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Draft Regional Long-Range Transportation Plan and State of the System Report

East-West Gateway
Board of Directors
March 25, 2015

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Long-Range Transportation Plan

- Identifies current and future needs based on population projections and travel demand
- Updated every four years
- Projects must be included in the long-range plan to receive federal funding
- Plan must be fiscally constrained
- Plan must be performance-based(MAP-21)

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State of the System

Details the analysis that went into developing Connected2045

- Population & employment forecasts
- State of the transportation system
  - Preservation
  - Bicycle/Pedestrian
  - Accessibility and affordability
  - Safety
  - Congestion management
  - Freight
  - The environment
- Transportation investment plan
  - Project evaluation framework
  - Financial capacity analysis
- Public engagement process

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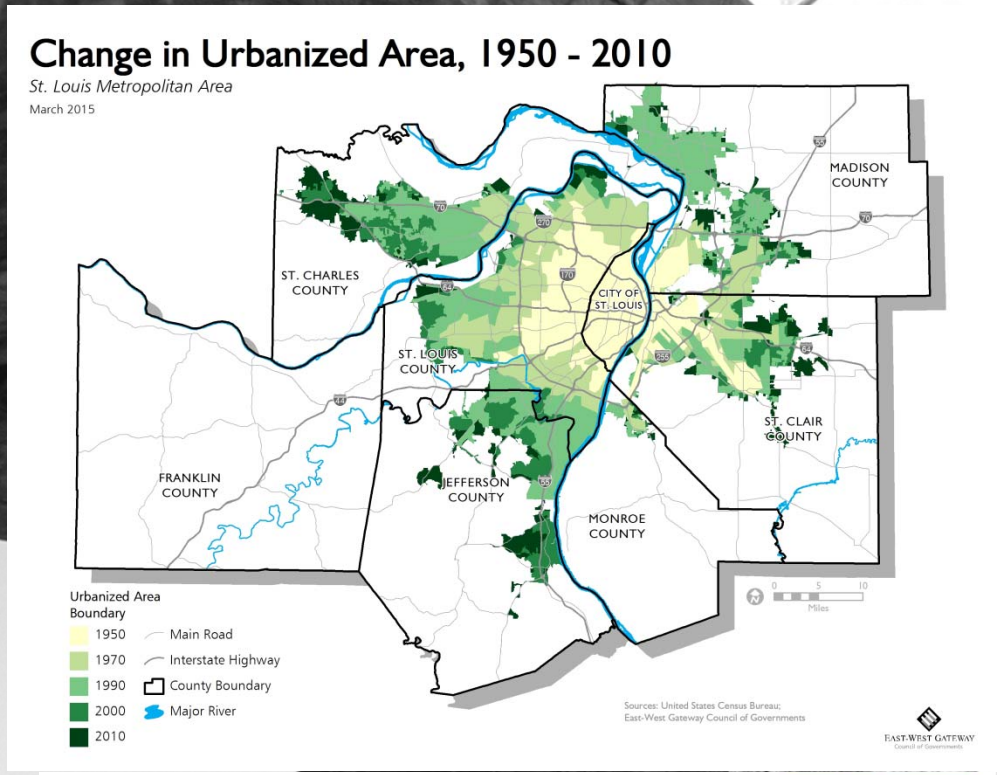
Chapter 1 - Regional Context



