

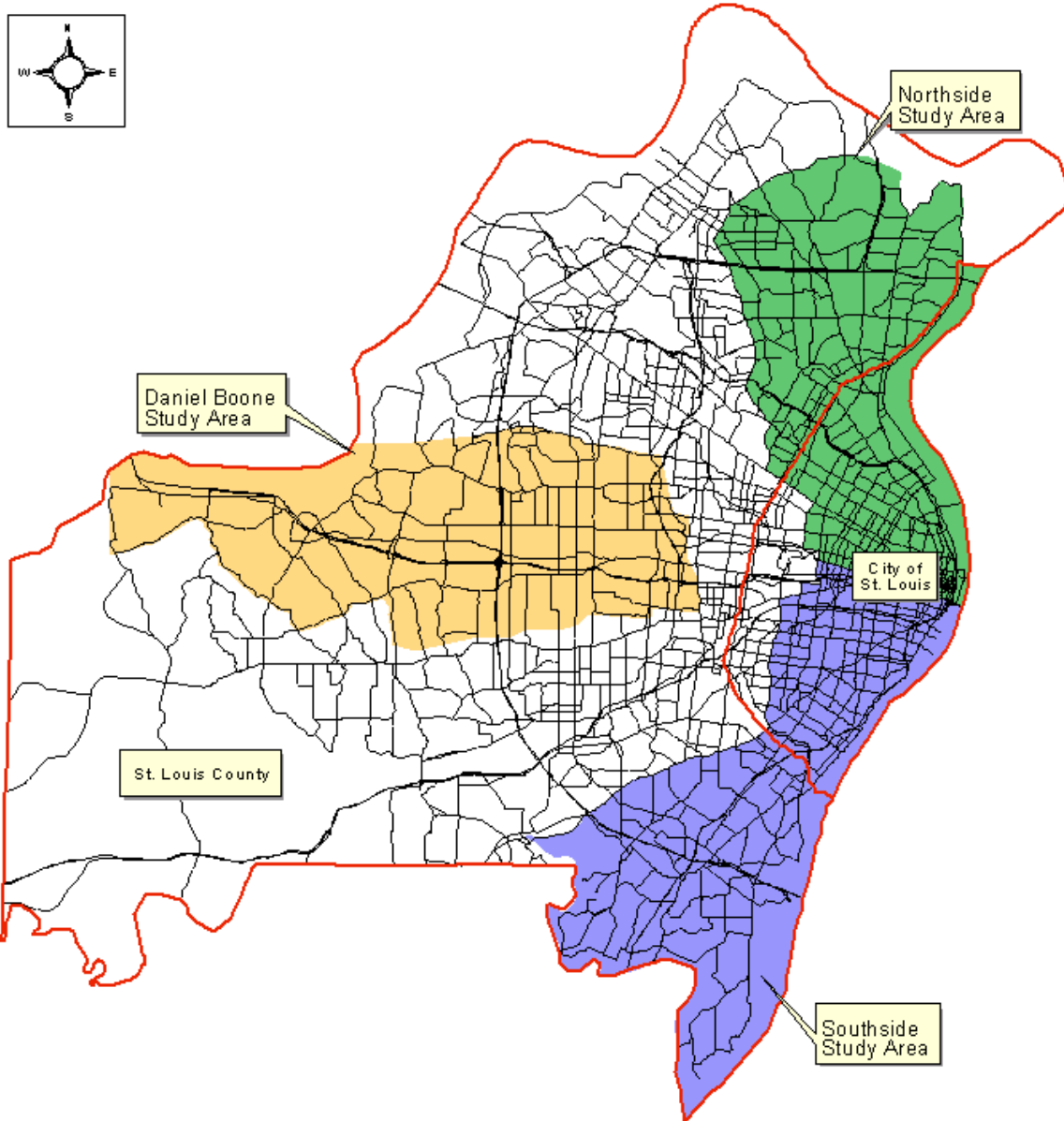
# Major Transportation Investment Analysis

