Mn/DOT will regularly review business outreach efforts on a project-by-project basis and apply lessons learned to future projects. …

Based on these recommendations, proposed mitigation for the Central Corridor LRT Project focuses on: (1) minimizing the unavoidable impacts of construction activities; (2) proactive communications with both corridor businesses and the community to minimize confusion and uncertainty regarding the timing and duration of construction activities; (3) promotional and marketing activities to encourage patronage of businesses during construction; (4) technical assistance to business during the construction period to improve business management and customer communication skills; (5) financial assistance to businesses losing nearby on-street parking, and; (6) general financial assistance to small businesses affected by construction activities.

4.2.2 Mitigation Commitments

The following mitigation activities are already being implemented through commitments in contracts or agreements entered into by Met Council for the Central Corridor LRT Project.

Efforts to minimize the unavoidable impacts of construction activities

Construction contract specifications will include measures to minimize construction-related disruptions to businesses, and will include incentives to encourage contractor cooperation with implementation of these measures. Construction contract specifications will also include measures to minimize construction-related noise, vibration, and dust impacts through construction practices. Elements identified in construction documents are summarized below.

- **Construction Access Plans:** A construction access plan will be developed for all Civil West and Civil East project segments to identify construction-related access concerns for each corridor business and document the Project's understanding of how business access will be maintained during construction. A sample access plan is included in Appendix D. Access plans will contain maps showing existing and planned patron, delivery, and resident access during construction periods. Maps will also show times of business operations and deliveries. Businesses will be notified of any changes to access at least two weeks prior to the start of construction.

- **Contractor Incentive Program:** A contractor incentive program will be provided to encourage effective communication and cooperation between the contractor, businesses and residents. A Construction Communication Committee ("CCC") comprised of business owners, residents, and other stakeholders will be created for each outreach sector identified in contract documents. The CCC will meet every two weeks to vote on identified evaluation criteria measuring contractor efforts to minimize construction-related impacts and award quarterly incentives to contractors demonstrating compliance with these measures. The construction contracts include an $850,000 allowance (project-wide total) for the contractor incentive program. A sample CCC charter, evaluation process and evaluation form are included in Appendix E.

- **Special Events Plans:** Special events anticipated in the corridor during the construction period will be identified in the construction documents. Contractors will work with cities and community groups to coordinate construction activities with these events to protect

the both the work site and the public, and minimize construction-related disruptions during scheduled special events.

- **Construction Best Management Practices (BMPs):** Contract documents will require best management practices (BMPs) to help minimize construction-related noise, vibration and dust impacts to businesses throughout construction.

Proactive communications by the Contractor

- **Contractor Community Relations Leader:** Construction contract specifications will also include public outreach measures to assure that impacted businesses are fully informed about potential construction-related disruptions, which will also be included in the contractor incentive program described above. Each contractor will be required to provide a Contractor Community Relations Leader to establish and maintain communication between Community Outreach Coordinators, businesses and the public. Contractor Community Relations Leaders will communicate construction activities to the public and businesses, and respond to concerns from business owners during project construction. Contractor Community Relations Leaders will also attend weekly Construction Communication Committee meetings and monthly public involvement meetings.

Proactive communications by the Project Proposer

A comprehensive public outreach program has been implemented for the Project to assure that impacted businesses are fully informed about potential construction-related disruptions, including: temporary access modifications; parking availability; temporary street closures; temporary utility shut-offs; abnormally loud construction noise or vibrations; and potential light/glare impacts associated with any necessary nighttime construction. The elements of the public outreach program are described below.

- **Construction Public Information and Communication Plan:** A Construction Communication Plan will be developed for all Civil West and Civil East project segments. A sample communication plan is included in Appendix F (Construction Public Information and Communication Plan, Capitol Area, August 2010). The Construction Communication Plan will contain the following elements:

  - Provide a 30-day notice of construction (includes private utility relocations and LRT construction).
  - Provide a 72 hour advance notice to businesses for utility shut-offs.
  - Provide a 24-hour construction hotline and project information line.
  - Communication with businesses through weekly meetings with Community Outreach Coordinators and the contractor's community relations leader as well as monthly public informational meetings.
  - Provide clear directional signage, variable message signs, and construction site information such as contact information and anticipated completion dates. The construction contracts will include a $200,000 allowance (project-wide total) to accommodate special signage. (See also Construction Signage.)
  - Produce communication materials such as weekly construction updates, construction update posters, and monthly newsletters ("Making Tracks" newsletter). Weekly construction updates will be distributed by email, news release and posted to the Central Corridor Project Website. (See Appendix B). Work with affected business

owners to include information regarding their businesses in these construction update materials. (See also Construction Information Packet.)

- **Community Outreach Coordinators (COC):** Community Outreach Coordinators will be provided by the Metropolitan Council throughout project construction. The Community Outreach Coordinators will act as a liaison between the public and local businesses and project contractors. Community Outreach Coordinators will be available to answer questions and direct specific construction-related concerns back to project contractors and the Central Corridor Project Office.

- **Construction Information Packet:** Construction information packets will be developed for all Civil West and Civil East project segments. A sample construction information packet is included in Appendix B (Central Corridor LRT 2011 Construction Schedule. University Avenue: Emerald to Hamline). Construction information packets will include a description of upcoming construction activities, construction schedule, and construction staging. Construction information packets will also include contact information for Community Outreach Coordinators, business assistance, and local City contacts for non-construction related questions.

- **Construction Signage:** Construction signage will include "Open for Business" signage for all businesses that are subject to temporary changes in access. These signs will include an "open for business" statement, emergency contact information, and Central Corridor Project Office contact information. Approximately four signs will be required per block of construction, and signs will be in place until substantial completion of construction of the surface elements of the project.

Measures to assist businesses losing nearby on-street parking

- **Construction Employee Parking Plan:** Construction contracts will require contractors to minimize use or available parking by developing an employee parking plan to direct employee and construction vehicle parking away from business and residential areas. Contractors are responsible for identifying parking off-site and transporting workers to the work site if necessary. Construction vehicles will be parked within delineated construction zones and work material will be kept out of existing parking areas.

- **Neighborhood Commercial Parking Program:** The Metropolitan Council has funded a program administered by the City of St. Paul to address the loss of parking during and after project construction by providing financial assistance to improving off-street parking. The program provides low-interest loans of up to $25,000 to individual businesses that can be used for facilitating agreements with other businesses for shared parking or limited construction improvements to improve the access or parking efficiency (e.g., driveway grades, more efficient uses/physical reconfiguration of existing parking). As of January 2011, the Neighborhood Commercial Parking Program included $1.325 million in loan funds.

Technical and financial assistance to businesses affected by construction activities

Business programs have been developed to provide measures to assist businesses impacted by construction of the Project. These programs have been identified to specifically assist small businesses that may be impacted by temporary vehicular and pedestrian access changes,

traffic detours, or other construction-related impacts (e.g., noise, dust). The business assistance programs include the following measures.

- **Business Mitigation Fund:** The business mitigation fund support program provides low- or no-interest loans and grants with no obligation to repay to small businesses (gross annual sales less than $2 million) that may experience construction-related disruptions. The business mitigation fund includes $1.5 million in loan funds. Individual small businesses whose business focuses on retail sales would be eligible for loans of up to $10,000. Loans could be used for basic business expenses including taxes, rent/mortgage, utility or personnel payments. The business mitigation fund is being administered by the City of St. Paul Housing and Redevelopment Authority.

- **Business Resources Collaborative (BRC):** The Business Resources Collaborative (BRC) is an informal coalition that provides support and technical assistance to businesses affected by the Project. The BRC has received $230,000 in grants in support of its operations. The BRC provides the following services to businesses along the Central Corridor:

    - Provide business consulting and technical assistance (e.g., business and real estate development loan assistance; parking; energy efficiency programs; advocacy, information and referrals).
    - Provide and maintain a business resource/information clearinghouse (http://www.readyforrail.net).
    - Provide a grassroots "buy local" marketing campaign to help provide customers to Central Corridor businesses during project construction.

- **University Avenue Business Preparation Collaborative (U7):** The University Avenue Business Preparation Collaborative (U7) was created by community development organizations to provide marketing support, on-site business consulting, resource center and planning center, small business workshops, grants for marketing and façade improvements, microlending and financing support to small businesses along the Central Corridor. U7 has received $400,000 in grants from the Central Corridor Funders Collaborative in support of its operations.

4.2.3 Value of Mitigation Commitments

The above mitigation commitments represent a substantial investment of financial resources as well as staffing commitments to communications activities and inspection activities to assure contractor compliance. The following tables summarize direct financial commitments to date totaling over $8.7 million (Table 4-1) as well as staffing/contractual commitments (Table 4-2).

Table 4-1. Mitigation Measures: Financial Commitments

Mitigation Measures		Dollar Amount	Responsible Agency
Construction Contract	Construction Access Plan	$200,000	Metropolitan Council/ Contractor
	Contractor Incentive Program	$850,000	Metropolitan Council
Project Communications	Community Outreach Coordinators	$4,000,000	Metropolitan Council
	Construction Communication Plan (Special Signage) (1)	$200,000	Metropolitan Council/ Contractor
Parking Assistance	Neighborhood Commercial Parking Program	$1,325,000	City of St. Paul
Business Assistance Programs	Business Mitigation Fund	$1,500,000	City of St. Paul
	Business Resources Collaborative (2)	$230,000	N/A
	University Avenue Business Preparation Collaborative (U7) (3)	$400,000	N/A
	Other (4)	$7,670	N/A
	TOTAL	$8,712,670	

(1) Includes temporary directional signage, including portable changeable message signs, project identification boards, construction site signage, and other signs.
(2) Includes grants from Central Corridor Funders Collaborative as well as a matching investment from the City of St. Paul for marketing during project construction.
(3) Includes grants from Central Corridor Funders Collaborative.
(4) Includes grants from Central Corridor Funders Collaborative to Central Corridor Partnership and Asian Economic Development Association to support presentations from business mitigation consultants.

Table 4-2. Mitigation Measures: Staffing and Contract Commitments (Non-Direct Financial Commitments)

Mitigation Measures		Responsible Agency
Construction Contract	Special Events Plans	Metropolitan Council/ Contractor
	Best Management Practices (BMPs)	Metropolitan Council/ Contractor
Project Communications	Contractor Community Relations Leader	Contractor
	Construction Communication Plan	Metropolitan Council
	Construction Information Packet	Metropolitan Council
	Construction Signage	Metropolitan Council/ Contractor
Parking Assistance	Construction Employee Parking Plan	Metropolitan Council/ Contractor

5.0 PUBLIC COORDINATION

Two town hall meetings were held on February 17, 2011 from 8:00 a.m. to 10:00 a.m. and 6:00 p.m. to 8:00 p.m. at the Model Cities Brownstone conference room, 849 University Ave. W., St. Paul as part of the development of this EA.

The purpose of these town hall meetings was to have an open forum discussion with citizens and businesses regarding potential impacts to businesses during project construction, including the potential loss of business revenue during the construction period. The town hall meetings were held in an open house format. Representatives of the FTA, the Metropolitan Council, City of St. Paul and Business Resource Collaborative (BRC) members were available at the meetings to discuss the Project and the supplemental environmental review process. Business owners, employees and citizens were provided the opportunity to discuss specific issues and provide written and verbal comments.

A formal meeting notice announcing the Town Hall Meeting was published in local newspapers (Pioneer Press, Star Tribune and Finance and Commerce). News advisories were distributed by the Metropolitan Council to area media outlets, community groups, stakeholders and project partners. This news advisory was also distributed by the Metropolitan Council to community leaders, business owners and other area organizations, and was posted on the Project Website.

6.0 CONCLUSION AND SUMMARY OF COMMITMENTS

Studies of construction-related impacts on business revenues resulting from transportation projects have identified a number of factors that contribute to loss of business revenue during project construction including loss of access, loss of parking, reduced traffic flow and utility shut offs. Indirectly, potential customers may also be discouraged from patronizing businesses due to both real and perceived inconvenience factors including congestion, confusion, safety concerns, noise, vibration and dust. These studies also recognize that there are many factors unrelated to construction activity that may also impact business revenues, including external economic factors, unemployment rates, and world events.

