Committees and Consulting Team

• Advisory and Technical Committees
  • East-West Gateway
  • Bi-State Development
  • Metro
  • City of Saint Louis
    • Mayor’s Office
    • Treasurer’s Office
    • Planning and Urban Design
  • Saint Louis Development Corporation
  • Saint Louis County
  • Missouri Department of Transportation

• Consulting Team
  • AECOM
  • WSP USA
  • EDSI
  • Vector Communications
  • Development Strategies
  • Kivindyo Engineering Services
  • Resource Systems Group
1: Project Overview
Northside-Southside Light Rail Project

Northside-Southside is a proposed on-street light rail line running north and south from downtown St. Louis to connect people to jobs in our region and encourage investment and vitality in our neighborhoods.

- On-street accessibility to neighborhoods and area businesses
- Operated by Metro as part of regional transit system
- Will connect to existing MetroLink via transfer at 14th and Clark Station

Northside-Southside will serve many residents who do not have reliable access to a personal vehicle, and who could benefit from increased access to jobs and education.*

*2015 Census data

27% Study Area Households Do Not Own Cars

30% Study Area Households Below Poverty Line

Connect to Thousands of Jobs in Central Corridor
2008 Northside-Southside Study

- 2007-2008 Northside-Southside Alternatives Analysis
- Led by East-West Gateway Council of Governments, in coordination with Metro and Missouri Department of Transportation

**Purpose:**
- Improve transit service to connect northern and southern corridors within the City of St. Louis through the Central Business District
- Coordinate land use and transit investment

**Challenges:**
- Balancing cost and ridership
- City/County coordination
- Engineering in-street running rail
2017 Study Alignment and Stations

- We are reviewing, confirming, and updating the 2008 study

- Alignments studied
  - Modified 2008 route and three alternatives
    - NGA 1: St. Louis Avenue
    - NGA 2: Jefferson Avenue
    - NGA 3: Cass Avenue

- 29 draft station locations

- The study recommends a phased approach to implementing light rail
  - Recommendation based on technical analysis and public input
  - Implementable budget
  - Re-examine future alignment options, including potential Broadway alignment
Why On-Street Light Rail?

On-street light rail can help stabilize, revitalize and redevelop neighborhoods.
- Encourages neighborhood development
- Increases pedestrian traffic, which supports safer neighborhoods
- Calms traffic

Why this route?
- Northside-Southside was first studied in 2006-2008
- Complements the existing MetroLink and MetroBus network, which supports regional transit connectivity
- Will connect residents to jobs

Why not bus rapid transit (BRT)?
- Ridership is expected to warrant light rail investment.
- Light rail has a stronger and longer track record of catalyzing development.
On-Street Light Rail Features

Tracks run even with the street

Open, street-level stations

Part of neighborhoods, increased walking and biking

Encourages transit-oriented development
2: Project Schedule
**Project Schedule**

<table>
<thead>
<tr>
<th>2017</th>
<th>2018</th>
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<tbody>
<tr>
<td>JAN</td>
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<td>APR</td>
<td>MAY</td>
</tr>
<tr>
<td>MAY</td>
<td>JUN</td>
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</table>

- **EXISTING CONDITIONS INVENTORY**
- **PURPOSE AND NEED**
- **DEVELOP DESIGN CRITERIA**
- **DETAILED DEFINITION OF ALTERNATIVES**
- **DETAILED ALTERNATIVE EVALUATION**
- **SELECTION OF LOCALLY PREFERRED ALTERNATIVE**

*Technical Committee Meeting*
3: Community Engagement and Agency Coordination Plan
Community Engagement Goals

- **Re-engage 2008 study participants** in a way that honors their previous input and focuses on identifying changing conditions and priorities;

- **Conduct substantial outreach to potentially affected communities** and stakeholders along new or revised alternatives;

- **Inform stakeholders** about Federal Transit Administration funding process and the steps necessary to move from an LPA to an operational project; and

- **Foster opportunities for communications** between regional stakeholders with the understanding that federal funding requires development of a project that has achieved broad community support.

**Agency partners**

**Elected officials**

**Residents**

**Transit riders**

**Individuals with limited mobility**

**Seniors, youth**

**Business owners**

**Limited English Proficiency**
Stakeholder and Community Engagement

- Stakeholder Meetings: 48
- Community Presentations: 35
- Open House Attendees: 229
- Comment Forms: 371
- Email List: 1,568
- Online Survey Responses: 3,363

www.northsidesouthsidestl.com @northsouthstl on Twitter, Instagram
Project Purpose

The purpose of the Northside-Southside Study is to identify the light rail investment that encourages **sustainable development** patterns which **expand access to opportunity** for Study Area residents, **matches demographic trends** and preferences within the Study Area, and leverages the existing transportation infrastructure to **improve connectivity** within and beyond the Study Area.
Project Need #1
Stabilization, Revitalization, and Redevelopment of Key Areas

Study area neighborhoods need stabilization, revitalization, and redevelopment.

