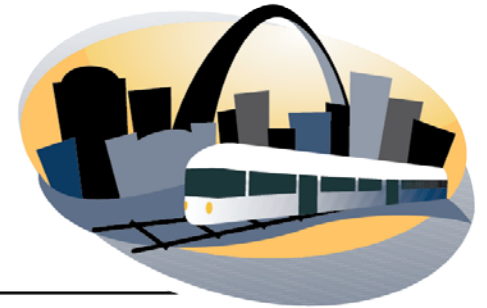


NORTHSIDE-SOUTHSIDE STUDY



March 15, 2019
TEAM Conference



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
- Kivindy Engineering Services
- Resource Systems Group



**NORTHSIDE
SOUTHSIDE
STUDY**

1 : Project Overview

Northside-Southside Light Rail Project

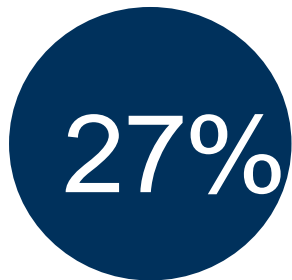


Northside-Southside is a proposed on-street light rail line running north and south from downtown St. Louis to connect people to jobs in our region and encourage investment and vitality in our neighborhoods.

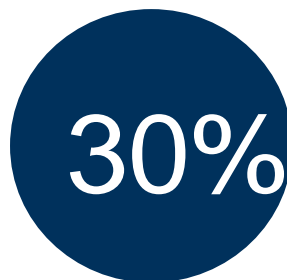
- On-street accessibility to neighborhoods and area businesses
- Operated by Metro as part of regional transit system
- Will connect to existing MetroLink via transfer at 14th and Clark Station

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*



Study Area Households Do Not Own Cars



Study Area Households Below Poverty Line

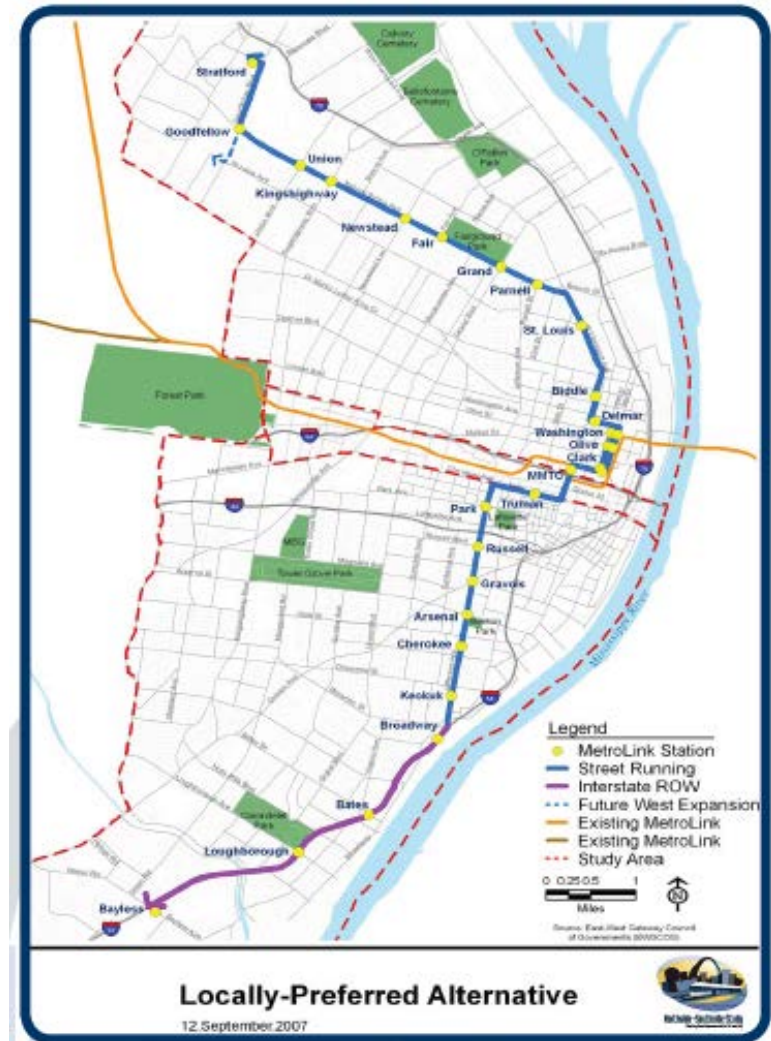


Connect to Thousands of Jobs in Central Corridor



2008 Northside-Southside Study

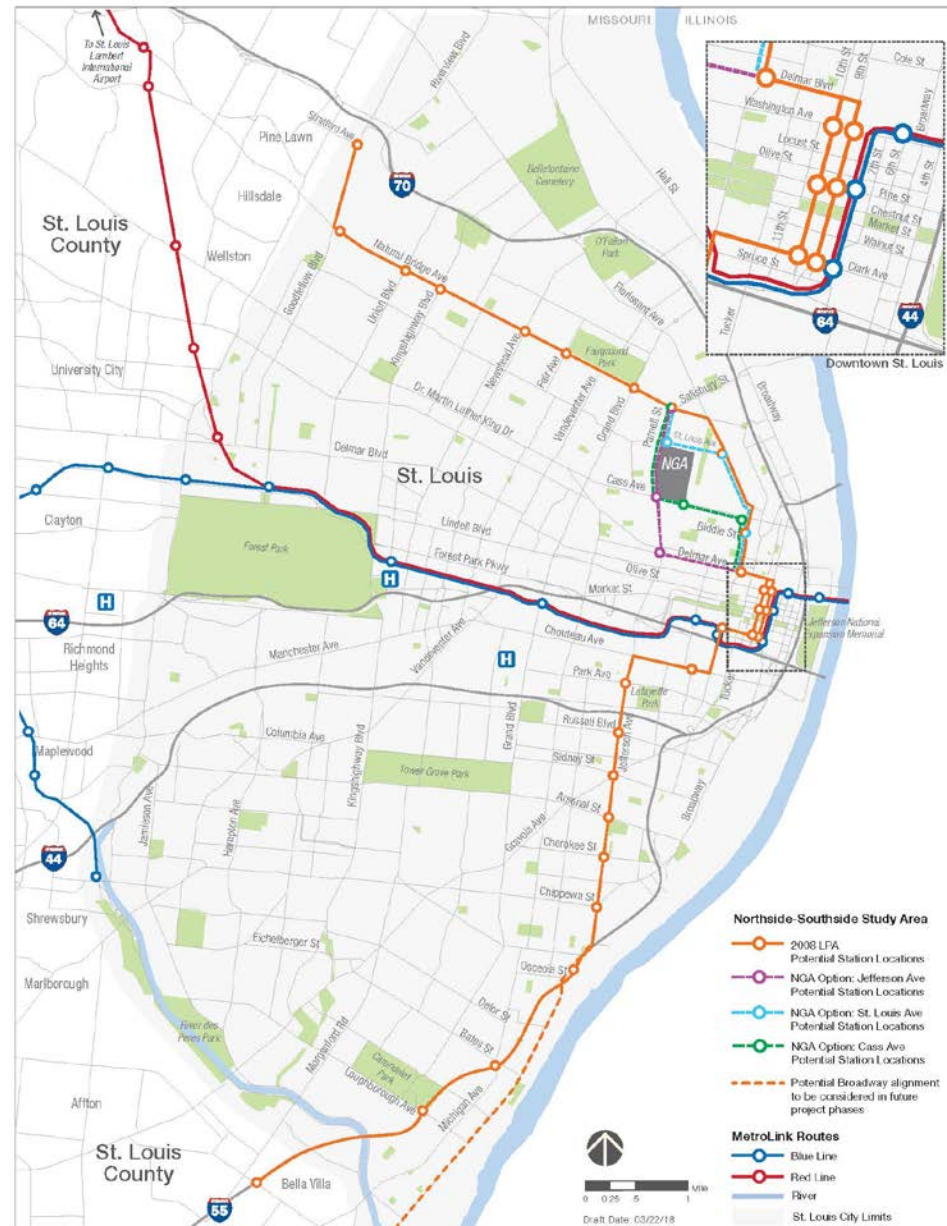
- 2007-2008 Northside-Southside Alternatives Analysis
- Led by East-West Gateway Council of Governments, in coordination with Metro and Missouri Department of Transportation
- **Purpose:**
 - Improve transit service to connect northern and southern corridors within the City of St. Louis through the Central 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



