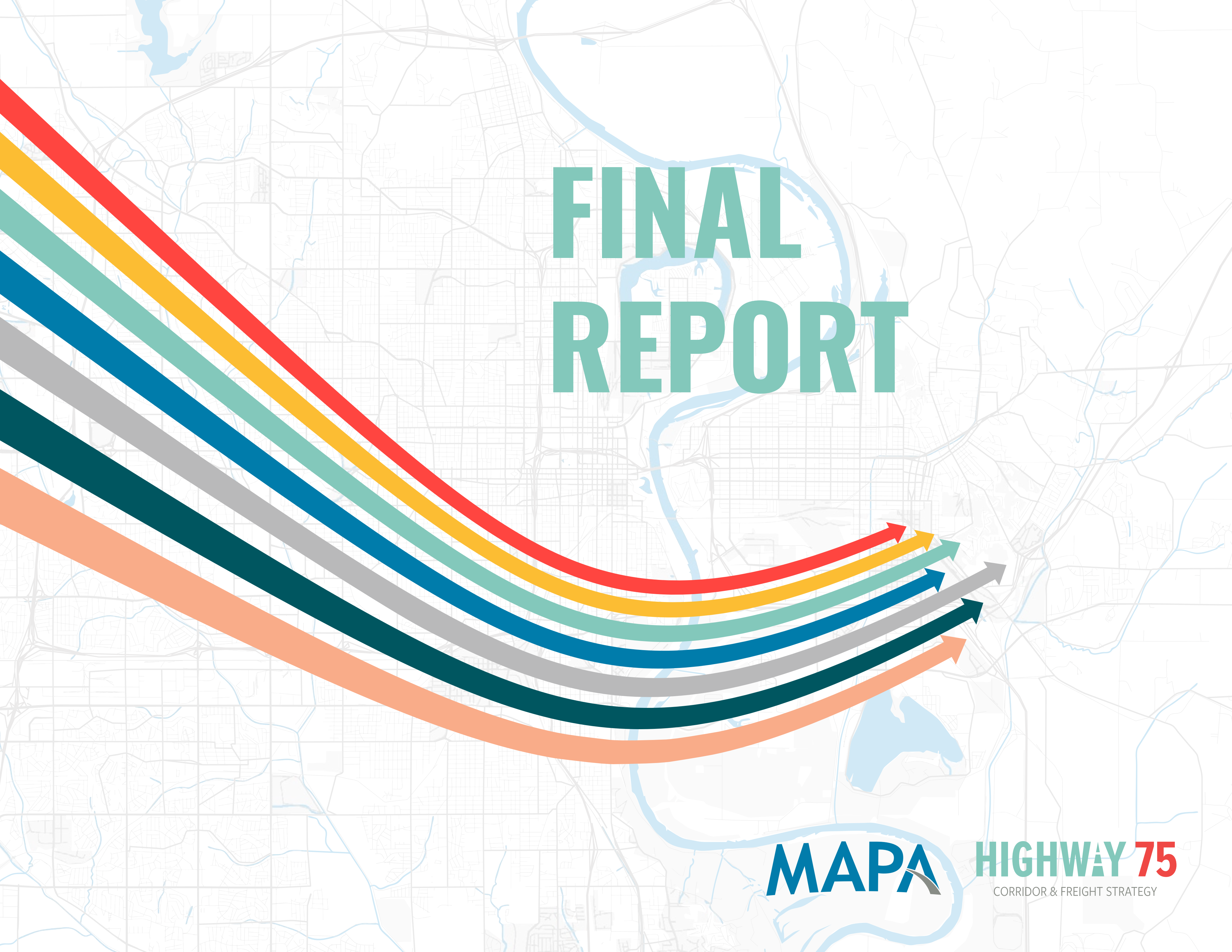


FINAL REPORT

MAPA

HIGHWAY 75
CORRIDOR & FREIGHT STRATEGY

Table of Contents

List of Abbreviations

- **CIA:** Community Impact Assessment
- **MAPA:** Metropolitan Area Planning Agency
- **TDM:** Travel Demand Model
- **FHWA:** Federal Highway Administration
- **MUD:** Metropolitan Utilities District
- **USDOT:** U.S. Department of Transportation
- **EPA:** Environmental Protection Agency
- **DAT:** Transportation Disadvantaged Tract
- **ADT:** Average Daily Traffic
- **BCA:** Benefit Cost Analysis

Figures

Tables

Introduction

The Omaha-Council Bluffs Metropolitan Area Planning Agency (MAPA) and its partner agencies have conducted the Highway 75 Corridor & Freight Strategy Study as a high-level study to identify feasible, planning-level concepts that can meet mobility and community goals.

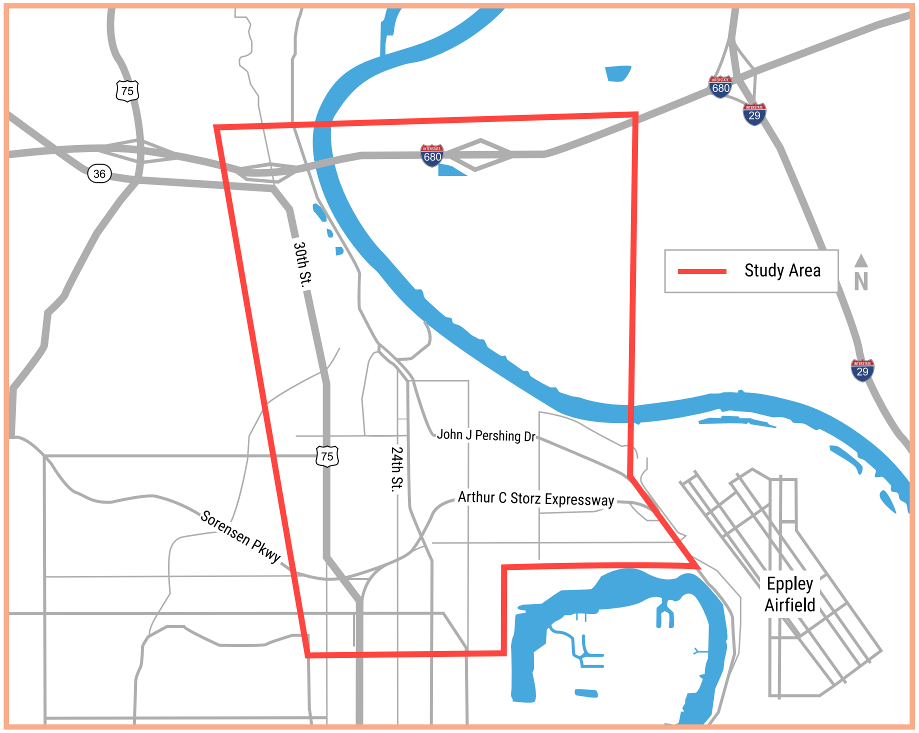
Project Background

The study area is divided by US Highway 75 in northeast Omaha, locally known as 30th Street. The adjacent land uses are primarily residential and commercial with about 15,000-20,000 vehicles using the corridor daily, and between four and six percent of those trips being heavy trucks. Negative impacts to the neighborhood from this transportation corridor include noise, pollution, crashes, auto-centric character, and subsequent negative health impacts.

Since the mid-1950s, there has been a long history of investigating potential alignments of the U.S. Highway 75 corridor. Most recently, there has been continued interest in addressing the need for an improved connection between the North Freeway, the Storz Expressway, and I-680, while also mitigating the community impacts of the current Highway 75 alignment along 30th Street. In 2019, the Nebraska Legislature approved funds for MAPA to conduct a study that will assess potential transportation and economic options in the study area.

The feasibility study evaluated multiple alignments for a new roadway alignment alternative to serve some of this traffic with fewer ongoing neighborhood impacts post implementation. A new roadway alignment could potentially serve as an alternate truck route to 30th Street provided that the new alignment is redesignated as Highway 75. The redistribution of trucks from 30th Street to a new alignment would provide the opportunity for 30th Street to be redesigned to better serve the neighborhood.

Figure 1.1 Study Area



Transportation studies and roadway construction since 1950 have had dramatic impacts on this community. The construction of the North Freeway south of this study area created significant impacts within these Omaha neighborhoods. Highway 75 traffic has created a barrier for residents and businesses in the study area. Study findings and recommendations from previous studies were compiled and reviewed for study consideration. The following studies can be found on MAPA's website:

- North Freeway Corridor Study: 1975
- I-680 to Eppley Airfield Corridor Study: 1999
- 30th Street Traffic Study & Truck O-D Survey: 2006
- Historic Florence Master Plan: 2007

Study Goals

Guiding the study is a set of goals. These study goals are the framework by which any potential changes to the transportation system are evaluated to see if it is consistent with the vision for the community and mobility in the corridor. These goals are shown in **Figure 1.2**.

Figure 1.2 Study Goals

- Mobility
- Safety
- Neighborhood quality
- Accessibility
- Freight movement
- Economics

Study Process

1. Public and Stakeholder Input
2. Baseline Transportation and Community Assessment
3. Develop and Screen Alternatives
4. Evaluation of Potentially Feasible Alternatives
5. Community Impact Assessment

Public and Stakeholder Input

Input received from the community and system users was crucial in determining direction for the study and helping vet ideas for potential transportation changes. To facilitate a broad, inclusive discussion across the community a range of engagement and input methods were utilized.

- Public Meetings
- Stakeholder Group, including neighborhood and business representation

Study awareness was spread through a range of means, including active social media presence on MAPA's channels, staff walking in the Florence Days parade route through the majority of the study area handing out information cards to attend the second public meeting, and a community bike ride prior to the draft plan document.

Public Meeting 1

The first public meeting was held virtually on December 14, 2021. This meeting with approximately 46 attendees introduced participants to the study, and had structured feedback opportunities for live questions and answers, and guided online "Choose Your Own Adventure" activities that covered the topics of:

- Freight & vehicle mobility
- Neighborhood characteristics & livability
- Bicycle & pedestrian

Public Meeting 2

The second public meeting was held in person at Florence City Hall on May 19, 2022. This meeting with approximately 120 attendees was in an open house format that included the following stations:

- Information boards for the community members in attendance to learn more about the current neighborhood and transportation conditions in the study area.
- Large plots of the screened alternatives on an aerial base to show the details of the remaining alternatives being considered.
- A "build your own streetscape" activity for 30th Street for attendees to use to-scale game pieces to select the elements they would like to include in their ideal 30th Street cross-section.

Baseline Transportation and Community Conditions

The baseline conditions analysis provided an overview of the current transportation and community conditions from the following perspectives:

- Study area resident analysis
- Mobility
- Safety
- Accessibility for all users
- Freight movement

It evaluated current data, forecasts, and trends to evaluate study area status prior to considering what types of alternatives might be developed to address needs identified. Additional details on the baseline conditions analysis is provided in the full **Baseline Conditions Document**.

Study Area Resident Analysis

Understanding the demographic baseline of study area residents allows for greater focus on developing alternatives that deliver equitable outcomes.

Demographic data for study area residents was reviewed and a number of demographic indicators were mapped. These indicators include:

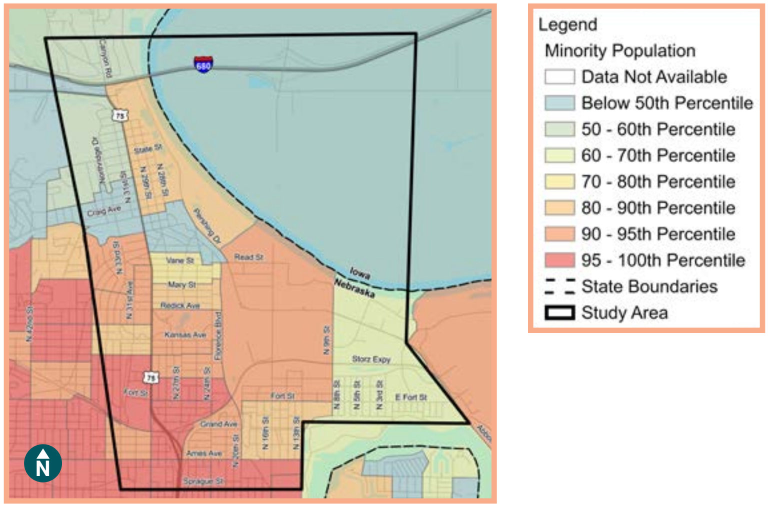
- Population density
- Low-Income populations
- Minority populations
- Percent of population with a disability
- Linguistically isolated populations
- Environmental justice populations
- Age

Two of the areas critical to equity assessment were minority and low-income populations.

Minority Populations

The population living in the study area has a significant concentration of minority residents as shown in **Figure 2.1**. The majority of block groups fall within the 80th percentile (for Nebraska block groups) or higher for proportion of minority residents. Block groups in the southern portion of the study area demonstrate the highest concentrations of minority residents, ranking in the 95th percentile or higher for this demographic indicator.

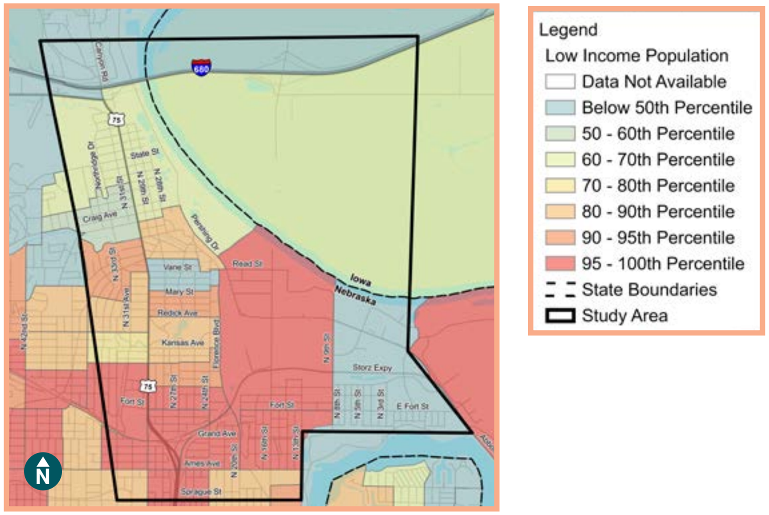
Figure 2.1 Minority Populations



Low Income Populations

The population living within the study area also has a significant concentration of low-income populations as shown in **Figure 2.2**. The majority of these block groups fall in the 80th percentile of higher, meaning they have substantially more low-income residents when compared to the average block group for the state of Nebraska.

Figure 2.2 Low Income Populations

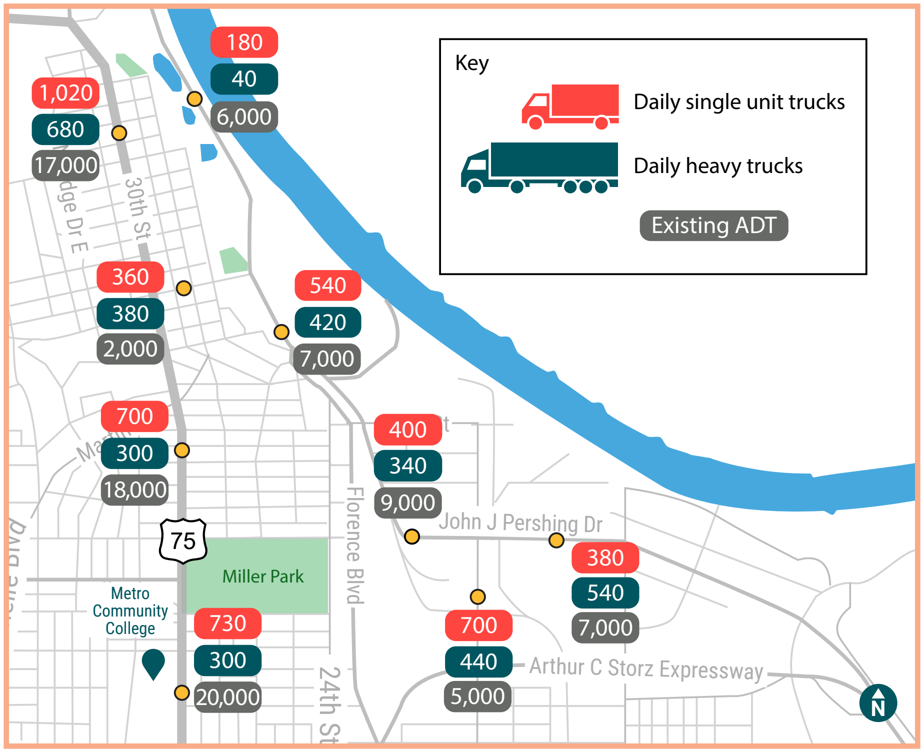


Mobility

Existing Traffic Volumes

Existing traffic volumes for major streets in the study area are shown in **Figure 2.3**. As seen in the figure, volumes on Highway 75 range from 16,000 – 20,000 vehicles per day and highlight the critical role this road plays in moving traffic between I-680 and downtown Omaha. **Figure 2.3** also shows the existing daily freight volumes through the core of the study area.

Figure 2.3 Existing Truck Traffic Volumes



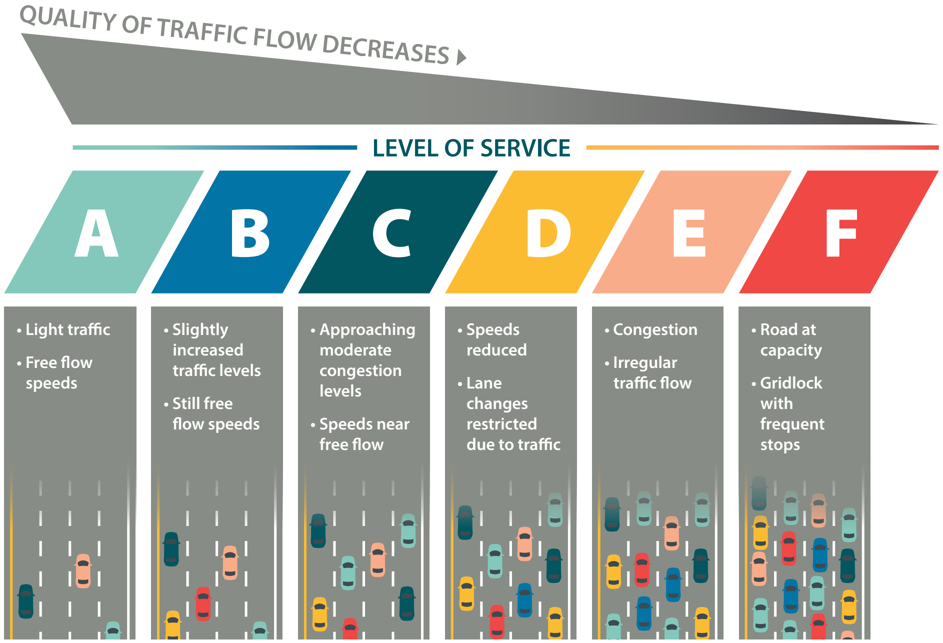
Peak Hour Traffic Analysis

A traffic analysis was completed to provide a general estimate of operations in the study area. Based on the analysis streets are estimated for peak hour level of service (LOS) which ranges from an "A," meaning free flow traffic, to an "F," or complete gridlock.