The Technical Report, prepared by the Volpe Institute, categorized business types along the project corridor using NAICS codes, identifying business types most sensitive to these factors based on previous studies. The Technical Report anticipates that construction activities will cause temporary partial blockages to access, traffic detours, parking restrictions, temporary utility shutoffs and nuisance impacts such as noise, vibration, dust and visual impacts. The Technical Report states that while any individual business has the potential to experience business revenues losses during the construction period, previous studies indicate that businesses that include general merchandise, food stores, automotive outlets, and home furnishings stores are more likely to experience greater sales revenue losses due to construction, as well as other economic factors.

The Technical Report also states that the estimate of impacts is subject to significant uncertainty. Given this uncertainty, it is likely that there may be businesses with sales revenue losses other than those identified as being impacted. If construction impacts to businesses are sufficiently adverse, then businesses may fail or relocate. Less severely impacted businesses

would likely experience short-term declines in revenues due to reduced business activity. Construction activity also has the potential to increase revenues of some business types as a result of construction spending during the project.

While many of the factors identified above cannot be avoided during construction activity, a number of mitigation measures have been identified to minimize the negative impact of construction activities, improve communications and provide assistance to businesses to counteract loss of business revenue. These measures include:

Efforts to minimize the unavoidable impacts of construction activities

- Construction Access Plans
- Contractor Incentive Program
- Special Events Planning
- Construction Best Management Practices (BMPs)

Proactive communications

- Contractor Community Relations Leaders
- Construction Public Information and Communication Plans
- Community Outreach Coordinators
- Construction Information Packets
- Construction Signage

Measures to assist businesses losing nearby on-street parking

- Construction Employee Parking Plan
- Neighborhood Commercial Parking Program

Technical and financial assistance to businesses affected by construction activities

- Business Mitigation Fund
- Business Resources Collaborative (BRC)
- University Avenue Business Preparation Collaborative (U7)

Direct financial commitments to these mitigation measures total over $8.7 million. In addition, significant staffing, communication and contractual commitments are provided to implement mitigation measures and assure contractor compliance.

APPENDIX A

U.S. Department of Transportation
Federal Transit Administration

Technical Report on the Potential Impacts on Business Revenues during Construction of the Central Corridor Light Rail Project

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This report investigates the potential impacts to business revenues along the Central Corridor resulting from the construction of the Central Corridor Light Rail Project. This study addresses the potential loss of revenue by local businesses during the construction period.

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Contents

Tables

1.0 Introduction

This report will investigate the impacts to business revenues along the Central Corridor resulting from the construction of the Central Corridor Light Rail Project ("Project"). It is prepared in response to the District Court's January 26, 2011 opinion issued in *NAACP et al v. USDO*T,[1] in which the Court held that the Final Environmental Impact Statement ("FEIS") did not evaluate potential impacts on the loss of business revenue during construction and that it should have been evaluated during the National Environmental Policy Act ("NEPA") process. This study will address the potential loss of revenue by local businesses during the construction period for the Project. This report will classify the businesses that abut the alignment, identify the potential environmental impacts caused by the construction of the project, and attempt to quantify the potential average loss of revenue for small businesses, to the extent that such potential losses can be quantified.

It is important to note that there is a dearth of information available that provides a reliable methodology for quantifying potential business losses caused by construction of a project like the Central Corridor Project. We undertook an exhaustive review of the literature, searching the largest online bibliographic database of transportation research and working with research librarians in government and a major research university and were only able to find four prior studies since 1990 that used objective data to attempt to quantify the construction impacts on businesses that abut the construction of transportation alignments. These studies, which are set forth in more detail in Table 1, reflect a range of impacts on business revenues, from positive impacts to larger negative impacts on discrete market segments. These studies also reflect that some businesses may show an increase in revenues likely due to receiving business from construction workers. None of the studies reviewed provided an "apples to apples" comparison, with each study reflecting projects of different sizes and scope, construction duration, and construction staging options. Moreover, what is clear from reviewing the studies is that numerous factors other than construction can impact a business' revenues, including external economic factors, unemployment rates, and world events. The ability to control for these external factors is limited. Indeed, based on the experience of the businesses along the Central Corridor between 2009 and 2011, the number of vacancies increased from 126 to 193.[2]

2.0 Methodology

2.1 Framework

The analysis has two parts:

- Development of a set of environmental impact categories during construction that would have a potential adverse impact on business revenues

[1] *NAACP, et al. v. US Department of Transportation, et. al.*, CIV 10-147 (W.D. MN, UNPUBLISHED DECISION, January 26, 2011).
[2] Business census data of the Central Corridor from the Metropolitan Council. E-mail 2/23/11 from Robin Caufman.

- An assessment of the environmental impacts of construction on business revenues[3]

The output of the analysis is a qualitative analysis of how business revenues may be impacted by construction and a quantitative *estimate* of the potential losses on average businesses may experience during construction. We cannot to any reliable degree project the potential loss of revenues due solely to the construction of the project for any specific business. At best, we can identify, based on prior studies, discrete market segments that may in the aggregate be more sensitive to revenue fluctuations when stressed by outside economic factors that include construction of a major transportation project adjacent to the business.

2.1.1 Impact Categories

The Minnesota Department of Transportation's February 2009 report, *Mitigation of Transportation Construction Impacts* ("MnDOT Report"), was the starting point for the development of impact categories. The report, required by Minnesota law, surveyed business owners recently affected by highway construction projects to determine the greatest impacts on the businesses and the most successful mitigation practices.[4] The businesses named loss of access, highway or road closures, detours, reduced traffic, poor signing, and project length as major impacts, as well as congestion resulting from lane closures, lost parking leading to avoidance of the construction area (and surrounding businesses), and property damage resulting from contractor actions.

Because the MnDOT Report focused mainly on highway construction projects, the analysis presented in this study also considered Environmental Impact Statements (EIS) from four light rail projects that are either constructed or in the final design phase: Portland's light rail link to Milwaukie, scheduled to be finished in 2015; Dallas's Green Line (the DART Project), already operating as of December 2010; and two projects in Seattle, the East Link and the North Link, scheduled to open in 2016. All of the projects except the DART Project have some stretch of the corridor operating along a retail street. In the EIS reviews, the major impacts considered were access to businesses, traffic impacts, noise and vibration, temporary loss of parking, increased dirt and dust, visual impacts, and utility shutoffs. These environmental reviews did not attempt to quantify the effect these impacts would have on the potential loss of business revenues during construction.

From the sources noted above, the following impact categories were derived:

- Pedestrian access
- Traffic and vehicular access
- Temporary parking loss
- Utility shutoffs
- Noise and vibration
- Increased dirt and dust
- Visual impacts

[3] Note that reliance on estimation methods that use sales tax revenue will only be able to detect sales revenue impacts on items that are taxed in the places that were studied.

[4] CH2MHill for the Minnesota Department of Transportation, "Report on Mitigation of Transportation Construction Impacts". Final Report. February 2009.

2.1.2 Impacts of construction on sales revenues

Few studies have attempted to quantify specific values for loss of revenue associated with construction, and the identified studies focus on the impacts of highway construction rather than transit. In addition, the quantified impacts vary with the context of the project, so there is not a single point estimate on which all agree. With the current state of knowledge about construction impacts on business revenues, developing reliable point estimates of such transit construction impacts is infeasible to implement on a project-level analysis. To develop an estimate of construction impacts on a project-level foundation, it is necessary to have a reliable estimate of current and future revenues for specific businesses, and then adjust that estimate by the change in business resulting from the construction absent other economic or social factors. Difficulties in estimating future revenues include: accurately predicting the overall state of the economy and how it affects businesses in the construction zone, predicting local changes in socio-economic characteristics, anticipating other local changes that would affect traffic or business patterns (such as the opening or closing of competing businesses outside the construction zone), anticipating other technology or behavioral changes that could affect businesses in each industry (such as the downsizing of businesses due to technological advances in the business function), and anticipating force majeure impacts (e.g. "acts of nature") to businesses. As a result, predicting the amount of lost business revenue for any given business or market segment is highly uncertain and speculative. Business forecasts generally are not done for corridors for this reason, even under ordinary circumstances, let alone when business is disrupted by a construction project.

Table 1 presents estimates of construction impacts on business revenues drawn from studies in the literature. These studies were identified through a comprehensive literature search to identify studies that were completed since 1990 and used objective methods to measure construction impacts on sales revenues, such as analyzing sales tax revenue of businesses during construction. The construction projects analyzed were all highway projects, with measures taken to minimize disruption. Moreover, the highway projects varied significantly from the Central Corridor project in terms of construction complexity, duration, construction staging options, geographic constraints and construction seasons, all of which can contribute to the impact of construction on a given business' revenues.

Table 1. Recent quantitative studies of construction sales revenue impacts on businesses

Study	Context of construction	Magnitude of impact
Buddemeyer, Young and Vander Giessen (2008)[5]	Highway reconstruction near Dubois, Wyoming on the way to Jackson Hole and Yellowstone National Park	No impact: "holding steady with minor declines"
De Solminihac and Harrison (1993)[6]	Houston urban highway rehabilitation, including High Occupancy Vehicles (HOV) lanes and a transit center	General merchandise: 28% decrease Food stores: 37% decrease Automotive outlets: 32% decrease Home furnishings: 17% decrease
Wildenthal and Buffington (1996)[7]	Widening a state highway in Caldwell, TX (population 3000)	5% decrease
Young, Wolffing, and Tomasini (2005)[8]	Twelve highway construction projects in Wyoming in towns ranging in size from 807 to 53,011 people	8.3% decrease to 39.9% increase

The studies ranged in sophistication of analytical techniques. For instance, Buddemeyer, Young and Vander Giessen provided summary statistics of sales data, while De Solminihac and Harrison tried to control for other effects on revenues through advanced statistical methods. They estimated average impacts of construction on sales tax revenues by comparing to businesses in a similar location during the same time period. Even with the more sophisticated method, these average impacts do not provide good predictions of sales revenue impacts for any particular business, because businesses experienced both greater and lesser impacts, with only the average presented. The average is presented with a confidence interval that lets the reader interpret how sure the authors are. For instance, De Solminihac and Harrison used a confidence level of 90% in their analysis to conclude that there were no sales revenue impacts for building materials, clothing, restaurants, drug stores, liquor stores, and "miscellaneous". Consequently, the average sales revenue impact was sufficiently small that the study could not distinguish it from zero. This occurs when there are businesses in the category that have increased sales and others with decreased sales. For example, if sales at sandwich shops increase and sales at formal restaurants decrease, the overall category of restaurants could show on average no effect.

[5] Buddemeyer, Jenna, Rhonda Young and Steven Vander Giessen, "Highway Construction Related Business Impacts: Phase 3 Effort for the Town Of Dubois". FHWA-WY-08/01F. March 2008: http://rip.trb.org/browse/dproject.asp?n=11090.

[6] De Solminihac, Hernan E. and Robert Harrison, "Analyzing Effects of Highway Rehabilitation on Businesses" Transportation Research Record 1395, Transportation Research Board of the National Academies, Washington, D.C., 1993, pp 137-143.

[7] Wildenthal, MT and Buffington, "Estimated Construction Period Impact of Widening State Highway 21 in Caldwell, Texas" Transportation Research Record 1559, Transportation Research Board of the National Academies, Washington, D.C., 1996, pp 76-83.

[8] Young, Rhonda Kae, Chris Wolffing, and Michael Tomasini, "Highway Construction Impacts on Wyoming Businesses" *Transportation Research Record: Journal of the Transportation Research Board, No. 1924*, Transportation Research Board of the National Academies, Washington, D.C., 2005, pp. 94–102.

Considering the complexities of using information from the literature, the analysis used in this report applied the estimates of impacts provided by one study to estimate the upper bound of effects of the Project on sales revenues of impacted businesses. The source used was De Solminihac and Harrison (1993) because the context was the most analogous to the Central Corridor Project. The project reviewed in the De Solminihac and Harrison study was in a major urban area with a variety of options for consumers to switch their business away from the construction corridor based on the environmental impacts caused by construction. It included some transit elements (bus transitway) as part of major work on a busy urban highway. The business mix on that corridor is weighted differently than the CCLRT corridor but includes the same categories of business.