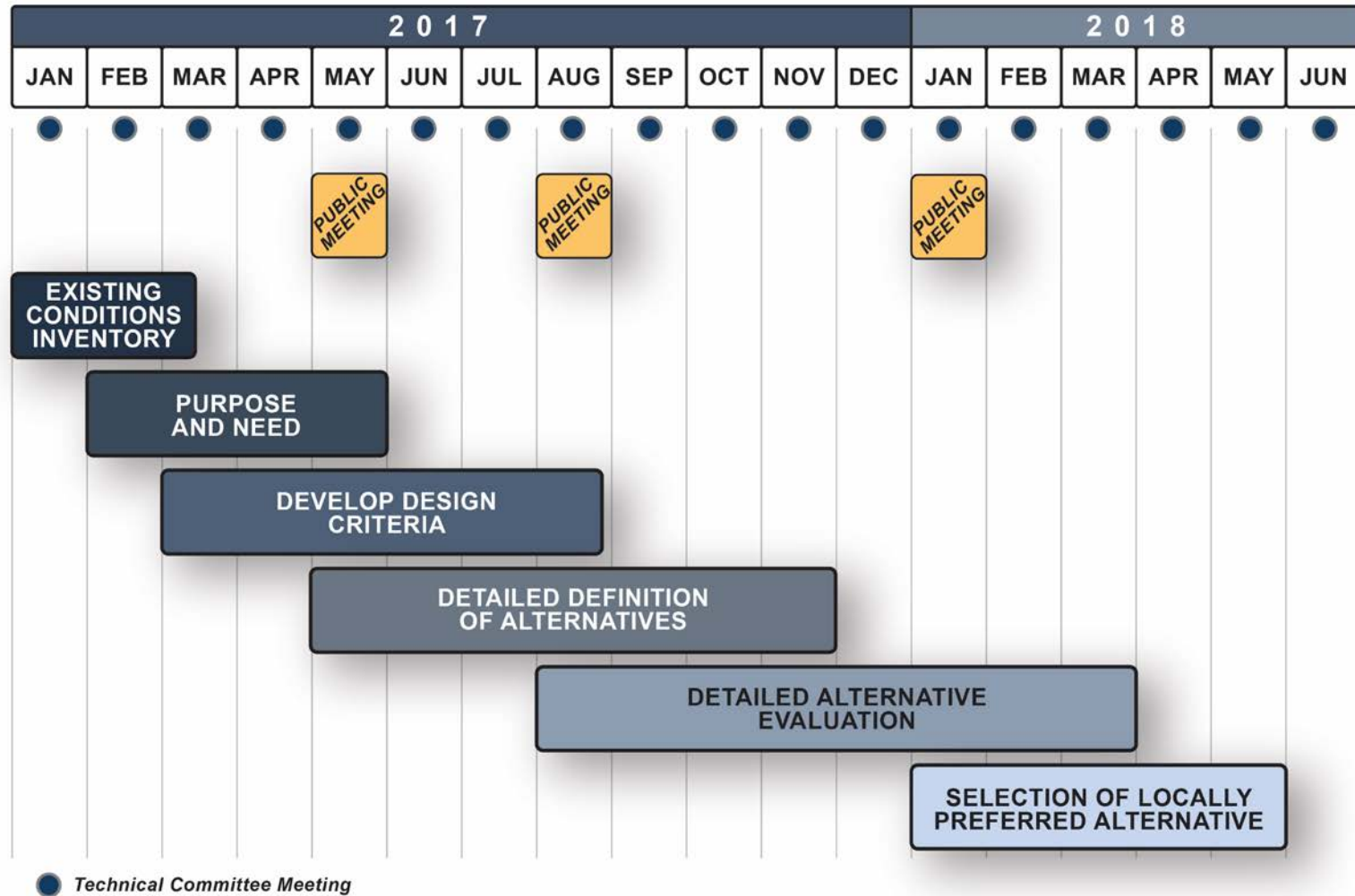


**NORTHSIDE
SOUTHSIDE
STUDY**

2: Project Schedule



Project Schedule





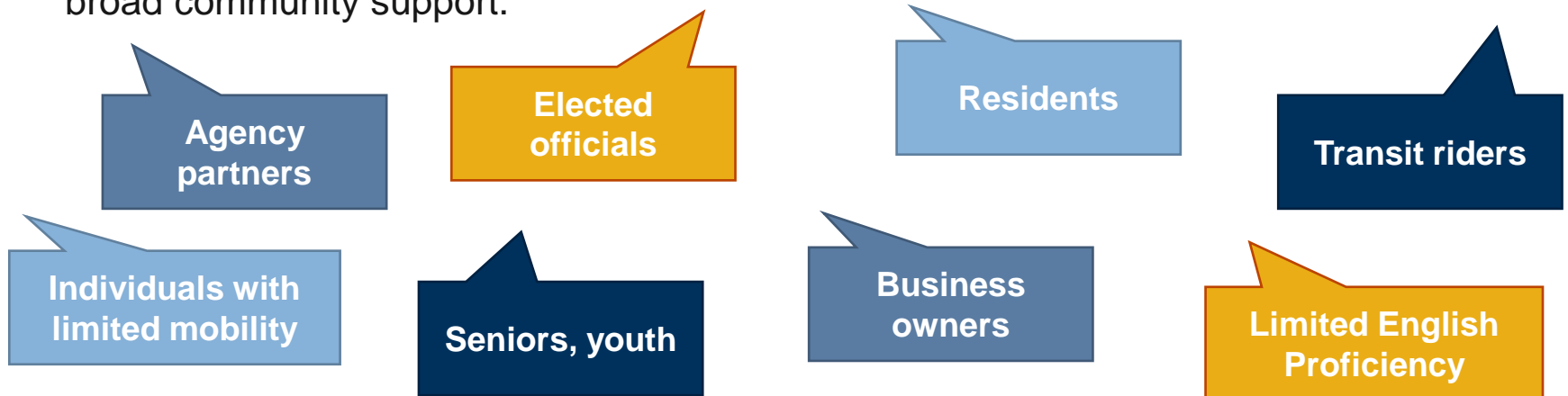
**NORTHSIDE
SOUTHSIDE
STUDY**

3 - Community Engagement and Agency Coordination Plan



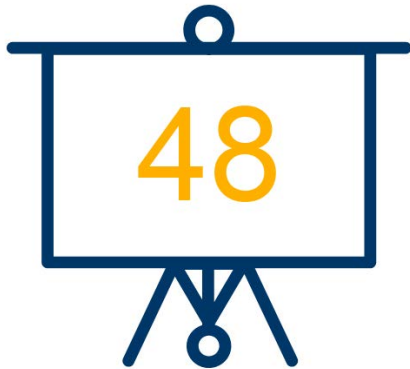
Community Engagement Goals

- **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.





Stakeholder and Community Engagement



Stakeholder Meetings



Open House Attendees



Email List



Community Presentations



Comment Forms



Online Survey Responses

www.northsidesouthsidedstl.com [@northsouthstl](https://twitter.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.

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

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

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

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

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

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

Study team incorporated community interest in redevelopment into narrative.

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.



