SUMMARY DEFINITION AND EVALUATION OF THE CASS AVENUE ALTERNATIVE
Document Revision Record

Project/Report Name: Summary Evaluation of the Cass Avenue Alignment  
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Contents

1.0 Project Overview ............................................................................................................................... 1
2.0 Defining the Cass Avenue Alternative .............................................................................................. 2
3.0 The Cass Avenue Alternative: Key Metrics ....................................................................................... 2
4.0 Why is the Cass Avenue Alignment an Option to Study Further? .................................................... 4

List of Tables

Table 3-1: Summary of Key Evaluation Metrics for the Full Corridor............................................................ 4

List of Figures

Figure 1-1: Northside-Southside Study Area ............................................................................................. 1
Figure 2-1: Alignment Options through the NGA/Old North St. Louis Neighborhood............................... 2
Figure 3-1: The Four Full Corridor Alternatives ....................................................................................... 3
1.0 Project Overview

The Northside-Southside MetroLink Conceptual Design Study (Northside-Southside Study) is being led by the East-West Gateway Council of Governments (EWGCOG) with support from the City of St. Louis. The Northside-Southside Study builds upon the 2008 Northside-Southside Study, which included a previously-adopted locally preferred alternative (LPA), as shown on Figure 1-1.

Since the proposed Northside-Southside MetroLink expansion line was first explored in the late 1990s and then studied in 2008, the City of St. Louis and its neighborhoods have changed considerably. New development has transformed much of the central corridor. South St. Louis, along Broadway and Jefferson Avenue, has enjoyed grassroots community revitalization with the addition of new residents and small businesses. North St. Louis is the future home of the multi-billion dollar National Geospatial-Intelligence Agency (NGA) West campus. The proposed Northside-Southside line would have the potential to leverage and extend the economic growth and momentum happening in the City of St. Louis. However, concentrations of poverty, joblessness, and crime continue to erode neighborhoods in both North and South St. Louis.

Through this study, decision-makers will work with stakeholders and members of the public to select a light rail investment that meets the needs of the community while maximizing competitiveness for federal capital funding through the Federal Transit Administration’s (FTA) New Starts Capital Investment Grant Program.
2.0 Defining the Cass Avenue Alternative

The routes and station locations that were initially evaluated during this study were defined in the *Detailed Definition of Alternatives* report, which was finalized in October 2017. Three alternatives through the NGA/Old North St. Louis neighborhood were included for study (2008 LPA, St. Louis Avenue, and Delmar Boulevard, as shown by the orange, blue, and purple lines in Figure 2-1). Subsequent to this report, the study team received community feedback and learned additional details about the pedestrian and vehicle entrances to the new NGA facility.

This input resulted in the addition of an alternative primarily along Cass Avenue through the NGA / Old North St. Louis / Carr Square neighborhood, as shown in Figure 2-1 (green line).

The Cass Avenue alternative would travel along Natural Bridge Avenue before turning south on Parnell Street to Jefferson Street, turning east on Cass Avenue, and then turning south on 14th Street. Station locations for the Cass Avenue alternative through the NGA / Old North St. Louis / Carr Square neighborhood include:

- Natural Bridge & Parnell
- Madison & Jefferson
- Cass & 16th
- Delmar & 14th

Detailed design drawings of the Cass Avenue alternative are in Appendix A.

3.0 The Cass Avenue Alternative: Key Metrics

A series of key metrics for the Cass Avenue alternative were calculated to enable an apples-to-apples comparison with the three previously-defined alternatives through the NGA / Old North St. Louis / Carr Square neighborhood. These metrics reflect data for the full 17-mile corridor, and were calculated using the same data sources and methodologies that were used to evaluate the initial three alternatives, as reported in the *Detailed Evaluation of Alternatives Summary Report* and the six supporting technical memoranda.
There are essentially no significant differences in the technical evaluation results that would dictate the selection of one alternative over another, as shown in Table 3-1. Selection of the alternative(s) in the NGA/Old North St. Louis/Carr Square neighborhood to carry forward for study in the next project phases must, then, rely on the degree to which each meets the project goals, community preference, and neighborhood development plans, as discussed in Section 4.0.