For all of the corridors in the study area, only two intersections currently operate worse than LOS C:

- North Freeway / Storz Expressway / Sorensen Parkway – LOS D
- Pershing Drive / Dick Collins Road (unsignalized intersection) - LOS E

Figure 2.4 Level of Service



Future Traffic Volumes

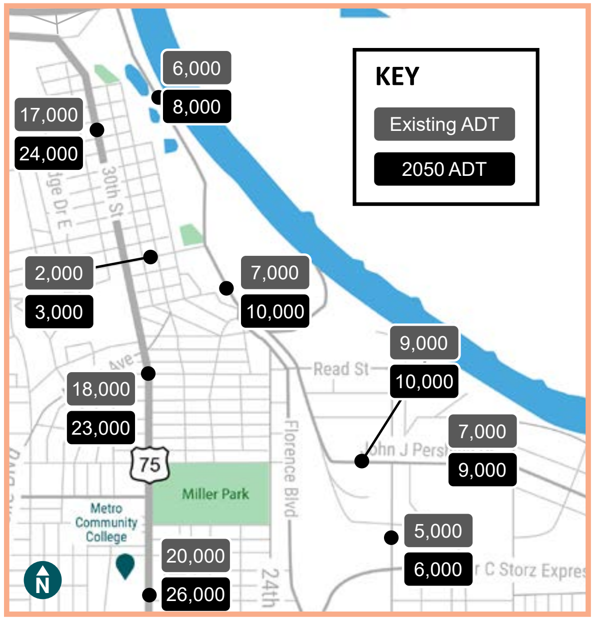
Future traffic levels were forecasted using the travel demand model for the MAPA region. The predicted growth in traffic volumes is shown in **Figure 2.5**.

Many of the major roadways in the study are forecasted to see an increase of over 1,000 vehicles per day under the no-build scenario. The future traffic volumes allow for a baseline estimate of Future Traffic Level of Service. Some future growth in traffic is expected and street segments that will be LOS D and E by the year 2050 include:

- Sorensen Parkway
- Pershing Drive
- Ames Avenue

While 30th Street / Highway 75 does not currently exhibit LOS issues, forecasted growth in daily traffic volumes is expected to push traffic operations to LOS C and LOS D along the corridor by 2050.

Figure 2.5 Existing & Future Traffic Volumes



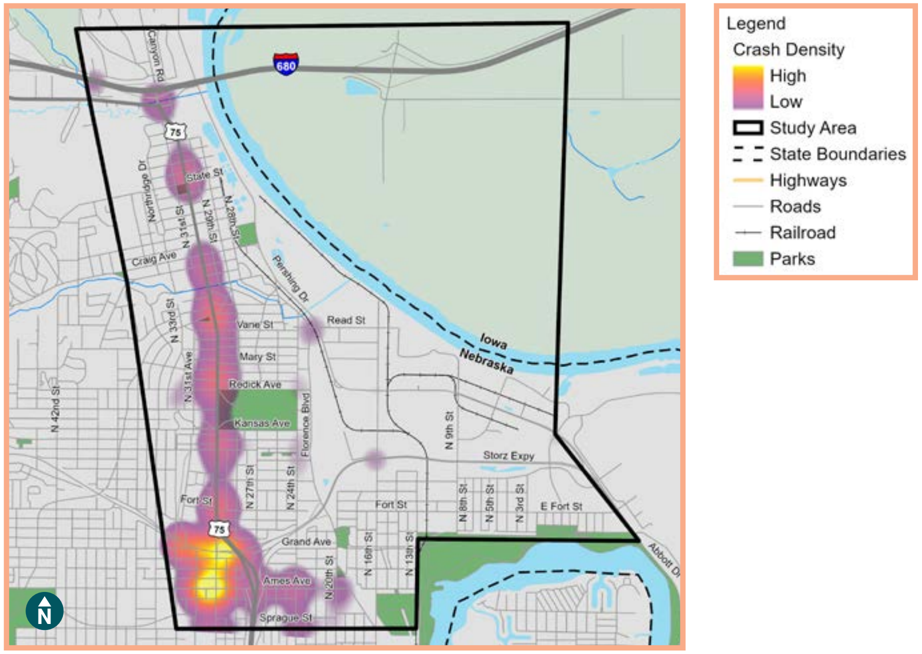
Safety Conditions

Existing safety conditions for vehicles, bicyclists, and pedestrians was established for the Highway 75 Corridor study area. The safety assessment reviewed crash data for the years 2015 to 2019 to develop a safety profile that includes:

- Crash density
- Intersection crash frequency
- Intersection crash rates
- Bicycle and pedestrian crash events

A review of 2015–2019 crash data for the study area shows that 2,135 reported crashes occurred during the analysis period, with nine fatal crashes during that time. **Figure 2.6** is a heat map that illustrates the location density of the 2,135 crashes that occurred during the 2015 to 2019 analysis period. Of those 2,135 crashes, 92 were injury crashes and nine were fatal.

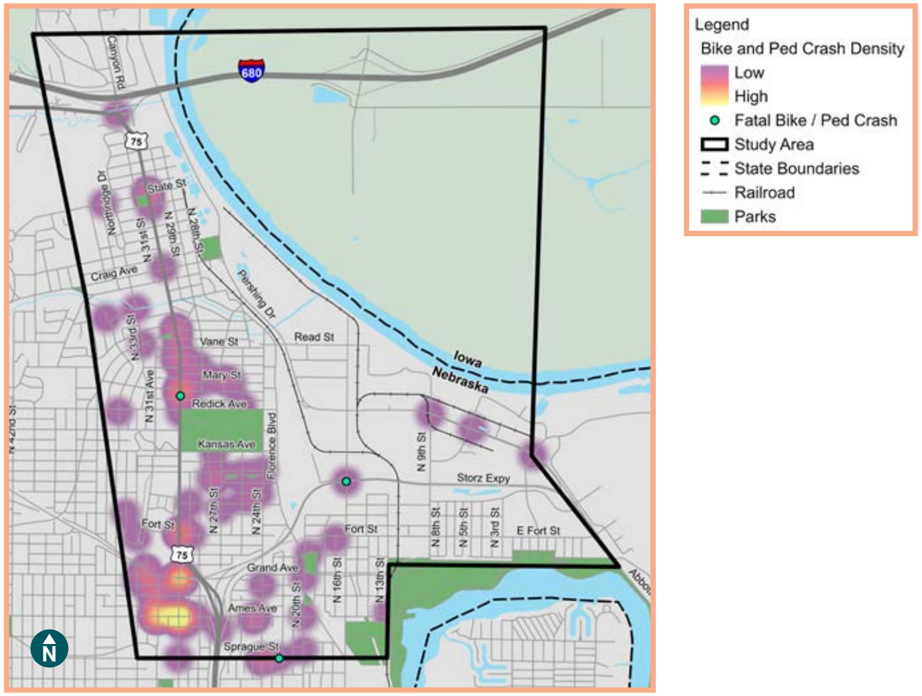
Figure 2.6 Crash Density



Bicycle and Pedestrian Safety

Crashes involving bicyclists and pedestrians totaled 87 crashes between 2015 and 2019, with 42 of these resulting in severe injuries and three fatal injuries. **Figure 2.7** displays bicycle and crash density. Similar to vehicular crashes, most of the bicycle and pedestrian crashes occurred in the southern part of the study area and along the 30th Street corridor. The figure also shows the location of the three bicycle and pedestrian involved crashes that resulted in a fatality.

Figure 2.7 Bike / Pedestrian Crash Density



Bicycle and Pedestrian Network

Bicycle infrastructure in the Omaha area consists of on street and off-street facilities. On-street facilities include bike lanes and marked shared routes while the regional trail network provides an extensive network of off-street facilities connecting major recreational destinations.

Trail Network

A large portion of the Riverfront Trail is within the study area and runs along the Missouri River. This trail extends from Carter Lake Park in the south to NP Dodge Memorial Park in the north. While the coverage of the trail network is significant throughout the region, it does not maintain many connections to the remaining bicycle network or non-recreation community destinations. There are no bike lanes or marked shared routes within the study area.

Drone photography courtesy of MAPA

Bicycle Level of Traffic Stress

Bicycle Level of Traffic Stress (LTS) is a measure that classifies a street based on its perceived level of comfort for bicyclists. The classification is based on a set of criteria related to the roadway facility being analyzed; these criteria include characteristics like road width, posted speed limit, presence of parking lanes, etc

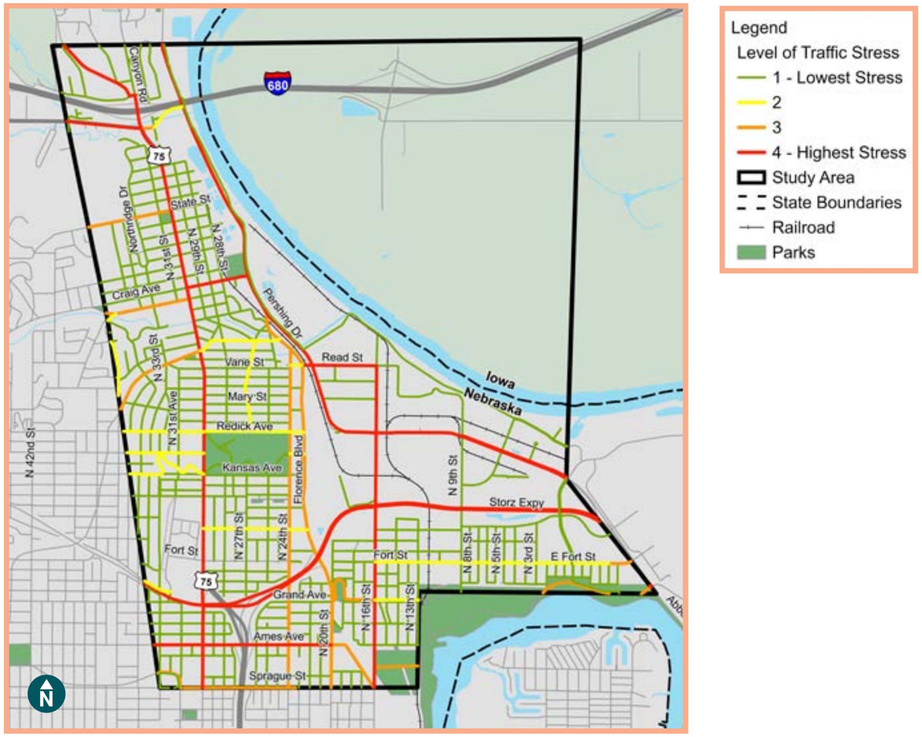
The LTS analysis evaluates these criteria for each road segment to develop a composite LTS score, ranging from one to four as seen in **Table 2.1**.

Table 2.1 Level of Traffic Stress

Level of Traffic Stress	Description
1	Comfortable for all ages and abilities (i.e. trails and bike boulevards)
2	Comfortable for most adults (i.e. buffered bike lanes)
3	Comfortable for confident bicyclists (i.e. sharrows and minor arterials)
4	Uncomfortable for most bicyclists (i.e. major arterial with no bicycle facilities)

Streets and those identified as part of the bicycle network that are within the study area were included in an LTS analysis. The LTS score for segments are shown in **Figure 2.8**.

Figure 2.8 Bicycle Level of Traffic Stress



Pedestrian System

Sidewalks and Pedestrian crossings are present throughout the study area and create critical links in the walking network.

Freight Movement

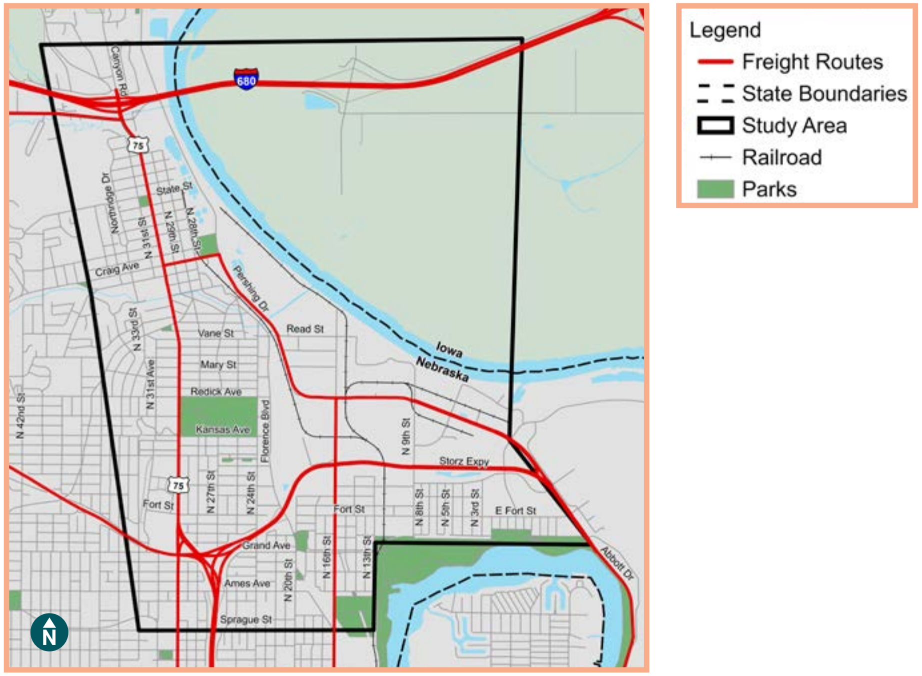
The study area includes and is adjacent to many important companies and industries for the Omaha – Council Bluffs region and contributes to the movement of freight for the local and regional economy.

Freight Routes and Truck Flows

The Omaha-Council Bluffs region has an expansive freight network that includes national, state, and local routes. With the north-south mobility provided by I-29 and the east-west mobility provided by I-80, freight truck traffic is common on the region's interstate system; a major challenge related to the presence of these facilities is truck traffic using state and local routes to get to these interstate routes, as is the case in the study area.

The truck routes and rail lines operating in the study area are shown in **Figure 2.9**.

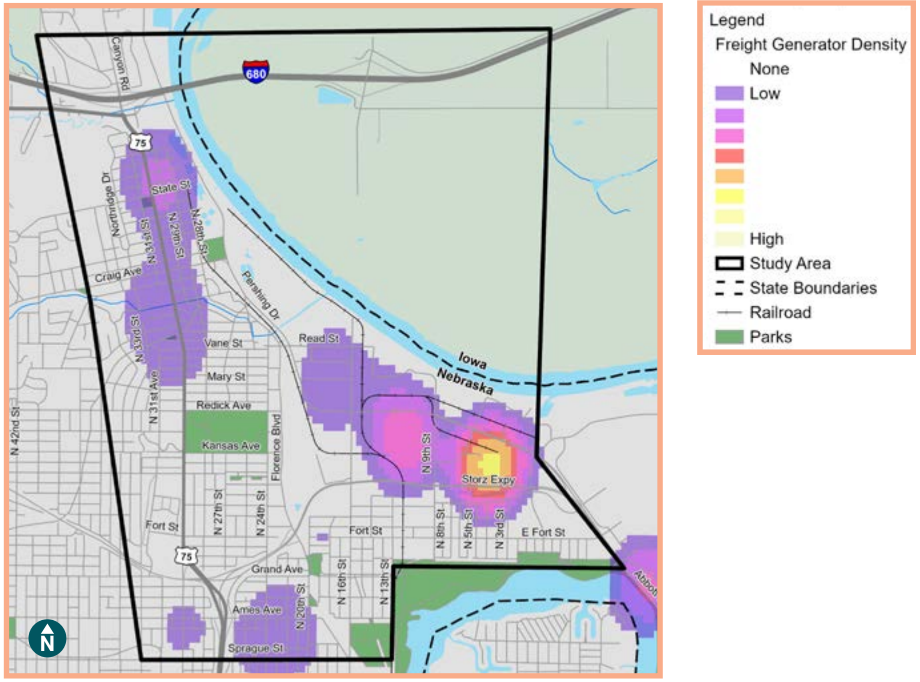
Figure 2.9 Truck Routes



Major Freight Generators

Available data on freight-related employment was paired with information on truck trip generation rates to estimate the density of freight generating land uses within the study area. As seen **Figure 2.10**, the highest concentration of freight generators is in the eastern part of the study area where much industrial activity occurs.