	Employment			
		2010	2013	Percent Change
1	**Austin**	**806,530**	**905,684**	**12.3**
2	San Francisco	2,005,300	2,236,330	11.5
3	Houston	2,636,307	2,921,521	10.8
4	Nashville	788,900	868,740	10.1
5	Salt Lake City	608,450	663,690	9.1
6	Charlotte	999,715	1,086,935	8.7
7	Dallas	3,000,624	3,257,903	8.6
8	Denver	1,253,785	1,360,732	8.5
9	Los Angeles	5,465,547	5,928,537	8.5
10	Seattle	1,741,502	1,888,461	8.4
11	Phoenix	1,731,734	1,859,980	7.4
12	Columbus	946,036	1,015,993	7.4
13	San Antonio	910,653	977,917	7.4
14	Detroit	1,773,386	1,903,712	7.3
15	Portland	1,022,097	1,094,850	7.1
16	Miami	2,294,720	2,454,632	7.0
17	Indianapolis	938,793	1,001,774	6.7
18	Oklahoma City	594,685	633,933	6.6
	Average	1,870,915	1,987,160	6.4
19	San Diego	1,407,396	1,492,427	6.0
20	Minneapolis	1,800,661	1,906,459	5.9
21	Atlanta	2,330,010	2,463,755	5.7
22	Louisville	595,209	628,835	5.6
23	Boston	2,487,077	2,620,247	5.4
24	Baltimore	1,328,424	1,391,290	4.7
25	New York	8,763,594	9,157,095	4.5
26	Chicago	4,388,996	4,583,214	4.4
27	Kansas City	1,001,229	1,041,599	4.0
28	Cleveland	1,014,533	1,051,285	3.6
29	Milwaukee	826,369	854,690	3.4
30	Cincinnati	1,005,942	1,040,070	3.4
31	Pittsburgh	1,152,643	1,189,222	3.2
32	Washington DC	3,126,286	3,221,042	3.0
33	**St. Louis**	**1,338,283**	**1,371,788**	**2.5**
34	Philadelphia	2,780,923	2,848,114	2.4
35	**Memphis**	**615,697**	**628,140**	**2.0**