## *Recommended Alternatives*

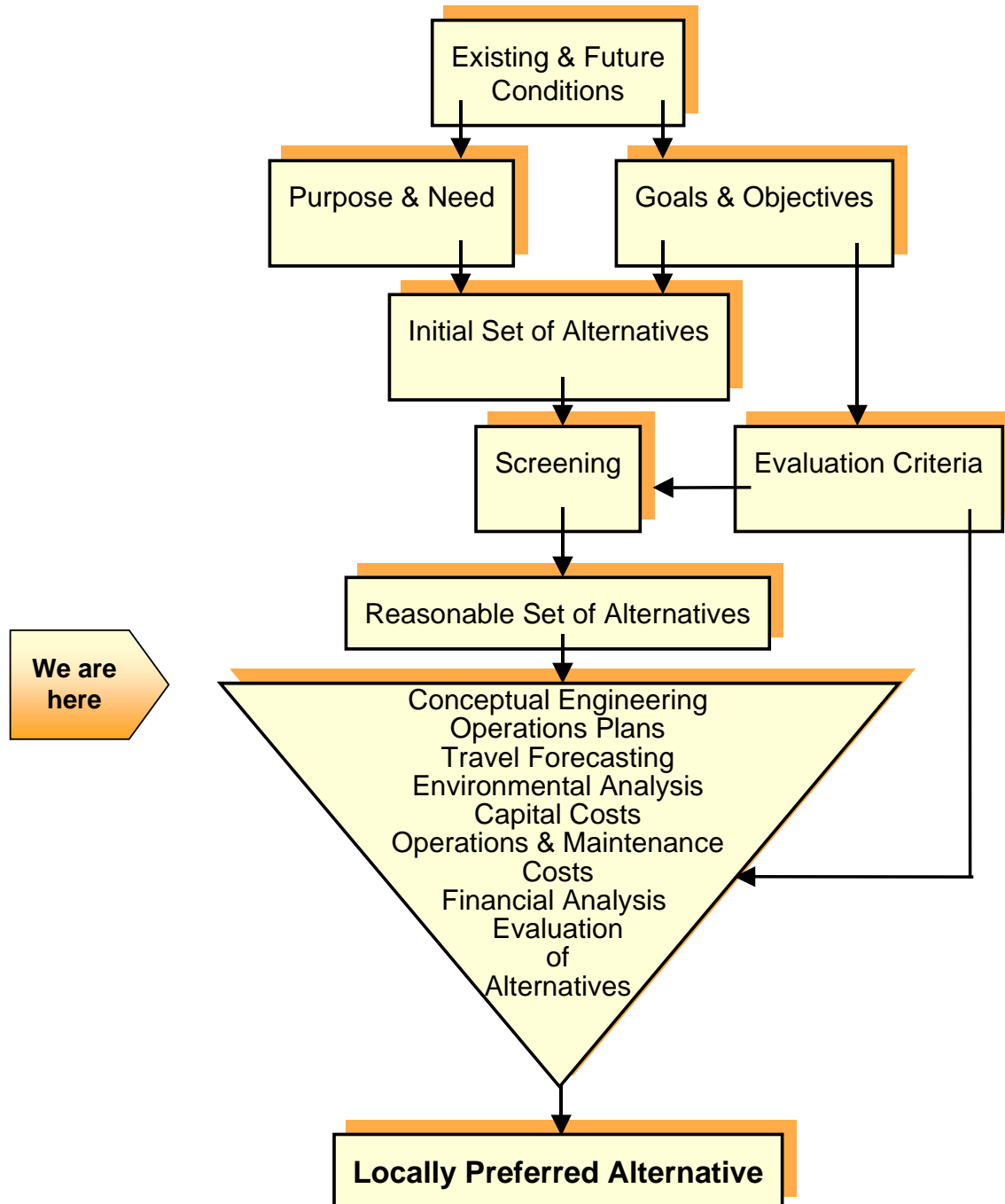
*For the Northside, Southside, and Daniel Boone Study Areas*



# Study Area Location Map



# MTIA Process



# Southside Study Area

## *Study Area Purpose and Need*

- ***Provide direct access to jobs:*** Need to serve the commute trip from home to work within the Study Area.
- ***Preserve neighborhoods:*** Use of new transportation infrastructure to maintain and/or enhance quality of life in communities and neighborhoods.
- ***Promote economic opportunities:*** Use of new transportation infrastructure as catalyst for new development (jobs, services, commercial activity) in areas of declining employment.
- ***Relieve congestion:*** Improve mobility on major arterials and roadways experiencing high levels of traffic congestion.
- ***Minimize traffic impacts:*** Mitigate secondary travel impacts on local city streets due to high traffic demand from South County to St. Louis CBD and from South County to Clayton CBD and other destinations.
- ***Pursue cost effective, safe transportation solutions.***

# Southside Study Area

## Goals and Objectives

### ACCESS TO OPPORTUNITY

*Goal:* Improve travel for the home to work commute for Southside residents and employees.

*Objectives:*

- Provide more direct transit connections linking Southside residents with employment sites in the Southside study area and throughout the region as a whole.
- Reduce travel times (both auto and transit).
- Improve intermodal connections.