Figure 2.10 Freight Generator Density

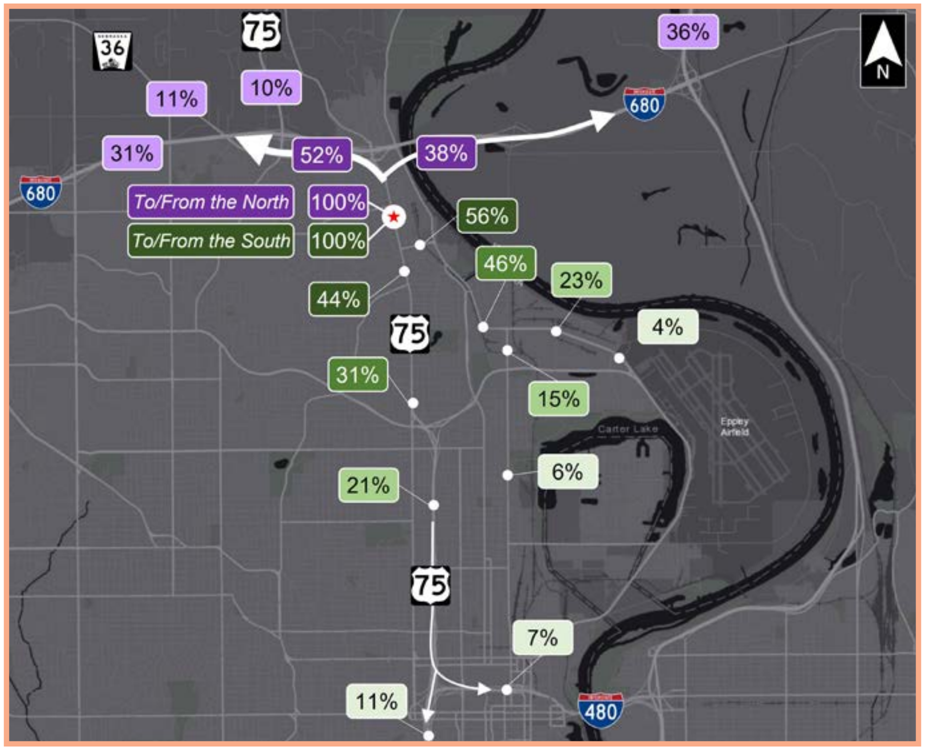


Truck Origin-Destination Analysis

One of the key issues in the study area is truck travel patterns, and how the movement of freight can be efficiently facilitated while limiting impacts on the surrounding community. Understanding where trucks begin their trips and where their destinations are is critical to improving the efficiency of freight. An origin-destination analysis was completed to identify where trucks are traveling through the study area and the routes they take; this analysis is summarized in **Figure 2.11**. This figure highlights the following:

- A majority of freight trips on 30th Street are locally generated in the industrial area north of Carter Lake
- 18% of freight that occurs on 30th Street reaches I-480
- 82% of freight that occurs on 30th Street is locally generated

Figure 2.11 Truck Origin-Destination



Transit System

Several Metro routes are operated in the study area and these routes have numerous stops located along them. The Metro routes operating in the study area are shown in **Figure 2.12** and include:

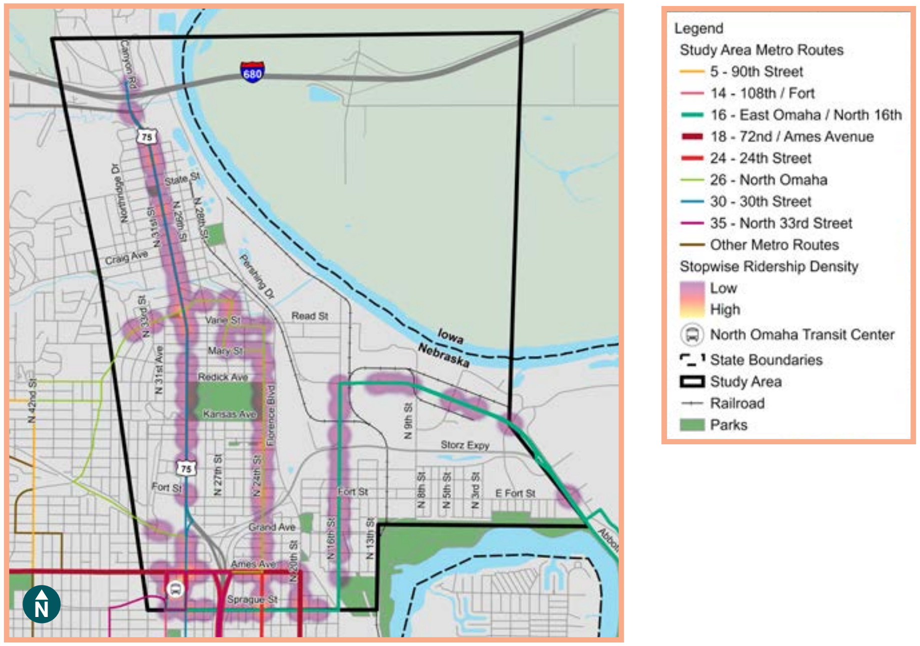
- **#5 –** 90th Street
- **#14 –** 108th / Fort
- **#16 –** East Omaha / North 16th
- **#18 –** 72nd / Ames Avenue
- **#24 –** 24th Street
- **#26 –** North Omaha
- **#30 –** 30th Street
- **#35 –** North 33rd Street

The North Omaha Transit Center is located within the study area, between 30th and 31st Streets north of Sprague Street.

Transit Ridership

Boarding and alighting data from Metro Transit in **Figure 2.12** shows ridership during pre COVID conditions, capturing system-wide boardings and alightings from February 2020.

Figure 2.12 Transit Ridership



Environmental Constraints

A desktop review of environmental constraints was conducted to identify any potential impacts proposed alternatives could have to study area environmental resources. Environmental constraints were categorized into the following:

- **Physical constraints –** geographic features such as floodplains, wetlands, levees, threatened and endangered species, and waterways
- **Human constraints –** social and cultural features such as historic districts, parks, trails, and regulated materials sites

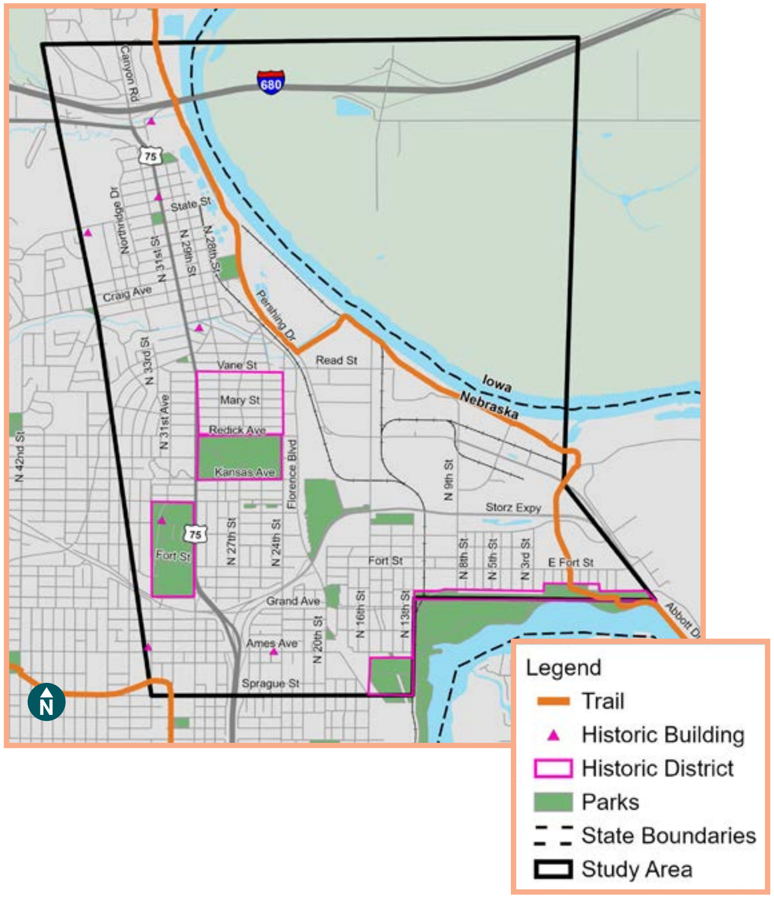
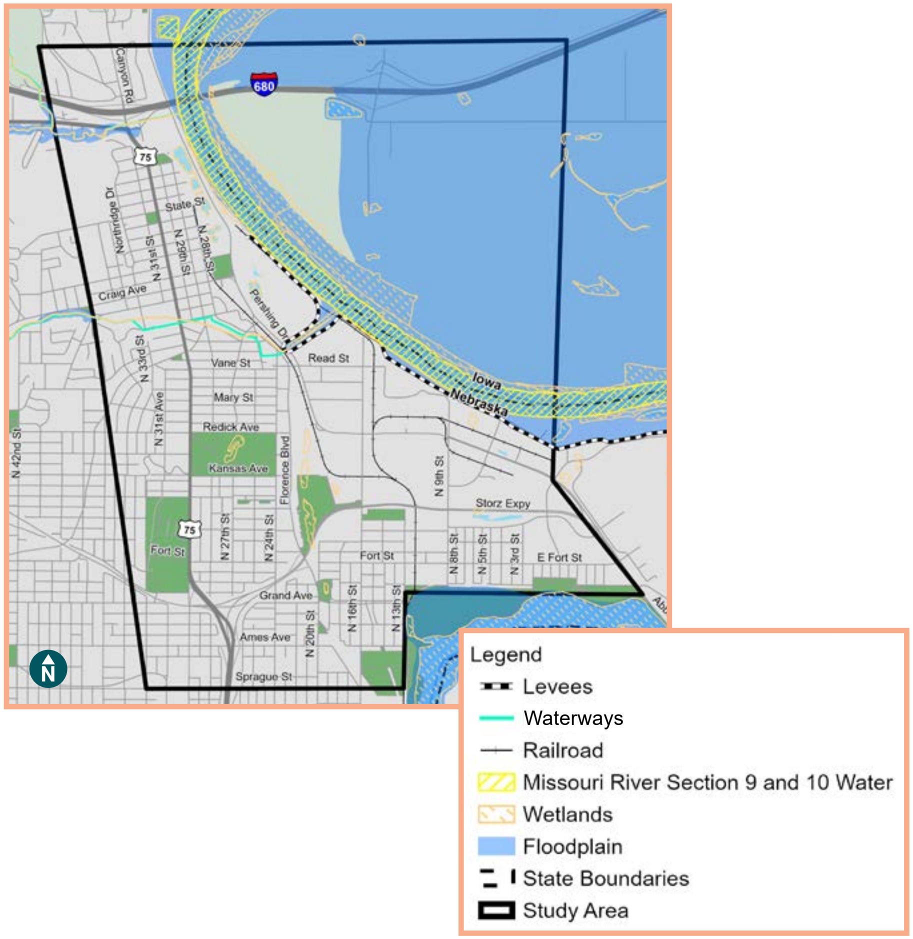


Figure 2.13 Environmental Human Constraints

Physical environmental constraints that exist in the study area are shown in **Figure 2.13** and include floodplain along the Missouri River and associated wetland areas. Human environmental constraints that exist in the study area are shown in **Figure 2.14** and include several historic districts located in the central part of the study area, several historic buildings, a number of parks, and a number of regulated material sites.



2.14 Environmental Physical Constraints

Develop and Screen Alternatives

Initial Alternatives

At the outset of the Highway 75 Corridor Feasibility Study process, the study team identified seven initial, generalized alternative alignments to connect between Storz Expressway / North Freeway and I-680. Initial alternatives are shown in **Figure 3.1**

Many of the initial alternatives were not carried forward for further consideration due to the high neighborhood impacts, limited potential to feasibly divert heavy trucks from 30th Street, or engineering feasibility. An evaluation matrix, shown in **Table 3.1**, was developed to compare initial alternatives. Potentially feasible build options were narrowed down to the no-build and Alternatives 4, 5, 6, and 7 (A / B).

Figure 3.1 Initial Alternative Alignments

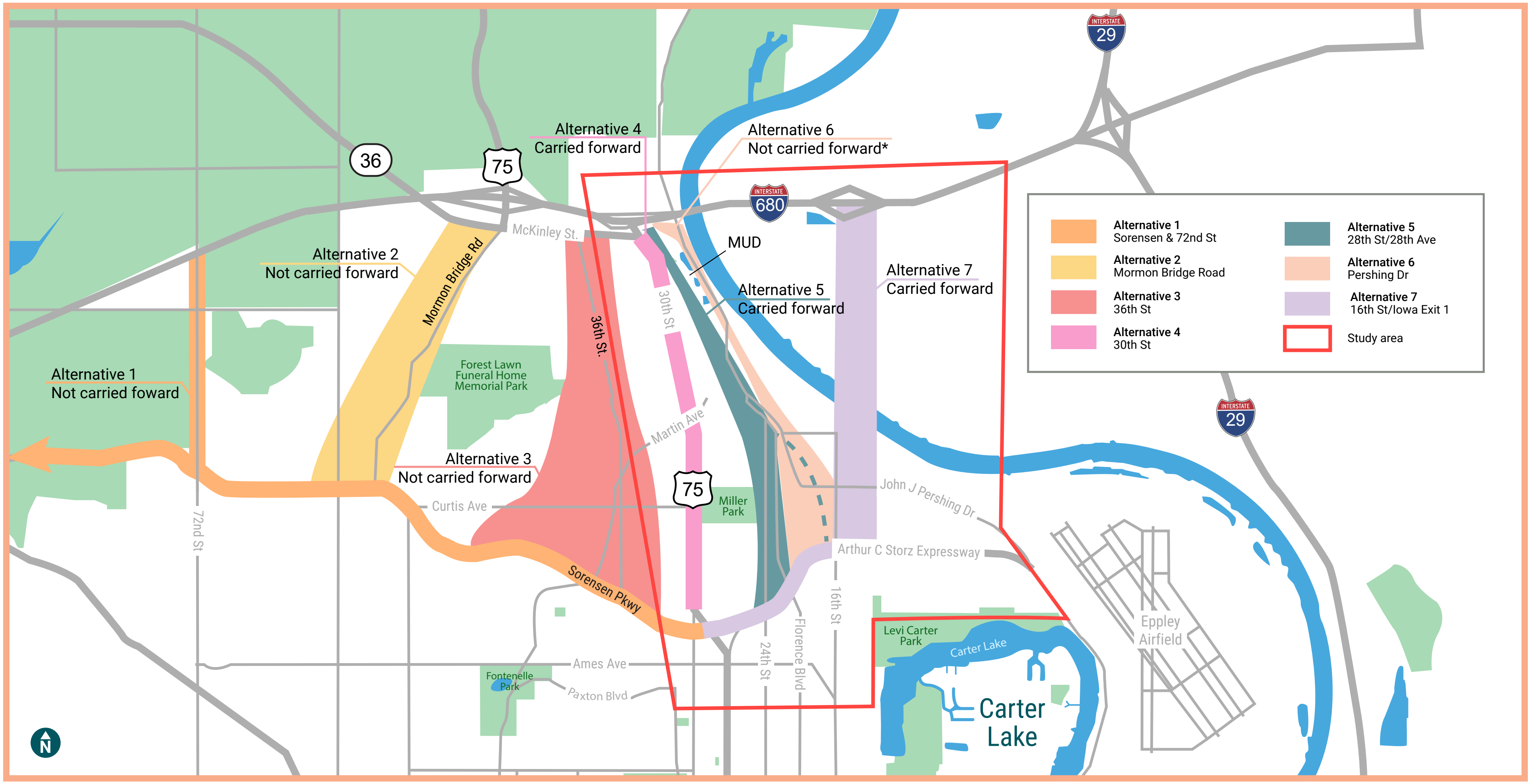


Table 3.1 Initial Alternatives Matrix

Potential Alignment	Neighborhood Impacts Limiting traffic in residential & business districts	Vehicular Mobility Maintaining vehicular travel time & reliability	Safety Reducing crash frequency & severity to all users	Accessibility for All Users Connecting people to places	Freight Movement Travel time/ reliability	Resiliency & Environment Minimize impacts to environment & impacts from natural events	Option Carried Forward
No-Build 30th St (Current Alignment)	−	−	−	−	−	−	Yes
Alternative 1 Sorensen Parkway & 72nd St	−	✗	−	−	✗	−	No
Alternative 2 Mormon Bridge Rd	✖	−	−	✓	✗	−	No
Alternative 3 36th Street	✖	−	−	✓	✗	✗	No
Alternative 4 30th Street Complete Street Enhancements	✓	✗	✓	✔	✗	−	Yes
Alternative 5 28th St / 28th Ave	✗	−	−	✓	−	✗	Yes
Alternative 6 Pershing Drive	✓	−	✔	✓	✔	✗	No*
Alternative 7 16th St / Iowa Exit 1 (Missouri River Crossing)	✔	✓	✔	✓	✔	✖	Yes

✔	✓	−	✗	✖
Improves		**Neutral**		**Worsens**

*Alternative 6 was carried forward for additional evaluation but was determined to be not feasible due to physical and environmental constraints between the water treatment plant and the Missouri River

Alternatives Removed from Consideration

Through the screening process outlined above, some of the alternatives that did not meet the basic mobility, safety, and / or community goals of the study were removed from further consideration. The initial three alternatives shown in **Figure 3.2** removed from consideration were:

- **Alternative 1:** This alternative would use existing Sorensen Parkway and 72nd Street. As this alignment is oriented significantly farther west than the existing US 75 and would create significant out of direction travel for travel to/from N36 (north), US 75 (north) and I-680 (east). As a replacement for the current Highway 75 corridor, Alternative 1 would be ineffective for most freight and commuters currently on Highway 75.
- **Alternative 2:** This alternative would use Sorensen Parkway and Mormon Bridge Road. Like Alternative 1, this alignment is farther west of the current US 75 alignment and would create significant out of direction travel for travel to/from I-680 (east). Mormon Bridge Road would require some reconstruction and widening to accommodate heavy freight and commuter traffic and would introduce significant new traffic levels to a new neighborhood leading to new neighborhood impacts.
- **Alternative 3:** This alternative would use 36th Street approximately 6 blocks west of the current Highway 75. This alignment would cause minor out of direction travel for travel to/from I-680 (east). This alternative also does not have a direct connection to an existing I-680 interchange. And like Alternative 2, this alternative would require significant reconstruction and widening to support the highway traffic and would have introduce significant new traffic levels to a new neighborhood leading to new neighborhood impacts.

Figure 3.2 Alternatives Screening

Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6*	Alt 7
Removed			Retained			

*Later discarded

Alternative 6, which would use Pershing Drive, was passed through the initial screening as it provides a relatively direct route between airport industrial areas and I-680. This would potentially offer traffic relief from 30th Street, and has the potential for a new street alignment with minimal impacts to homes and businesses. Alternative 6 was then evaluated in more detailed engineering assessments, with alignments that considered the existing Pershing Drive next to Metropolitan Utilities District's (MUD) Florence Water Plant and a new bridge / viaduct that would run parallel between Pershing and the Missouri River in an attempt to avoid the significant amount of utilities that run along Pershing Drive. After much investigation and preliminary concept development, Alternative 6 was not considered feasible due to impacts to underground infrastructure, impacts to side slope stability between Pershing and the Missouri River, and impacts to MUD plant access, operations and security.