✓ LRT will catalyze development and leverage existing and planned developments
✓ LRT will promote stable and strong neighborhoods throughout the Study Area

Areas of decreased commercial and residential development require increases in community safety.

✓ LRT will increase foot traffic at station areas
✓ LRT will contribute to the economic sustainability of neighborhoods

The positive momentum of recent or planned investments can be leveraged by light rail investment.

✓ LRT will link residents with services, schools, public assets, and access to jobs

The character of existing stable residential areas needs to be preserved.

✓ LRT will focus context-sensitive development in station areas
✓ LRT will bolstering property values
Project Need #2
Expanded Access to Jobs and Activity Centers

Study Area residents – especially transportation-disadvantaged residents – need improved access to jobs.

✔ LRT will enhance direct connections between transportation-disadvantaged households and employment opportunities

Light rail is an attractive transit alternative that is competitive with cars.

✔ LRT will enhance MetroLink system ridership, expand reliable transit access for Study Area residents to jobs Downtown and along the central corridor, and complement the underlying local bus network.
## Community Feedback and Action Steps

Northside-Southside was **largely supported** by the community, with few concerns about paying for project or bus line connections.

Respondents tended to **favor the Florissant Avenue or Cass Avenue** (once introduced) options.

Northside residents were concerned about **parking and noise** due to light rail on **St. Louis Avenue**.

Southside **stations north of Chippewa** were supported. Residents showed heavy support for stations where redevelopment had already begun.

**Crime and security** around stations were major concerns. This was the number one reason some residents did not support the alignment.

Study team will pass information along to future phases of study.

Study team incorporated this feedback into LPA decision-making and for future phases.

St. Louis Avenue was removed as option for locally preferred alternative.

Study team incorporated community interest in redevelopment into narrative.

Study team will pass information along to future phases of study.
4: Detailed Definition and Evaluation of Alternatives
Conceptual Engineering

- North Terminus Park and Ride near Goodfellow and I-70
- NGA Alternative Alignments
- 9th and 10th Downtown One Way Connectors
- 14th Street Bridge over Mill Creek and Civic Transit Center
- Interstate 44 and Jefferson Avenue Interchange
- Interstate 55 Corridor to Bayless Avenue
- Maintenance Facility
TYPICAL SECTIONS

The following are examples of how Northside Southside would be designed to fit into the street, including bike, pedestrian and vehicle lanes. As these drawings show, on-street light rail will be part of a multi-modal streets that can include cars, pedestrians, bikes, buses and light rail vehicles.

PARNELL/JEFFERSON

14TH STREET (FLORISSANT TO O'FALLON)

DOWNTOWN: 9TH/10TH ST

CLARK

JEFFERSON ST

CHouteau
Demographics

2015 Population Density

2015 Employment Density
Demographics

A high concentration of people who are members of Environmental Justice groups live within the Study Area.
Transit Usage in the Corridor

Transit ridership represents a larger portion of trips in the Corridor than in the City or Region.

Percent of Commuters Who Use Transit to Commute to Work

Means of Transportation to Work
- Public Transportation Usage:
  - Fewer than 10%
  - 10% - 20%
  - More than 20%
- Study Area

Source: Data, Census AOS, 2013
Build Alternatives: Stations

2-Car Platforms
• 180 – 200 feet long
• 11 – 15 feet wide, 14 inches tall

3 primary station types proposed
• Side (split side)
• Center
• Curb side
Build Alternatives

Side Platform Stations
Build Alternatives

Center Platform Stations
Build Alternatives
Curbside Platforms
New Starts Project

Justification Criteria

4:
Overview of the FTA New Starts Evaluation

What is New Starts?
• Part of the FTA’s Capital Investment Grant Program
• Projects from around the country compete in annual funding cycles
• Typically awards 50% of the total capital cost
• Funded $2.18B in FY 2016; $3.5B in FY 2017
• Program is subject to change under the Trump administration
FTA New Starts Evaluation Criteria

Each criterion gets a ranking:

- High
- Medium-High
- Medium
- Medium-Low
- Low

Medium rating or higher required for both project justification and local financial commitment
FTA New Starts Evaluation Criteria

- Existing conditions
- Future development
- Ridership (*focus on transit-dependent*)
- Balance of cost and ridership
- Benefits compared to cost
- New riders
Detailed Evaluation Process