### SUSTAINABLE DEVELOPMENT

*Goal:* Maintain and/or enhance Southside neighborhoods and communities.

*Objectives:*

- Invest in new transportation services and infrastructure that contribute to maintaining and/or enhancing quality of life in Southside neighborhoods.
- Integrate transportation infrastructure investments and land development or redevelopment in ways that are economically sustainable and consistent with community values and historic preservation.

### CONGESTION MANAGEMENT

*Goal:* Relieve congestion in areas projected to experience traffic growth.

*Objectives:*

- Improve traffic conditions on congested major arterials within the Southside Study Area.
- Increase use of alternative transportation modes.

*Goal:* Minimize secondary traffic impacts on local streets due to lack of direct roadway connections or bottlenecks of congestion on the primary road system.

*Objectives:*

- Enhance roadway connectivity and provide improvements to facilitate major travel movements in the study area.

## **SAFETY/PRESERVATION OF INFRASTRUCTURE**

*Goal:* Pursue cost-effective, safe transportation solutions.

*Objectives:*

- Make best use of the existing transportation infrastructure.
- Increase the effectiveness of the existing and planned regional transportation system at lowest possible cost.
- Provide for safer roadways, including pedestrian and bicycle opportunities.

# Southside Study Area

## No Build Alternative

The No Build alternative represents future transportation conditions in the year 2020 if no action is taken beyond transportation projects that are already planned and committed at the time of the current study. The year 2020 is the horizon year for the Southside MTIA. The No Build alternative, required by federal planning guidelines, provides a baseline against which the effects of all other alternatives can be measured.

## LIGHT RAIL TRANSIT (LRT)/BUS TRANSIT

1. Cross County MetroLink Extension (all three segments).
2. New Light Rail Transit Stations (to be determined for Cross County link into South County, some will include parking).
3. Feeder Bus Service to LRT; Neighborhood Circulators.
4. Flexible Routing and Demand Response Bus Service.
5. Maintain Express Bus to Regional Central Business Districts (CBDs).
6. Proposed Transfer Centers (4).
7. Transition to Transit Center Design for Bus Service.
8. Some growth in Fixed Route/Express Bus Service (20% approx. increase).
9. Downtown Multimodal Center at 14<sup>th</sup> Street and Spruce Street.

## HIGHWAY/ROADWAY

1. I-55, Poplar Street Bridge to Mississippi River, reconfigure ramps.
2. Close I-70 ramps, at Poplar Street Bridge and Memorial Drive.
3. I-70 ramps, Spruce St. at I-64, new I-70 Northbound and Southbound ramps.
4. I-55, capacity and interchange improvements, south of Southside Study Area in Jefferson County. From Richardson Road to MO. M becomes 8 lanes. From MO. M to McNutt Road becomes 6 lanes. from McNutt to MO. A, remains 4 lanes. From MO. A. to U.S. 64, add auxiliary lanes.
5. I-64, Kingshighway Boulevard to Tower Grove Avenue, add auxiliary lanes (one in each direction), interchange improvements.
6. I-44/I-55 interchange improvement (reconfigure I-44 ramps, design improvement on EB I-44 bridge at I-55).
7. McRee Road, Vandeventer Avenue to Kingshighway Boulevard, widen from 2 to 4 lanes.
8. I-255 and MO. 231 interchange improvement.
9. MO. 231 (Telegraph Rd.), Christopher to Meramec River, widen from 2 to 5 lanes.
10. MO. 21 (Tesson Ferry Rd.), M to H, south of the Southside Study Area, widen from 2 lanes to 4-lane freeway.
11. New 8-lane Mississippi River Bridge and I-70 relocation (in Northside Study Area).
12. Signal Coordination and TSM improvements along Broadway, Grand Avenue, Kingshighway Boulevard and Gravois Road within the city limits.
13. Grattan Street Parkway, 18<sup>th</sup> and Gratiot Street to Lafayette and I-55, construct new 4-lane arterial.
14. Kennerly Road, Tesson Ferry Road to Sappington Road to I-270, widen from 2 to 5 lanes.

15. Meramec Bottom Road, I-55 to Lemay Ferry Road, widen from 2 to 3 lanes.
16. Sappington Road, Kennerly Road to Lindbergh Boulevard, widen from 2 to 3 lanes.
17. Forder Road, Telegraph Road to Ringer Road, widen from 2 to 3 lanes.
18. Spruce Street extension at Multimodal center.

## **INTELLIGENT TRANSPORTATION SYSTEMS (ITS)**

1. Transit ITS strategies.
2. ITS Improvements, districtwide, such as ramp signals, changeable message boards, vehicle detection on the mainlines, and Automated Vehicle Location (AVL) technologies for transit vehicles.