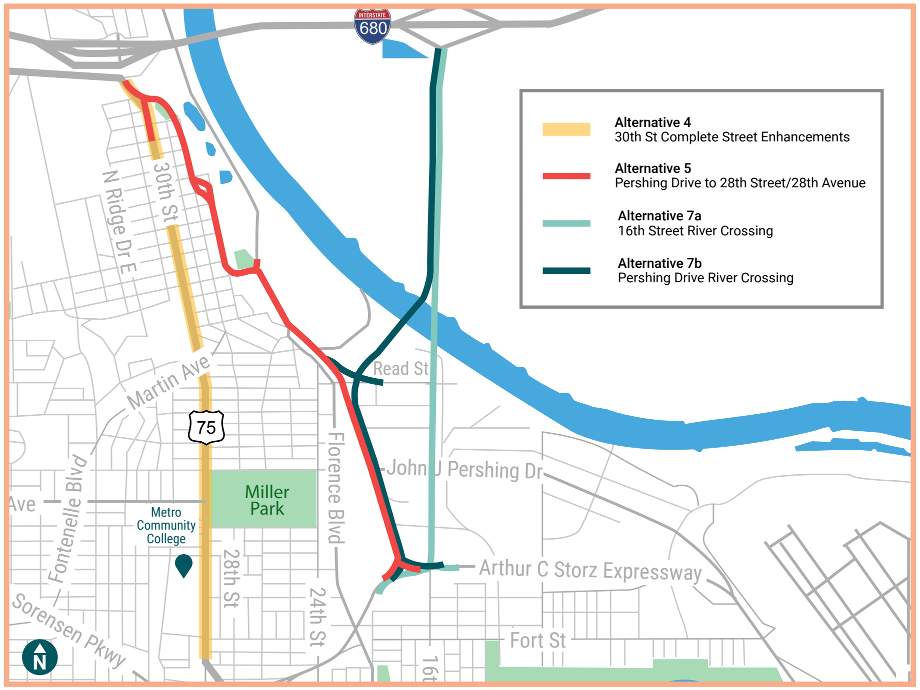
Figure 3.3 Example Alternative 6 Alignment Considered

Evaluation of Potentially Feasible Alternatives

Figure 3.4 provides an overview of the four potentially feasible alternative alignments carried forward from the initial alternatives screening. Lane configurations for each alternative were developed from future year travel demand forecasts combined with planning level volume to capacity analysis. The identified cross-sections were 3-lane (one through lane each direction with a center left turn lane) and 5-lane (two through lanes in each direction and a center left turn lane or median-divided with left turn lanes). Lane configurations for each alternative are:

- **Alternative 4:** 3 lane
- **Alternative 5:** 3 lane
- **Alternative 7A:** 5 lane
- **Alternative 7B:** 5 lane

Figure 3.4 Potentially Feasible Build Alternative Alignments



The no-build alternative would not construct a new connection to I-680. Traffic, including freight, would continue to use 30th Street, Craig Avenue and Pershing Drive among other routes to connect to I-680.

These are **DRAFT** preliminary improvement alternatives. Each alternative has not undergone detailed design or engineering. Future project steps including design and engineering would be necessary prior to moving forward with any alternative. Additionally, funding would need to be identified for any of these next steps.

Bicycle and pedestrian connections along the new alignments and across Storz Expressway to connect with the regional bicycle and pedestrian system are being considered for this alternative. Existing and proposed trail connections are shown on each figure. Sidewalks are not shown on each figure, but are assumed to parallel the alternative alignments where proposed trails are not present.

Alternative 4: 30th Street

If Highway 75 is designated on another alternative route (i.e., 5, 7A, or 7B), or if state and local policies changed to enable it as a standalone alternative, Alternative 4 could be implemented on 30th Street to potentially include several or all of the following traffic calming options and complete street amenities:

- Reducing the number of lanes & speed limit
- Adding pedestrian bump-outs
- Adding high visibility crossings
- Adding bicycle amenities
- Providing additional on-street parking
- Improved transit infrastructure and service

Alternative 4 would face fewer project development hurdles than Alternatives 5, 7A, and 7B since it does not have any:

- Right-of-way acquisition
- Park impacts
- Natural resource impacts

As noted previously, the challenge for Alternative 4 is that 30th Street is a designated truck route and national highway, and current policy would require at least four lanes to maintain current and projected traffic flow levels. Thus, a new Highway 75 alignment or change to state and local policy would be required for Alternative 4 to be implemented.

Between Willit Street & Tucker Street (Within the Florence Business District)

Figure 3.5 North Existing Configuration

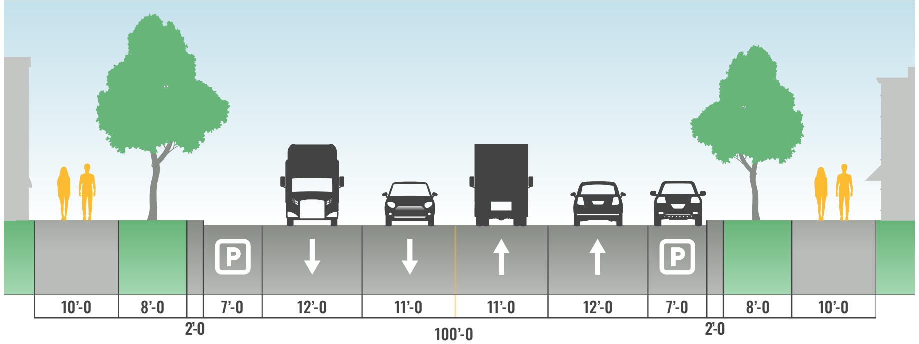


Figure 3.6 North Build Option A (Buffered Bike Lanes)

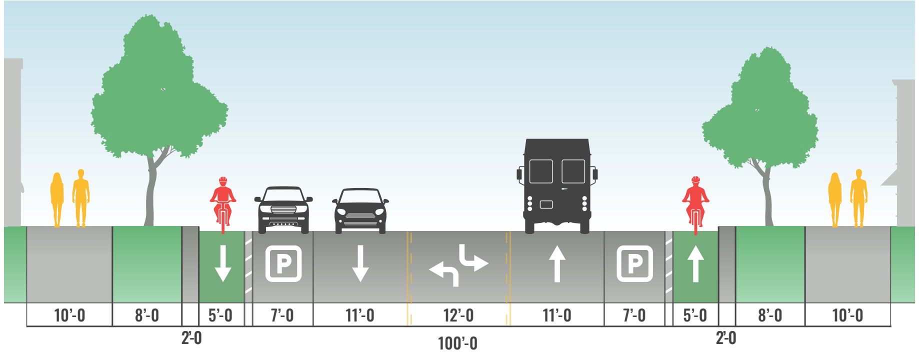


Figure 3.7 North Build Option B (Cycle Track)

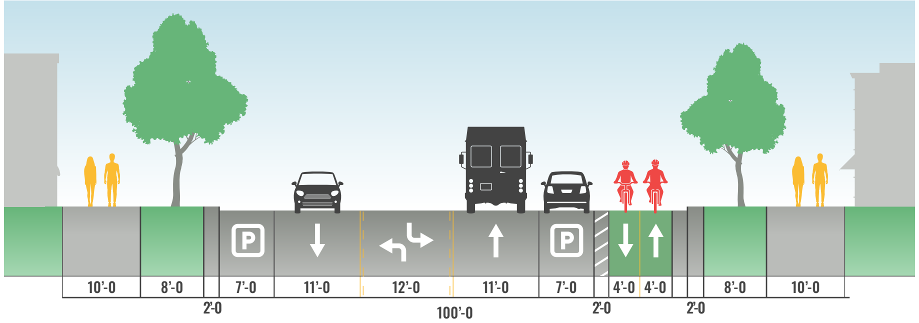
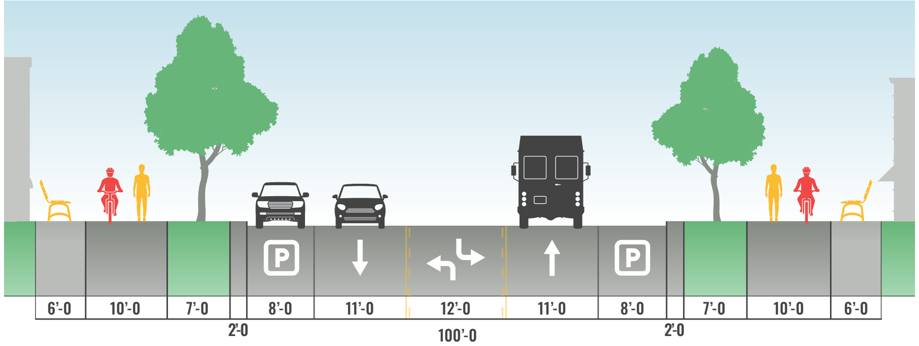


Figure 3.8 North Build Option C (Narrowed Curb-to-Curb Section)



Typical sections along 30th Street are intended to provide a range of example options and will be refined in later project development phases. The 30th Street corridor has a wide range of cross sections and any bicycle/pedestrian enhancements will need to be investigated at every block and every intersection along the corridor to determine a recommended solution.

Between Redick Ave (Miller Park) & Whitmore Street

Figure 3.9 South Existing Configuration

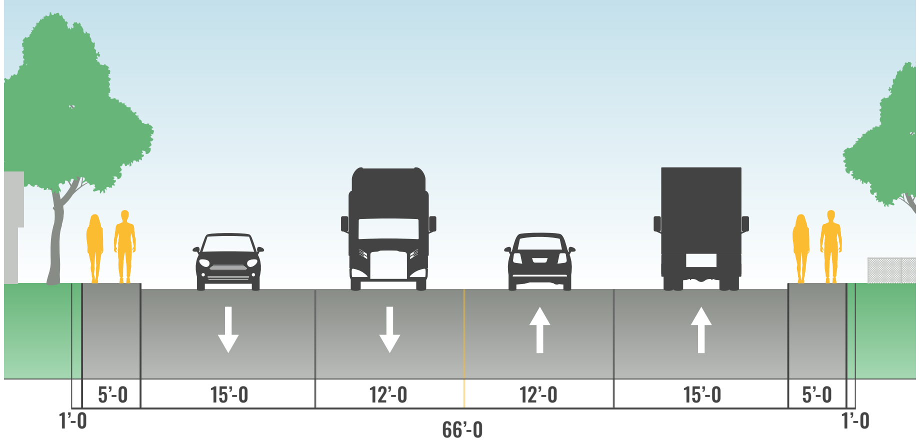


Figure 3.11 South Build Option B (Additional Parking) Figure

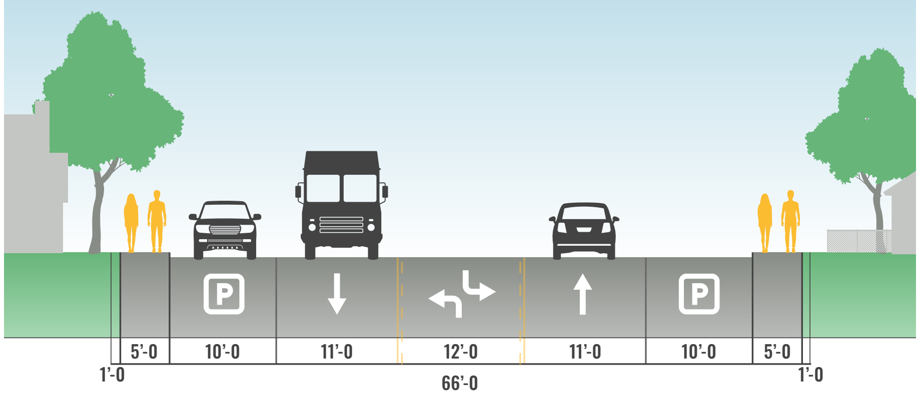


Figure 3.10 South Build Option A (Buffered Bike Lanes)

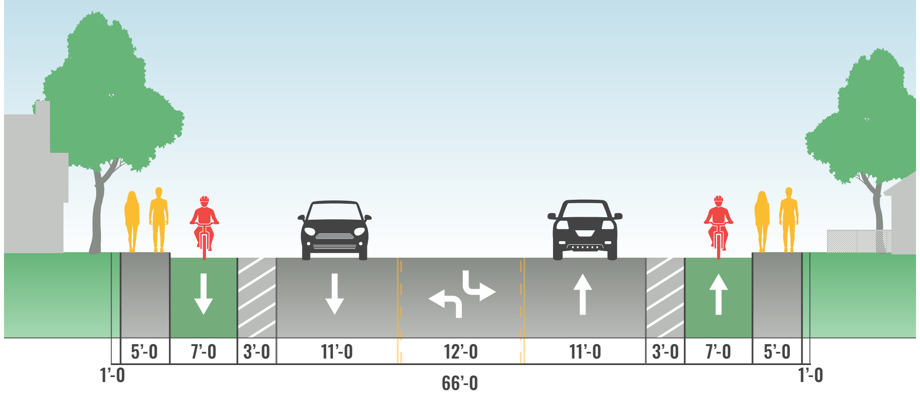
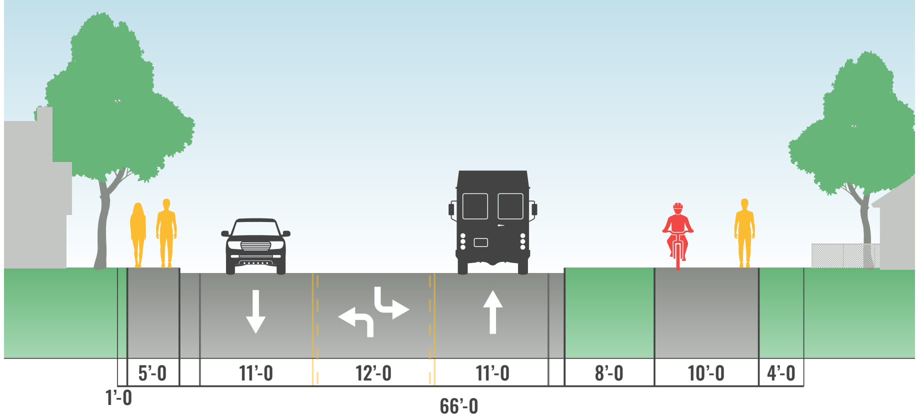


Figure 3.12 South Build Option C (Narrowed Curb-to-Curb Section with Trail)



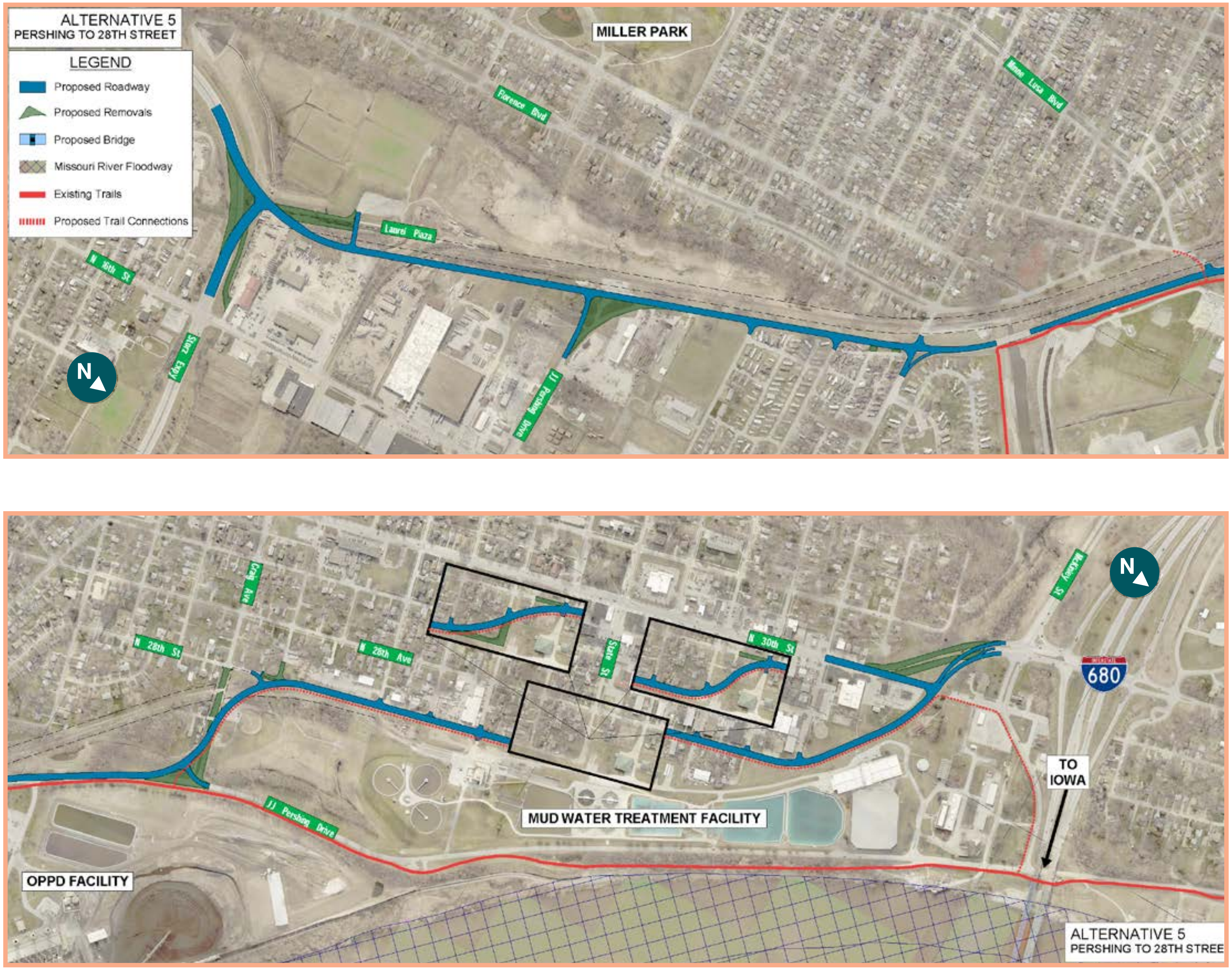
Typical sections along 30th Street are intended to provide a range of example options and will be refined in later project development phases. The 30th Street corridor has a wide range of cross sections and any bicycle/pedestrian enhancements will need to be investigated at every block and every intersection along the corridor to determine a recommended solution.

Alternative 5

Alternative 5 would begin using Storz Expressway then extend north connecting to the current Pershing Drive alignment. Continuing north, Alternative 5 would be located to the west of the Omaha Public Power District facility. Alternative 5 would then divert from current Pershing Drive and tie into the current 28th Street via Craig Avenue.

Alternative 5 would be located to the west of the MUD water treatment facility, diverting from current 28th Street and tying into current 28th Avenue at Tucker Street. At this tie in near State Street, two different horizontal curve options are being evaluated, dependent on right-of-way impacts and design speeds. Alternative 5 would continue to extend north and tie into existing I-680 in Nebraska at current “Exit 13,” 30th Street.