Source: Bureau of Economic Analysis

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Regional Context

Figure 2: Age Pyramid, St. Louis Region, 2014

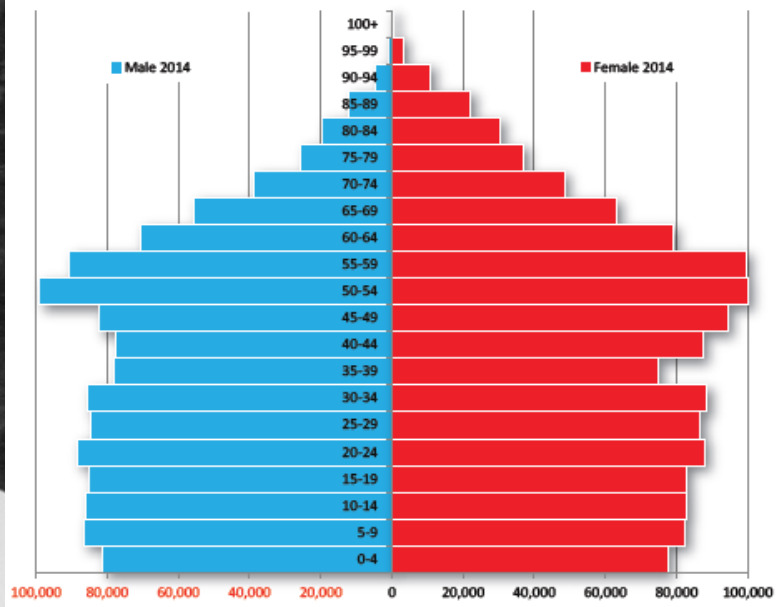


Figure 3: Age Pyramid, St. Louis Region, 2045

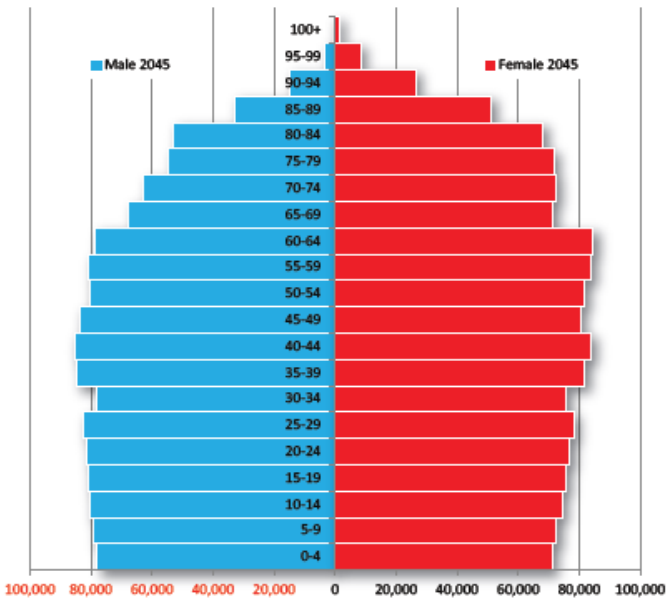
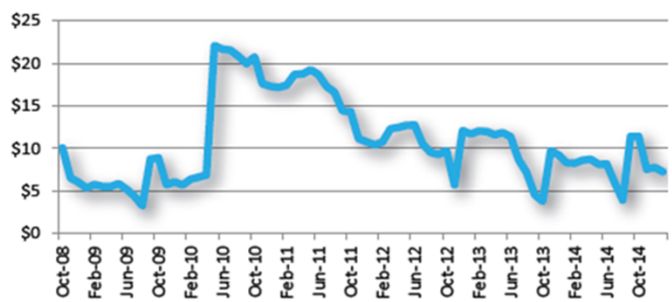


Figure 4: Highway Trust Fund Balance
FY09-FY15 in Billions of Dollars



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Long-Range Transportation Plan for the St. Louis Region

EAST-WEST GATEWAY Council of Governments
Creating Solutions Across Jurisdictional Boundaries

Table 1: Performance Management Framework

MAP-21 Goals	MoDOT Goals	IDOT Goals	EWG's 10 Guiding Principles		"System Measures"	"Project Scoring Measures"
Infrastructure Condition	Taking care of the system	Preserve and Manage the Existing System	"Preserve and Maintain the Existing System"	Ensure the transportation system remains in a state of good repair.	• Bridge Condition* • Pavement Condition*	Project Addresses Preservation Deficiency
	Connections & Choices	Promote Funding for the Public Component of the System	"Support Public Transportation"	Invest in public transportation to spur economic development, protect the environment and improve quality of life.	• Transit Ridership** • Transit Access**	Project Strengthens Transit System
	Connections & Choices		"Support Neighborhoods & Communities"	Connect communities to opportunities and resources across the region.	• Housing + Transportation Cost**	Project Increases Access to Regional Resources
			"Foster a Vibrant Downtown & Central Core"	Improve access to and mobility within the central core by all modes to increase the attractiveness of St. Louis and strengthen the regional economy.	• Population and Employment in the Central Core	Project Serves Downtown and/or the Central Core
	Connections & Choices	Provide a System that Offers a High Degree of Multi-Modal Connectivity, Mobility and Accessibility	"Provide More Transportation Choices"	Create viable alternatives to automobile travel by providing bicycle and pedestrian facilities.	• Mode Split** • Vehicle miles traveled per capita**	Project Includes Bike/ Pedestrian Element
Safety	Safety	Improve Transportaiton Safety	"Promote Safety and Security"	Provide a safe and secure transportation system for all users.	• Number/Rate of Fatalities* • Number/Rate of Serious Injuries*	Project Improves User Safety
Congestion Reduction & System Reliability	Economic Development	Address Congestion and Maximize Efficiency and Effectiveness through Operations	"Support a Diverse Economy with a Reliable System"	Reduce congestion and improve travel time reliability to support the diverse economic sectors of the region.	• Annual Hours of Delay* • Planning Time Index*	Project Improves System Reliability
	Economic Development	Target Investments to Support Business and Employment Growth	"Support Quality Job Development"	Support the growth of wealth producing jobs that allow residents to save and return money to the economy.	• Access to Quality Jobs	Project Increases Access to Quality Job Clusters
Freight Movement & Economic Vitality	Economic Development	Provide for Efficient Freight Movement	"Strengthen Intermodal Connections"	Support freight movement and connections that are critical to the efficient flow of both people and goods.	• Annual Hours of Truck Delay* • Truck Congestion Cost* • Freight Tonnage	Project Supports Regional Freight Assets
Environmental Sustainability		Ensure a Compatible Interface of the System with Environmental, Social, Energy and Land Use Considerations	"Protect Air Quality and Environmental Assets"	Encourage investments that recognize the linkages between the social, economic, and natural fabric of the region.	• Criteria Pollutant Emissions* • Conservation & Environmental Significance Score	Project Improves Air Quality/Protects the Natural Environment