1. Confirm evaluation methodology
2. Collect data and perform analyses
3. Document results

Summary Report

Six Tech Memos (each includes methodology, data sources, results)

- TM #1: Ridership
- TM #2: Capital Costs
- TM #3: O&M Costs
- TM #4: Environmental
- TM #5: Transportation
- TM #6: Station Area
6: Selection of the Locally Preferred Alternative (LPA)
# Linking Study Criteria to New Starts Criteria

<table>
<thead>
<tr>
<th>Project Goals</th>
<th>Phase 1: Detailed Evaluation</th>
<th>Phase 2: Refinement of the LPA</th>
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<tbody>
<tr>
<td><strong>Foster Sustainable Development and Redevelopment</strong></td>
<td>Station area population and employment densities</td>
<td>Economic Development</td>
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<td></td>
<td>Station area equity characteristics</td>
<td>future development</td>
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<tr>
<td></td>
<td>Station area land use and economic development opportunities</td>
<td>Land Use</td>
</tr>
<tr>
<td></td>
<td>Environmental impacts / benefits</td>
<td>existing conditions</td>
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<tr>
<td><strong>Improve Access to Opportunity</strong></td>
<td>Ridership</td>
<td>Environmental Benefits</td>
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<td>Transit travel times</td>
<td>benefits compared to costs</td>
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<td></td>
<td>Traffic impacts</td>
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<td>Parking impacts</td>
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<td></td>
<td>Potential right-of-way impacts</td>
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<td>Bicycle and pedestrian impacts</td>
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<td><strong>Develop and Select an Implementable and Community-Supported Project</strong></td>
<td>Capital and O&amp;M costs</td>
<td>Cost Effectiveness</td>
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<td>Cost effectiveness</td>
<td>balance of cost and ridership</td>
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<td></td>
<td>Community support</td>
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### Key Evaluation Metrics: Full Corridor

<table>
<thead>
<tr>
<th>Criterion</th>
<th>2017 Design</th>
<th>Via St Louis</th>
<th>Via Delmar</th>
<th>Via Cass</th>
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<tbody>
<tr>
<td># of Daily Riders (2025)</td>
<td>16,500</td>
<td>17,200</td>
<td>17,000</td>
<td>16,600</td>
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<tr>
<td># of Transit-Dependent Riders (2025)</td>
<td>7,800</td>
<td>8,100</td>
<td>8,000</td>
<td>7,600</td>
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<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 / PM peak)</td>
<td>3 mins/ 8 mins</td>
<td>0 mins/ 1 min</td>
<td>1 min/ 2 mins</td>
<td>2 mins/ 3 mins</td>
</tr>
<tr>
<td># of Residents (2015)</td>
<td>82,200</td>
<td>82,200</td>
<td>81,600</td>
<td>82,400</td>
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<tr>
<td># of Jobs (2015)</td>
<td>81,800</td>
<td>82,200</td>
<td>89,600</td>
<td>82,400</td>
</tr>
</tbody>
</table>

* Includes $320 M for vehicles and maintenance facility

**Full corridor: there are no major differentiators**
### The LPA: Grand to Chippewa, via Cass or Florissant

**Assumption = $700M budget**

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Via Cass</th>
<th>Via Florissant</th>
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<tr>
<td># of Daily Riders (2025)</td>
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<td># of Transit-Dependent Riders (2025)</td>
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<td>Rail O&amp;M Cost ($ 2017 M)</td>
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<td># of Residents (2015)</td>
<td>47,100</td>
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<tr>
<td># of Jobs (2015)</td>
<td>65,500</td>
<td>64,900</td>
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Cass Avenue is the preferred alignment
16 stations
Can be expanded north and south
Why Grand to Chippewa?

Best bus connections

Grand and Chippewa provide connections to two of the system’s most heavily used bus routes (70 on Grand and 11 on Chippewa)

Best balance of cost and ridership

Fewer riders and increasing capital costs north of Grand and south of Chippewa

Best meets project goals

Stabilization, revitalization, and redevelopment of key areas

Expanded access to jobs and activity centers
Why Cass and Florissant?