**NORTHSIDE
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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

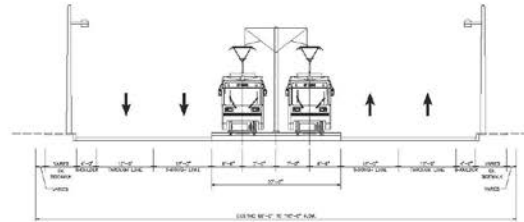


TYPICAL SECTIONS

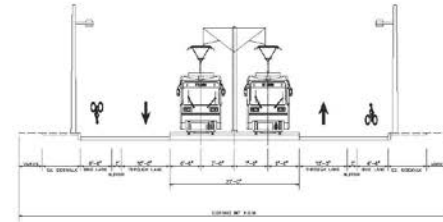
The following area examples of how Northside-Southside would be designed to fit into the street, including bike, pedestrian and vehicle lanes. As these drawings show, on-street light rail will be part of a multi-modal streets that can include cars, pedestrians, bikes, buses and light rail vehicles.



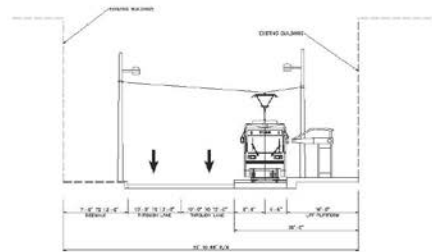
**NORTH
SOUTH** SIDE



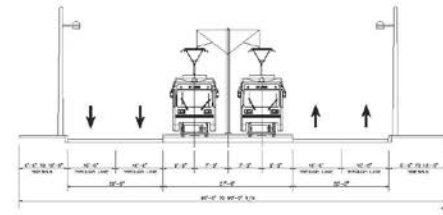
PARNELL/JEFFERSON



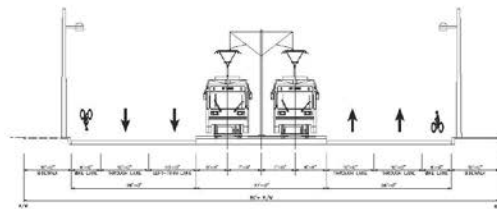
14TH STREET (FLORISSANT TO O'FALLON)