**Anticipated MAP-21 Requirement* ***OneSTL Performance Indicator*

Fact Sheets

Preserve and Maintain the Existing System

Ensure that the transportation system remains in a state of good repair.

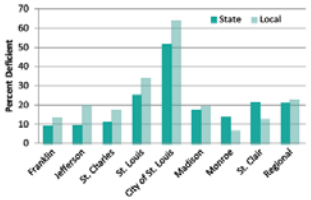
One of the major challenges facing the federal government, states and metropolitan areas is keeping the transportation system in good repair. The decades-long emphasis on system expansion has limited the resources available for rehabilitating and replacing aging system components **failing pavements, deficient bridges, and deteriorated transit facilities create safety problems, reduce operational efficiency, and negatively impact travel quality.** Deficient bridges and deteriorating pavement are spread throughout the St. Louis, impacting the travel of citizens and businesses within and through the region

Deferring preservation work is significantly more expensive than pursuing a regular cycle of maintenance, rehabilitation, and replacement. Although transportation infrastructure in the St. Louis region is in relatively good condition compared to much of the United States, the current transportation funding shortfall emphasizes the need to prioritize limited resources in the preservation of existing infrastructure to avoid incurring much larger expenses in the future.

EWG will track system condition over time to assist in prioritizing funding, recognizing that system preservation is a regional issue—suburban, rural, and urban areas all face the challenge of maintaining the transportation system to serve the needs of citizens both now and into the future.

Map 1: Deficient Bridges in the St. Louis Region

Figure 7: Percent of Deficient Bridges in Missouri and Illinois Counties, 2014



Source: FHWA, National Bridge Inventory, 2014

DEFICIENT BRIDGES

Percent of bridge deck area that is structurally deficient or functionally obsolete, 2013

1	New York	63.8
2	Boston	58.7
3	Pittsburgh	55.2
4	San Francisco	50.4
5	Seattle	49.3
6	Detroit	49.2
7	Chicago	47.1
8	Cleveland	44.7
9	Philadelphia	42.8
10	Los Angeles	41.7
11	Cincinnati	37.4
12	Washington DC	37.1
13	Portland	36.6
14	Dallas	34.2
Average		33.9
15	Charlotte	32.0
16	Houston	30.9
17	Louisville	30.8
18	Milwaukee	30.0
19	Baltimore	30.5
20	Indianapolis	30.1
21	Kansas City	30.0
22	Memphis	29.8
23	Columbus	29.6
24	St. Louis	29.1
25	Oklahoma City	28.6
26	Denver	27.8
27	Phoenix	26.2
28	San Antonio	24.0
29	Austin	22.7
30	Miami	22.7
31	Nashville	20.9
32	Atlanta	20.3
33	San Diego	19.4
34	Minneapolis	14.6
35	Salt Lake City	9.3

HIGHER — AVERAGE — LOWER

Source: FHWA, National Bridge Inventory, 2013

PRESERVE AND MAINTAIN

Strategies

Strategy: Ensure investments in preservation are adequate to continuously improve pavement and bridge conditions on state highway systems.