# Southside Study Area

## **Alternative 2. Transportation Systems Management (TSM)**

The TSM alternative consists of an integrated package of low-cost, operational transportation improvements that are designed to make the best use of the existing transportation infrastructure. Examples include increased bus service, traffic signal coordination, access management along arterial roadways, and intelligent transportation system (ITS) improvements. The TSM alternative, required by federal planning guidelines, provides a basis of comparison to alternatives that are more expensive in terms of both capital investment and operational costs.

### **TRANSIT**

1. Increased frequency of express bus along I-55 during the peak periods.
2. Enhanced feeder bus service to new MetroLink stations.
3. Enhancements to circumferential routes to U.S. 40 via I-270.
4. Completion of transit system redesign around transfer centers: more routes, improved frequency, increased span of operation.
5. Increased local, fixed route service along key transit arterials.
6. Higher investment in Intelligent Transportation Systems (ITS) transit improvements.
7. Altogether would represent about a 40% increase in transit compared to existing conditions.

### **HIGHWAY/ROADWAY**

1. Access management and/or signal coordination along key arterials: Telegraph Rd, Lindbergh Blvd, Gravois Road, Tesson Ferry Road, Lemay Ferry Road, River Des Peres Boulevard, Forest Park Avenue, Chouteau/Manchester Avenues, and Chippewa Street.
2. Provide transit-supportive amenities along key corridors: add park and pool facilities, integrated signal systems, signal prioritization for buses, pedestrian improvements and curb cuts at selected intersections.

### **BIKEWAY/PEDESTRIAN**

1. Identify opportunities to tie bike/pedestrian improvements with MTIA proposed capital improvements.

## **INTELLIGENT TRANSPORTATION SYSTEMS (ITS)**

1. “Regional” diversionary routing (i.e. use of variable message signs before major decision points, information systems).
2. Ramp signals/queue bypass at on-ramps that are near or that serve transit centers.
3. Extended implementation of ITS improvements (approximately 60% increase). Possibilities include accident investigation, glare screens, truck channelization strategies, etc.

# Southside Study Area

## **Alternative 3. Light Rail Transit (Union Pacific Railroad Right-of-Way)**

This alternative would extend MetroLink service from downtown into south St. Louis County. This alternative provides a high level of connectivity with the existing and planned MetroLink system as well as light rail alternatives proposed for the Northside study area.

### **FEATURES**

- Uses existing and former railroad corridors, primarily at surface level.
- It has modest land costs and minimal potential for displacements of residences and businesses.
- Provides direct access to key activity centers in the Southside study area.
- Offers the greatest potential for transit oriented development and neighborhood revitalization.

### **ALIGNMENT / ALTERNATE ALIGNMENTS**

From existing MetroLink at either the Grand MetroLink Station or along Tucker Boulevard south along on of the following alignments:

- South and west along Tucker Boulevard (12<sup>th</sup> Street) or 14<sup>th</sup> Street and Choteau Avenue to the Union Pacific Railroad right-of-way.
- South and west along Tucker Boulevard (12<sup>th</sup> Street) or 14<sup>th</sup> Street and Lafayette Avenue to the Union Pacific Railroad right-of-way.
- South along the Union Pacific Railroad right-of-way.

These three options converge at the Union Pacific Railroad right-of-way near its intersection with Lafayette Avenue. The alignment then follows the rail right-of-way south to approximately the intersection of Bayless Avenue and I-55. The alignment then follows one of the following alignments:

- South along the Union Pacific Railroad right-of-way to the Cross-County MetroLink extension.
- South along I-55 right-of-way to the Cross-County MetroLink extension.

The alignment then follows the Cross-County extension south to its terminus north of Butler Hill Road.

# Alternative 3

## Light Rail Transit (LRT)

Union Pacific Railroad

**LEGEND**

- Main Alignment Segment
- Alignment Option  
(Candidate routing option between main alignment sections)



# Southside Study Area

## **Alternative 4. Light Rail Transit (I-55 Right-of-Way)**

This alternative provides a high level of connectivity with the existing and planned MetroLink system as well as the Northside light rail alternatives. The light rail would be constructed primarily at surface level, though it would probably require sections of elevated structure or tunnel to negotiate the major interchanges along the two interstates.

### **FEATURES**

- Uses available right-of-way within an active transportation corridor.
- Minimal potential for displacements of residences and businesses.
- Land costs would be minimal.
- Provides direct access to the downtown St. Louis area as well as key activity centers and major employment centers.