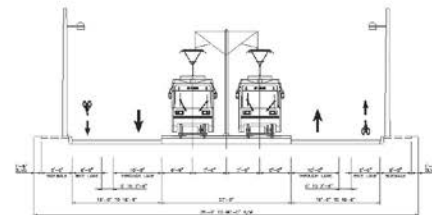
DOWNTOWN: 9TH/10TH ST



CLARK



JEFFERSON ST

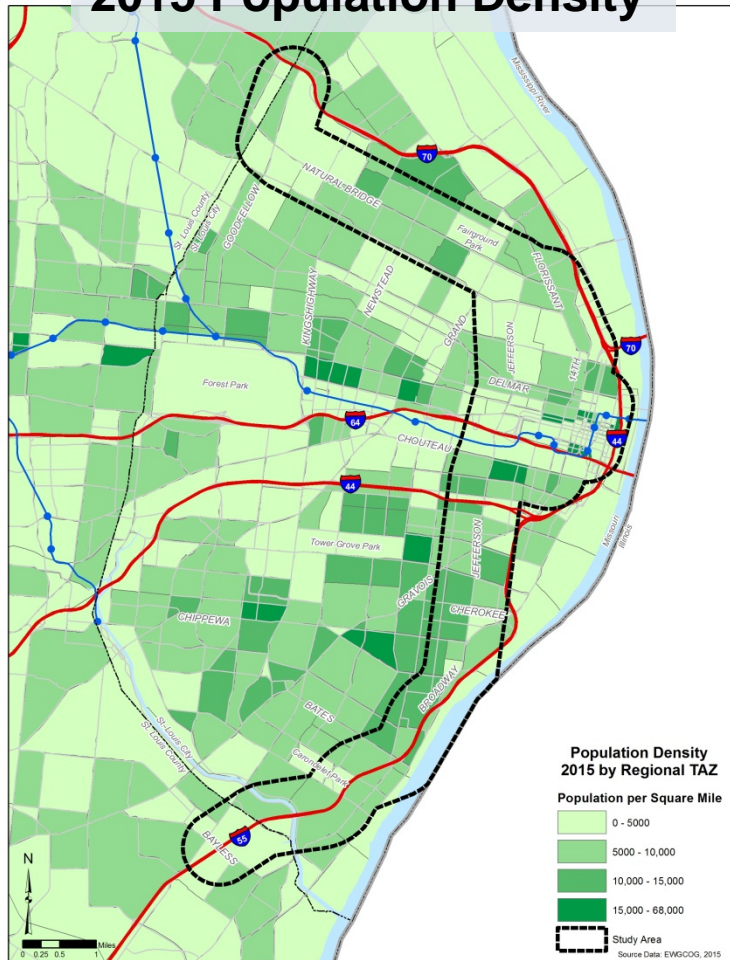


CHOUTEAU

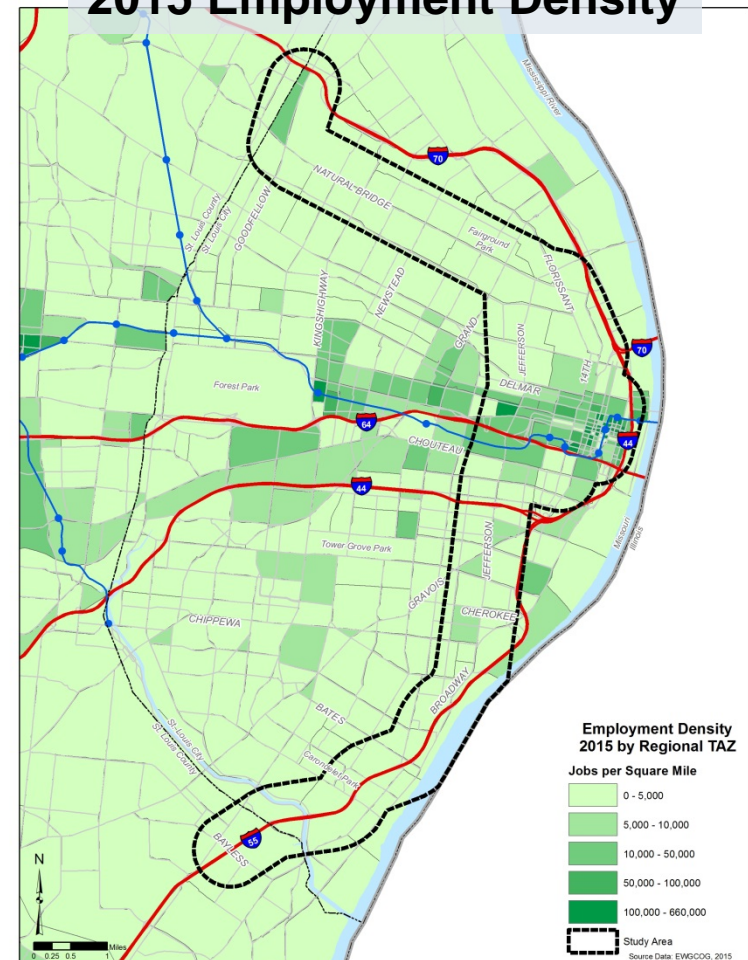


Demographics

2015 Population Density



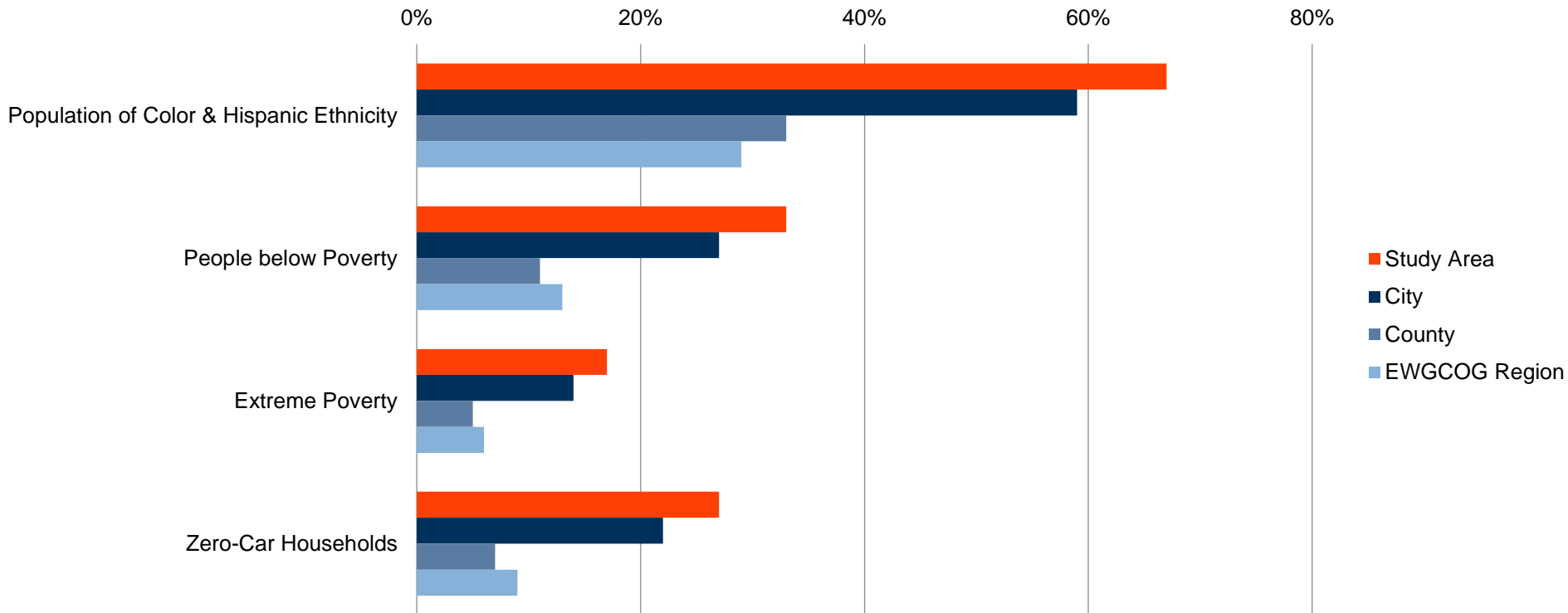
2015 Employment Density





Demographics

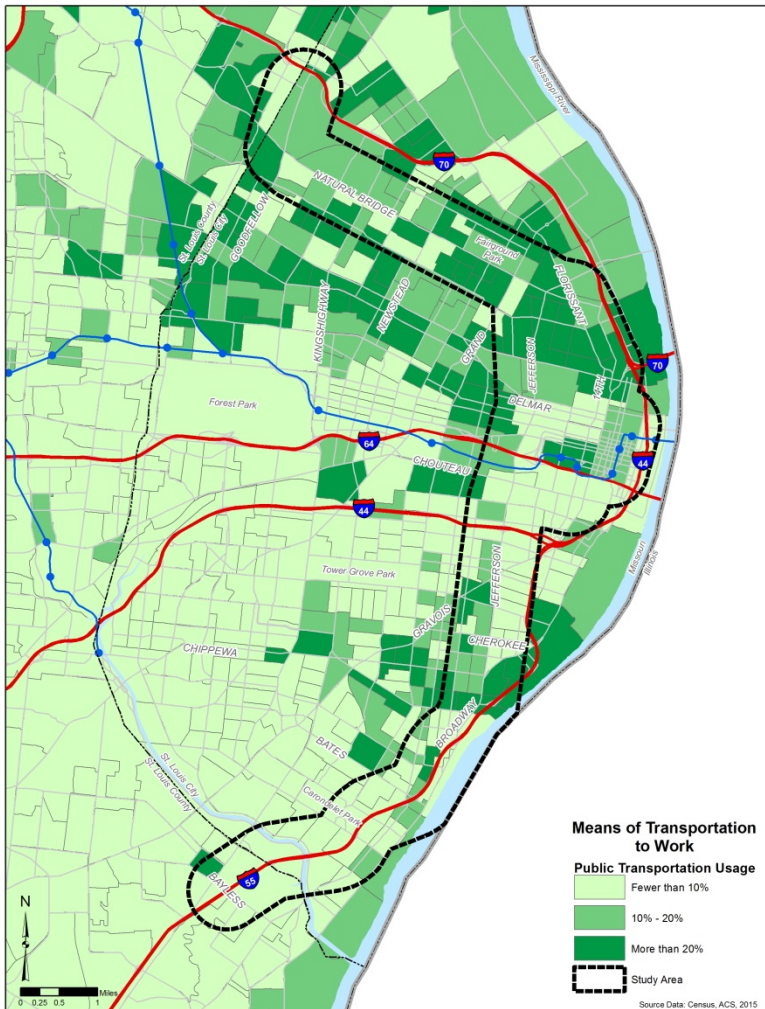
A high concentration of people who are members of Environmental Justice groups live within the Study Area.