Figure 3.13 Alternative 5 Alignments

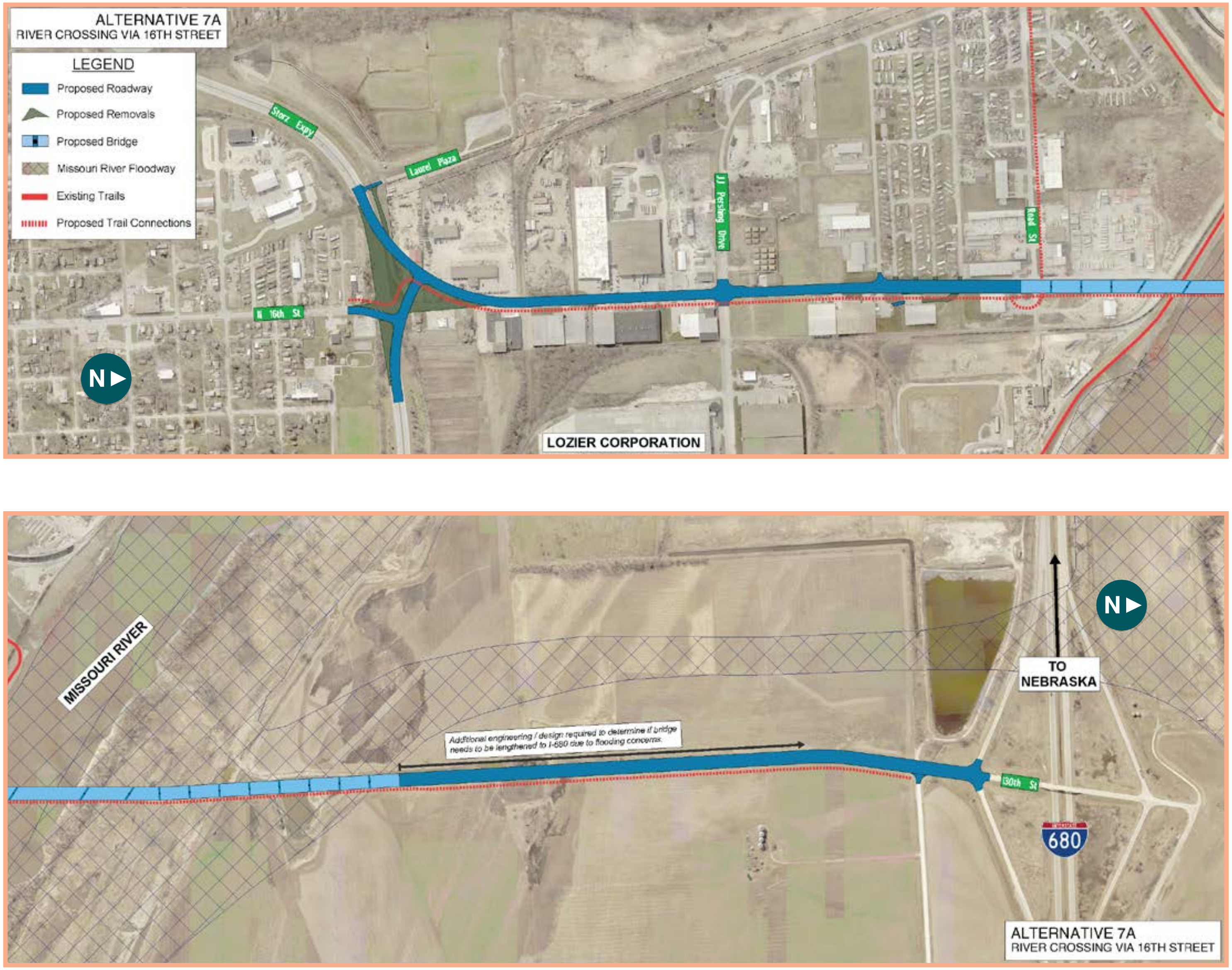


Alternative 7A

Alternative 7A assumes a 5-lane cross-section which would begin by using Storz Expressway and extend north at towards 16th Street. Alternative 7A would follow the existing 16th Street alignment before crossing the Missouri River. Alternative 7A would continue to extend north and tie into existing I-680 in Iowa at current "Exit 1".

Given the higher traffic volumes and high truck volumes south of the bridge, this alternative is assumed to be 5-lanes. It is also assumed that a 4-lane bridge (two through lanes northbound and two through lanes southbound) would be built. Traffic volumes forecast for the bridge through 2045 could likely be served from a capacity standpoint with one lane in each direction. However, as bridges are major, long-term investments and there is risk in underbuilding the span and 4-lanes were assumed.

Figure 3.14 Alternative 7a Alignments



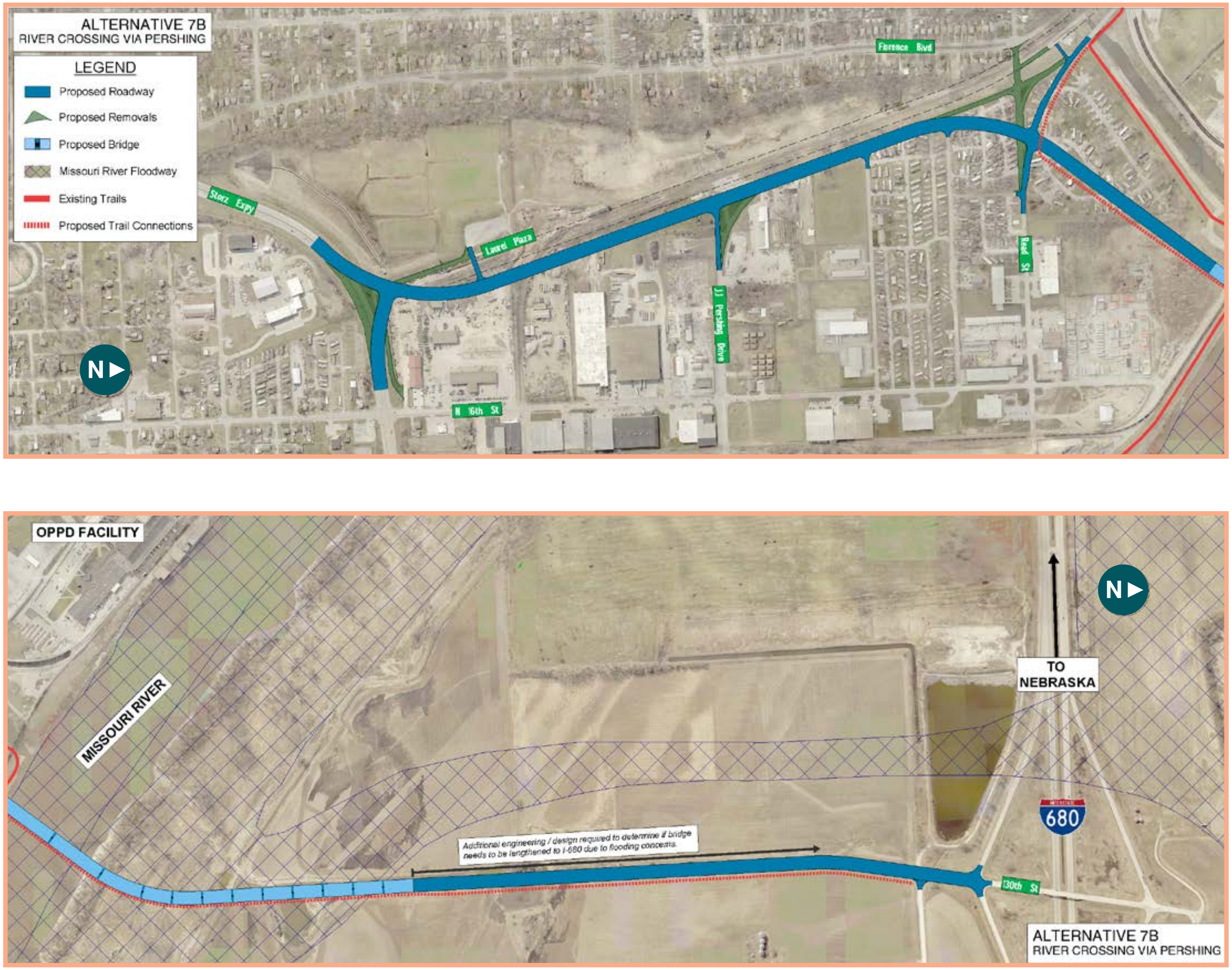
Additional engineering / design required to determine if bridge needs to be lengthened to I-680 due to flooding concerns.

Alternative 7B

Alternative 7B would begin using Storz Expressway then extend north connecting to the current Pershing Drive alignment. At Pershing Drive, Alternative 7B would stretch north before crossing the Missouri River just south of the Omaha Public Power District facility. Alternative 7B would continue to extend north and tie into existing I-680 in Iowa at current "Exit 1".

Similar to Alternative 7B, the higher forecasted traffic volumes and high truck volumes south of the bridge indicate the need for 5-lanes. A 4 lane bridge is also assumed due to the long-term major investment nature of bridges.

Figure 3.15 Alternative 7b Alignments



Community Impact Assessment Evaluation

The Community Impact Assessment looked at the post-implementation impacts of four alternatives on the neighborhood's transportation and mobility, traffic noise, cultural resources, property (including residential and business displacement), air quality, and economy.

Build Alternative Impacts

The new alignment options could impact the neighborhood both positively and negatively. The goal of the assessment is to consider impacts to key community characteristics after implementation of any new corridor alternatives. Community characteristics that were considered are in **Table 4.1**.

Table 4.1 Community Impact Table

Community Characteristic	Items Considered	
Population & Housing	• Race and ethnicity • Transportation • Disadvantaged populations • Disability housing	• English proficiency • Income • Impacts
Transportation & Mobility	• Active transportation • Access to jobs, services, & schools • Truck volume and routes	• Emergency response • Traffic volume • Travel times • Safety
Traffic Exposure	• Traffic exposure index	• Air quality • Noise impacts
Community & Cultural Resources	• Public utilities & services • Historic sites & districts • Medical & health care facilities • Schools	• Parks • Trails • Open space • Libraries
Property Acquisitions & Displacement	• Number of full & partial acquisitions • Number of residential unit displacements	• Acreage of acquisitions • Value of acquisitions • Number of business displacements
Income & Employment	• Economic development potential	
Community Cohesion	• Social characteristics • Community resources • Access to facilities	• Neighborhoods • Community identity • Quality of life • Festivals / fairs

Population and Housing

The study team established baseline conditions for several population indicators using different data. A brief summary of population indicators within the study area is listed below:

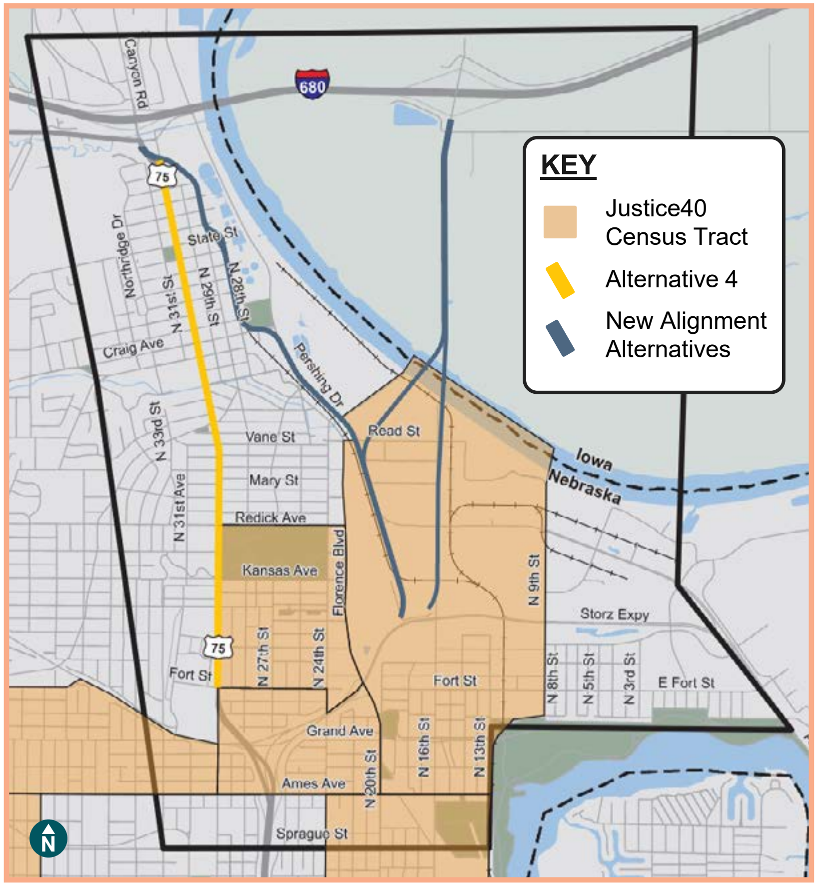
- **Race and ethnicity:** A majority of block groups fall within the 80th percentile or higher for minority populations, with most of the southern portion of the study area ranking in the 95th percentile or higher.
- **Age:** A significant number of older residents over the age of 64 live south of Craig Avenue and east of 30th Street. Several block groups in the central and southern parts of the study area are in the 80th percentile or higher for residents under the age of 5.
- **Population density:** The study area has a wide range of population densities, but most census tracts range between approximately 4,000 people to over 6,000 people per square mile. For comparison, typical population densities in downtown range between 7,000 and 10,000 people per square mile and typical west Omaha population densities range between 2,000 and 3,000 people per square mile.
- **Disability:** A majority of the study area has 16-20% of the population with a disability which is above Nebraska's statewide average of 12%.
- **English proficiency:** Several block groups rank in the 70th percentile or higher for linguistically isolated populations.
- **Income:** A majority of the study area residents rank in the 80th percentile or higher for low income.

The study team also reviewed existing zoning, exiting land use, and future land use within the study area as it relates to housing. The study area land use is a large area of high-density single family residential, and some commercial, educational, and recreational land uses all divided by 30th Street, designated Highway 75.

Population and Housing Impacts

The Community Impact Assessment includes looking at potential Highway 75 alternatives through the lens of equity. The range of alternatives were compared against USDOT defined census tracks that met the definition of "transportation disadvantaged". As a part of USDOT's Justice40 initiative, there are census tracts that meet criteria for being statistically disadvantaged in the categories of historically, transportation, health, economy, equity, resilience, and environment. As shown in **Figure 4.1**, parts of five census tracts at the south end of the study area meet the definition of transportation disadvantaged tracts.

Figure 4.1 Transportation Disadvantaged Census Tracts



New alternative alignments (Alternative 5, 7A, and 7B) will likely not accelerate the pace of residential development or impact the population growth within the study area. Development along 30th Street may accelerate if the areas adjacent to 30th Street become more walkable and livable community by:

- Reducing traffic volumes (including freight volumes) along 30th Street
- Converting 30th Street from its current four lane cross-section to a three lane cross-section

Population and Housing Summary

Alternative 4

Reduced traffic volumes on 30th Street, a reduced 30th Street cross section, combined with pedestrian crossing amenities (intersection bump-outs and high visibility crossings) can provide a significant benefit to the elderly population and younger residents crossing 30th Street. Reducing vehicle speeds and crossing distances would provide a safety benefit for pedestrians and cyclists crossing 30th Street.

Alternative 5

The proposed alignment of Alternative 5 would impact single family homes on 28th Street and 28th Avenue between Craig Avenue and Bondesson Street. These impacts and potential residential displacements are discussed in detail in the Property Acquisitions and Displacement section.

Alternative 7A & 7B

The proposed alignment of Alternative 7A would not impact residential properties by utilizing the existing 16th Street alignment and land that has not been developed on the Iowa side due to the Missouri River floodplain.

Alternative 7B

The proposed alignment of Alternative 7B would impact a mobile home park southeast of OPPD. These impacts and potential residential displacements are discussed in detail in the Property Acquisitions and Displacement section.

Transportation and Mobility

The study team established baseline multimodal conditions including:

- Volume to capacity ratios
- Freight volumes and Origin-Destination patterns
- Safety summaries
- Bicycle level of service
- Intersection level of service
- Transit routes and ridership

New alignments would have a significant impact on travel patterns and modes within the study area.

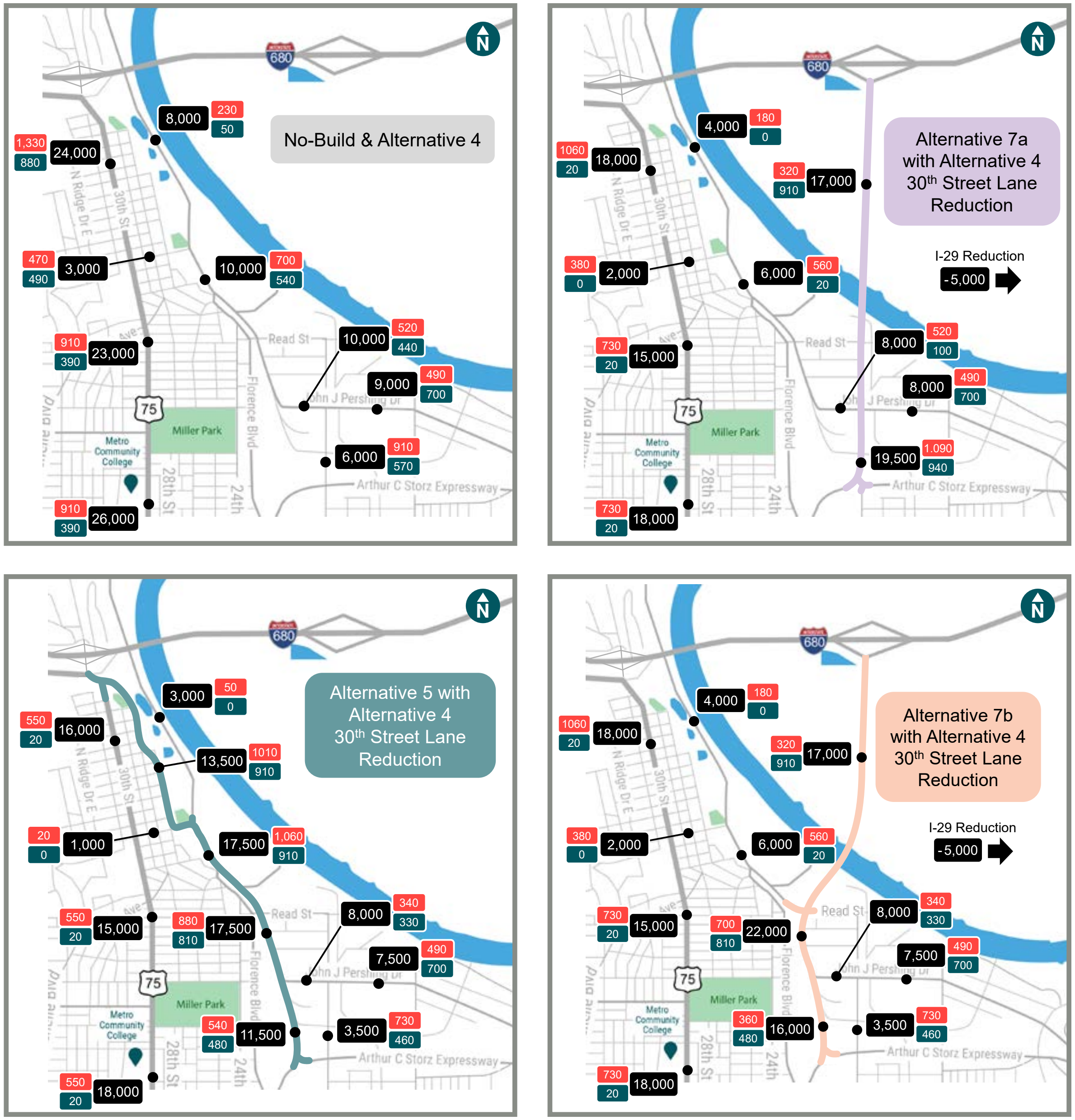
Transportation / Mobility Impacts

Traffic Volumes

Future year traffic volumes are shown in **Figure 4.2**. Future year forecasts for all vehicles were developed using MAPA's Travel Demand Model.