### **ALIGNMENT**

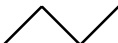

- This alignment begins downtown and continues south along the I-55 right-of-way, as far as the South County Shopping Center in South St. Louis County.
- From the shopping center, it travels east along the I-255 right-of-way terminating at a park-and-ride lot near the Jefferson Barracks Medical Center.
- In the City of St. Louis, it connects with the downtown area via Tucker Boulevard.

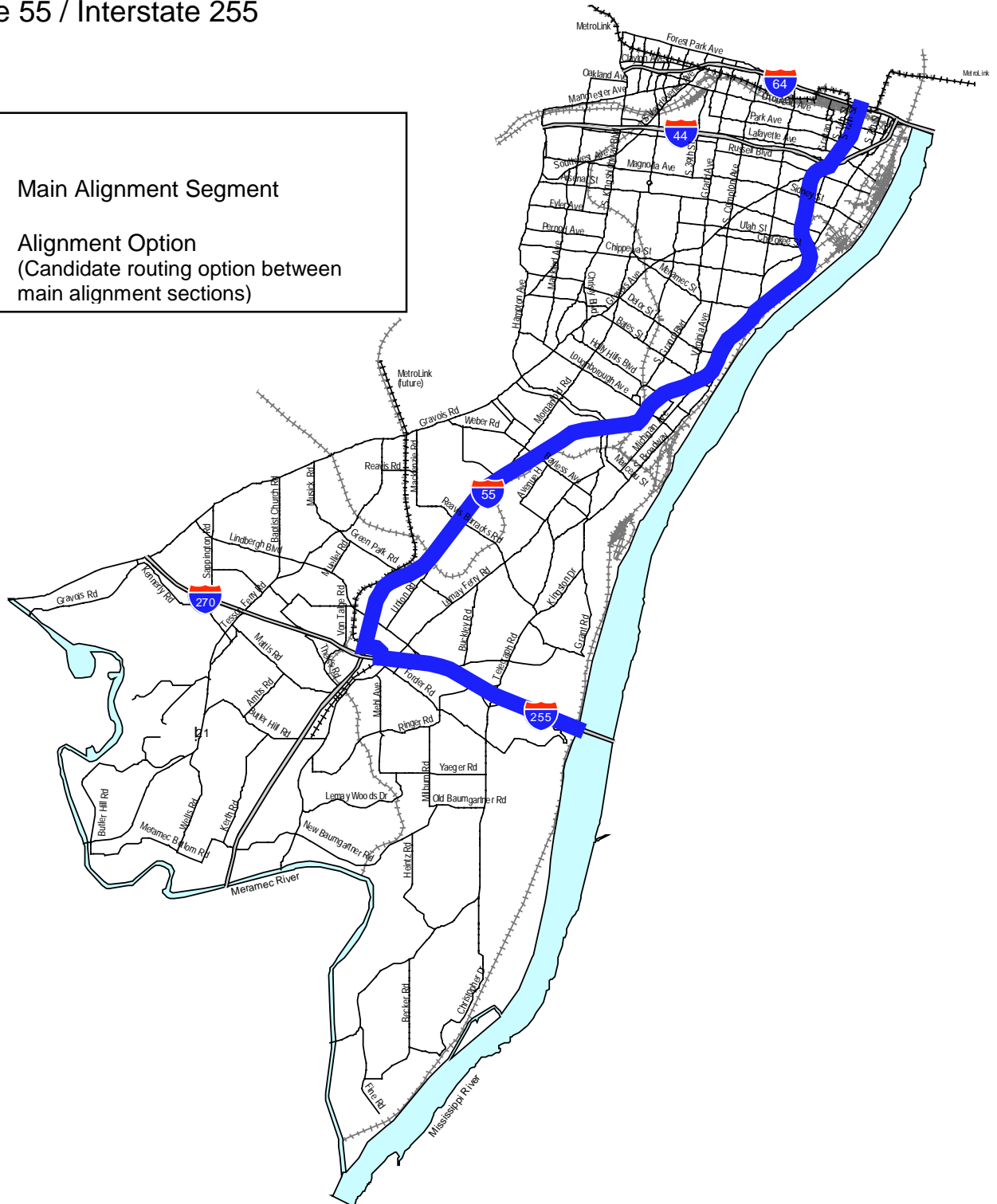
# Alternative 4

## Light Rail Transit (LRT)

Interstate 55 / Interstate 255

**LEGEND**

-  Main Alignment Segment
-  Alignment Option  
(Candidate routing option between main alignment sections)



# Southside Study Area

## **Alternative 5. *Bus Rapid Transit*** ***(Union Pacific Railroad Right-of-Way)***

This alternative proposes the construction of a two-lane roadway for exclusive use by buses. The purpose of this alternative is to provide a travel time preference for transit riders by separating transit vehicles from local traffic and congestion on city streets.