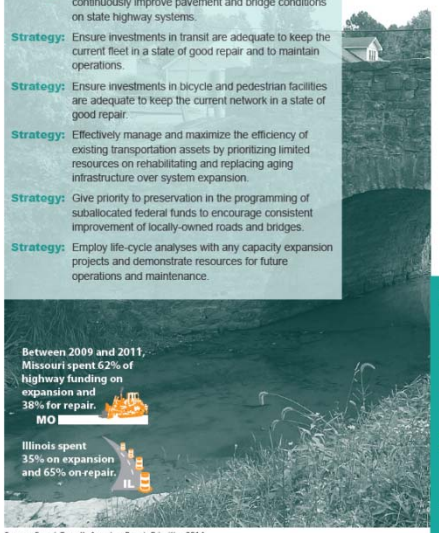
Strategy: Ensure investments in transit are adequate to keep the current fleet in a state of good repair and to maintain operations.

Strategy: Ensure investments in bicycle and pedestrian facilities are adequate to keep the current network in a state of good repair.

Strategy: Effectively manage and maximize the efficiency of existing transportation assets by prioritizing limited resources on rehabilitating and replacing aging infrastructure over system expansion.

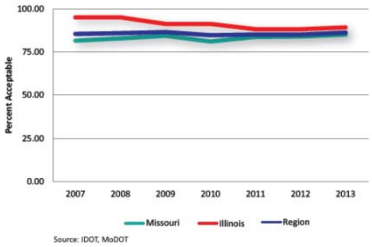
Strategy: Give priority to preservation in the programming of suballocated federal funds to encourage consistent improvement of locally-owned roads and bridges.

Strategy: Employ life-cycle analyses with any capacity expansion projects and demonstrate resources for future operations and maintenance.



Source: Smart Growth America: Repair Priorities 2014
Transportation spending strategies to save taxpayer dollars and improve roads.

Figure 8: Percent of Acceptable Pavement Conditions by State Maintained Roads, 2007-2013



Source: IDOT, MoDOT

Performance Measures

Performance Measures	Definition	Desired Trend	Baseline
Bridges	Percent of Bridges in the Region Rated Structurally Deficient	↓	2014 21.1%
Pavement	Percent of pavement rated "not acceptable"	↓	2013 13%

PRESERVE AND MAINTAIN

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Chapter 3 - Investment Plan

IDOT: 2016-2045 (YOE dollars, millions)	
Total Revenue	$5,525
Preservation/Operations Cost	$4,144
Balance for Major Projects	$1,381
Major Project Costs	$4,508
Total Balance	($3,127)

MoDOT: 2016-2045 (YOE dollars, millions)	
Total Revenue	$7,721
Preservation/Operations Cost	$5,167
Balance for Major Projects	$2,554
Major Project Costs	$3,643
Total Balance	($1,089)

Metro: 2016-2045 (YOE dollars, millions)	
Maintaining Existing System	
Capital Revenue	$3,013
Operating Revenue	$14,838
Total Revenue	$17,851
Capital Expenses	$3,330
Operating Expenses	$15,760
Total Expenses	$19,090
Balance	($1,239)