They best meet the project needs

#1: Stabilization, Revitalization, and Redevelopment of Key Areas
- Aligns with Choice Neighborhoods designation and other redevelopment activity
- Serves existing neighborhoods

#2: Expanded Access to Jobs and Activity Centers
- Cass best serves NGA pedestrian entrances
- Community preference to serve both residents and NGA; too many parking impacts on St. Louis Ave.
Locally Preferred Alternative Evaluation

- **Economic Development**: Medium
- **Land Use**: Medium-high
- **Environmental Benefits**: Medium-high
- **Congestion Relief**: Medium-high
- **Cost Effectiveness**: Low
- **Mobility Improvements**: Medium

Overall Score:
- Low: 9
- Medium-low: 15
- Medium: 21
- Medium-high: 27
- High: 30

**Overall Score**: Medium (16)
Opportunities for Improvement

- *Implement* transit supportive plans and policies
  - A lot of good planning has occurred and is ongoing; we need to implement:
    - Zoning
    - Incentivize TOD
  - Create example development
- Increase employment around proposed stations –
  - the MOS is currently within a few thousand jobs of the next threshold
- Improve pedestrian facilities
- Look for ways to increase ridership
7: Financial Planning
Proposition 1

- April 2017 ballot measure
  - Increased City sales tax by a half cent
  - Estimated to generate $20 M / year
    - $12 M / year toward planning, engineering, construction, and operation of Northside-Southside
    - Balance will be split between neighborhood revitalization, workforce development, public safety, and infrastructure
  - Voter turnout was twice as high as last general election (30% vs 12.5% of voters)
Preliminary Financial Analysis Assumptions

Assumptions

- **Capital Funding Sources:**
  - Local Sales Tax: Economic Development Sales Tax
  - Capital Investment Grant (CIG) New Starts funding

- **Capital Financing Tools:**
  - TIFIA; or
  - City bonding

- **Capital Cost in Base Year (2017$):** $667.3 million

- **O&M Funding Sources:**
  - Coordinate with Metro
## Preliminary Capital Financial Scenarios

<table>
<thead>
<tr>
<th>Assumption</th>
<th>Funding Revenues</th>
<th>Financing</th>
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<tr>
<td><strong>TIFIA</strong></td>
<td>Economic Development Sales Tax and CIG New Starts Funding</td>
<td>TIFIA Loan</td>
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<td>Sales tax revenues cover costs of Project Development, including NEPA</td>
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<tr>
<td><strong>City Bonding</strong></td>
<td>Economic Development Sales Tax and CIG New Starts Funding</td>
<td>City Bonding</td>
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<tr>
<td>Sales tax revenues cover costs of Project Development, including NEPA</td>
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### Project Costs for Base Year (2017$): $667.3 million

<table>
<thead>
<tr>
<th></th>
<th>Project Costs w/o Financing (YOE$ M)</th>
<th>Financing Costs (YOE$ M)</th>
<th>Total Project Cost (YOE$ M)</th>
<th>Funding Gap (YOE$ M)</th>
<th>% of Project Cost Not Funded</th>
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<tbody>
<tr>
<td><strong>TIFIA</strong></td>
<td>$897.1</td>
<td>$44.6</td>
<td>$941.7</td>
<td>$149.9</td>
<td>15.9%</td>
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<tr>
<td><strong>City Bonding</strong></td>
<td>$897.1</td>
<td>$49.7</td>
<td>$946.8</td>
<td>$210.6</td>
<td>22.2%</td>
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Bridging the Funding Gap

Potential Funding & Financing Sources

- Surface Transportation Block Grant (STBG) Program
- Congestion Mitigation and Air Quality (CMAQ) Improvement Program
- Transportation Alternatives Program (TAP)
- Economic Development Sales Tax: Infrastructure (10%)
- MoDOT
- Value Capture
- Naming Rights
- New Taxes or Fees
Where We Are in the FTA Process

- **NEPA**: JULY 2019 – JUNE 2021 (2 YEARS)
- **PROJECT DEVELOPMENT**: JULY 2020 – JUNE 2022 (2 YEARS)
- **ENGINEERING**: JULY 2022 – JUNE 2025 (3 YEARS)
- **CONSTRUCTION**: JULY 2025 – JUNE 2029 (4 YEARS)

1.5 YEARS
Key Messages

• Northside-Southside will help bring jobs and economic opportunities to North and South St. Louis neighborhoods, as well as expand transit options.
  • Northside-Southside light rail will encourage redevelopment and access to jobs, which will bring revitalization and stability to surrounding neighborhoods.

• We have a plan for how to move Northside-Southside forward.
  • The first phase will cost $667 million, well under the $1.3 billion projected for the entire route.
  • The next step is to take the project to the East-West Gateway Board of Directors for a vote to apply for federal funding.

• Northside-Southside will serve the entire St. Louis region.
  • Northside-Southside will not only serve the City of St. Louis, but residents and visitors from across the region. The new route will connect to new major job centers at NGA, downtown and Cortex innovation districts, and the Central corridor.
Recent Actions

• The East-West Gateway Board of Directors adopted the Grand to Chippewa alignment as the Locally Preferred Alternative for the Northside-Southside MetroLink corridor based on EWG staff recommendation on August 29, 2018.