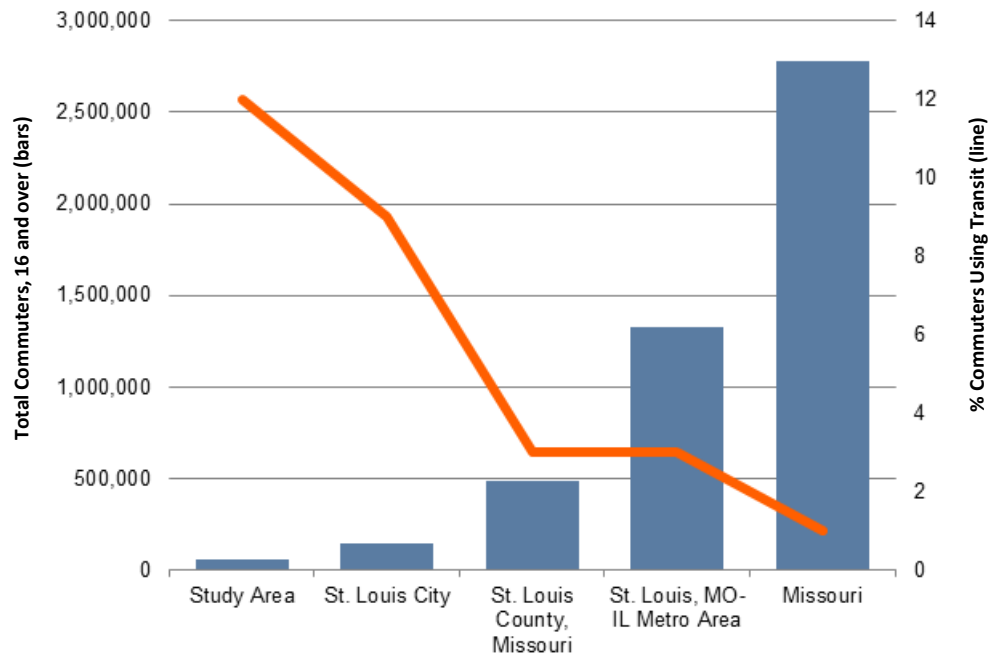


Transit Usage in the Corridor

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



Percent of Commuters Who Use Transit to Commute to Work





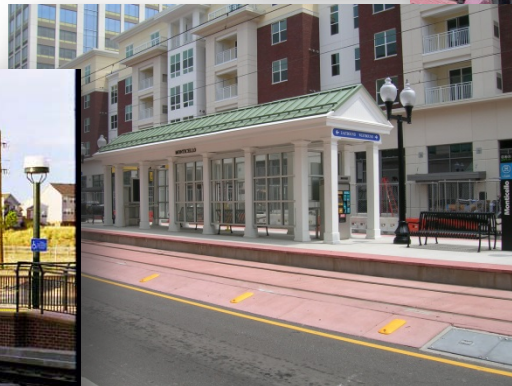
Build Alternatives: Stations

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

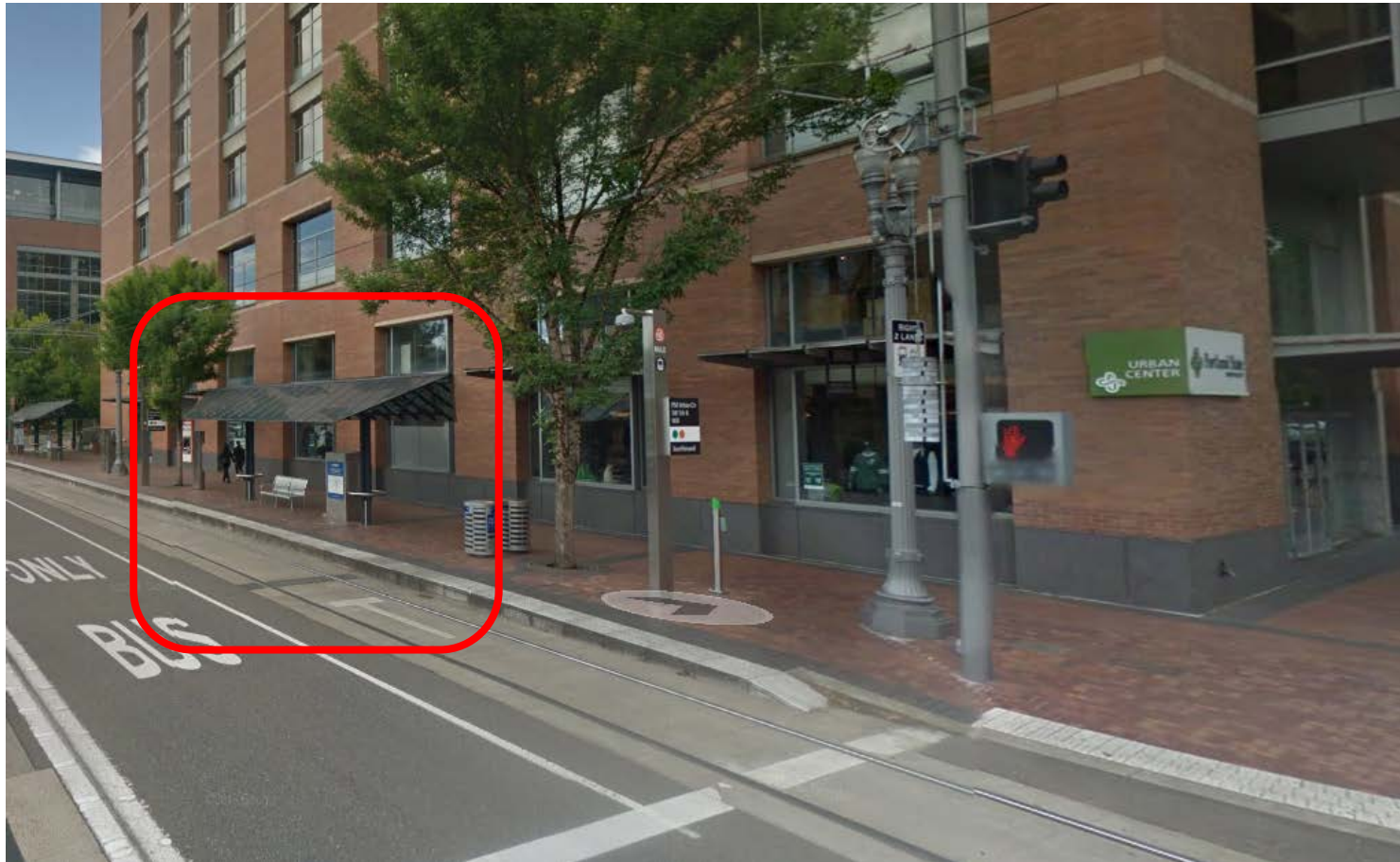
Center Platform Stations





Build Alternatives

Curbside Platforms





Grand Station Area Rendering





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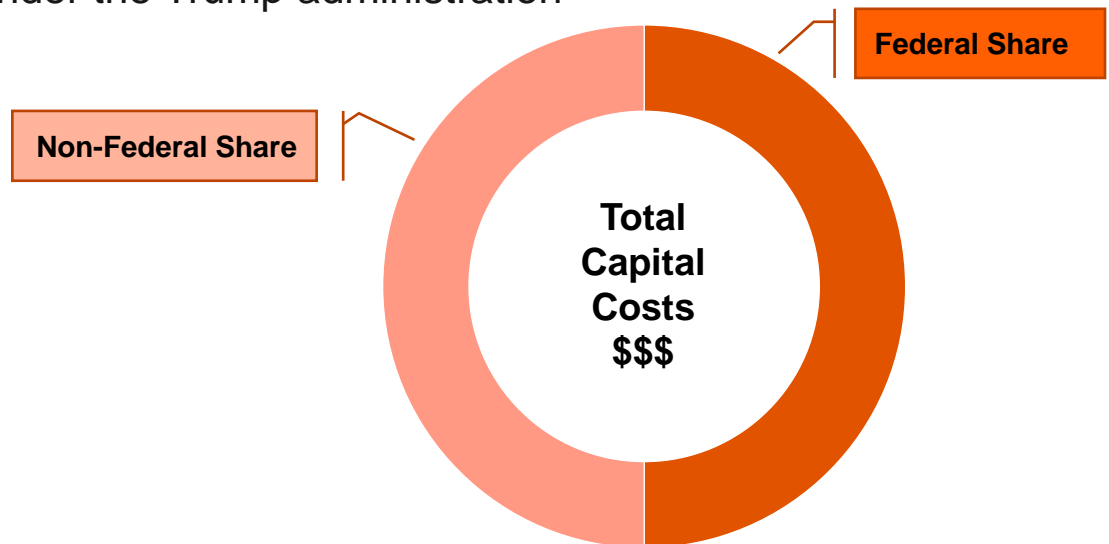
4: New Starts Project Justification Criteria



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



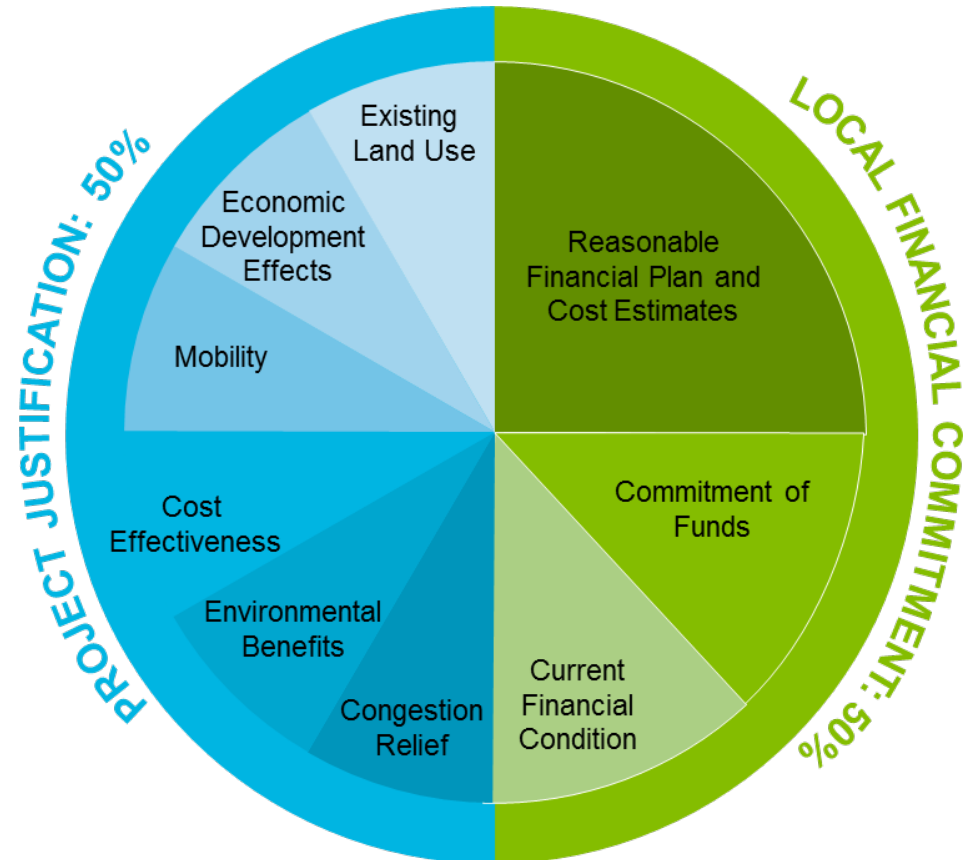


FTA New Starts Evaluation Criteria

Each criterion gets a ranking:

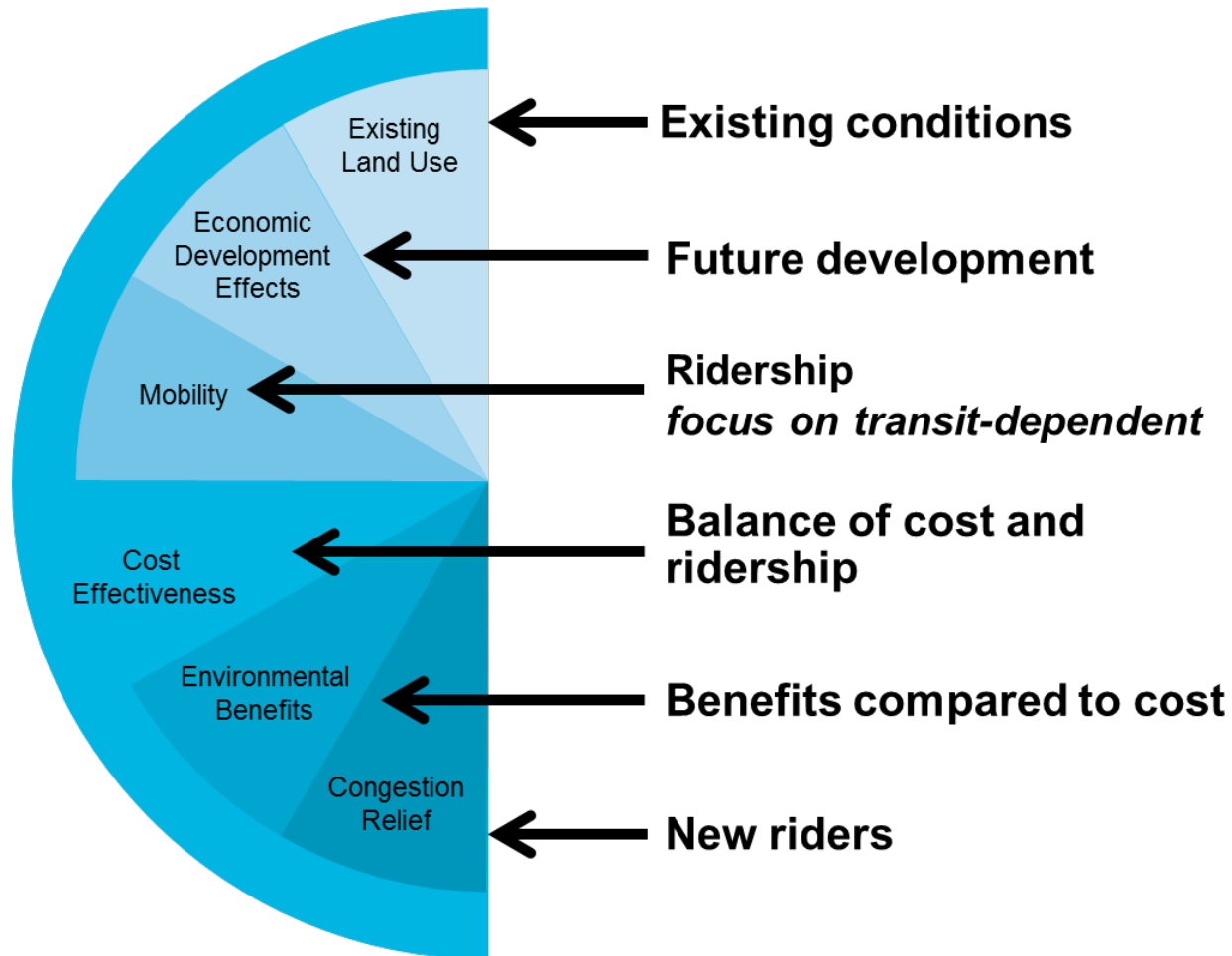
- High
- Medium-High
- Medium
- Medium-Low
- Low

Medium rating or higher required for both project justification and local financial commitment