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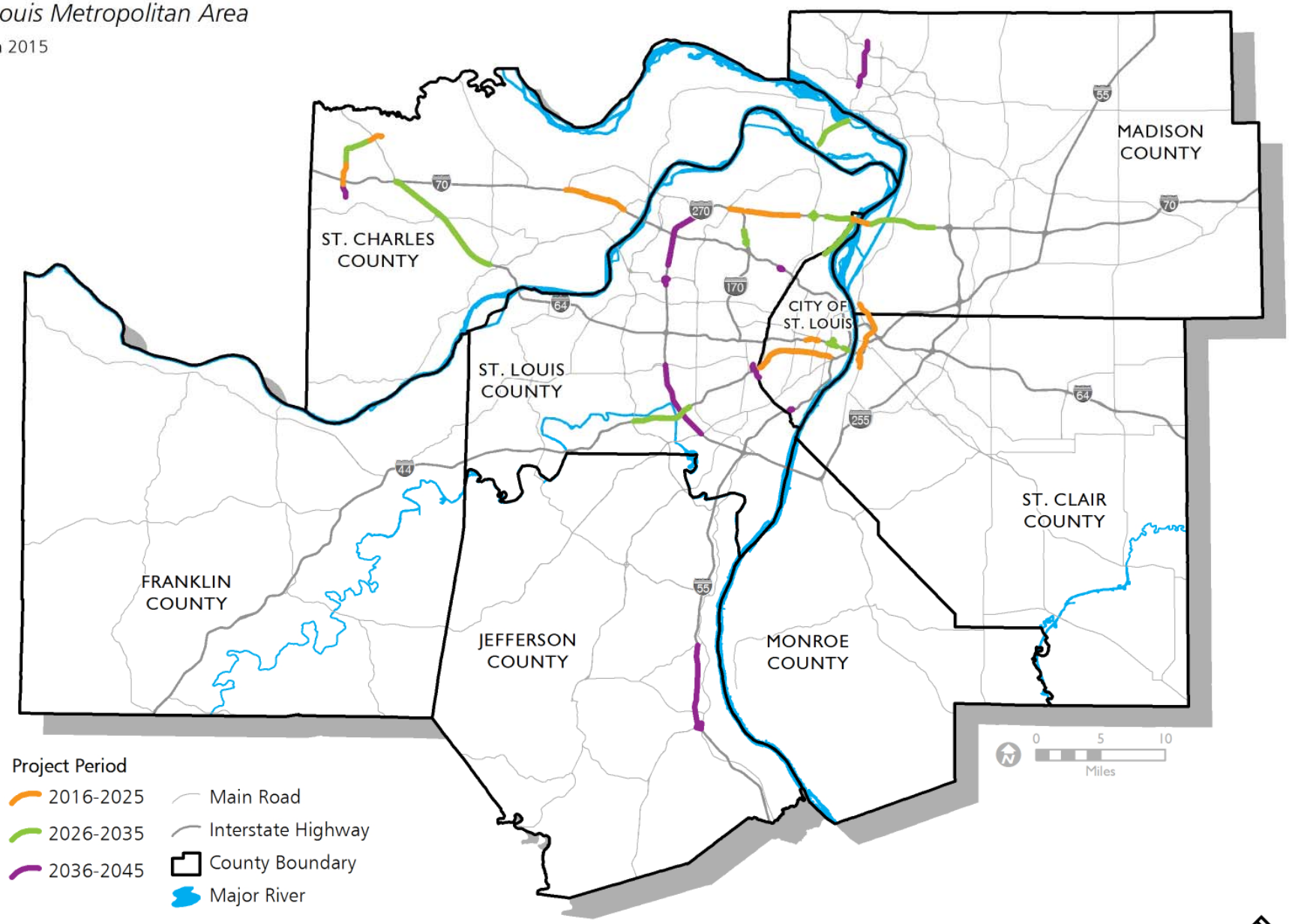
Funded Project Locations