The estimates provided by the other three studies in Table 1 were used to support a predicted lower bound of no effect since the business contexts for those construction projects would tend to lead to the economic stimulus effects of construction spending outweighing the disruptive effects on businesses of the construction itself. The projects were in much smaller towns whose economies are more rural and reliant more on tourism, in some cases. A critical consideration is that these towns also were likely to have fewer options for consumers to choose alternative businesses if they were disrupted by the environmental impacts of construction.
The percentage impacts from De Solminihac and Harrison (1993) are applied to revenue data from a July 2010 business survey by the U-Plan community planning studio to develop the upper bound revenue loss by business type.[9] For the calculation of sales revenue impacts, the categories are consolidated to reflect the way business categories are aggregated in the previous studies. These categories reflect differences in potential sales revenue impacts by business category, but are not tied directly to the qualitative impacts that will be described. No attempt was made to adjust the impacts for seasonal factors because of the inherent uncertainty in the estimates and lack of information to attempt to adjust for seasonal patterns in revenue in conjunction with fluctuating levels of construction activity through the seasons.

Estimates of the numbers of small businesses affected are presented in this report. Small businesses are defined as those with annual revenues less than $2 million. The percentage impacts from De Solminihac and Harrison (1993) are applied to annual revenues of small businesses in the corridor to generate an upper bound sales weighted average overall impact estimate for small businesses.

2.2 Data

In order to identify small businesses along the corridor, the dataset assembled by U-Plan (a community planning studio located on the corridor) was utilized ("U-Plan Dataset"). The U-Plan Dataset initially consisted of 1,410 entities that were located on University Avenue and Washington Avenue in July 2010. U-Plan validated the data against lists from the University Avenue Business Association, Asian Economic Development Association, and the University of Minnesota capstone project. The validation effort resulted in 1,272 businesses in December of 2010, compiled with annual revenue as well as a GIS data point based on the business address. The U-Plan Dataset does not include downtown St. Paul and Minneapolis and is not limited to

[9] U-PLAN Community Studio, "University Avenue Business List, July 2010" 712 University Avenue, Suite 105 Saint Paul, MN 55104 adam@u-plan.org

businesses adjacent to the alignment. There were 947 businesses with revenue in the dataset along the construction alignment.

2.2 Description of businesses

The Central Corridor has a diverse economy with nearly all of the NAICS codes represented along it.[10] Table 2 shows the breakdown of businesses along the corridor by the categories used in De Solminihac and Harrison (1993), including the percentage with revenues less than $2 million per year. Overall, the majority of businesses in the corridor are small businesses with revenues less than $2 million per year.

Table 2. Sector composition of the Central Corridor

Business Type	Number of Businesses	Percent With Annual Revenue Less than $2 million	Number of Businesses with Revenue Less than $2 million
Food Stores	25	76%	19
General Merchandise	6	33%	2
Furniture Stores	3	100%	3
Automotive Retail	53	81%	43
All Other Businesses	860	85%	731
TOTAL BUSINESSES	947	84%	798

Food stores include supermarkets, convenience stores, liquor stores, and meat markets. Along the Central Corridor, the general merchandise stores are mainly national chains. Automotive retail includes both new and used car and truck dealers, tire and auto parts stores, and auto repair stores. All other businesses include manufacturing establishments, specialty stores, restaurants, personal care services, and professional services like architects and lawyers.

3.0 Results

3.1 Potential Construction-Related Impacts

This analysis addresses seven different impacts that the construction of light rail can have on local business revenues. Construction can impede access to businesses by foot and by vehicle; it can temporarily consume space for parking; it can lead to temporary, and potentially unexpected, utility shutoffs; increased truck traffic and certain construction activities such as sheet piling can increase ambient noise levels and lead to unpleasant vibrations; road demolition for the laying of

[10] The North American Industry Classification System (NAICS) is the standard used by Federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy. See http://www.census.gov/eos/www/naics/ for additional information on how the codes classify businesses.

tracks can increase the amounts of dust and dirt in the air; and the construction vehicles and temporary fencing of the work site can impede business visibility.

3.1.1 Impacts to Pedestrian Access

Impediments to pedestrian access will occur mainly at the beginning of the construction period within each phase, when one side of the road is demolished to build new sidewalks and roadway. During this period, pedestrians will need to access the building from side streets or use temporary sidewalks created by the contractor.

3.1.2 Impacts to Vehicle Access

Restrictions to vehicle access will also occur mainly at the beginning of the construction period within each phase, when one side of the road is demolished to build new sidewalks and roadway. Construction can impact vehicular access to businesses in two ways: it can increase congestion on the roadway and block access to entryways. Increased congestion on the roadway can lead to potential customers avoiding the location, effectively reducing traffic to the business, and congestion can also serve to block access, as it becomes difficult to turn in or out of the building's parking lot. Access can also be blocked if roadways or intersections are closed for a length of time. These effects can be more severe if the customers are uninformed of the situation and are unexpectedly unable to access a business from the direction they are approaching, potentially causing them to turn around and take their business elsewhere.

In addition to the impact to customers, constraints on vehicle access also hinder delivery of goods to the stores and restaurants, which can be further hampered by roadway congestion. Impacts to vehicle access may cause businesses to reduce or relocate services during the period of roadway reconstruction. Businesses that rely on pick-ups and deliveries at specific times may be affected by traffic conditions along the roadway. Most office buildings along the CCLRT corridor have parking lots accessible by side streets and can alert their employees and clients to the need to change their route to work for the construction period.

3.1.3 Impacts on Parking

Parking along the corridor alignment will be lost during construction due to roadway reconstruction, and side street parking may be impacted on days when intersections are closed for construction activities. The effects of this temporary loss of parking may impact smaller establishments without access to off-street parking more than businesses that have off-street parking lots.

3.1.4 Impacts due to Utility Shutoffs

Business impacts due to utility shutoffs usually have a fairly short duration and can be scheduled around business hours. Utilities located along the corridor include gas, water, electricity, and internet service, and all will need to be relocated during at least one phase of the project. There are approximately four hotels and bed and breakfasts adjacent to the alignment, all of which potentially need access to at least water and electricity 24 hours a day. Additionally, restaurants and food stores would need advanced warning of shutoffs to ensure adequate food storage and

safety measures are put in place, and the loss of power or water could impact personal care services and manufacturers. Professional services businesses tend to keep regular business hours, so that utility shutoffs could be adjusted to minimize impacts.

3.1.5 Impacts due to Noise and Vibrations

Noise and vibrations from construction and truck traffic can create an unpleasant shopping environment during the duration of construction and could impact business revenues. These impacts likely will be more significant during the beginning of the construction phase, when dirt and debris from demolition are removed and replaced with new materials. Because University Avenue is a major truck route within St. Paul, the additional construction trucks will not have as great an impact as they would traveling on a residential street. Additionally, the noise from the construction site and from any traffic congestion resulting from the site can lead retail shoppers to go elsewhere until the construction is finished.

3.1.6 Impacts Due to Dust and Dirt

Reconstructing the road and sidewalks will generate a lot of dirt and dust, not all of which will stay inside the construction site. The need to clean this dust will negatively impact businesses, particularly car dealerships whose goods are stored out in the open. The dirt and dust may also necessitate more window cleaning and mopping or sweeping as it is tracked in by customers, and will impact possibilities for outdoor dining during the summer months. Because most dust is generated while construction work is actually occurring, it should be confined to daylight hours unless it is disturbed by the wind at night.

3.1.7 Visual Impacts

Construction of temporary fencing and equipment movement and storage may obstruct business signage and may lead customers to believe that businesses have closed during the construction period, leading them to look elsewhere for their business. This problem would largely affect non-appointment based businesses, such as retail shops and many restaurants, as those businesses with appointments can assure their customers that they are operating. It would also reduce the likelihood of impulse decisions to stop in at a particular store or personal care service place, such as a nail salon.

3.2 Economic Impacts

No studies have directly tied the impacts qualitatively described to quantitative estimates of sales revenue losses. As described in the methodology section, the potential for sales revenue losses was calculated using information from the literature on actual losses during construction projects. Baseline revenue figures are from the U-Plan Dataset. There have been some new businesses and some closures since that measurement, and refined data is currently not available. In the absence of substantive data available to assess loss of revenue directly applicable to construction-related environmental impacts on a light rail transit project in an urban setting, this analysis utilized previously published studies as the framework for defining the potential loss of revenue for the corridor with an understanding that the assessment is an estimation at best.

For small businesses under $2 million in annual sales revenues, the upper bound average percentage revenue loss is estimated to be 2.5%. This estimate is derived from averaging revenue-weighted potential losses across all business types. All small businesses in the corridor were assigned to the impact categories as discussed in the Methodology section. The revenues from each were multiplied by the percentage impacts from De Solminihac and Harrison (1993). The resulting revenue loss estimates were summed and divided by the total revenues from all small businesses in the corridor, yielding the upper bound average percentage loss of 2.5%. As noted in the Methodology section, the lower bound of average impacts is predicted to be no average loss. This range of potential average losses to small businesses of 0 to 2.5% of revenue adds up all of the losses and gains in revenues that might result from the construction disruption and spending. Changes in sales revenues to individual businesses could fall above or below this range. Some businesses that sell to the construction workers and companies will likely benefit with higher revenues during construction. Some businesses that experience disruption but do not attract business from the construction spending may see their revenues decline. For instance, clothing stores that sell work clothes appropriate to construction workers may see their revenues increase, while the shop that sells formal wear may lose business to similar stores unaffected by construction.

4.0 Conclusion

While this technical analysis examined impacts on business revenues along the Central Corridor resulting from the construction of the Central Corridor Light Rail Project, the analysis presented in this report is not a conclusive statement on the potential loss of revenue for the businesses along the CCLRT alignment. As described in the Methodology section, quantifying the amount of lost business revenue in the absence of future global and local economic factors and historical context is an inconclusive analysis to undertake for project-level analysis. However, given the limitation of available data, the analysis describes a range of potential impacts both in terms of qualitative assessments of potential impacts (through an EIS review of analogous transit projects in metro areas) and estimates of sales revenue impacts of construction (by developing a corresponding classification system utilized by previously published studies approximately analogous to the CCLRT project).

Over the course of the project, businesses adjacent to the alignment are likely to experience potential impacts on revenues from construction, including issues with pedestrian access, vehicle access, parking, utility shut-offs, noise and vibrations, dust and dirt, and visual impacts. These effects will be phased over the course of the project, with construction extending from March 2011 to November 2012. During that time, while any individual business has the potential to experience loss business revenues during the construction period, the studies indicate that business that include general merchandise, food stores, automotive outlets, and home furnishings stores are more likely to experience greater sales revenue losses due to construction, as well as other economic factors. This estimate of impacts is subject to significant uncertainty, including:

- Limited published research on the sales revenue impacts of construction on businesses caused reliance on a single study for the upper bound, which addresses impacts of a primarily highway project going through neighborhoods with a different mix of businesses than the Central Corridor.

- The statistical analysis in that study concluded that there were no sales revenue impacts for building materials, clothing, restaurants, drug stores, liquor stores, and "miscellaneous businesses". Consequently, it is likely that there were average sales revenue impacts that were sufficiently small that the study could not detect them, and some businesses in these categories gained revenue while other businesses lost revenue.

Given this uncertainty, it is likely that there will be businesses with sales revenue losses other than those identified as being impacted. In some cases, the losses may be significant, since statistical methods provide average results for a group, rather than exact predictions for individual businesses. At the same time, there are likely to be businesses that experience increased revenues as a result of construction spending during the project. Based on the level of aggregation and uncertainty associated with the studies on which this analysis relies, there is no way to predict what any one business will experience during the construction project. This analysis provides estimates of average effects for broad categories of businesses, and applies these estimates to the small businesses in the corridor to yield a range of average impacts on the small businesses of no impact to 2.5% loss of revenue during the construction period.