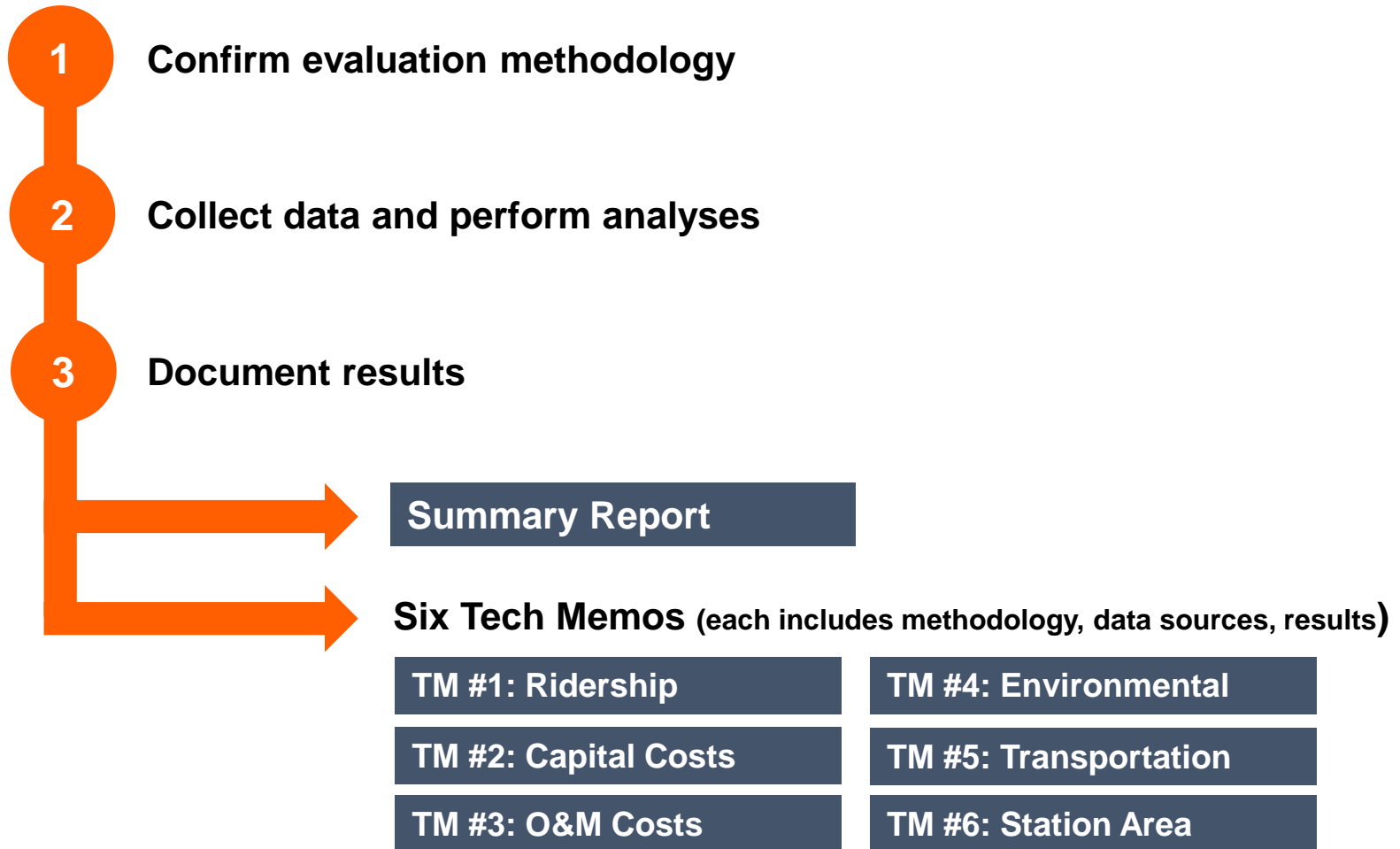


FTA New Starts Evaluation Criteria





Detailed Evaluation Process





**NORTHSIDE
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6: Selection of the Locally Preferred Alternative (LPA)



Linking Study Criteria to New Starts Criteria

Project Goals	Phase 1: Detailed Evaluation	Phase 2: Refinement of the LPA
<i>Foster Sustainable Development and Redevelopment</i>	Station area population and employment densities Station area equity characteristics Station area land use and economic development opportunities Environmental impacts / benefits	Economic Development <i>future development</i> Land Use <i>existing conditions</i> Environmental Benefits <i>benefits compared to costs</i>
<i>Improve Access to Opportunity</i>	Ridership Transit travel times Traffic impacts Parking impacts Potential right-of-way impacts Bicycle and pedestrian impacts	Mobility Improvements <i>ridership</i> Congestion Relief <i>new riders</i>
<i>Develop and Select an Implementable and Community-Supported Project</i>	Capital and O&M costs Cost effectiveness Community support	Cost Effectiveness <i>balance of cost and ridership</i>



Key Evaluation Metrics: Full Corridor

Criterion (numbers rounded to nearest \$M or 100)	2017 Design	Via St Louis	Via Delmar	Via Cass
# of Daily Riders (2025)	16,500	17,200	17,000	16,600
# of Transit-Dependent Riders (2025)	7,800	8,100	8,000	7,600
Capital Cost (\$ 2017 M)*	\$1,372	\$1,373	\$1,376	\$1,379
Rail O&M Cost (\$ 2017 M)	\$28	\$28	\$28	\$28
Change in traffic travel time (at AM / PM peak)	3 mins/ 8 mins	0 mins/ 1 min	1 min/ 2 mins	2 mins/ 3 mins
# of Residents (2015)	82,200	82,200	81,600	82,400
# of Jobs (2015)	81,800	82,200	89,600	82,400

* 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

Criterion (numbers rounded to nearest \$M or 100)	Via Cass	Via Florissant
# of Daily Riders (2025)	9,000	8,200
# of Transit-Dependent Riders (2025)	4,200	4,000
Capital Cost (\$ 2017 M)	\$667	\$660
Rail O&M Cost (\$ 2017 M)	\$17	\$14
# of Residents (2015)	47,100	47,000
# of Jobs (2015)	65,500	64,900

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

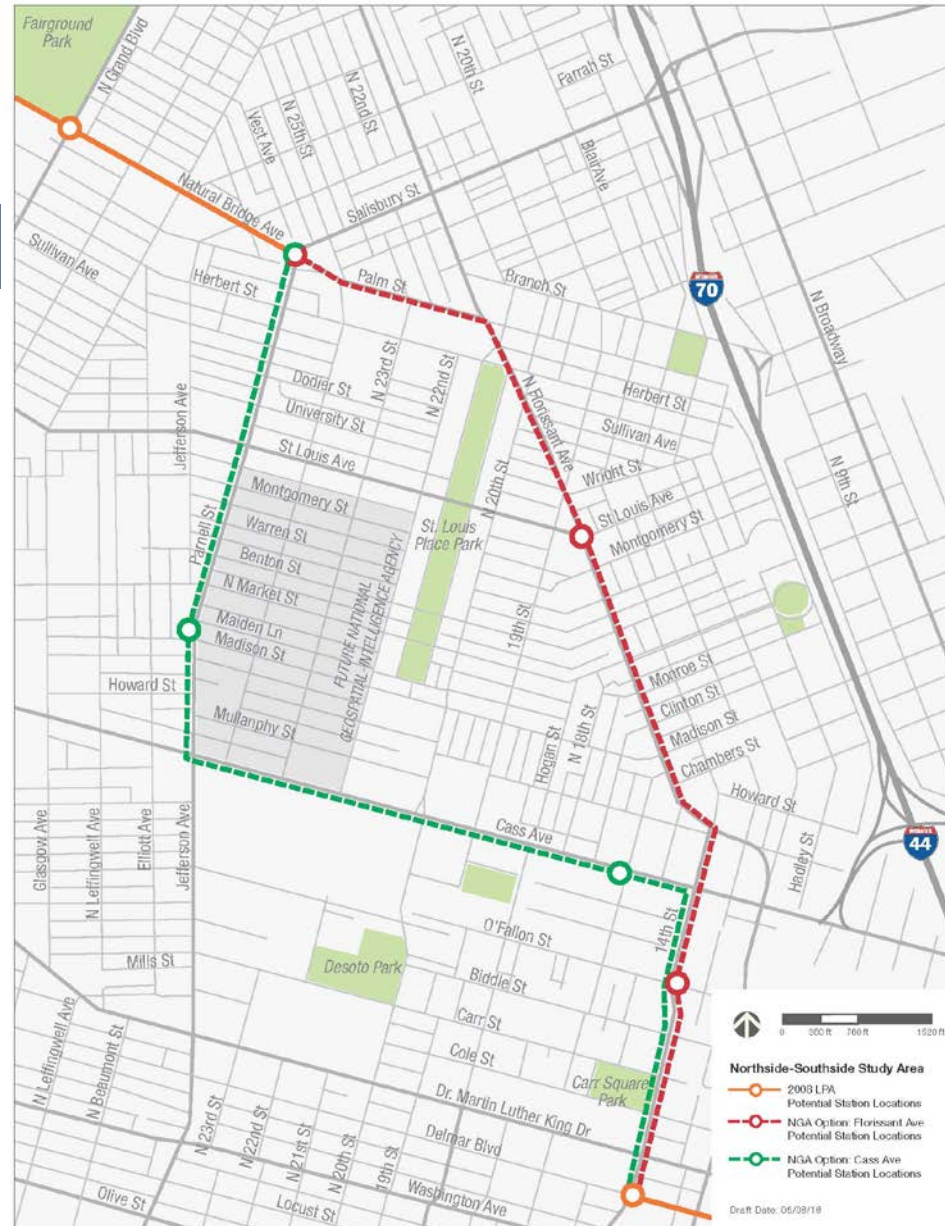
#2: Expanded Access to Jobs and Activity Centers