St. Louis Metropolitan Area

March 2015



Source: East-West Gateway Council of Governments

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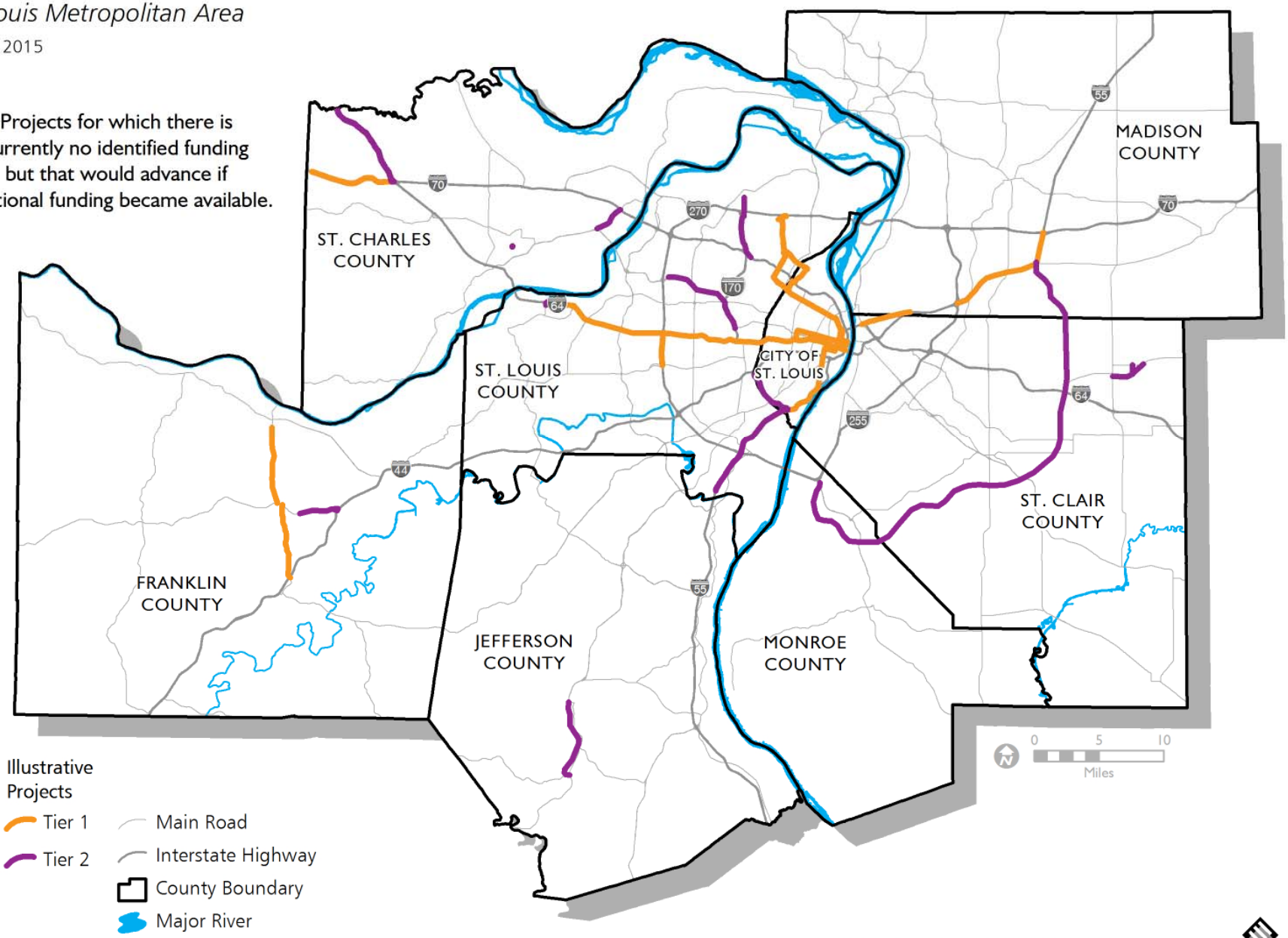
Council of Governments

Illustrative Project Locations

St. Louis Metropolitan Area

March 2015

Projects for which there is currently no identified funding but that would advance if additional funding became available.