APPENDIX B

Having trouble viewing this email? Click here

Updated October 15, 2010
Construction Details for the week of October 18th - October 24th

For all construction questions, call the Construction Hotline: (651) 602-1404

Advanced Utility Relocation Overview

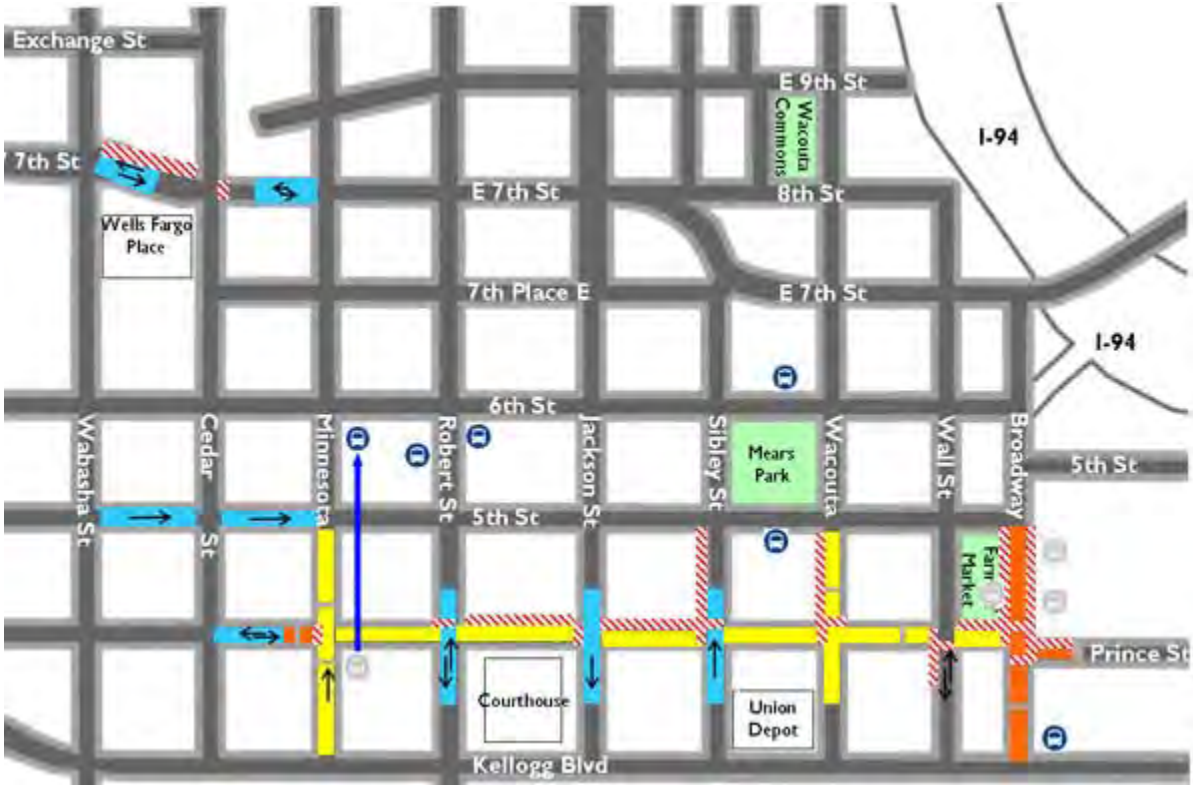
- Utility relocation and road construction is occurring on Fourth Street between Minnesota and Broadway streets in preparation for the Central Corridor Light Rail. This work includes relocating utilities, permanently removing parking meters and replacing sidewalks and light poles.When this work is complete in November 2010, the road will be restored to its final layout with one lane of traffic westbound between Wacouta and Minnesota streets. (Scheduled completion subject to change due to weather and unforeseen circumstances.)
- Additional work in 2011 and 2012 will involve laying the tracks, building the stations and installing the electrical and communication systems. More detail will be provided when the schedule is available.

ALERT: Construction crews have started sidewalk reconstruction along 4th Street between Minnesota and Broadway; watch for marked pedestrian detours. The information included in this update and map reflects work at the beginning of the week. Change may occur midweek; check www.centralcorridor.org construction alerts for any changes that occur midweek.

New sidewalks are being installed on Fourth Street.

Traffic and pedestrian modifications until further notice
Businesses are open and accessible via the skyway system and sidewalks.
Street signs and the information below provide alternate route information.

Downtown St. Paul:
Utility Relocation Construction
For the Week of October 18th-October 24th



A printable version of this map is also available.

Traffic Detail

- Prince St. closed approximately 100 feet east of Broadway.
- Fourth between Broadway to just west of Minnesota closed to through traffic; local access only.
- Broadway closed to through traffic between 5th Street and Kellogg.
- Wacouta closed to through traffic at intersection with Fourth**.**
- Sibley open to one lane northbound**.**
- Jackson open to one lane southbound.
- Robert open to one lane in each direction.

- Minnesota closed between Fifth and Kellogg; local access only. **-NEW**
- Seventh between Minnesota and Cedar open to one lane of traffic in each direction.
- Seventh between Cedar and Wabasha open to two lanes eastbound and one lane westbound.
- Fifth between Minnesota and Wabasha open to two lanes of traffic eastbound.

Sidewalk Detail

- South and east crosswalks at Prince and Broadway closed. Alternate routes are crosswalks at Kellogg and Broadway. Midblock crossing available between Prince and Kellogg. West and north crosswalks at Fourth and Broadway closed. Alternate routes are crosswalks at Wall and Fourth.
- West and south crosswalks at Fourth and Wall closed. Use east and north crosswalks.
- North and west crosswalks at Fourth and Wacouta closed. Use east and south crosswalks. **-NEW**
- West and north crosswalks at Fourth and Sibley closed. Use east and south crosswalks.
- North crosswalk at Fourth and Robert closed. Use east, west and south crosswalks.
- West crosswalk at Fourth and Jackson closed. Use east, north and south crosswalks.
- West crosswalk at Fourth and Minnesota closed. Use east, north and south crosswalks.
- East crosswalk at Seventh and Cedar closed. Use west, south and north sides crosswalks. **-NEW**
- Sidewalk closed on north side of Seventh between Wabasha and Cedar. Alternate route is sidewalk on the south side of Seventh. **-NEW**
- Sidewalk closed on north side of Prince approximately 100 feet east of Broadway. Alternate route is temporary midblock crossing to sidewalk on south side of Prince.
- Sidewalks closed on west and east sides of Broadway between Fifth and Prince. Alternate routes are sidewalks on Wall.
- Sidewalk closed on the north side of Fourth between Broadway and Wall. Alternate route is sidewalk on south side of Fourth.
- Sidewalk closed on west side of Wall at Fourth extending 150 feet south. Alternate route is sidewalk on east side of Wall.
- Sidewalk closed on west side of Sibley between Fourth and Fifth. Alternate route is east sidewalk.
- Sidewalk closed on west side of Wacouta between Fourth and Fifth. Alternate route is east sidewalk.
- Sidewalk closed on north side of Fourth between Jackson and Sibley. Alternate route is south sidewalk.
- Sidewalk closed on north side of Fourth between Jackson and Robert. Alternate route is side walk on south side of Fourth.

Bus stop relocation detail

- Routes 21, 53, 63, 70, 294, 350, 351, 353, 361 and 364 in both directions. Bus stops on Broadway will be closed; passengers are directed to board east bound/south bound buses on Fifth Str. between Sibley and Wacouta and west bound/north bound buses at Kellogg and Broadway or at Sixth Str. and Sibley.
- Routes 68 and 71 southbound: Bus stop on the west side of Robert between Sixth and Fifth is open
- Routes 68 and 71 northbound: Bus stop on the northeast corner of Robert and Fourth is closed. Passengers should use the regular bus stop on the southeast corner of Robert and Sixth.

Got questions? Contact the project office, not the work crews!

Please don't go around barriers into work zones. Construction hours will generally be from 7 a.m. to 5 p.m. weekdays, but crews will be allowed to work from 7 a.m. to 10 p.m. seven days a week if needed. Schedules are subject to changes due to weather and other unforeseen circumstances! Check www.centralcorridor.org frequently for updates.

If you have questions or concerns, please contact the Central Corridor LRT Project office at centralcorridor@metc.state.mn.us or call 651-602-1645.

For all construction questions, call the Construction Hotline: 651-602-1404

For general project questions and comments, contact:

Community outreach coordinator Dana Happel
Office: 651-602-1954 Cell: 612-968-8382
Email: dana.happel@metc.state.mn.us

For utility service questions, contact:

District Energy -
Nina Axelson
Phone: 651-925-8147
Email: nina.axelson@ever-greenenergy.com

Xcel Energy -
Shannon M. Forss
Phone: 612-720-3663
Email: shannon.m.forss@xcelenergy.com

St. Paul Public Works -
Shannon Tyree
Phone: 651-266-6063
Email: shannon.tyree@ci.stpaul.mn.us

St. Paul Regional Water Services -
Jerry Strauss
Phone: 651-266-6268
After hours dispatch: 651-266-6874
Email: jerry.strauss@ci.stpaul.mn.us

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About the project: The Central Corridor Light Rail Transit Project will link downtown St. Paul and downtown Minneapolis along Washington and University avenues via the state Capitol and the University of Minnesota. Construction began in late summer 2010 on the planned 11-mile Central Corridor line, and service will begin in 2014. The line will connect with the Hiawatha LRT line at the Metrodome station in Minneapolis and the Northstar commuter rail line at the Target Field Station. The Metropolitan Council will be the grantee of federal funds. The regional government agency is charged with building the line in partnership with the Minnesota Department of Transportation. The Central Corridor Management Committee, which includes commissioners from Ramsey and Hennepin counties, the mayors of St. Paul and Minneapolis and the University of Minnesota, provides advice and oversight. Funding is provided by the Federal Transit Administration, Counties Transit Improvement Board, state of Minnesota, regional railroad authorities for Ramsey and Hennepin counties, city of St. Paul, Metropolitan Council and the Central Corridor Funders Collaborative.The Central Corridor LRT Project Website is www.centralcorridor.org.

Metropolitan Council

Forward email

Central Corridor Project Office | Griggs Midway Building | 540 Fairview Ave. N. | Suite 200 | Saint Paul | MN | 55104

Central Corridor
Light Rail Transit

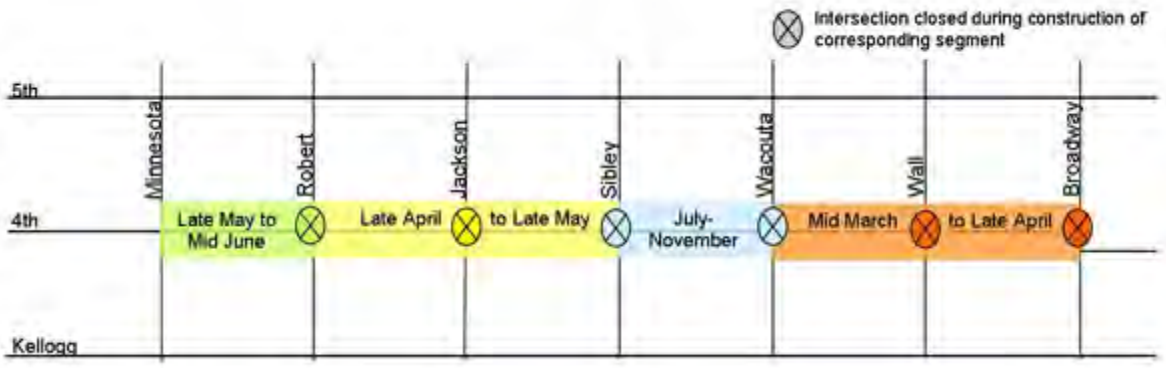
News Advisory

Contact: Laura Baenen
Communications Manager
Central Corridor LRT Project
Metropolitan Council
651-602-1797 office
612-269-4365 cell
Laura.baenen@metc.state.mn.us

LRT work to begin March 21 in segments on 4th Street

Feb. 7, 2011 – ST. PAUL – Construction of the Central Corridor Light Rail Transit line will begin March 21 in segments on Fourth Street in St. Paul. Below are details by segment:

First stage: road and rail guideway constructed in segments



Mid-March to late April: From Wacouta to Broadway streets under construction. Wall and Broadway intersections will be closed during this time

Late April to late May: From Robert to Sibley streets under construction. Jackson Street intersection will be closed during this time.