Cass best serves NGA pedestrian entrances

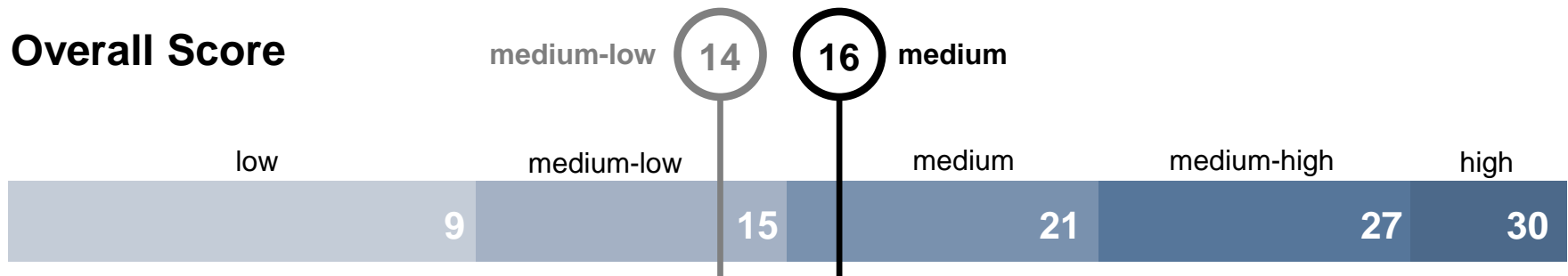
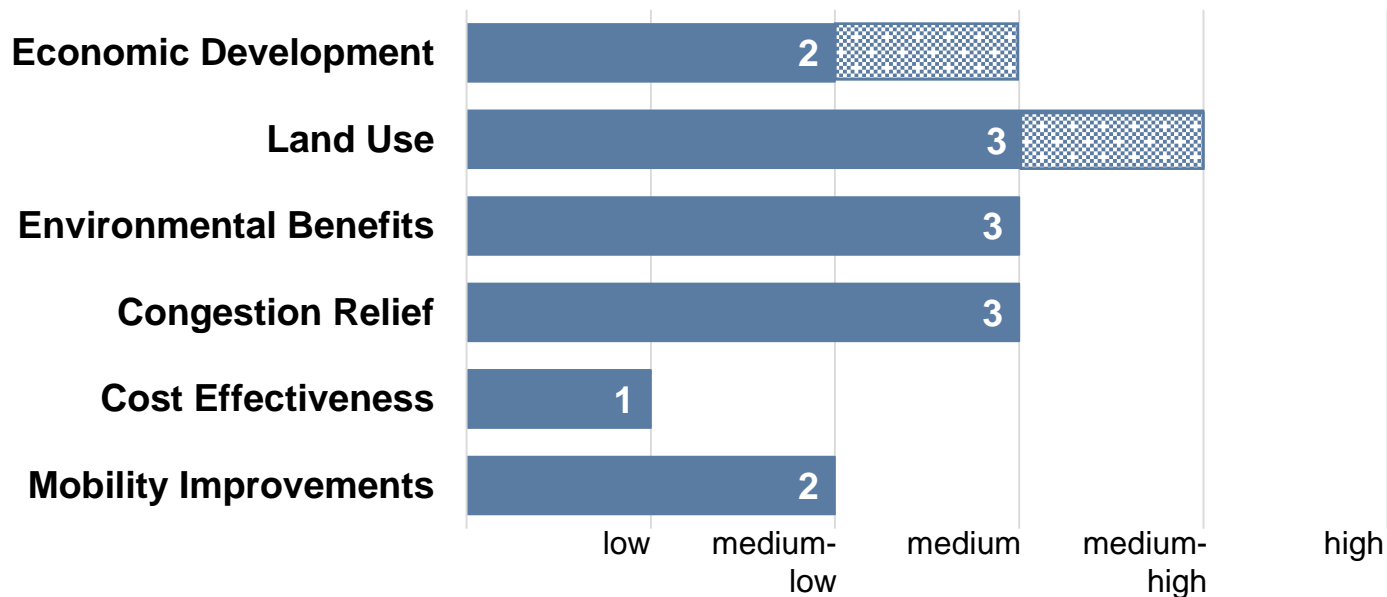


Community preference to serve both residents and NGA; too many parking impacts on St. Louis Ave.





Locally Preferred Alternative Evaluation





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





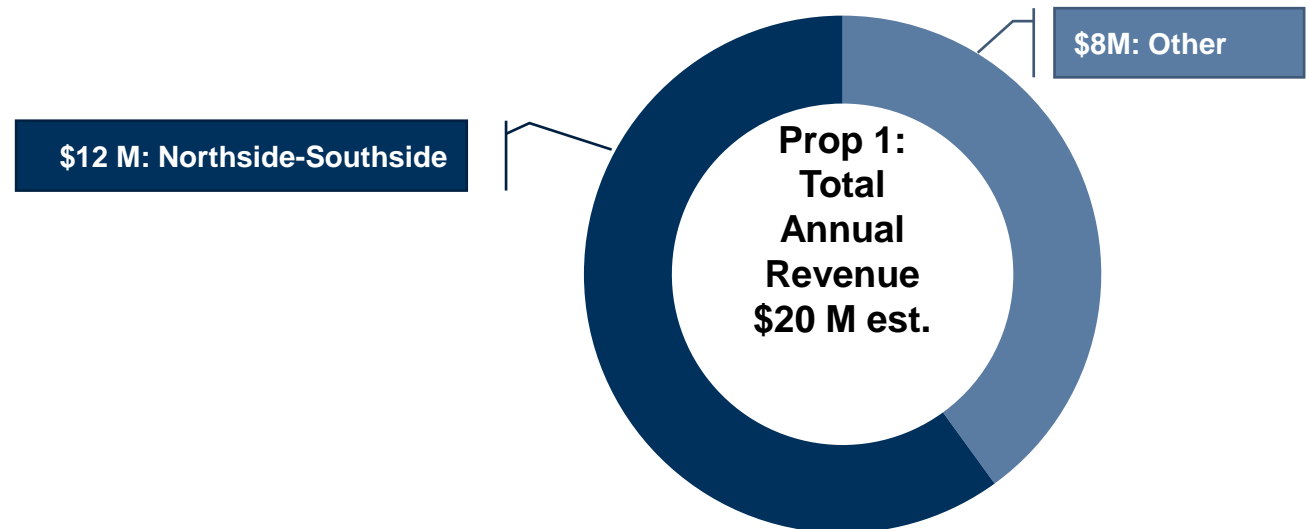
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7: Financial Planning



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

	Assumption	Funding Revenues	Financing
TIFIA	Sales tax revenues cover costs of Project Development, including NEPA	Economic Development Sales Tax and CIG New Starts Funding	TIFIA Loan
City Bonding	Sales tax revenues cover costs of Project Development, including NEPA	Economic Development Sales Tax and CIG New Starts Funding	City Bonding

Project Costs for Base Year (2017\$): \$667.3 million

	Project Costs w/o Financing (YOE\$ M)	Financing Costs (YOE\$ M)	Total Project Cost (YOE\$ M)	Funding Gap (YOE\$ M)	% of Project Cost Not Funded
TIFIA	\$897.1	\$44.6	\$941.7	\$149.9	15.9%
City Bonding	\$897.1	\$49.7	\$946.8	\$210.6	22.2%



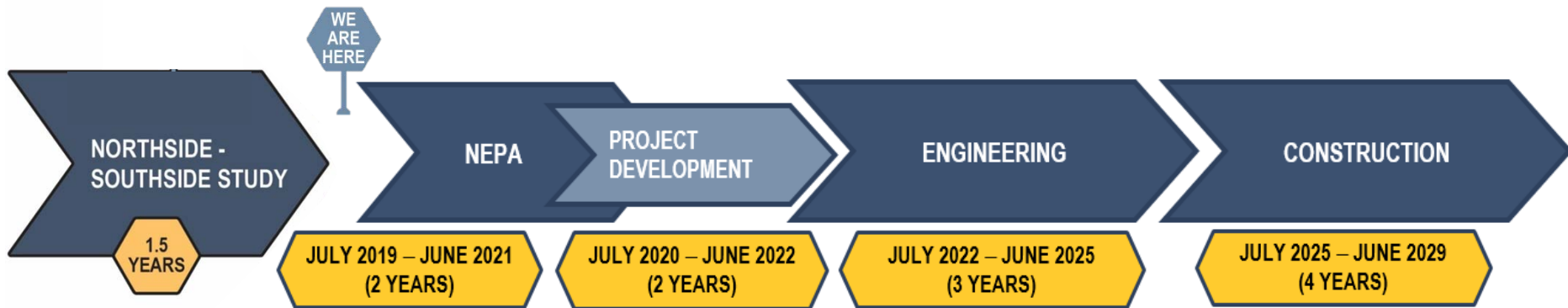
Bridging the Funding Gap

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





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.

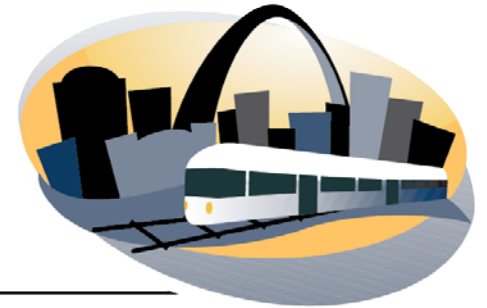


Recent Actions

- 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.



NORTHSIDE-SOUTHSIDE STUDY



March 15, 2019
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