Source: East-West Gateway Council of Governments

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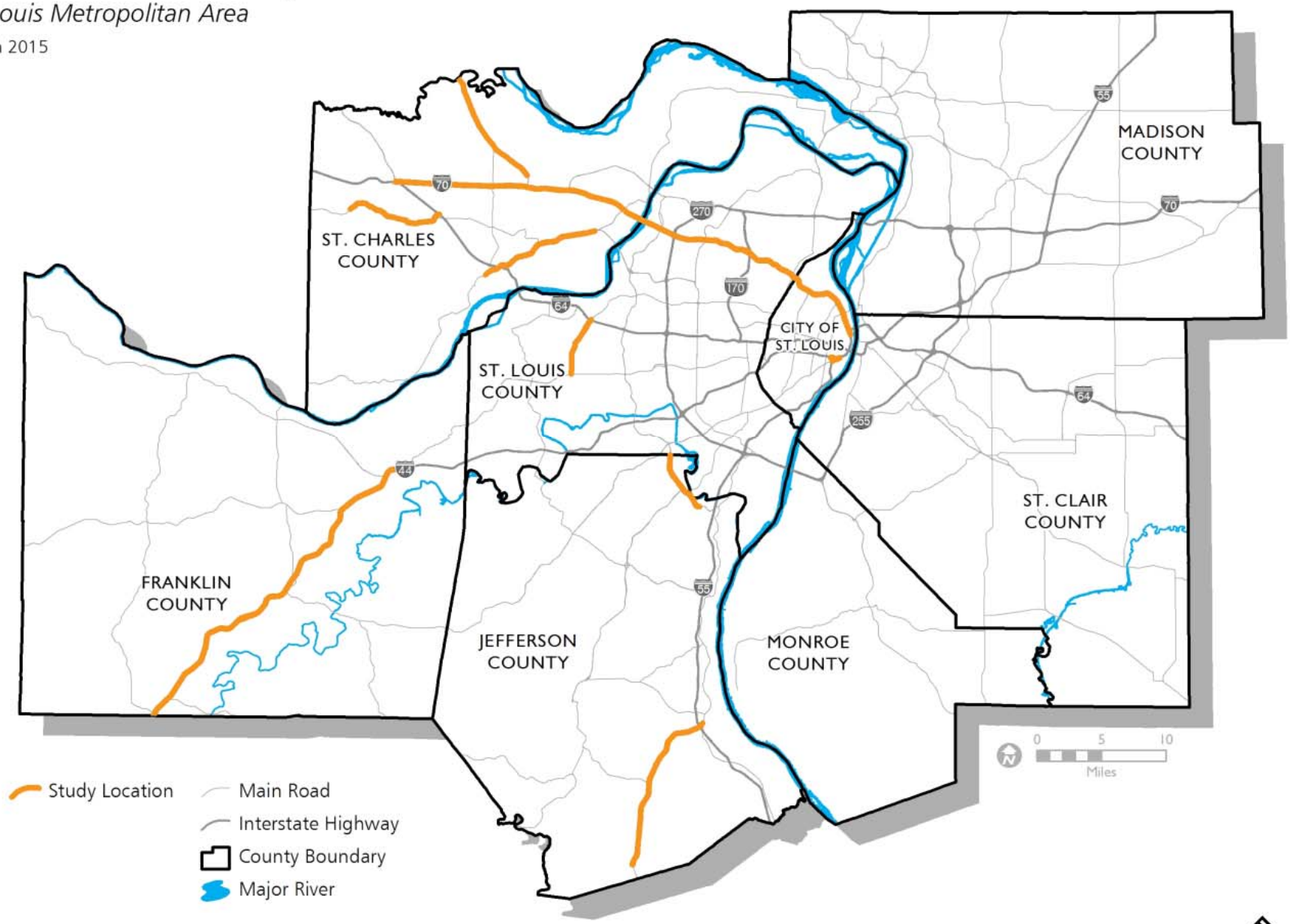
Corridor Study Locations

St. Louis Metropolitan Area

March 2015



Source: East-West Gateway Council of Governments

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Chapter 4 - Air Quality Conformity

- Analysis complete
- Final document to be released with draft plan in early April

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Next Steps

- Draft Plan - Early April
- Open Houses - April & May
  - Traditional
  - Online
- Final Plan: June

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Questions?

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