Late May to mid-June: From Minnesota to Robert streets under construction. Robert Street intersection will be closed during this time.

July to November: From Sibley to Wacouta streets under construction. Sibley and Wacouta intersections will be closed during this time.

Traffic control measures, including barricades and signage installed.

Removal of temporary asphalt and excavation for the track guideway and stations.

Asphalt paving of street of new roadway between Wacouta and Broadway.

Foundation for the guideway and station is poured.

Construction between Wacouta and Sibley, which includes guideway, station and track work; begins after track work completed on rest of the segments. Timing coordinated with Union Depot work to minimize impacts.

Lanes closed to through traffic.

Access maintained to parking facilities or alternative parking provided.

Newly constructed sidewalks remain open.

Cross street intersections closed, as marked, to through traffic.

Second stage: construct embedded track

Mid-May to early June: Embedded track construction between Wacouta and Broadway streets. Intermittent lane closures at Wall and Broadway intersections.

Early June to early July: Embedded track construction between Robert and Sibley streets. Intermittent lane closures at Jackson Street intersection.

July: Embedded track construction between Minnesota and Robert streets. Intermittent lane closures at Robert Street intersection.

July to November: Embedded track construction between Sibley and Wacouta streets. Intermittent lane closures at Sibley and Wacouta intersections.

Lanes open to through traffic, intermittent closures when pouring concrete.

Access maintained to parking facilities or alternative parking provided.

Newly constructed sidewalks remain open.

Intermittent cross street intersection closures when laying track through the intersection, notice will be provided.

Schedules subject to changes due to weather and other unforeseen circumstances! Weekly online construction updates at www.centralcorridor.org provide schedule updates and changes.

About the Central Corridor LRT Project

The Central Corridor Light Rail Transit Project will link downtown St. Paul and downtown Minneapolis along Washington and University avenues via the state Capitol and University of Minnesota. Construction began in 2010 on the planned 11-mile Central Corridor line, and service will begin in 2014. The line will connect with the Hiawatha LRT line at the Metrodome station in Minneapolis and the Northstar commuter rail line at the new Target Field Station. The Metropolitan Council would be the grantee of federal funds. The regional government agency is charged with building the line in partnership with the Minnesota Department of Transportation. The Central Corridor Management Committee, which includes the mayors of St. Paul and Minneapolis, commissioners from Ramsey and Hennepin counties and the University of Minnesota, provides advice and oversight. Funding is provided by the Federal Transit Administration, Counties Transit Improvement Board, state of Minnesota, Ramsey and Hennepin counties' regional railroad authorities, city of St. Paul, Metropolitan Council and the Central Corridor Funders Collaborative. For details, visit www.centralcorridor.org

APPENDIX C

Improving mobility

Easing congestion

Strengthening our communities

Central Corridor LRT 2011 Construction Schedule

University Avenue: Emerald to Hamline

Finished Product

- LRT tracks and stations
- New sidewalks
- New curbs and gutter
- New street surface
- New landscaping

Work in Progress

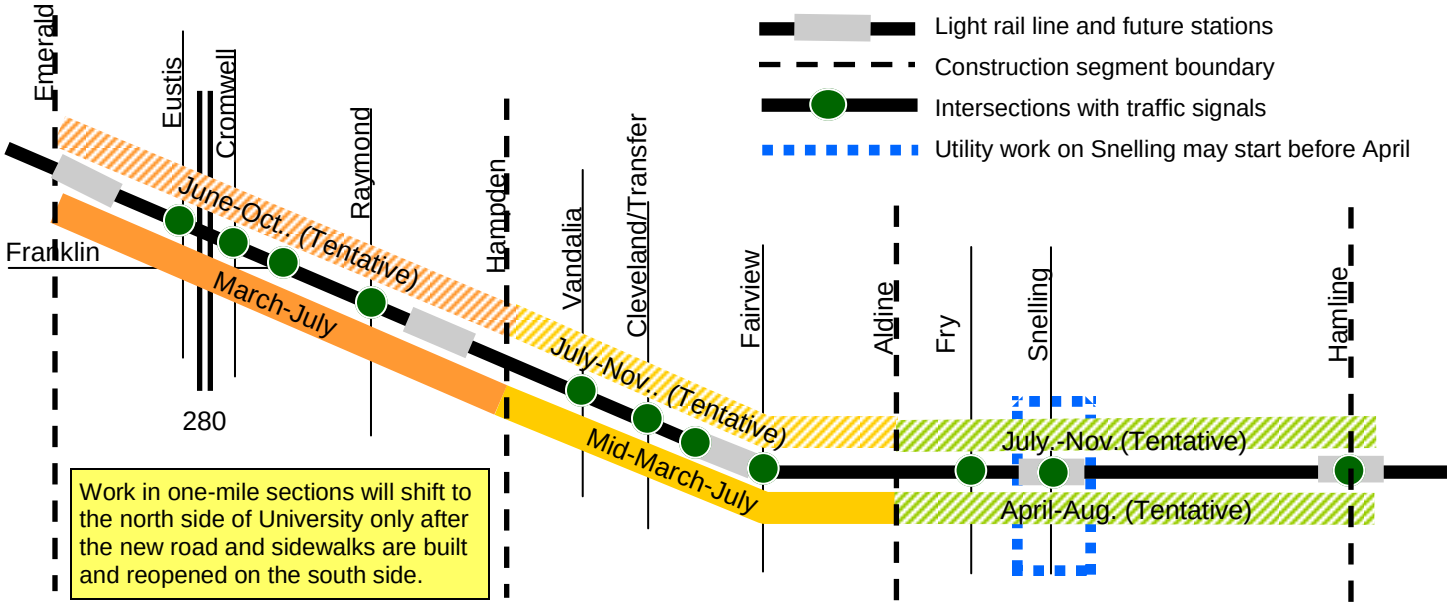
- One through lane of traffic each way on University Avenue
- Alternate vehicle access to buildings
- Temporary sidewalks, ramps over construction
- Pavement restored within 150 days, sidewalks within 15 days

www.centralcorridor.org

What to Expect from 2011 Construction

- Heavy construction will start in March on the south side of University at Emerald and progress eastward in approximately one-mile sections to just east of Hamline.
- Work in the one-mile sections will shift to the north side of University only after the new road and side-walks are built and reopened on the south; project staff will provide notification prior to shifting traffic lanes.
- When work is done on the north side, two lanes of traffic will be restored in each direction with work continuing in the middle of the road on track, guideway and stations through 2012.
- Snelling Avenue will be open during the State Fair.

Planned Construction Schedule by One-Mile Sections



1. Traffic control measures, including barricades, signage, temporary traffic signalization and temporary accesses will be installed. Left turns across University will be restricted to 11 signalized crossings.
2. Partial removal of the street surface (on one side of the street at a time), sidewalks, curbs, gutters, median, trees and other vegetation. At least four feet of sidewalk width will be maintained, except when the existing or new sidewalk is being constructed.
3. Relocation of public and private utilities, such as water, storm and sanitary sewers and electrical and phone lines.
4. Excavation for the track guideway and stations; station foundation work.
5. Removal of remainder of curbs and other half of sidewalks and construction of new sidewalks. Contractor is required to provide alternate pedestrian access via ramps and temporary walkways over construction and to restore the sidewalk within 15 days of removal.
6. Reinstallation of curbs, gutters, medians and trees.
7. Asphalt paving of street.
8. Traffic switch to newly paved south side of University so crews can work on the north side of the street, repeat steps 1-7.
9. Construction of guideway and stations and welding of embedded track in the middle of the street.

Construction Will Be Staged to Maintain Traffic and Pedestrian Access

Crews will stage construction to maintain one lane of through traffic in each direction on University Avenue. The contractor is required to restore the roadway within 150 days after the pavement is removed. During this time, traffic and pedestrian access will be maintained to all businesses and properties. Construction and outreach staff will meet with each building to discuss access plans and timing of sidewalk replacement. At least four feet of sidewalk will be maintained, except when the new sidewalk is being constructed. The following graphics demonstrate how the contractor will remove portions of the road and sidewalk in stages.

Stage 1: Work starts on south two-thirds of University. One lane of traffic maintained in each direction on the north side of University. Roadway restored within 150 days.

Stage 2: Work shifts to north two-thirds of University. One lane of traffic maintained in each direction on the newly restored road on the south side of University. Pavement restored within 150 days.

Stage 3: Two lanes of traffic restored in each direction. Work continues on guideway, track and stations in the middle of University through November 2011. In 2012, crews return to complete station and tracks and install overhead wires and communication systems.

Schedules subject to changes due to weather and other unforeseen circumstances! Weekly online construction updates at www.centralcorridor.org provide schedule updates and changes.

24-hour hotline 651-602-1404

Contacts and More Information

Community outreach coordinators for the Central Corridor LRT Project are liaisons between the public and contractors. For questions or concerns about 2011 construction activities on the western Saint Paul portion of University Avenue, contact outreach coordinators:

- Rita Rodriguez, 651-602-1805, rita.rodriguez@metc.state.mn.us
- Joey Browner, 651-602-1953 joey.browner@metc.state.mn.us
- Construction hotline at 651-602-1404

To stay informed ahead of the construction work:

- Get email updates every Friday on road, sidewalk and crosswalk detours and relocated bus stops for the coming week. To sign up, fill in your email address in the yellow box at the top right of the www.centralcorridor.org homepage.
- Attend regular meetings for businesses and residents in the construction zone. To receive meeting notices, contact outreach coordinator Rita Rodriguez at rita.rodriguez@metc.state.mn.us or 651-602-1805 or the general project email address at centralcorridor@metc.state.mn.us

To get business assistance:

- Contact the Business Resources Collaborative at www.readyforrail.net

For non-construction related questions, contact City of Saint Paul staff:

- **Land-Use**
  Christina Morrison, Planner, (651) 266-6546, christina.morrison@ci.stpaul.mn.us
- **Parking**
  Craig Blakely, Senior planner, (651) 266-6697, craig.blakely@ci.stpaul.mn.us
- **Public Works**
  Shannon Tyree, Public Relations Manager, (651) 266-6063, shannon.tyree@ci.stpaul.mn.us

Please don't go around barriers into construction zones. Construction hours will generally be from 7 a.m. to 5 p.m. weekdays, but crews will be allowed to work from 7 a.m. to 10 p.m. seven days a week if needed. ***Schedules are subject to change due to weather and other unforeseen circumstances! Check www.centralcorridor.org frequently for updates.***

About the project: The Central Corridor Light Rail Transit Project will link downtown Saint Paul and downtown Minneapolis along Washington and University avenues via the state Capitol and the University of Minnesota. Construction began in late summer 2010 on the planned 11-mile Central Corridor line, and service will begin in 2014. The line will connect with the Hiawatha LRT line at the Metrodome station in Minneapolis and the Northstar commuter rail line at the Target Field Station. The Metropolitan Council will be the grantee of federal funds. The regional government agency is charged with building the line in partnership with the Minnesota Department of Transportation. The Central Corridor Management Committee, which includes commissioners from Ramsey and Hennepin counties, the mayors of Saint Paul and Minneapolis and the University of Minnesota, provides advice and oversight. Funding is provided by the Federal Transit Administration, Counties Transit Improvement Board, state of Minnesota, Ramsey and Hennepin counties' regional railroad authorities, city of Saint Paul, Metropolitan Council and the Central Corridor Funders Collaborative.