- Traffic volumes for Alternative 4 & 5 reduce 30th Street trips in Florence by 8,000 compared to the no build, which is more than the bridge alternatives. The new alignment reduces the ADT in front of MUD by 5,000 compared to the no build.
- Traffic volumes for the bridge alternatives carry 17,000 ADT across the Missouri River. These alternatives reduce trips along I-29 by 5,000 ADT compared to the no-build due to a more direct route from downtown Omaha to I-29 north of I-680.

Figure 4.2 Traffic Volumes



Daily single unit trucks
Daily heavy trucks
Future ADT

Level of Service

Volume to capacity ratios were calculated for the no-build and build alternatives. Future year volumes, shown in **Figure 4.3**, were compared to daily capacities from MAPA's travel demand model with minor adjustments based on access spacing, vehicle mix, and cross street traffic were used. A key map for the volume to capacity ratios is shown in **Figure 4.3** with ID's matching the segment column in **Table 4.2**.

Figure 4.3 Volume to Capacity Key Map

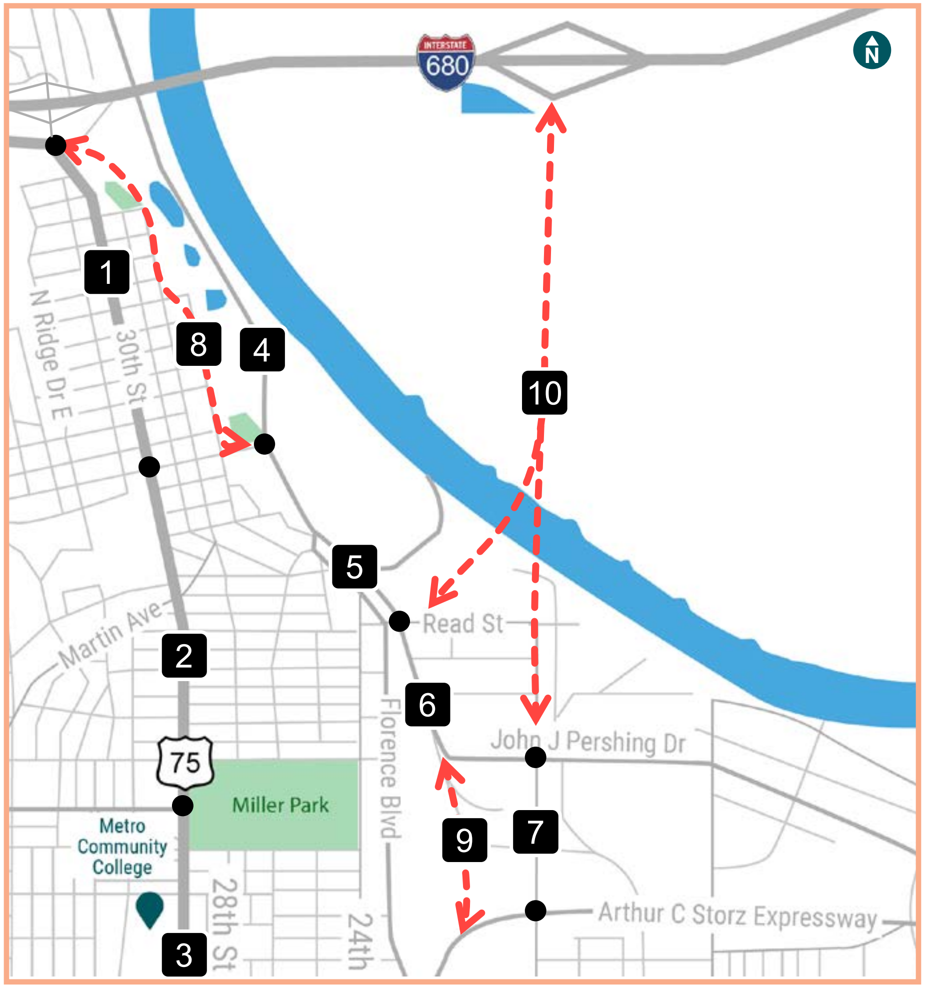


Table 4.2 Future Year Planning-Level Volume to Capacity Ratios

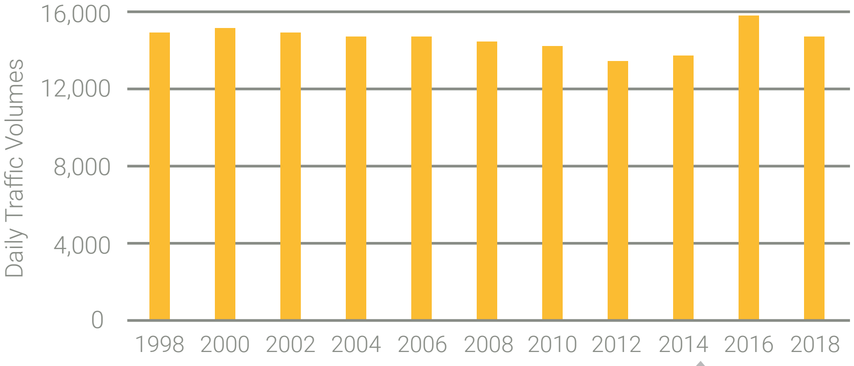
Segment	No-Build		Alt 4[1]		Alt 4 & 5		Alt 4 & 7a		Alt 4 & 7b	
ID	Lanes	V/C	Lanes	V/C	Lanes	V/C	Lanes	V/C	Lanes	V/C
1	4	0.80	**3**	**1.33**	3	0.89	3	1.00	3	1.00
2	4	0.77	**3**	**1.28**	3	0.83	3	0.83	3	0.83
3	4	0.87	**3**	**1.44**	3	1.00	3	1.00	3	1.00
4	2	0.67	2	0.67	2	0.25	2	0.33	2	0.33
5	2	0.83	2	0.83	**3**	**0.88**	2	0.50	2	0.50
6	2	0.83	2	0.83	**3**	**0.88**	5	0.67	**5**	**0.55**
7	2	0.60	2	0.60	2	0.35	**5**	**0.49**	2	0.35
8	–	–	–	–	**3**	**0.68**	–	–	–	–
9	–	–	–	–	**3**	**0.58**	–	–	**5**	**0.40**
10	–	–	–	–	–	–	**5**	**0.43**	**5**	**0.43**

[1] Alternative 4 V/C ratios assumed no traffic diversion from the No-Build forecasted volumes. It is anticipated that pass-through commuters may avoid the 30th Street corridor and use alternative routes during peak periods.

Bolded cells in ID 5–10 indicate segments along build alternative alignments

For the build alternatives, various segments are at or approaching a future year volume to capacity ratio of 1.0. It is important to note that the year 2050 forecasted volumes from MAPA's model include sizable redevelopment within and around the study area. Shown in **Figure 4.4**, historical daily traffic volumes along 30th Street have hovered around 14,000– 16,000 since 1998.

Figure 4.4 Historical Average Daily Traffic on 30th Street (South of McKinley Street)



Travel Times

Travel time comparisons between the 30th Street alignment and build alignments were developed. Two main Origin-Destination pairs, shown in **Figure 4.5**, were selected to assess travel times through the study area.

- Between I-680 & Ames Avenue: Representing north-south trips through the study area
- Between I-680 & 9th Street / Pershing Drive:
  - Represents heavy freight movements to/from industrial land uses north of Carter Lake
  - Represents trips to / from the airport

Average travel times, shown in **Table 4.3**, are split into two categories to represent I-680 trips to/from the west and to/from the east. Travel times represent existing peak period travel conditions. It is expected that all travel times would increase slightly in the future due to traffic grown in the study area.

- I-680 traffic to/from the west includes trips from N-36, Highway 75, or I-680 that travel into the study area.
- I-680 traffic to/from the east includes trips from Iowa that travel into the study area.

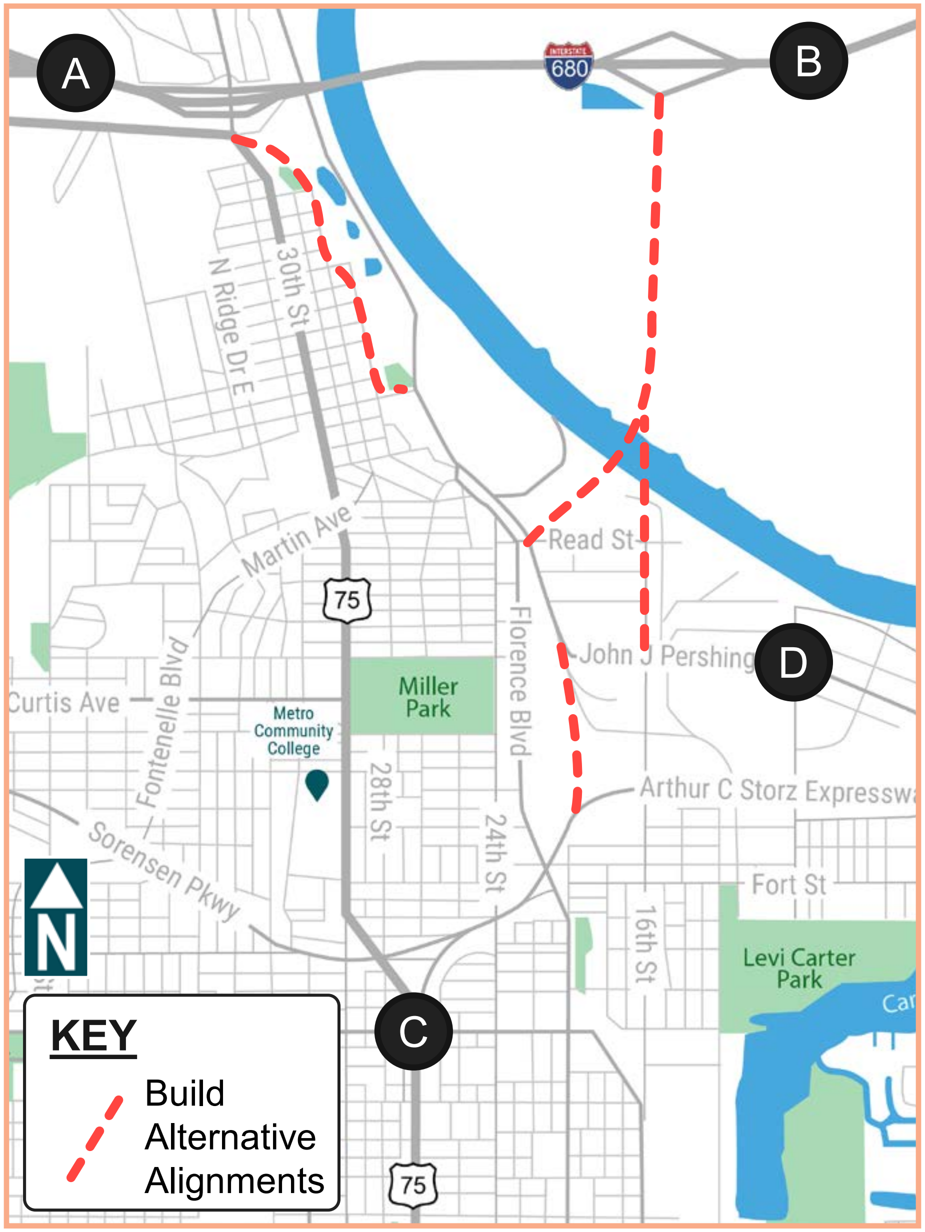
Table 4.3 Peak Period Travel Time Comparisons – Estimated Year 2022 Traffic Conditions

Route	Origin-Destination Travel Time (minutes)			
	To/From West		To/From East	
	A–C	A–D	B–C	B–D
Existing Road Network[1]	9.0	9.0	10.5	10.5
Via Alternative 4	12.0	10.0	13.5	11.5
Via Alternative 5	8.0	7.5	9.5	9.0
Via Alternative 7a	7.5	6.5	6.0	5.0
Via Alternative 7b	7.5	7.0	6.0	5.5

[1] *Utilizing Road Network that aligns with City of Omaha Truck Routes, including 30th Street*

Travel times for Alternative 4 are expected to be slower than the "Existing Road Network" travel times noted in **Table 4.3** due to traffic calming measures along 30th Street.

Figure 4.5 Origin-Destination Key Map



Safety

Two safety metrics were used to compare the no-build alternative to the new alignment and reconfiguration options: conflict area comparison and lane reduction benefits.

Conflict Area Comparison

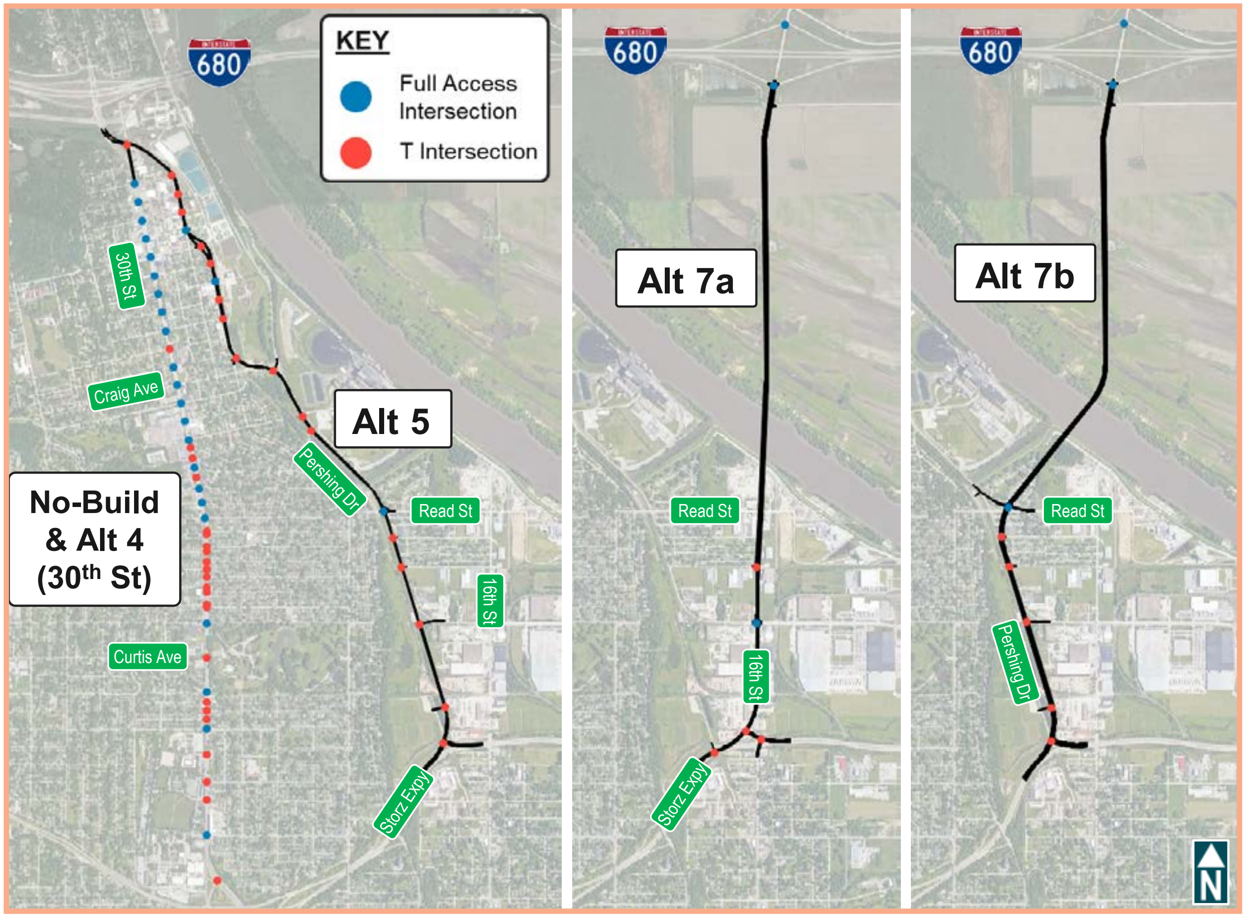
A summary of intersection access along 30th Street compared to the new alternative alignments is shown in **Figure 4.6** and **Table 4.4**. 30th Street currently has 45 intersections between McKinley Street and Sorensen Parkway not including numerous residential and business driveways.

Table 4.4 Intersection Summary

Alternative	Intersections
No-Build	45
Alt 4	45
Alt 5	20
Alt 7a	7
Alt 7b	8

The new alternative alignments provide a more controlled access route for heavy trucks and pass through trips. These routes require out-of-direction travel for some origin-destination pairs which may increase exposure due to the length of the alternative route. However, it is expected that the alternatives will provide a net safety benefit.

Figure 4.6 Conflict Area Comparison



KEY

● Full Access Intersection

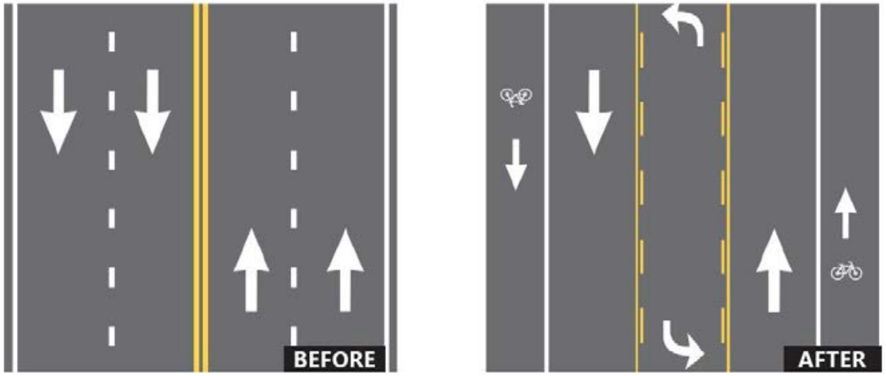
● T Intersection

Lane Reduction Benefits

The new alternative alignments provide a travel time and reliability benefit to pass-through trips between I-680 & Storz Expressway / North Freeway. As shown previously in **Figure 4.6**, MAPA's TDM shifts 6,000 - 8,000 ADT from the 30th Street alignment to the new alternative alignments. This shift in traffic volumes will allow for more limited travel delays if the number of lanes on 30th Street is reduced to a three lane section (one lane in each direction with a two-way-left-turn-lane).

FHWA has developed a list of proven safety countermeasures that are proven to be effective throughout the country. One of the proven safety countermeasures is a roadway reconfiguration, shown in **Figure 4.7**.

Figure 4.7 Road Diet Examples



Source: FHWA

FHWA notes that the total crash reduction for a four-lane to three-lane conversion can range from 19%–47%.