### **FEATURES**

- Low construction cost.
- Offers opportunity for a “one-seat ride.”
- Situated within existing and former rail corridors.
- Potential for displacements and community disruption is low.
- Uses existing transportation corridors, which reduces land acquisition costs and potential relocation costs.

### **ALIGNMENT**

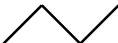

- This alternative proposes the construction of a two-lane roadway for exclusive use by buses within the Union Pacific Railroad right-of-way between Grand Station and I-55 near Green Park Road.
- Freeway ramps at I-55/Lindbergh Boulevard and I-255/Lemay Ferry Road would be widened to accommodate a bypass lane for buses.
- Riders would embark and disembark at transit stations along the route as well as ride buses that would enter the busway after circulating through local communities.

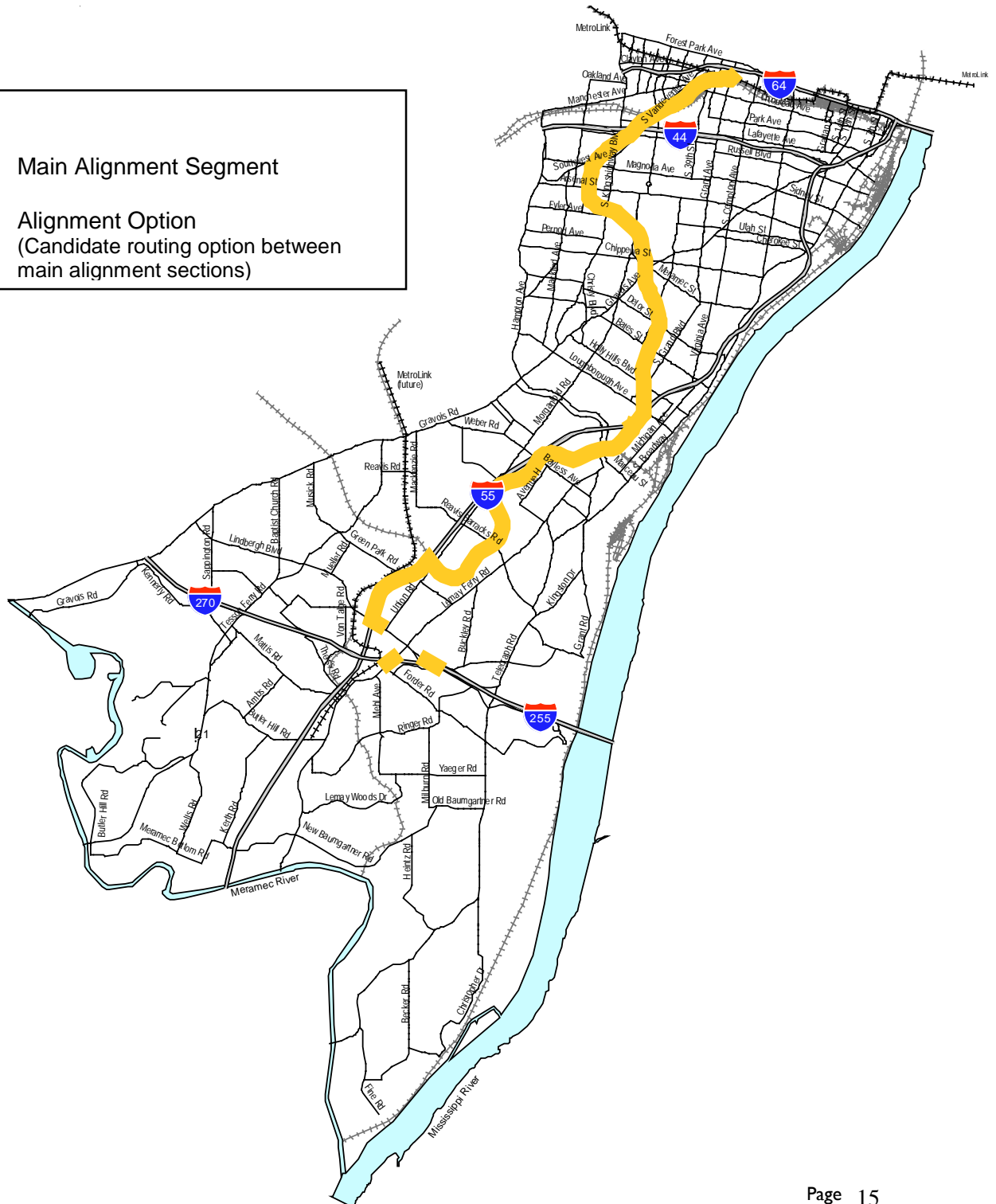
# Alternative 5

## Bus Rapid Transit (BRT)

Union Pacific Railroad

**LEGEND**

-  Main Alignment Segment
-  Alignment Option  
(Candidate routing option between main alignment sections)