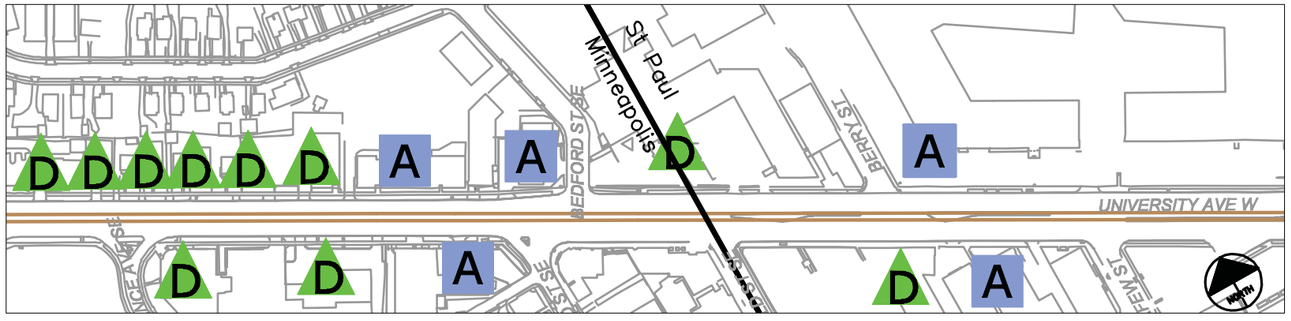
APPENDIX D

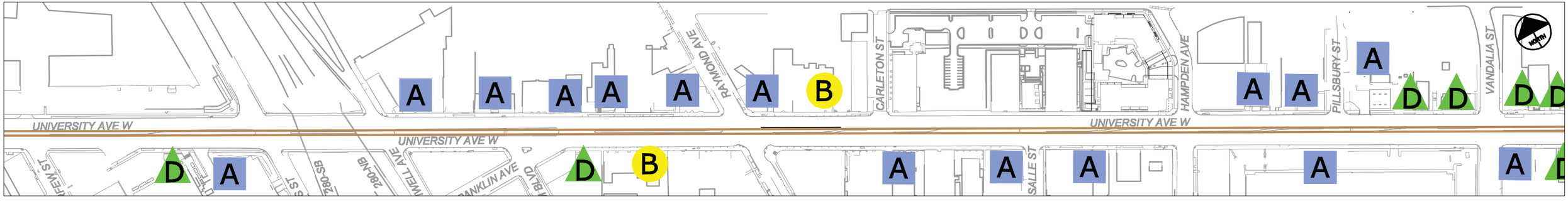
CORRIDOR ACCESS OPPORTUNITIES MAP
CE Segment 1

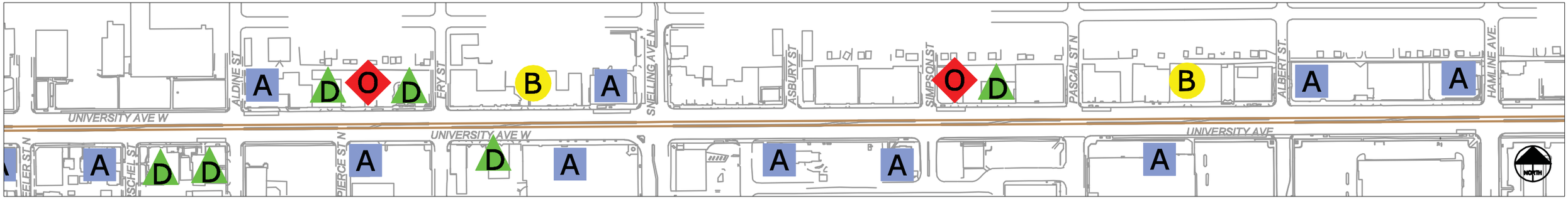
Draft 9-14-2010

LEGEND

- A Side street access available
- B Alley access available
- C New alley access
- D Maintain main access
- O Other







CORRIDOR ACCESS OPPORTUNITIES CE SEGMENT 1

February 14, 2011

Contents

Central Corridor

Light Rail Transit

Metropolitan Council

Clarence, Bedford

Notes:
-Plan used to show access for properties only.
-For traffic control and end treatment detail see traffic control plan.
-Sign locations are approximate.
-It is anticipated that general business way-finding signs will be needed and will be installed as directed by the CAR

ACCESS PLAN_A

LEGEND

- A Side street access available
- B Alley access available
- C New alley access
- D Maintain main access
- O Other
- No Left Turn

February 14, 2011

Berry, Curfew

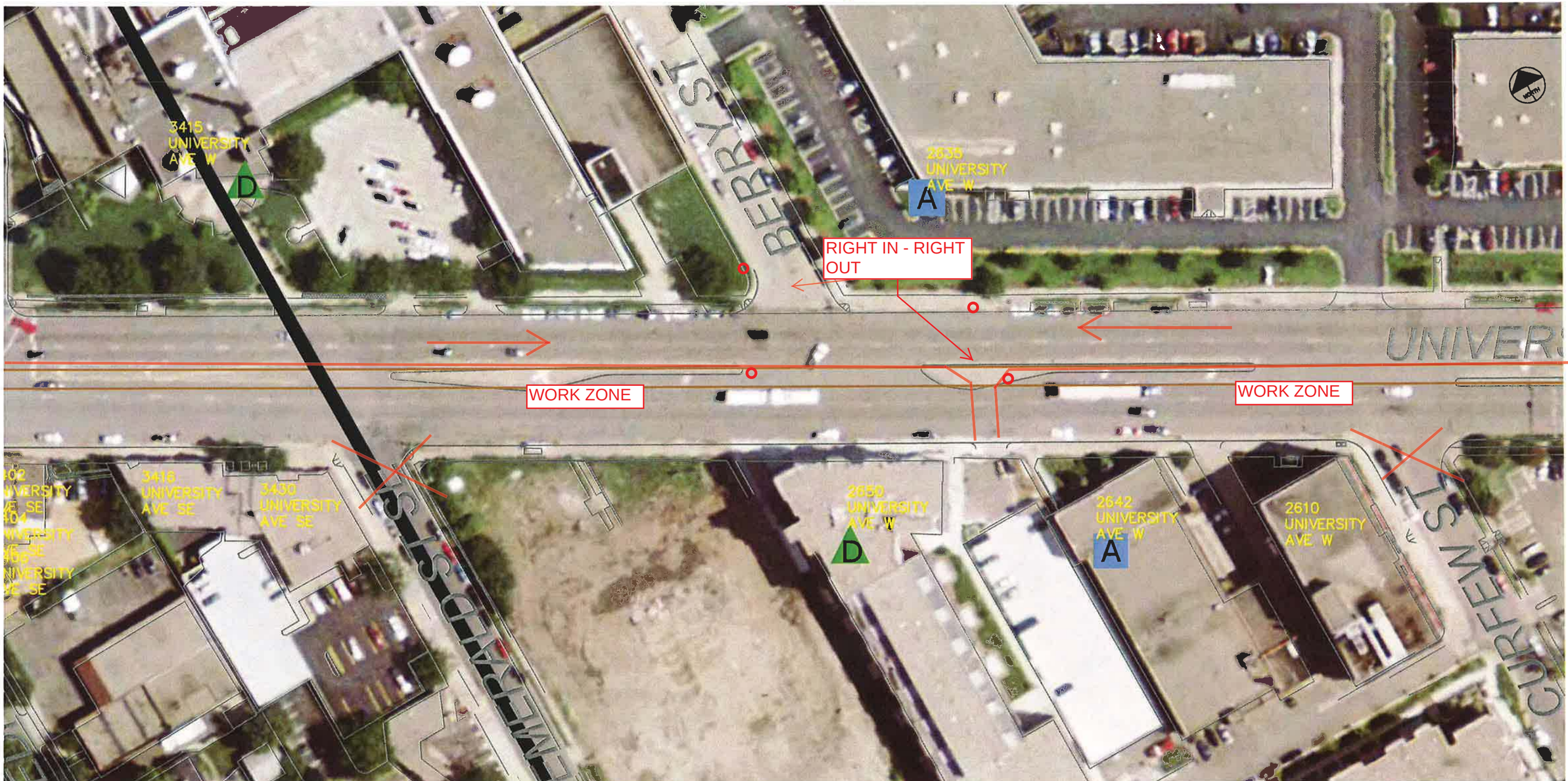
Notes:
-Plan used to show access for properties only.
-For traffic control and end treatment detail see traffic control plan.
-Sign locations are approximate.
-It is anticipated that general business way-finding signs will be needed and will be installed as directed by the CAR

LEGEND

- A Side street access available
- B Alley access available
- C New alley access
- D Maintain main access
- O Other
- No Left Turn

ACCESS PLAN_A

February 14, 2011



Highway 280

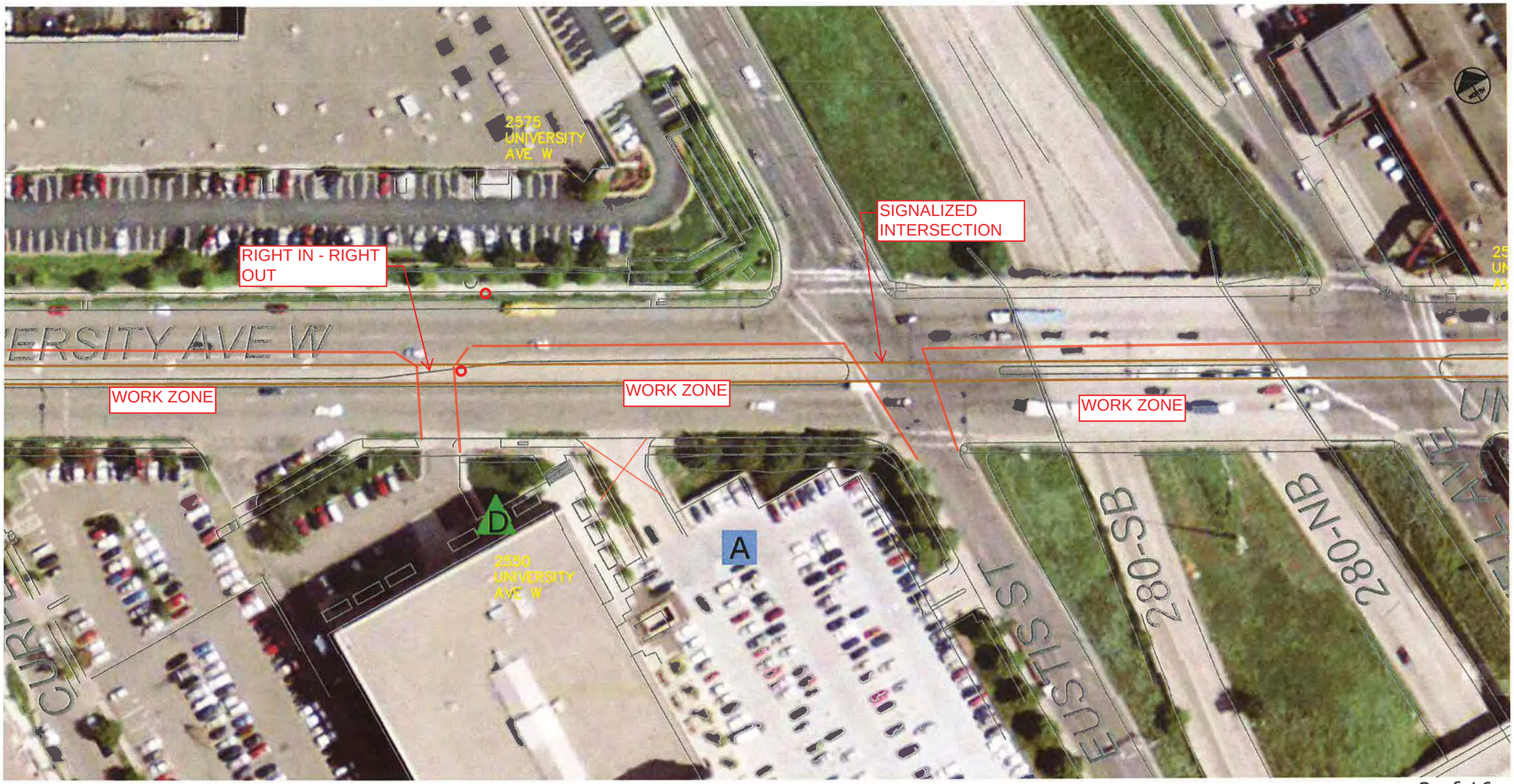
Notes:
-Plan used to show access for properties only.
-For traffic control and end treatment detail see traffic control plan.
-Sign locations are approximate.
-It is anticipated that general business way-finding signs will be needed and will be installed as directed by the CAR

LEGEND

- A Side street access available
- B Alley access available
- C New alley access
- D Maintain main access
- O Other
- No Left Turn