A planning-level predictive safety analysis was completed at major intersections within the study area. If implemented today, it is anticipated that all three of the build alternatives (5, 7a, and 7b) in tandem with Alternative 4 would reduce the number of crashes by approximately 28 crashes per year, or about 31% fewer crashes annually. This percentage could improve depending on the level of investment in safety enhancements along the 30th Street corridor.

For bicyclists, the level of traffic stress (LTS) with the lane reductions on 30th Street would be:

- **Current:** 35 miles per hour and 4-5 lanes = LTS 4 (high stress)
- **Potential:** 30 miles per hour and 3 lanes = LTS 3 (moderate stress)

Transportation and Mobility Summary

Safety

Overall safety benefits within the study area are anticipated for all modes. Main contributors to improved safety along 30th Street for all modes include roadway conversion to a three-lane section, volume reduction due to improved travel times on parallel routes, and the potential for bicycle and pedestrian enhancements (intersection bump-outs, high visibility crossings, leading pedestrian intervals, and various bicycle treatments).

Travel Time & Level of Service

Vehicular and freight travel times through the study area are expected to improve for Alternatives 5, 7a, and 7b. New alignments will provide a more controlled access route with less intersections and driveways compared to 30th Street. Planning level volume-to-capacity ratios are expected to approach 1.0 for the 30th Street reconfiguration and Alternative 5.

Access to Jobs, Services, & Schools

Limited changes to vehicular and transit access to jobs, services, and schools are expected compared to the no-build condition. Potential bicycle and pedestrian enhancements along 30th Street are expected bike access and walk access to services and schools within the study area.

Emergency Response

Three Omaha fire stations (#21, #22, and #23) are located within the study area. The 30th Street Roadway conversion to a three-lane section can help provide a safe and clear path for emergency vehicles. Existing portions of 30th Street that are undivided can cause confusion for vehicles pulling over for an emergency vehicle. The two-way-left-turn-lane in the proposed three-lane section gives emergency vehicles a way to bypass traffic if necessary, resulting in similar or improved response times compared to the current roadway configuration.

Additionally, Alternative 5 would provide a more direct route for Omaha fire station #23 to areas east of 30th Street.

Exposure and Traffic Noise

The study team focused on two metrics for exposure and traffic noise to compare the no-build alternative to new alignment and reconfiguration options:

1. **Residential Traffic Exposure:** An index was calculated for residences that may have large volume changes in front of their residence. This index focused on 30th Street, Craig Avenue, Pershing Drive, and the new alignments. The exposure index was calculated for all vehicles and heavy trucks, to show the relative differences in how many vehicles pass residences in each scenario. The exposure index calculation is shown below. Note that the exposure index was divided by a constant to obtain the values shown in **Table 4.5**.

$$\begin{aligned}\text{Exposure Index} = {} & (\text{ADT}_{\text{Segment 1}} \times \#\,\text{Residences}_{\text{Segment 1}}) \\ & + (\text{ADT}_{\text{Segment 2}} \times \#\,\text{Residences}_{\text{Segment 2}}) \\ & + (\text{ADT}_{\text{Segment i}} \times \#\,\text{Residences}_{\text{Segment i}})\end{aligned}$$

2. **Traffic Noise:** Traffic noise levels are evaluated on transportation projects within a set of defined policies and procedures. At this high level of study, a planning-level approach was used that generally follows the FHWA policy and guidance to screen for potential noise impacts if a project were constructed. We created a buffer analysis, at which distance represented the farthest extent of anticipated residential noise impacts (defined as approaching or exceeding the worst-hour of traffic noise levels). For residential uses, the criteria for exceeding the noise threshold is defined as 67 decibels (dBA), and approaching the noise threshold is defined as 66 dBA. Thus, noise buffers that reflected the 66 dBA noise impact threshold were developed for future traffic conditions. Noise impacts were buffered off the existing or proposed roadway edge. Residences where these buffers overlap with areas of frequent use were summed for each alternative. Items included in the noise analysis:
    - Design hourly volume
    - Vehicle mix (passenger cars, single unit trucks, and heavy trucks)
    - Roadway typical section (number of lanes and roadway width)

This planning level approach is appropriate for determining relative noise impacts when comparing alternatives, but more detailed noise assessments would be required in later steps of the project development process.

Exposure and Traffic Noise Impacts

Residential Traffic Exposure

Results for the residential exposure index for all vehicles and for heavy trucks is shown in **Table 4.5**. A higher index value represents more daily vehicle and truck traffic in front of residences.

All build alternatives ranked more favorably than the no-build alternative. The bridge alternatives ranked the best due to the re-routing of traffic into Iowa.

Table 4.5 Residential Traffic Exposure Index

Alternative	ADT Index	Heavy Truck Index
No-Build	3.0	81.4
Alternative 4	3.0	81.4
Alternative 4 & 5	2.3	28.6
Alternative 4 & 7a	2.1	4.7
Alternative 4 & 7b	2.1	8.9

Traffic Noise

The noise analysis results are shown in **Table 4.6**, including the number of impacted residential properties for each alternative. All new alignment alternatives reduce the total number of residential properties impacted by noise. The bridge alternatives reduce the number of impacted residences the most due to the limited development in Iowa.

Table 4.6 Noise Impacted Residences Summary

Alternative	Total Impacted Residences	Residences Located in Transportation Disadvantaged Tracts (DAT)
No-Build	115	19
Alternative 4[1]	115	19
Alternative 4 & 5	43	18
Alternative 4 & 7a	17	5
Alternative 4 & 7b	17	5

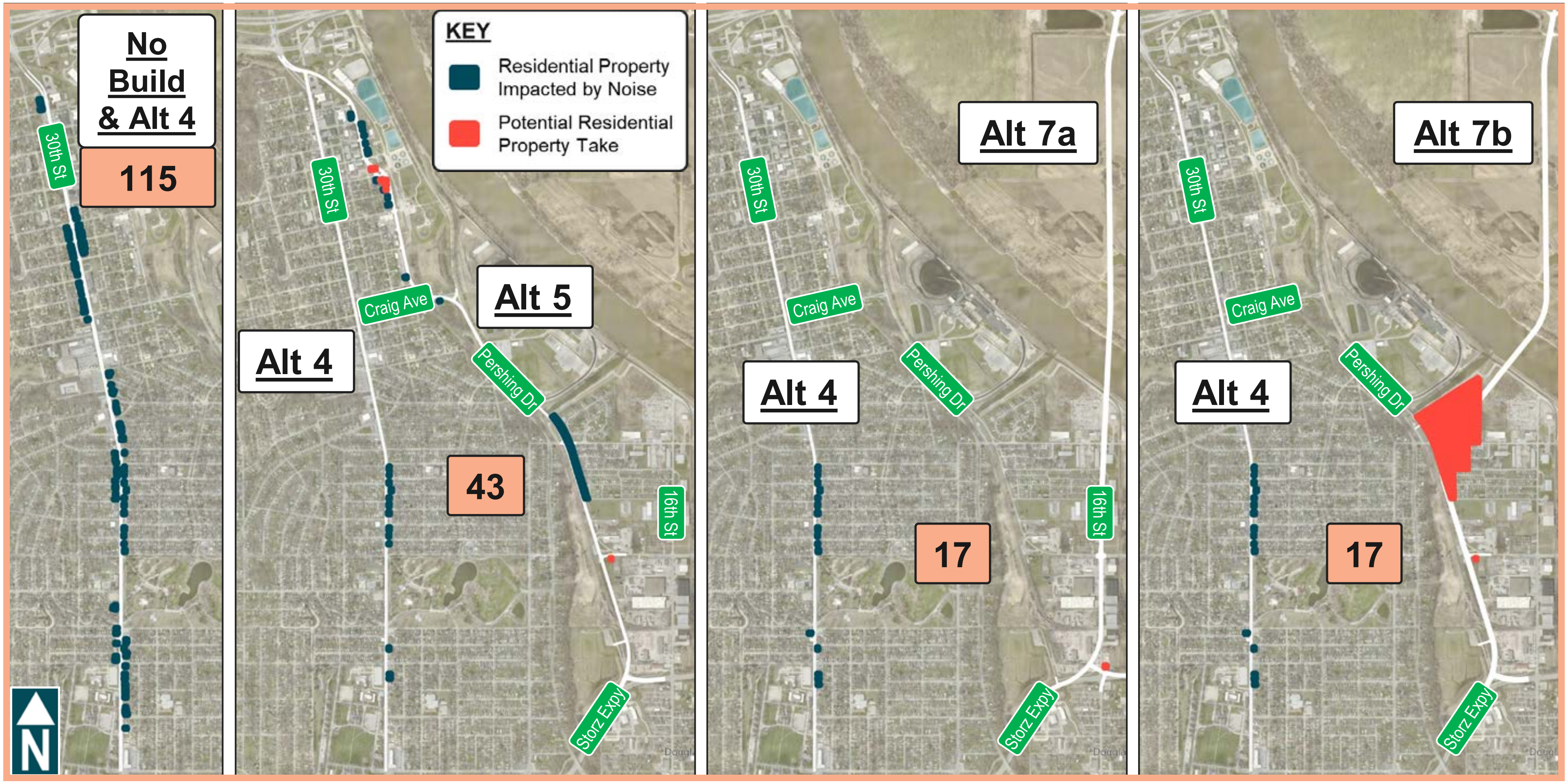
[1] *Alternative 4 speeds are 5 mph slower than the No-Build conditions. For purposes of this study, the planning-level noise analysis assumed no change to the number impacted residences between the No-Build and Alternative 4.*

Exposure and Traffic Noise Summary

Results from the analysis show a net reduction in exposure and traffic noise impacts for the study area for all build alternatives. The main factor for this reduction is the shift in average daily traffic from the 30th Street alignment to areas with a lower number of residential properties. The study team looked at the forecasted traffic shift due to the potential alternative alignments to assess if an alternative is shifting traffic into disadvantaged community (or vice versa).

Five DATs are fully or partially located within the project study area. As shown in **Table 4.8**, the no-build and build alignment alternatives all have noise impacts in DATs, with all build alternatives reducing the total impacted residences and residences located in DATs.

Figure 4.8 Planning Level Noise Impact Analysis Results



Community and Cultural Resources

This category was evaluated for impacts the new alignments have on the following items:

- Historic sites and districts
- Parks / open space
- Trails
- Natural resources

There are several parks, open spaces, and trails in the study area. The following historic properties are located in the study area:

- **Florence City Hall –** 2864 State Street
- **Florence Firehouse –** 8415 North 29th Street
- **Florence Depot –** 9000 North 30th Street
- **The Keirle House –** 3017 Mormon Street
- **Weber Mill (Florence Mill) –** 9102 N 30th Street
- **Bank of Florence –** 8502 North 30th Street (30th & Willit)
- **Notre Dame Academy and Convent –** 3501 State Street
- **Henry Neef House –** 2884 Iowa Street
- **Crook House –** 3000 Fort Street
- **Immanuel Deaconess Institute Nurses' Home –** 3483 Larimore Avenue
- **Druid Hall –** 2412 Ames Avenue
- **Minne Lusa Residential Historic District**
- **Fort Omaha Historic District**

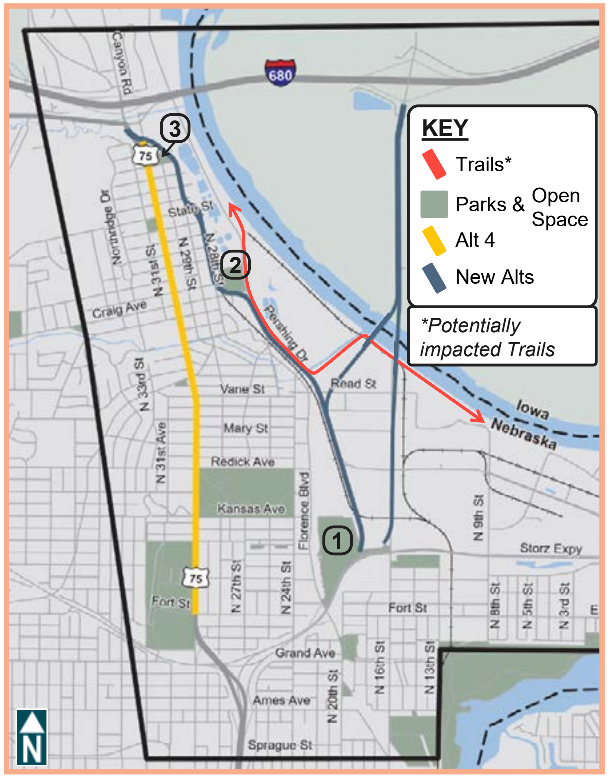
On National Register of Historic Places

The following parks and public buildings are located in the study area:

- Miller Park
- 28th and Craig Park
- Florence Park
- North Market Square Park
- Florence Public Library
- Miller Park Elementary
- Minne Lusa Elementary
- Nelson Mandela Elementary School
- St Philip Neri Elementary School

None of the listed historic sites are impacted by any of the proposed alternatives, so there are no negative impacts to these cultural amenities. Alternative 5 passes near the Florence Depot and approximately one block from the Florence City Hall and Firehouse. Remaining impacts to parks and trails are shown in **Figure 4.9** and detailed on the following page.

Figure 4.9 Impacts to Trails & Parks



Impacts to community and cultural resources are also listed below.

Alternative 4: No impacts – alternative stays within existing ROW

Alternative 5:

- Potential impacts to parks / open space:
  - **ID 1:** Driveway access impacts to the Rugby Football Club fields (Storz stormwater detention basin)
  - **ID 2:** Craig Park parking lot and driveway access impacts
  - **ID 3:** North Market Square Park baseball field impacts
- Existing trail along Pershing Drive between Read Street and Craig Avenue may be impacted in select locations to maintain trail setback from the proposed roadway.

Alternative 7a & 7b:

  - **ID 1:** Potential driveway access impacts to the Rugby Football Club fields (Storz stormwater detention basin)
  - Potential Missouri River floodplain impacts
  - Bridge would cross over existing trail along Omaha levee centerline

Potential Property Acquisitions and Displacement

Property impacts aren't known at this current planning level, but potential impacts were summarized for each new alternative alignment. For each impacted parcel, the study team determined if a full or partial acquisition was required.

Property Acquisitions and Displacement Impacts

The following figures and tables provide a summary of each potentially impacted parcel by alternative. Residential parcel displacements located in a DAT are highlighted in yellow in each potential property impact summary table. Impacted DAT parcels by alternative include:

Alternative 4: No anticipated property impacts

Alternative 5: One potential impacted residential parcel located in a DAT

Alternative 7a: One potential impacted residential parcel located in a DAT

Alternative 7b: One potential impacted residential parcel and multiple mobile home residences located in parcels 14, 15, & 16 located in a DAT

Figure 4.10 Alternative 5 (South) Potential Property Impacts

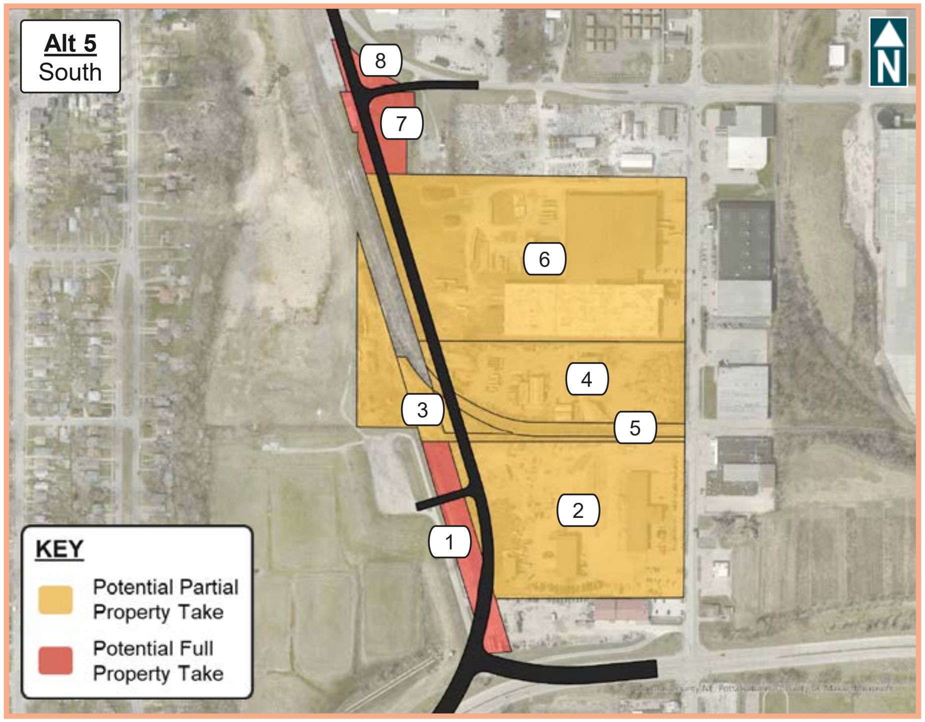


Table 4.7 Alternative 5 (South) Potential Property Impact Summary

Map Key	Existing Land Use	Existing Zoning	Acquisition	Relocation Required
1	Industrial	General industrial	Full	No
2	Industrial	General industrial	Partial	No
3	Industrial	General industrial	Partial	No
4	Industrial	General industrial	Partial	No
5	Industrial	Railroad	Partial	No
6	Industrial	Heavy industrial	Partial	No
7	Residential	General industrial	Full	Yes
8	Industrial	General industrial	Full	Yes