# Southside Study Area

## **Alternative 6. Roadway**

This alternative most directly addresses rapid growth of travel demand in South County. It proposes roadway widenings along the major arterials that are projected to experience high levels of congestion in the Southside study area.

### **FEATURES**

- Great potential for congestion relief.
- Travel time savings for trucks and motorists.
- Serves multiple travel markets and trip purposes within the study area.
- Offers the opportunity to improve the existing geometric design.
- Improves roadway safety.

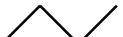

### **ALIGNMENT**

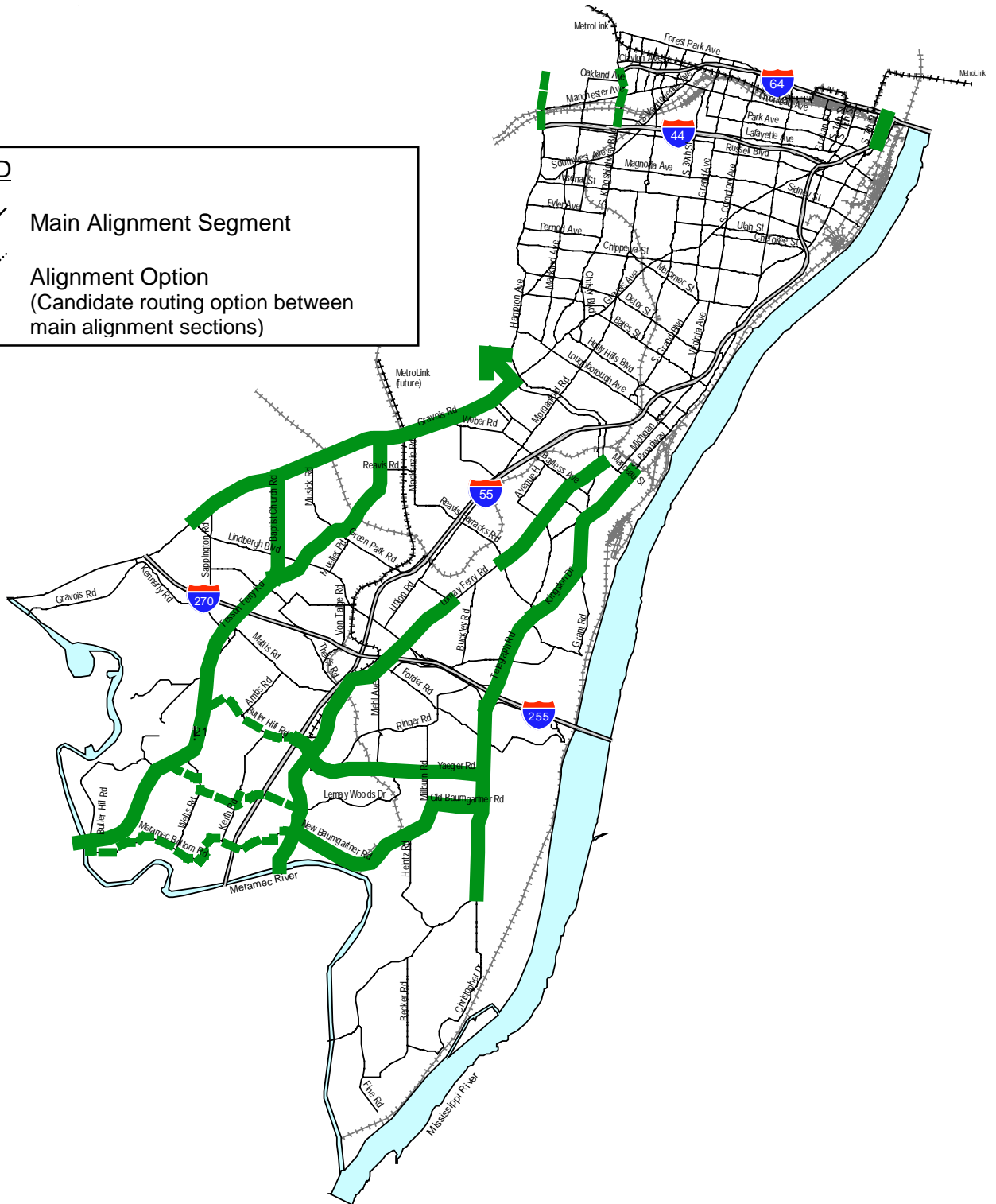
- Improvements would take place primarily within south St. Louis County along major north-south arterials such as:
  - Gravois Road
  - Tesson Ferry Road
  - Lemay Ferry Road
  - Telegraph Road
- South of I-270/I-255, new east-west roadways will be considered between Telegraph Road and I-55 and between Tesson Ferry Road and I-55.
- In the City of St. Louis, added ramp connectors at the I-55/I-64 interchange will be examined.
- An enhanced north-south roadway connection between I-64 and I-44 along either Kingshighway or Hampton Avenue will also be examined.