ACCESS PLAN_A

February 14, 2011



ACCESS PLAN_A

Cromwell, Franklin, Pelham, Raymond

Notes:
-Plan used to show access for properties only.
-For traffic control and end treatment detail see traffic control plan.
-Sign locations are approximate.
-It is anticipated that general business way-finding signs will be needed and will be installed as directed by the CAR

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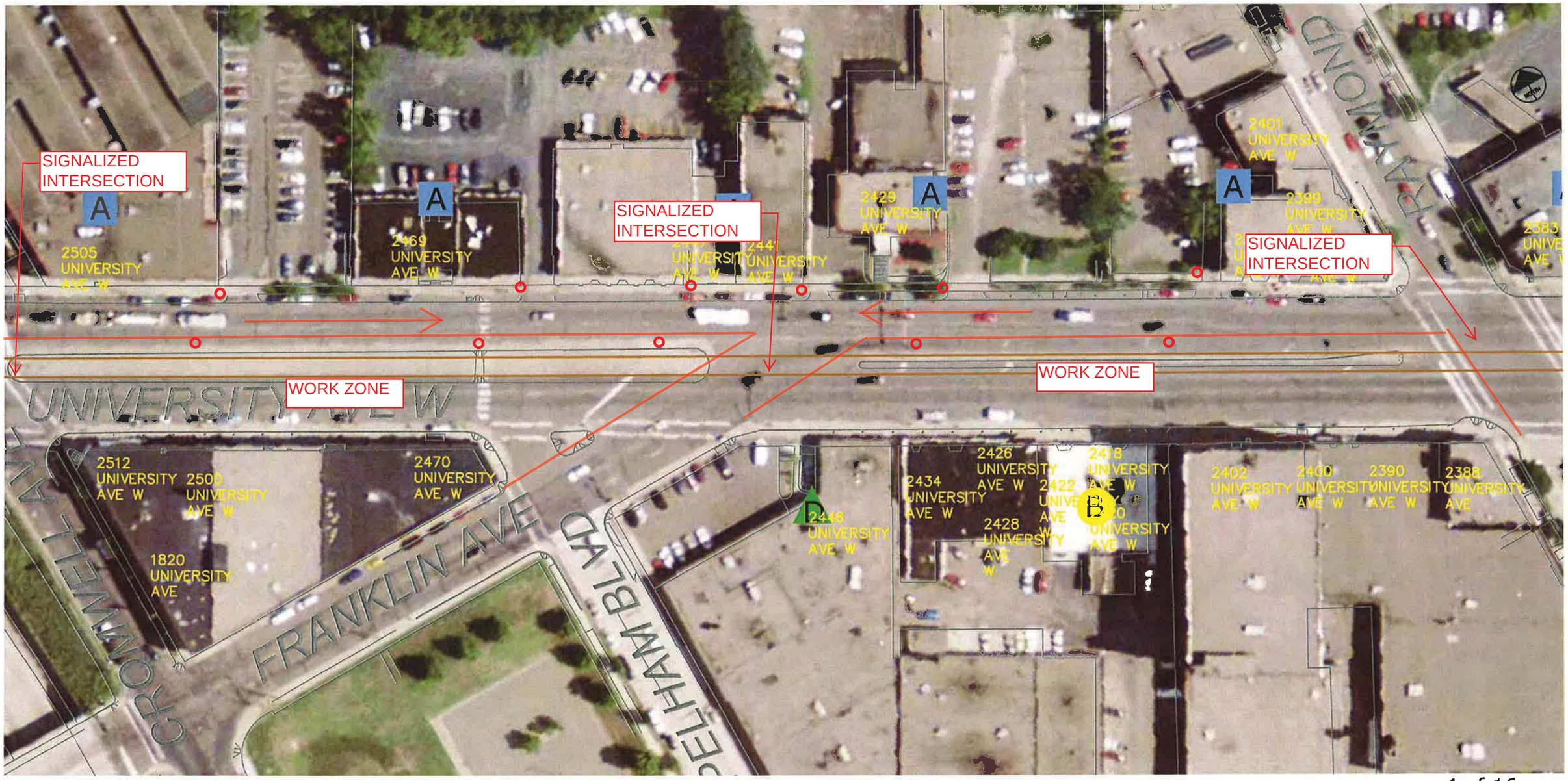
February 14, 2011



APPENDIX E

Metropolitan Council

Charter of the Central Corridor Construction Communication Committee (CCC) for the Capitol Area

INTRODUCTION

Based on feedback from project partners, the Business Advisory Council and the Community Advisory Council, the Metropolitan Council has created a smaller geographically and community based committees to seek ongoing public input during construction. The role of the Construction Communication Committee (CCC) is generally outlined in the Construction Public Information and Communication Plan for the Saint Paul portion of the alignment which will cover utility relocation activities, and construction completed under the Civil East and Systems contracts; the communication plan provides more detail. The Capitol Area is defined as the area between University Avenue at Marion Street to Robert Street, including Robert Street, 12th Street, and Cedar St. ending at I-94.

PURPOSE

The purpose of the CCC is to be proactive in communicating construction activities and addressing community concerns during construction. The CCC will provide an important vehicle for coordinating public outreach efforts that allow for two-way communication, resolving issues raised by the community and ensuring compliance with standards outlined in the Construction Public Information and Communication Plans.

RESPONSIBILITIES

The CCC is responsible for:

- Assisting with implementation of a coordinated, proactive communications effort that supports the Central Corridor LRT project.
- Advising the Central Corridor Project Office (CCPO) on communications and access during construction.
- Facilitating public participation and input into the construction process.
- Coordinating the dissemination of information to the public and identifying opportunities to leverage existing communications vehicles about the Central Corridor LRT project.
- Reviewing construction activities to ensure compliance with standards outlined in the Construction Public Information and Communication Plan.
- Participating in periodic assessments of the communications effort and providing feedback to adjust the communications plan as needed.
- Convening on a quarterly basis with other CCC's in the Civil East construction zone to evaluate the contractor's performance and adherence to set standards and make a recommendation for allocation of the contractor incentive.

Each committee member is responsible for:

- Attending scheduled CCC meetings,
- Contributing to the discussion of issues and concerns,
- Listening to and respecting the viewpoints of others,
- Participating in the development of solutions,
- Accepting the outcome of past decisions,
- Informing represented organizations of meeting discussions and outcomes,
- Following established communications protocol for responding to media contacts, and
- Delivering consistent key messages in all communications about the Central Corridor LRT project.

The Central Corridor Project Office and its staff are responsible for staffing the committee; developing construction plans that balance the project budget, timeline, access and community concerns; and seeking public input in the development of those plans.

MEMBERSHIP

Members of the CCC include community representatives, CCPO staff, public works staff from partner agencies, and representatives from utilities with work in the area. The community stakeholders will be the only one eligible to evaluate contractor performance and make recommendations for the contractor incentive program.

Community Stakeholders:

- Jim Aleckson, Minnesota State Department of Administration employee
- Rick Huston, Regions Hospital
- Tony Luna, Emma Norton Residence
- Margot Imdieke, ADA
- Kou Vang, business owner, District 7 Planning Council
- TBD, District 7/Capitol Heights resident

Technical Staff:

- Shoua Lee, CCPO, Outreach Coordinator (Chair)
- Mike Pretel, CCPO, Assistance Construction Manager, Civil East
- Greg Sorensen CCPO, Principal Engineer, Civil East
- TBD, Contractor Representative
- John Maczko or Shannon Tyree, City of St. Paul Public Works
- Ken Haider, Ramsey County,
- Nina Axelson or Brian Connolly, District Energy
- Shannon Forss, Xcel Energy, Project Manager
- Jerry Strauss, St. Paul Regional Water Services

TIMELINE

Each CCC will meet twice a month during construction or less depending on construction activity starting August 2010 and will continue to meet until Civil East work is complete.

Metropolitan Council

Contractor Incentive Evaluation Process

INTRODUCTION

The contractor incentive program was created based on feedback from the community and project partners. The program was incorporated into the construction specifications for both the Civil East and Civil West contracts. Civil East has $600,000 and Civil West has $250,000 available as incentive pay. Neighborhood and business representatives developed the evaluation form to rate the contractors' work in five different areas: information distribution, responsiveness to community concerns, maintenance of access, safety, and site cleanliness.

PURPOSE

The purpose of the contractor incentive program is to allow the community to take ownership of the project and provide some accountability between the contractor and the businesses and neighborhoods.

RESPONSIBILITIES

The active Construction Communication Committees for the Civil East and Civil West contracts are responsible for convening separately on a quarterly basis in their respective construction zones to evaluate the contractor's performance and adherence to set standards and make a recommendation for allocation of the contractor incentive.

TIMELINE

The first evaluation will be completed early 2011. All subsequent quarterly evaluations will be completed in the first 2 weeks of the month following the end of each quarter. Third quarter 2013 will be the last construction period to be evaluated.

RATING PROCESS

With the exception of the initial evaluation, all other evaluations will be special meetings to accommodate the Civil East CCC's and Civil West CCC's to meet and rate the contractors in a large group setting. CCC members are encouraged to complete the evaluation form prior to the meeting with feedback from the group(s) they represent. CCPO staff will provide a copy of comments received on that contract during the three month period as reference material. The meeting will break into three parts:

- CCC members complete their evaluation forms
- CCPO staff tally results and share them with the group
- CCC members reach a consensus on recommendation

The contractor will not participate in this evaluation process. Written comments from the CCC's will be forwarded to contractor and time will be set aside at the following regular CCC meetings for community stakeholders to give feedback to the contractor.

The recommendation will be forwarded to the Project Director for the final decision.

MEMBERSHIP

Community stakeholders of active CCC's are eligible to evaluate contractor performance and make recommendations for the contractor incentive program.

Civil East

- Capitol Area
- Downtown St. Paul
- University Avenue West
- University Avenue East

Civil West

- Prospect Park/Stadium Village
- East Bank/Stadium Village
- West Bank

ATTACHMENTS

- Evaluation form
- Incentive program schedule

Central Corridor
Light Rail Transit
Metropolitan Council

Contractor Evaluation Form

Name_____

Please review and rate the contractor's work on the following items from 0 to 10 with 0 meaning "strongly disagree" and 10 meaning "strongly agree." ***IN THE PAST QUARTER, DID THE CONTRACTOR:***

	Strongly Disagree										**Strongly Agree**
1. **Maintenance of Access – 30% Weight**											
a. Maintain vehicle and pedestrian access to businesses, parking lots & driveways	0	1	2	3	4	5	6	7	8	9	10
b. Implement and maintain effective and highly visible directional signage	0	1	2	3	4	5	6	7	8	9	10
c. Minimize impacts from public utility & other construction-related disruptions	0	1	2	3	4	5	6	7	8	9	10

Comments:

2. Safety – 15% Weight											
a. Maintain ADA compliant pedestrian access that is well- marked, multi-lingual, free of debris and detectable by low and no vision population	0	1	2	3	4	5	6	7	8	9	10
b. Ensure construction site is safe & secure at all times, including at the end of each day	0	1	2	3	4	5	6	7	8	9	10
c. Install and maintain appropriate safety barriers to construction site	0	1	2	3	4	5	6	7	8	9	10

Comments:

3. <u>Site Cleanliness & Organization – 15% Weight</u>

a. Dispose of trash & waste as required in proper containers to avoid overflowing - no littering — 0 1 2 3 4 5 6 7 8 9 10

b. Appropriate placement & maintenance of temporary sanitary facilities — 0 1 2 3 4 5 6 7 8 9 10

c. Minimize use of space for construction-related equipment, personal & construction vehicles and materials — 0 1 2 3 4 5 6 7 8 9 10

Comments:

4. <u>Information Distribution – 15% Weight</u>

a. Clearly identify a contractor point person and make them readily available — 0 1 2 3 4 5 6 7 8 9 10

b. Adhere to all notification requirements — 0 1 2 3 4 5 6 7 8 9 10

c. Make sure that weekly construction updates accurately reflects work performed in the field — 0 1 2 3 4 5 6 7 8 9 10

Comments:

<u>5. Responsiveness to Community Concerns – 25% Weight</u>

a. Provide a contractor point person that participates in meetings with the community, listens to concerns and implements timely solutions — 0 1 2 3 4 5 6 7 8 9 10

b. Respond to community concerns with courtesy and respect within allotted time (or sooner) based on classification of urgency — 0 1 2 3 4 5 6 7 8 9 10

Comments:

APPENDIX F

CONSTRUCTION PUBLIC INFORMATION AND COMMUNICATION PLAN
Capitol Area

August 2010

Submitted by
The Central Corridor Project Office

On behalf of
The Metropolitan Council

TABLE OF CONTENTS

1.0 INTRODUCTION

This Central Corridor LRT Communications and Public Involvement Plan is critical to the success of CCLRT. The objectives of the Plan are to:

- Build broad public awareness of, and support for, the project as an essential means to improve our transportation system and maintain regional competitiveness
- Identify key community, business, racial and ethnic groups within the corridor to maximize opportunities for public involvement and communication during the design and construction process to promote public ownership of the project
- Prepare project-area residents, businesses, property owners and commuters for realistic expectations during construction, listen to their concerns, and develop plans to minimize harmful or disruptive effects

This Construction Communication and Public Information Plan for the Capitol Area construction is a key component in the efforts to minimize impacts to businesses, properties, residents, students, Capitol Area facilities and staff. The purpose of this plan is to guide the Metropolitan Council, Contractor and project partners in involving the public and maintaining positive community relations during construction of the Central Corridor LRT Line. The Metropolitan Council, through the Central Corridor Project Office (CCPO) will be prepared to respond to the public's comment and concerns related to construction of Central Corridor LRT.