Figure 4.11 Alternative 5 (North) Potential Property Impacts

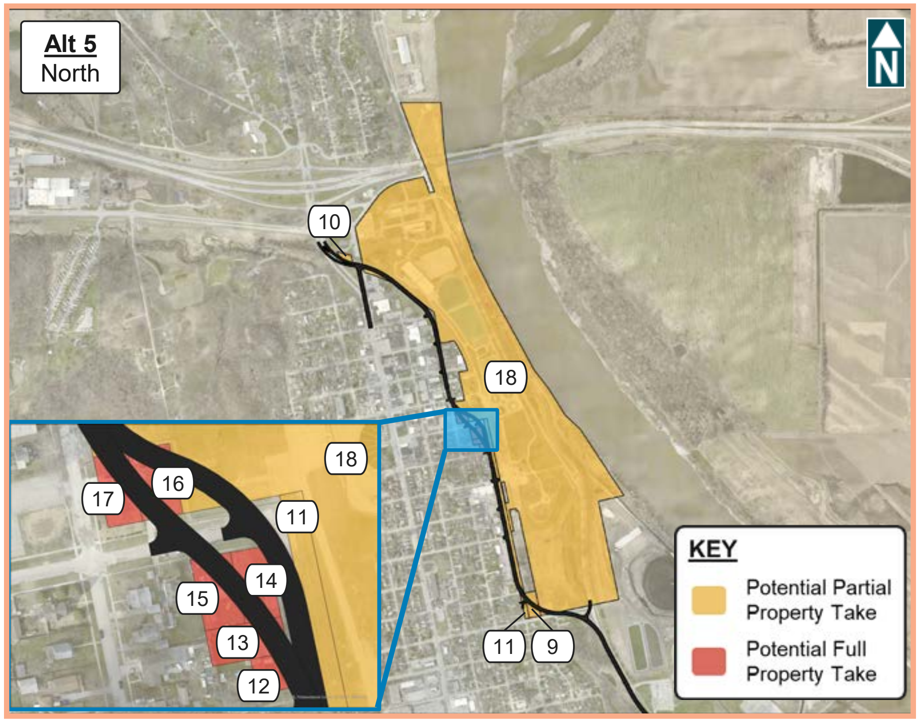


Table 4.8 Alternative 5 (North) Potential Property Impact Summary

Map Key	Existing Land Use	Existing Zoning	Acquisition	Relocation Required
9	Railroad	General industrial	Partial	No
10	Railroad	–	Partial	No
11	Railroad	–	Partial	No
12	Residential	General industrial	Full*	Yes
13	Residential	General industrial	Full*	Yes
14	Residential	Residential	Full	Yes
15	Residential	General industrial	Full*	Yes
16	Residential	General industrial	Full	Yes
17	Residential	General industrial	Full	Yes
18	Government	General industrial	Partial	No

** Full property take may not be required for the lower speed curve (to the east)*

Figure 4.12 Alternative 7a Potential Property Impacts

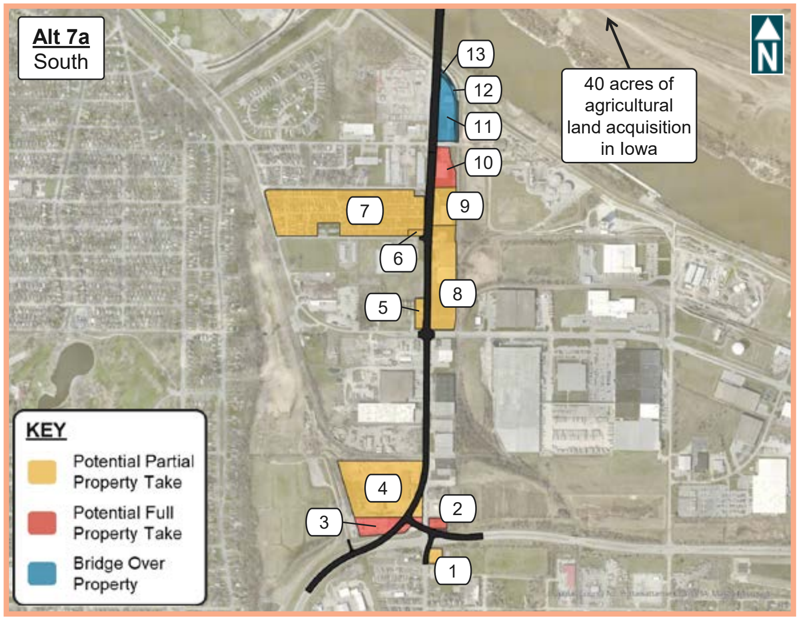


Table 4.9 Alternative 7a Potential Property Impact Summary

Map Key	Existing Land Use	Existing Zoning	Acquisition	Relocation Required
1	Commercial	General industrial	Partial	No
2	Residential	General industrial	Full	No
3	Industrial	General industrial	Full	Yes
4	Industrial	General industrial	Partial	No
5	Commercial	General industrial	Partial	No
6	Residential	General industrial	Partial	No
7	Commercial	General industrial	Partial	No
8	Industrial	General industrial	Partial	No
9	Industrial	General industrial	Partial	No
10	Industrial	General industrial	Full	Yes
11	Industrial	General industrial	Partial (over)	No
12	Railroad	General industrial	Partial (over)	No
13	Industrial	General industrial	Partial (over)	No
–	Agriculture	Agriculture	Partial	No

Figure 4.13 Alternative 7b Potential Property Impacts

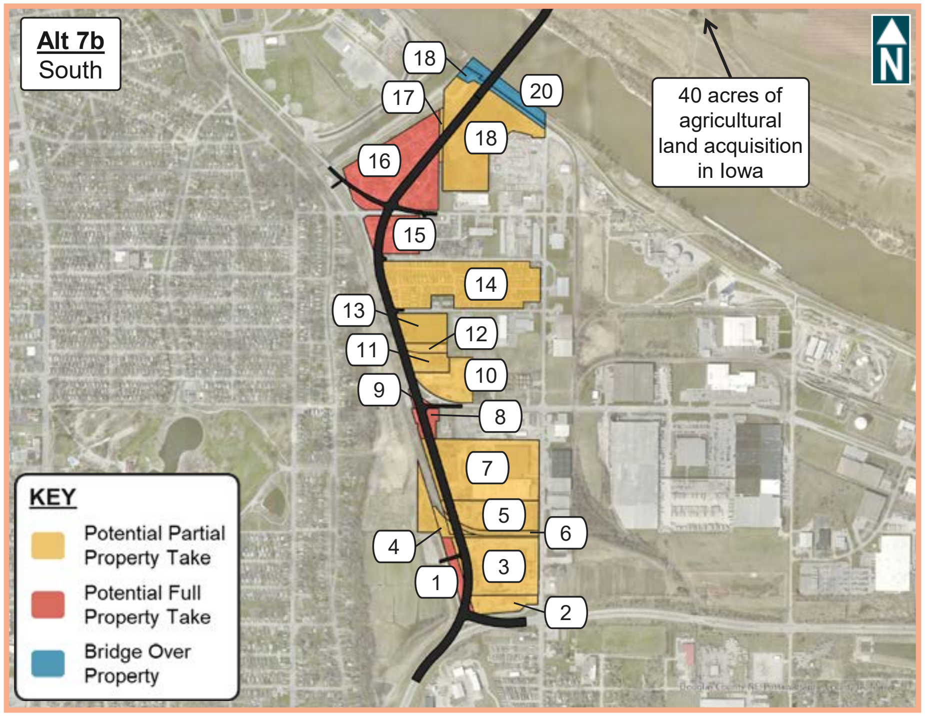


Table 4.10 Alternative 7b Potential Property Impact Summary

Map Key	Existing Land Use	Existing Zoning	Acquisition	Relocation Required
1	Industrial	General industrial	Full	No
2	Industrial	General industrial	Partial	No
3	Industrial	General industrial	Partial	No
4	Industrial	General industrial	Partial	No
5	Industrial	General industrial	Partial	No
6	Railroad	Railroad	Partial	No
7	Industrial	Heavy industrial	Partial	No
8	Residential	General industrial	Full	Yes
9	Commercial	General industrial	Full	Yes
10	Industrial	General industrial	Partial	No
11	Industrial	General industrial	Partial	No
12	Industrial	General industrial	Partial	No
13	Industrial	General industrial	Partial	No
14	Commercial	General industrial	Partial	Yes
15	Commercial	Mobile home residential	Full	Yes
16	Commercial	General industrial	Full	Yes
17	Government	General industrial	Partial	No
18	Industrial	General industrial	Partial	No
19	Government	General industrial	Partial (over)	No
20	Industrial	General industrial	Partial (over)	No
–	Agriculture	Agriculture	Partial	No

Air Quality

Emissions from motor vehicles are a significant source of air pollution that affects people's health. People that live or work in closest proximity to heavily traveled streets are shown to have an increased incidence and severity of health problems that may be related to air pollution from vehicles. When considering the potential impacts that transportation can have on the air quality of adjacent places, there are several factors to consider:

- Concentrations of pollutants are generally highest near the source, the vehicles in this case.
- Per vehicle, heavy commercial trucks typically contribute three times or more of harmful pollutants such as particulate matter (PM 2.5s), nitrogen oxides, and carbon monoxide than a typical light duty passenger vehicle.

Traffic proximity to people's homes, with higher contributions from heavy truck traffic, determines transportation's impact on air quality for adjacent residents. Given the high-level nature of this study, the study team used the data and indices developed for residential traffic exposure (both ADT and Heavy Truck indices) and inferred the relative level of potential transportation air quality impacts associated with each. It should be noted that more detailed air quality analysis would be required to get more refined estimates of air quality impacts associated with each alternative.

Air Quality Impacts and Summary

Based on the factors noted above that contribute to air pollution from adjacent transportation, the no build alternative is anticipated to have the highest amount of air quality impacts. All three build alternatives are anticipated to have lower residential air quality impacts than the no-build alternative. Furthermore, the bridge alternatives (7a and 7b) are anticipated to have lower air quality impacts than Alternative 5, due to the re-routing of traffic into Iowa.

Economic Development Potential

There are planned and upcoming economic development activities that can potentially leverage the alternative to create economic development benefits in the study area.

A full economic development study associated with a new Highway 75 corridor is proposed by MAPA. Until that full study can be completed, this study included a screening of potential economic development impacts for each alternative, related to the potential for 30th Street redevelopment, neighborhood impacts, impacts to businesses, and the potential to unlock new tracts for significant development.

Table 4.11 Economic Development Screening

Potential Alignment	30th Street Mixed-Use Potential	Neighborhood Impacts	Impacts to Existing Businesses (Access)	Unlocks Development Potential
No-Build 30th St (Current Alignment)	⊖	⊖	⊖	⊖
Alternative 4 30th St Complete Street Enhancements	✔	✔	✔	⊖
Alternative 5 28th St / 28th Ave	✔	✓	✓	⊖
Alternative 7a River Crossing via 16th	✔	✔	✗	⊖
Alternative 7b River Crossing via Pershing	✔	✖	✓	⊖

✔ — ✓ — ⊖ — ✗ — ✖

Improves **Neutral** **Worsens**

A summary of **Table 4.11** is provided on the following page.

- All three new alignment alternatives would improve the potential for mixed use redevelopment of 30th Street due to the diversion of trips and the potential to reduce the number of lanes on 30th Street.
- Alternative 5 and Alternative 7b would have some improvements to business impacts, while Alternative 7a would have some negative impacts to businesses along 16th Street.
- There are limited opportunities for major land redevelopments as a result of the alternatives.

The passage of LB 1024 in the Nebraska legislature in 2022 allowed more than $300 million in economic recovery funds to be spent on neighborhoods in north and south Omaha. Part of this effort focuses on bringing high-paying jobs into the neighborhoods, which in part includes the study area. Transportation connection improvements in the neighborhood could help leverage these investments though improved connections to businesses and a potential expansion of the airport business park.

Community Cohesion

Community cohesion is represented by the interactions among members of the neighborhood that build a sense of unity and recognition as part of the same group. The physical environment, including transportation facilities can act as connections and barriers that facilitate or interrupt those interactions.

The current design of 30th Street provides some barrier to community cohesion. The land uses along the corridor including retail, places of worship, parks, schools, and homes are all conducive to creating places that people want to walk to and spend time outdoors. Essentially, the land use supports a neighborhood-oriented atmosphere with mobility and access via short walk and bike trips.

The Florence neighborhood has an annual heritage celebration each year during "Florence Days," which is organized by the Florence Historical Foundation and held primarily along North 30th Street. The Florence Days festival contributes toward community cohesion by inviting people to gather to celebrate the area's history. Additional organized activities in the study area include the annual tree lighting in Mormon/Florence Park, an open house at the Bank of Florence, Miller Park's Fun in the Park, and Trick or Treat on the Boo-levard contribute to community cohesion.

Community Cohesion Impacts and Summary

The no-build scenario would retain 30th Street as a truck route and 4-lane arterial, which creates a neighborhood barrier due to the size of the street and the volume and speed of traffic. Diverting truck traffic away from 30th Street through any of the proposed alternatives has the potential to improve community cohesion by lessening the impact along 30th Street.

Additional benefit is predicted to result from development of Alternative 4 as a three-lane cross section due to the change in the character of the corridor. A four-lane to three-lane conversion provides opportunities for adding bicycle facilities, wider sidewalks, outdoor activity areas, additional parking, enhanced landscaping, and improved pedestrian crossing. This could potentially include street furniture, plantings, and signage.

Table 4.12 Feasible Alternatives Summary Matrix

Potential Alignment	Travel Time	Safety	Traffic Noise/ Air Quality	Freight Mobility	Natural Environmental Impacts	Business Property Impacts	Residential Property Impacts	Preliminary Cost Range
No-Build	−	−	−	−	−	−	−	$0
Alternative 4	✗	✓	−	✗	−	−	−	$6.5–$10 M
Alternatives 4 & 5	✓	✓	✓	✓	−	✗	✗	$40–$46 M
Alternatives 4 & 7a	✓	✔	✔	✔	✘	✘	−	$231–$393 M
Alternatives 4 & 7b	✓	✔	✔	✔	✘	✗	✘	$194–$348M

✔	✓	−	✗	✘
Improves		Neutral		Worsens

Benefit Cost Analysis

A planning-level benefit cost analysis was completed with the information developed through this study. Benefit-cost analysis is a comparison of the expected transportation benefits of the infrastructure investment compared to the cost of the investment. In general the higher the ratio, the more cost-effective the project is. The idea was to use a methodology consistent with the USDOT Benefit Cost Analysis Guidance for Discretionary Grant Programs (March 2022), and monetize the potential project transportation benefits and costs. Given the high-level nature of this study, benefits were determined though travel demand model output and planning-level predictive safety analysis. A refined benefit-cost analysis can be provided in later stages of project development. The table below shows the initial benefit-cost ratios associated with each alternative.

Table 4.13 Benefit Cost Analysis Results

Alternative	Planning-Level Benefit Cost[1]	Preliminary Benefit Cost Range
Alternative 4 & 5	0.99 – 1.19	✓
Alternative 4 & 7a	0.27 – 0.31	⊖
Alternative 4 & 7b	0.31 – 0.34	⊖
Alternative 4 (Stand alone)	3.97 – 4.76	✔

[1] *Benefit cost range was developed by applying a 20 year and a 30 year benefit horizon.*

⊖ **Low** — ✓ **Moderate** — ✔ **High**

It should be noted that benefit cost ratios are typically highest on projects delivered in corridors with significant transportation issues to be solved; this study is focusing on identifying solutions that provide positive community benefits beyond typical transportation metrics of mobility and safety. Some of the positive community factors that are difficult to monetize in a benefit-cost assessment include:

- Improvements to residents' health
- Improvements to economic value / economic development
- Improvements to community cohesion and livability

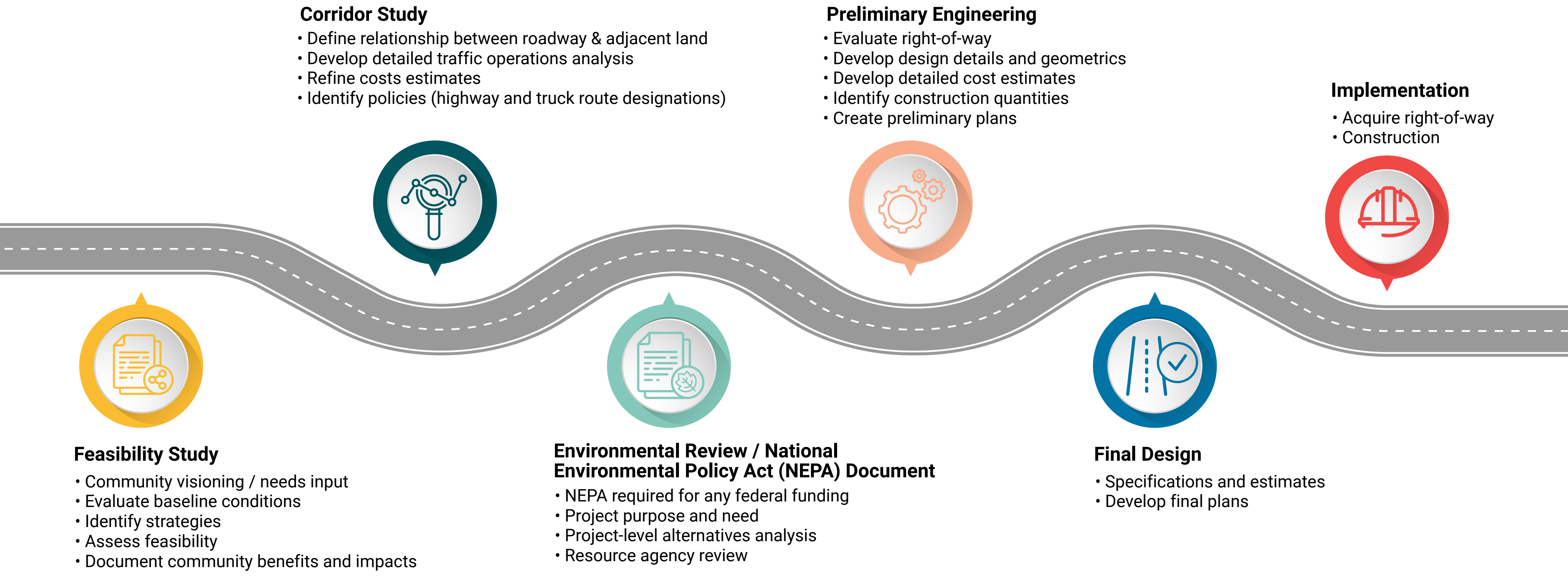
Additionally, future work could boost the benefit cost ratio by monetizing bicycle and pedestrian benefits. It should be noted that some Federal Grant programs focus on more community benefits than transportation benefits for funding opportunities.

Drone photography courtesy of MAPA

Next Steps

This study is first step in establishing the feasibility and potential benefits associated with making changes to Highway 75 and 30th Street through the study area. Additional future study and decision-making is required to progress project development. A potential path to project development is shown below. Some of these steps could be combined, but additional study, policy, design and funding commitments are required before any of the concepts outlined in this study can be implemented.

Figure 5.1 Timeline and Next Steps



Feasibility Study
- Community visioning / needs input
- Evaluate baseline conditions
- Identify strategies
- Assess feasibility
- Document community benefits and impacts

Corridor Study
- Define relationship between roadway & adjacent land
- Develop detailed traffic operations analysis
- Refine costs estimates
- Identify policies (highway and truck route designations)

Environmental Review / National Environmental Policy Act (NEPA) Document
- NEPA required for any federal funding
- Project purpose and need
- Project-level alternatives analysis
- Resource agency review

Preliminary Engineering
- Evaluate right-of-way
- Develop design details and geometrics
- Develop detailed cost estimates
- Identify construction quantities
- Create preliminary plans

Final Design
- Specifications and estimates
- Develop final plans

Implementation
- Acquire right-of-way
- Construction