# Alternative 6

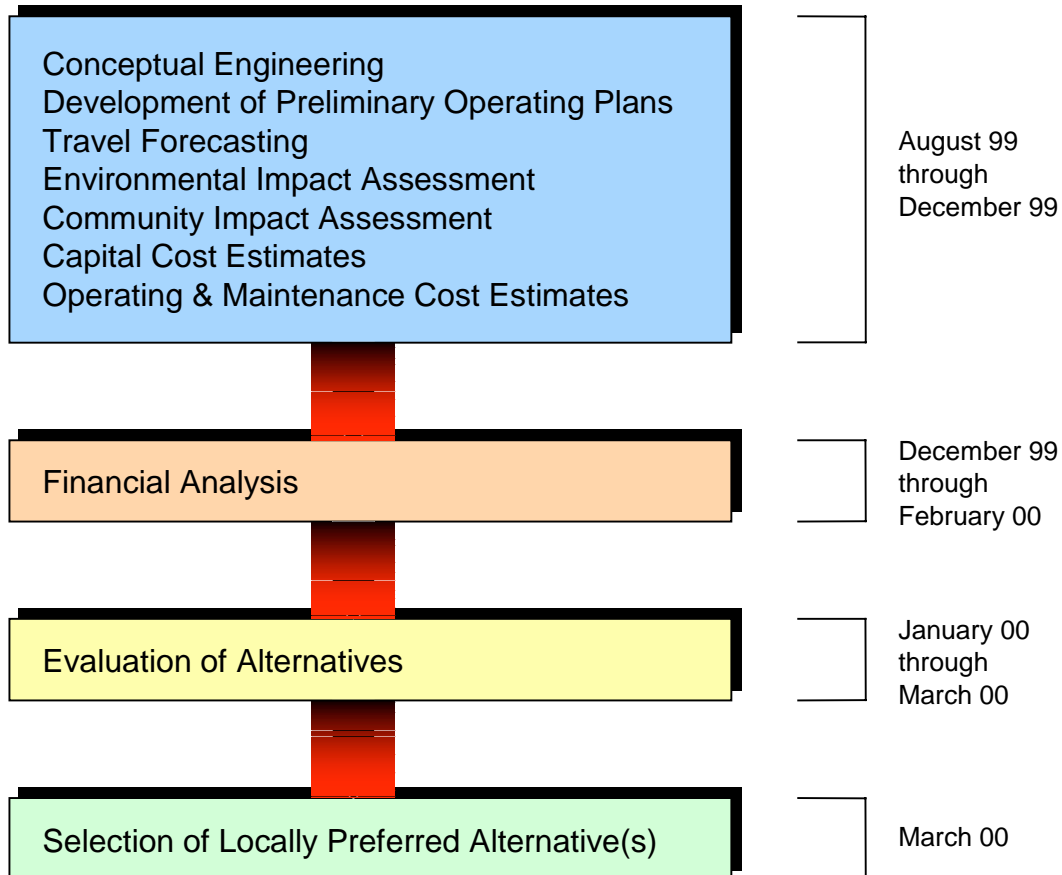
## Roadway

**LEGEND**

-  Main Alignment Segment
-  Alignment Option  
(Candidate routing option between main alignment sections)



# Next Steps in the MTIA Process



**Write us**  
MTIA  
701 N. 15th St.,  
Suite 1001E  
St. Louis, MO  
63103

**E-mail us**  
at [mtia@hshassoc.com](mailto:mtia@hshassoc.com)

**Visit our web site**  
[www.ewgateway.org/corridor/  
corridor\\_studies.htm](http://www.ewgateway.org/corridor/corridor_studies.htm)

**Call our  
hotline**  
(314) 436-7299

**For more  
information**