2.0 ROLES AND RESPONSIBILITIES

The Public Information and Communications Plan for the construction phase of the Central Corridor LRT project involves three entities:

- Central Corridor Project Office (CCPO)
- Construction Communication Committees (CCC)
- Contractor

This plan outlines the roles and responsibilities of each of these entities.

2.1 Central Corridor Project Office

The CCPO will have primary responsibility to assure that the activities specified herein are communicated to the public. The CCPO will be responsible for day-to-day public information and communications activities. The CCPO's public information activities will be directed by the Manager of Public Involvement and will include the following:

- Community Outreach Coordinator
- Communications Manager
- Engineering staff
- Construction staff

In addition to day to day activities, CCPO responsibilities include:

- Implementing the Public Involvement and Communications Strategic Plan
- Responding to media requests and inquiries
- Complying with the public information requirements outlined in this document
- Supporting the CCC
- Conducting CCPO-sponsored public information and community relation's activities
- Seeking public feedback on effectiveness of the public involvement and communications activities

2.2 Construction Communication Committees

The CCPO will create a Construction Communication Committee for each of the construction areas. Each CCC will have community representation:

- Resident
- Business
- Transit user
- Accessibility

And technical staff:

- CCPO community outreach coordinator
- CCPO construction staff
- CCPO engineering staff
- Contractor
- City public works designated staff
- County public works designated staff

The responsibilities of each of the CCC include:

- Assisting with implementation of a coordinated, proactive communications effort that supports the Central Corridor LRT project.
- Advising the Central Corridor Project Office (CCPO) on communications and access during construction.
- Facilitating public participation and input into the construction process.
- Coordinating the dissemination of information to the public and identifying opportunities to leverage existing communications vehicles about the Central Corridor LRT project.
- Reviewing construction activities to ensure compliance with standards outlined in the Construction Public Information and Communication Plan.
- Participating in periodic assessments of the communications effort and providing feedback to adjust the communications plan as needed.
- Convening on a quarterly basis with other CCC's in the Civil East construction zone to evaluate the contractor's performance and adherence to set standards and make a recommendation for allocation of the contractor incentive.

2.3 Contractor

The Contractor will designate a Community Relations Point person to work with the CCPO outreach, engineering and construction staff. That person will be responsible for supporting the flow of public information and communication efforts:

- Be one of the Contractors key personnel that can commit the contractor to action
- Have "real time" access to all project details that the contractor is currently engaged in
- Be a member of the CCC and attend all meetings
- Attend regularly scheduled construction update meetings
- Provide information to CCPO
- Support CCPO public information and communication efforts
- Ensure that the contractor responds to community concerns
- Provide adequate access for all snow and garbage removal
- Provide and maintaining signage as described in Section 3.3.4.

Contractor responsibilities established in this section will be subject to Contractor performance requirements identified in the contract General Conditions.

3.0 PUBLIC INFORMATION AND COMMUNICATION PLAN

3.1 Schedule Milestones

Within 15 days of award, the Contractor will complete and submit to the CCPO, its anticipated Schedule of Milestones. The Contractor will update and submit its schedule to the CCPO at least monthly. A copy of each update will be submitted to CCC.

3.2 Public Interaction

The CCPO is the first and preferred point of contact for residents, businesses or other member of the public with questions or comments on the Project. The CCPO and the contractor will take necessary steps to foster these contacts, including continuous interaction with the public and community.

3.2.1 Public Notifications

The CCPO will notify affected businesses, affected properties, affected residents and general public of construction progress, upcoming events and specific notifications, as shown in table 3.2-1. Notification of directly affected businesses and residents will be through personal contact and other communication strategies.

Table 3.2-1
Notifications

Notice	Requirement
• 30-day Construction Notification	Written notification of construction will be given 30 days prior to construction. Access maps will be provided per the Maintenance of Traffic and Access plan
• 72-hour Business/Commercial Utility Shutdown	Written notification by utility company of utility shutdown for businesses and commercial property.
• 48-hour Residential Utility Shutdown	Written notification by utility company of shutdown for residential property.
• Weekly Construction Updates	A construction update will be provided to each business or resident fronting a Construction Zone. The update will be a personal visit, email or letter based on business or resident's preference
• Emergency Unforeseen Utility Disruptions, Hazardous Conditions, Traffic Signal Emergencies, Security and Loss of Access	See Section 3.3
• Road and Driveway Closures	Written notice, email or personal contact at least 72-hours in advance of closure.
• Construction Schedule	One (1) month prior to start of construction

3.2.2 24-Hour Hotline

The CCPO established a 24-hour hotline that is staffed by a call center. The CCPO will provide the call center with instructions to guide personnel in responding to call and ensuring it is forwarded to the appropriate CCPO staff. The CCPO will develop procedures for addressing, responding to and documenting all calls to the hotline as well as emergency phone procedures. These procedures will be updated on a quarterly basis so that information contained therein is current.

Calls will be classified and addressed accordingly,

- Emergency call relating to risk to life, limb will be responded to according to emergency procedures
- Urgent construction related issue that requires response within a hour such as loss of access
- Non urgent issue or complaint that requires a response or resolution within 1 business day
- Comments or questions that require follow up from outreach or appropriate CCPO staff within 5 days

The CCPO will acknowledge receipt of complaint and indicate estimated time to resolve the complaint. The CCPO will review all complaints received and resolution or response of the issue to the CCC meetings. If the CCPO or Contractor is unable to resolve a complaint regarding Contractor's response to a complaint or concern within two (2) days, the Contractor will notify the Project Director. The Contractor will provide necessary information, staff support and representation to assist in resolving the issue.

3.2.3 Database

All calls and contacts from the general public regarding construction will be logged onto a form supplied by the CCPO. The CCPO will create a database to document contacts with individuals with construction comments or concerns:

- Contact name
- Business name, if applicable
- Address
- Phone number including business, mobile and home phone for emergencies
- Information about the contact including date, time, method of contact and a brief description of the nature of the contact,
- A brief description of handouts and a document control number that identifies a hardcopy of the contact information.

The CCPO will develop a standardized form to log contact information. This form will become the hard copy of all contacts. Handouts will be attached to this form. The contact information will include the information provided for the database as well as a description of what was discussed. The database will document all contact with the public and to be able to recreate what transpired during the Project.

The CCPO will provide contact forms for the Contractor's use in documenting contacts consistent with the database. The Contractor will provide all contact information to the CCPO within 24 hours.

All mass communications, emails or letters will be archived using the Central Corridor Project Office Document Management system.

3.2.4 Complaint/Comment Forms

The CCPO will provide on online complaint/comment forms to businesses and residents along the Project as a method for the public to express Project concerns. These forms will provide all information needed for entry into the database. The CCPO will also make paper complaint/comment forms available to the public. The forms will indicate the address and fax number where the forms can be sent and show the 24-hour hotline number.

3.2.5 Construction Schedule/Maintenance of Traffic and Access

The CCPO will notify properties, businesses and residents along the Project and will publicize commencement of construction prior to the beginning of construction in any area of the Project. This notification will publicize the projected dates for the construction by individual notices to stakeholders, community groups, businesses, and residents along the corridor, in the neighborhoods surrounding the construction including Capitol Heights and Mt. Airy, as well as along alternative routes. The Contractor will provide all relevant information concerning the construction schedule to CCPO who will then publicize the information.

The advertisements and notices will address:

- Road and lane changes
- Sidewalk and crosswalk closures
- Alternative routes
- Any other impacts such as street parking

Construction in any area will be constrained by the requirements of Contract. Each area where active construction is being conducted will be treated as a distinct entity in all notification activities.

Information regarding Project design and construction will be readily available in a form that can be quickly disseminated to the public.

3.3 Emergency Response

The Contractor will provide immediate response to emergencies by trained personnel from an incident response team within 30 minutes of receiving notification from CCPO, Utility Owner and/or affected business(es) and/or resident(s). Emergencies include, but are not limited to:

- Unforeseen utility disruptions
- Hazardous conditions
- Traffic signal emergencies
- Security concerns
- Loss of access notifications

All emergency and/or unforeseen disruptions will be explained to the public immediately by a personal contact from the CCPO. The person making the contact will provide to the affected party(ies) information such as:

- Cause of disruption (i.e., whether it is construction oriented or not);

- Actions being taken to alleviate the problem; and
- Anticipated duration of the disruption.

3.3.1 Telephone Trees

The CCPO and Contractor will establish and manage an emergency response telephone tree. All appropriate CCPO, project partner and Contractor personnel will be included on this telephone tree for immediate response in the event of an emergency. The telephone tree will be divided into areas of expertise so the proper people are called for specific emergency situations.

3.3.2 Documentation

All Emergencies will be logged into the construction issues database including contact information, reason for the emergency and response.

3.4 Business and Residential Impact Mitigation

The CCPO, CCC and Contractor will take steps to mitigate the impacts of construction by providing frequent and accurate information to businesses and residents based on project milestones.

3.4.1 Access Maps

The Contractor with the CCPO will develop access plans with businesses and residents on each block and will provide maps showing existing and planned patron and delivery and residential access during any construction period. The map(s) will identify times of business operation and deliveries.

3.4.2 Changes to Access

The CCPO will inform businesses and residents in writing or by personal contact, of any changes to access that may impact them, at least 2 weeks prior to start of construction. Contractor will submit a new access map to the CCPO Construction manger at least 2 weeks prior to construction for a written statement of no objection.

The Contractor will provide adequate access for all snow and garbage removal.

3.4.3 Signage

The Contractor will maintain public information and warning signage throughout the Project at each construction site consistent with the construction contract provisions.

3.5 Public Meetings

The CCPO will host a variety of public meetings and forums to provide construction information and listen to concerns including:

- Construction tours
- Neighborhood monthly meetings
- Business organizations
- Quarterly information sessions
- Small block

The Contractor's Community Outreach Liaison will attend these meetings. CCPO representatives will include the Project Resident Engineer and Community Outreach Coordinator.

The CCPO outreach staff will evaluate the effectiveness of these meetings and make adjustments based on community feedback.

3.6 Media Relations

An ongoing media relations campaign will occur and be managed by CCPO's Communications Manager. The Contractor will assist in giving timely information to CCPO's Communications Manager regarding construction activities for use in media events.

The CCPO's Communication Manager is responsible for conducting all media interviews and responding to inquiries. The Contractor, their Subcontractor and their employees will not conduct or participate in media events, radio or television broadcasts, without the written consent of CCPO, except in emergencies. In emergency situations, the Contractor will immediately notify CCPO's Public Involvement Manager and Communications Manager of any situations that may involve the media.