**Figure 3-1: The Four Full Corridor Alternatives**
Table 3-1: Summary of Key Evaluation Metrics for the Full Corridor

<table>
<thead>
<tr>
<th></th>
<th>2017 Design</th>
<th>Via St. Louis Avenue</th>
<th>Via Delmar Boulevard</th>
<th>Via Cass Avenue</th>
</tr>
</thead>
<tbody>
<tr>
<td># of Daily Riders (2025)</td>
<td>16,500</td>
<td>17,200</td>
<td>17,000</td>
<td>16,600</td>
</tr>
<tr>
<td># of Transit-Dependent Riders (2025)</td>
<td>7,800</td>
<td>8,100</td>
<td>8,000</td>
<td>7,600</td>
</tr>
<tr>
<td>Capital Cost ($2017 M)</td>
<td>$1,372</td>
<td>$1,373</td>
<td>$1,376</td>
<td>$1,379</td>
</tr>
<tr>
<td>Rail O&amp;M Cost ($2017 M)</td>
<td>$28</td>
<td>$28</td>
<td>$28</td>
<td>$28</td>
</tr>
<tr>
<td>Change in traffic travel time (at AM peak / PM peak)</td>
<td>3 minutes / 8 minutes</td>
<td>0 minutes / 1 minute</td>
<td>1 minute / 2 minutes</td>
<td>2 minutes / 3 minutes</td>
</tr>
<tr>
<td># of parking spaces impacted</td>
<td>2,600</td>
<td>2,200</td>
<td>2,200</td>
<td>2,300</td>
</tr>
<tr>
<td># of Jobs (2015)</td>
<td>81,800</td>
<td>82,200</td>
<td>89,600</td>
<td>82,400</td>
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<tr>
<td># of Residents (2015)</td>
<td>82,200</td>
<td>82,200</td>
<td>81,600</td>
<td>82,400</td>
</tr>
</tbody>
</table>

4.0 Why is the Cass Avenue Alignment an Option to Study Further?

The Cass Avenue alignment meets the goals of the Northside-Southside study, as defined in the Purpose and Need Report:

Project Need #1: Stabilization, Revitalization, and Redevelopment of Key Areas

- The Cass Avenue alternative best aligns with community investment strategies, including the Choice Neighborhoods designation.
- The Cass Avenue alternative serves the Old North and Carr Square neighborhoods.

Project Need #2: Expanded Access to Jobs and Activity Centers

- The Cass Avenue alternative best serves the pedestrian entrances to the NGA campus.
- The Cass Avenue alternative serves both North St. Louis and Carr Square residents and the NGA.
APPENDIX A: CASS AVENUE ALTERNATIVE DESIGN DRAWINGS
TABLE OF CONTENTS

SEGMENT 3 TYPICAL SECTIONS (NGA OPTION 3)  TS-035 TO TS-038
SEGMENT 3 PLAN AND PROFILES (NGA OPTION 3)  PP-332 TO PP-336
TYPICAL SECTIONS

5/7/2018

NORTHSIDE - SOUTHSIDE
STUDY
SEGMENT 3
NGA OPTION 3
TYPICAL SECTIONS

CONCEPTUAL
ONLY NOT FOR
CONSTRUCTION

NORTHSIDE-SOUTHSIDE STUDY

AECOM

12'-0" 7'-0"

PARK/ELL//JEFFERSON

EXISTING 95'-0" TO 110'-0" R.W.

PARNELL/JEFFERSON

SIDEWALK

THROUGH LANE

4'-0" TO 0'-0"

SHOULDER

VARIES

VARIES

R/W

12'-0"

THROUGH LANE

SHOULDER

R/W

7'-0"

27'-0"
TYPICAL SECTIONS

FILE NAME: Cass-TS-036.dgn

CONCEPTUAL ONLY
NOT FOR CONSTRUCTION

NORTHSIDE - SOUTHSIDE
STUDY
SEGMENT 3
NGA OPTION 3
TYPICAL SECTIONS

5/7/2018

ST LOUIS
SIDEWALK
EX.
VARIES

10'-0"
THROUGH LANE
VARIES

10'-0"
TURN LANE
PAINTED MEDIAN

EXISTING 74'-0" R.O.W.
(JEFFERSON TO HOGAN)

-THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT-