

Connected2045 Update: Draft Regional Long-Range Transportation Plan and State of the System Report

Board of Directors

April 24, 2019



EAST-WEST GATEWAY
Council of Governments

Creating Solutions Across Jurisdictional Boundaries

Long-Range Transportation Plan

- A long-range vision for the region's transportation system
- Identifies current and future transportation needs
- Updated every four years
- Developed in partnership with IDOT, MoDOT, and Metro
- Projects must be included in the long-range plan to receive federal funding
- Plan must be fiscally constrained

Long-Range Transportation Plan

***Connected2045* must be performance-based (FAST Act):**

“MPOs..., in cooperation with the State and public transportation operators, shall develop long-range transportation plans and transportation improvement programs through a **performance-driven, outcome-based approach to planning.**” (23 USC 134 (c) (1)).

Performance Areas:

- Safety
- Infrastructure condition
- Congestion reduction
- System reliability
- Freight movement and economic vitality
- Environmental sustainability
- Improved Accessibility and Mobility

Connected2045, East-West Gateway's Long-Range Transportation Plan



- Chapter 1: Regional Context
- Chapter 2: Principles, Strategies, and Performance Measures
- Chapter 3: Investment Plan
- Chapter 4: Air Quality Conformity

- State of the System Supplement

Chapter 1 - Regional Context

St. Louis Region
Emerging Transportation
Technology Strategic Plan

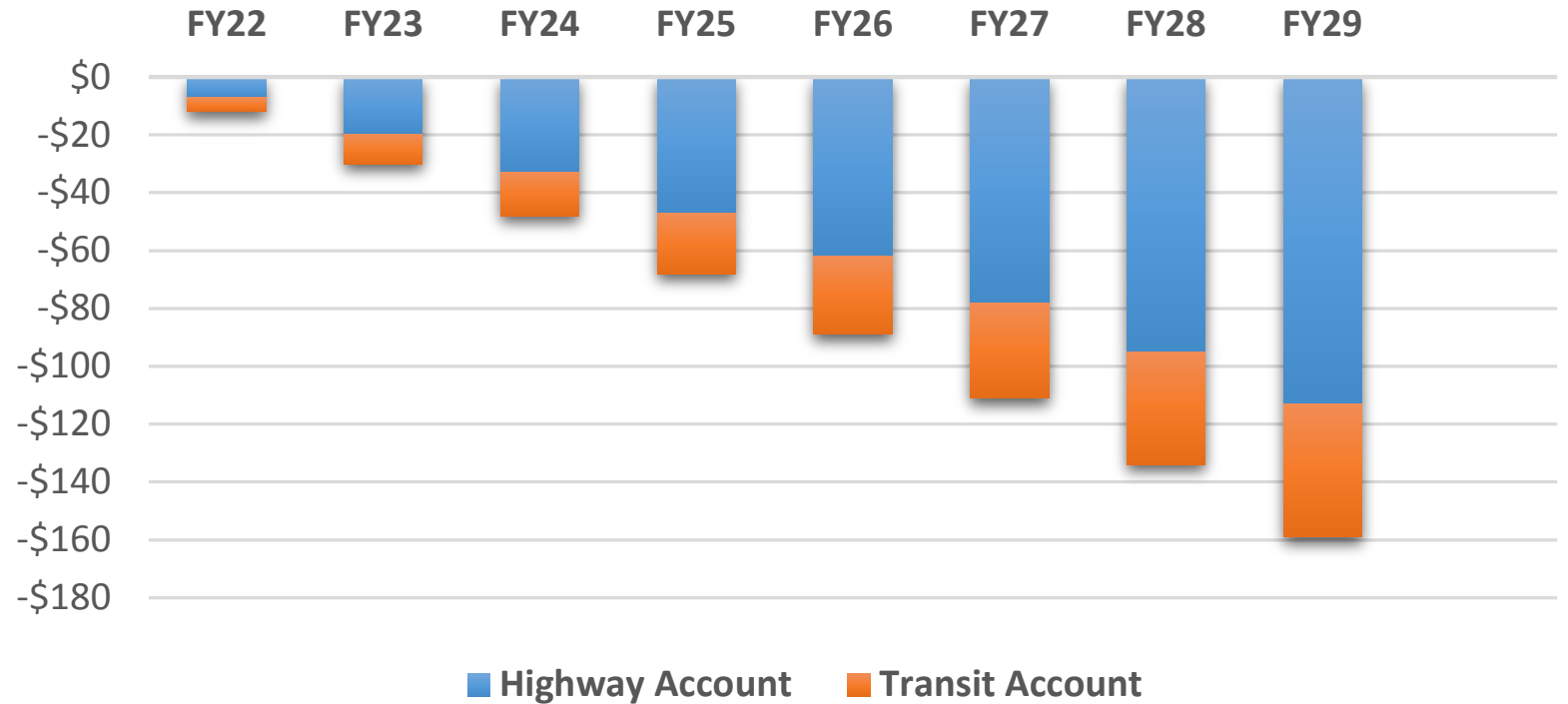
June 2017



Prepared for
East-West Gateway Council of Governments
by
ICF



Projected Highway Trust Fund Shortfalls (\$ billions)



Chapter 2 – Principles, Strategies, and PMs



Preserve and Maintain the Existing System

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

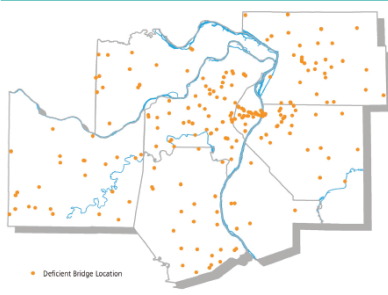
One of the major challenges facing the federal government, states and metropolitan areas is keeping the transportation system in good repair. The decades-long emphasis on system expansion has limited the resources available for rehabilitating and replacing aging system components **failing pavements, 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.

14 | Long-Range Transportation Plan for the St. Louis

Map 1: Deficient Bridges in the St. Louis Region



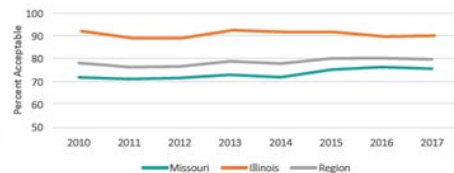
Deficient Bridges

Percent of deficient bridge deck area, 2017		
1	Providence	23.1
2	Hartford	13.1
3	Boston	13.1
4	New York	11.7
5	Memphis	11.3
6	Detroit	10.7
7	San Francisco	9.7
8	Chicago	9.5
9	New Orleans	9.3
10	Pittsburgh	9.0
11	Louisville	8.5
12	Oklahoma City	8.3
13	Philadelphia	8.2
14	Indianapolis	8.1
15	San Jose	8.1
16	Seattle	7.8
17	Charlotte	7.5
18	Buffalo	6.9
19	Richmond	6.9
20	Virginia Beach	6.8
21	Birmingham	6.4
22	Cleveland	6.4
23	Kansas City	6.4

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.
- Strategy:** Advance use of technologies such as use of drones and use of connected vehicle data to efficiently monitor pavement and bridge conditions.
- Strategy:** Encourage use of advanced pavement technologies and design that increase infrastructure resiliency.
- Strategy:** Consider new preservation protocols to address changes in travel conditions associated with connected/autonomous vehicles.

Figure 8: Percent of Acceptable Pavement Conditions by State Maintained Roads, 2010-2017



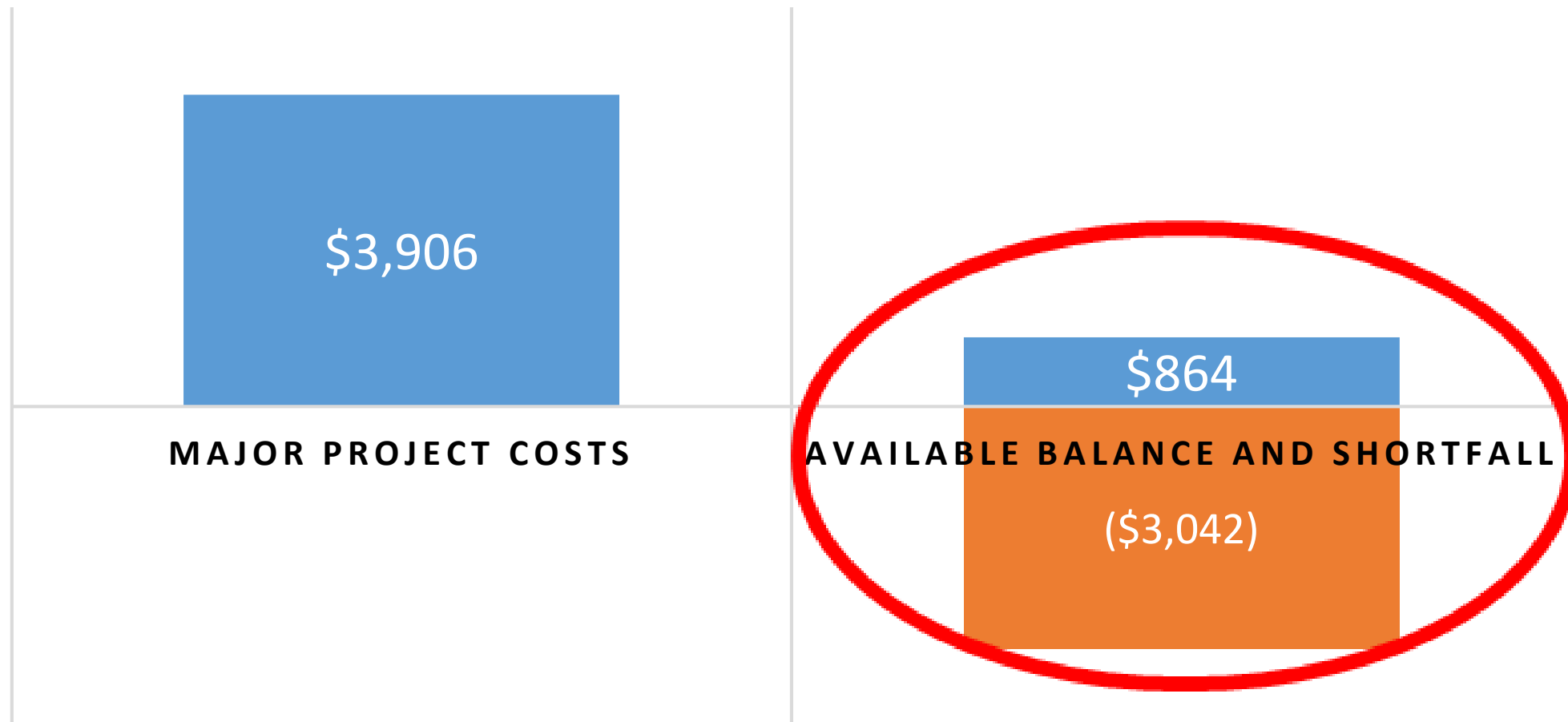
Performance Measures

Measure	Baseline		Target			
	Good	Poor	2-year		4-year	
	Good	Poor	Good	Poor	Good	Poor
Interstate NHS Pavement Condition						
Illinois	54.94%	0.40%	n/a	n/a	56%	1%
Missouri	70.70%	0%	n/a	n/a	77.50%	0%
Non-Interstate NHS Pavement Condition						
Illinois	49.31%	0.56%	48%	1%	45%	2%
Missouri	39.20%	3.50%	41%	2%	43%	1%
Bridge Condition						
Illinois	39.62%	10.87%	40%	9%	40%	8%
Missouri	31.40%	9.20%	31.40%	9.20%	31.40%	9.20%

- Discussion
- Map, Graphs, Charts
- *Where We Stand* table
- Strategies
- Performance Measures & Targets

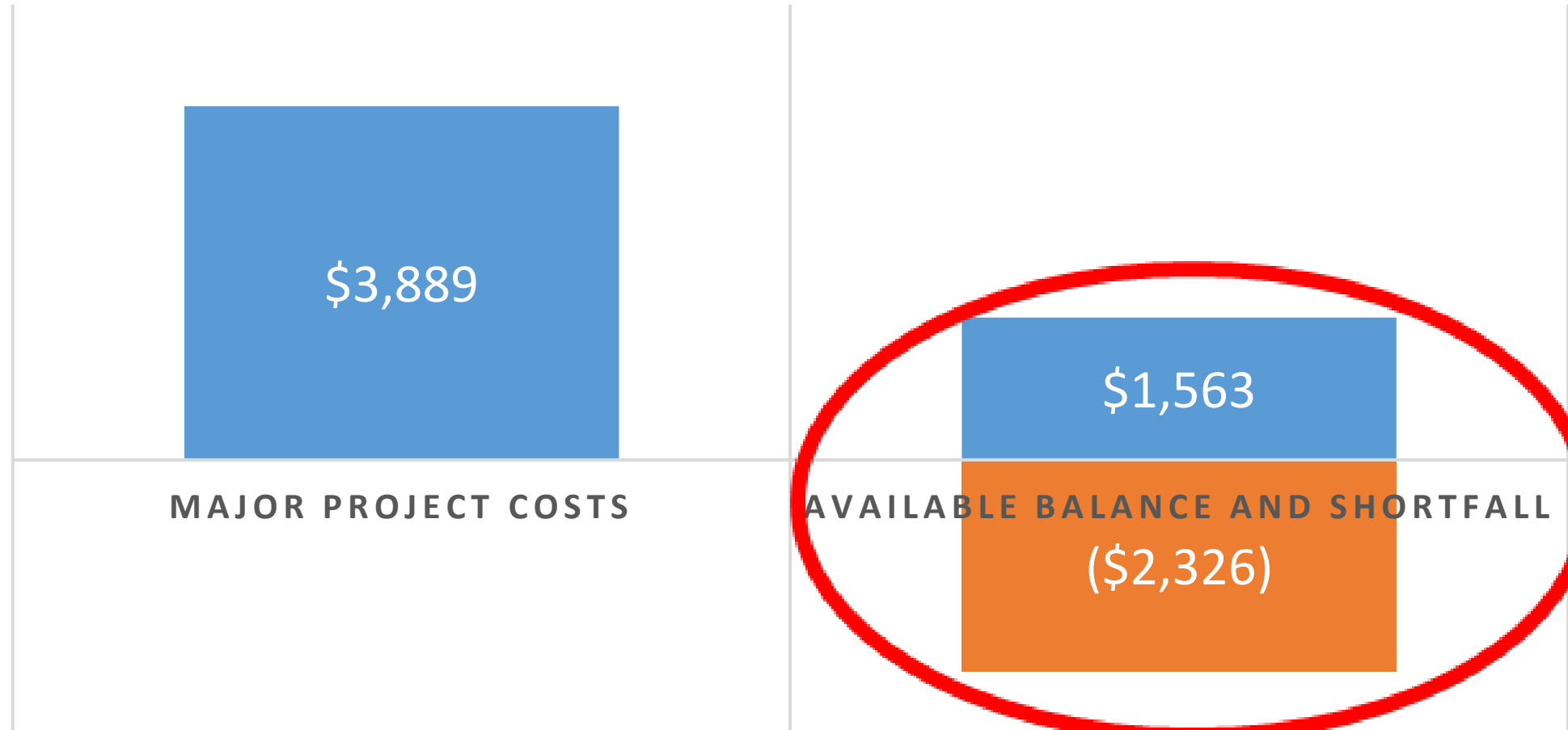
Chapter 3 – Investment Plan

IDOT FINANCIAL CAPACITY: 2020-2045 (YEAR OF EXPENDITURE DOLLARS, MILLIONS)



Chapter 3 – Investment Plan

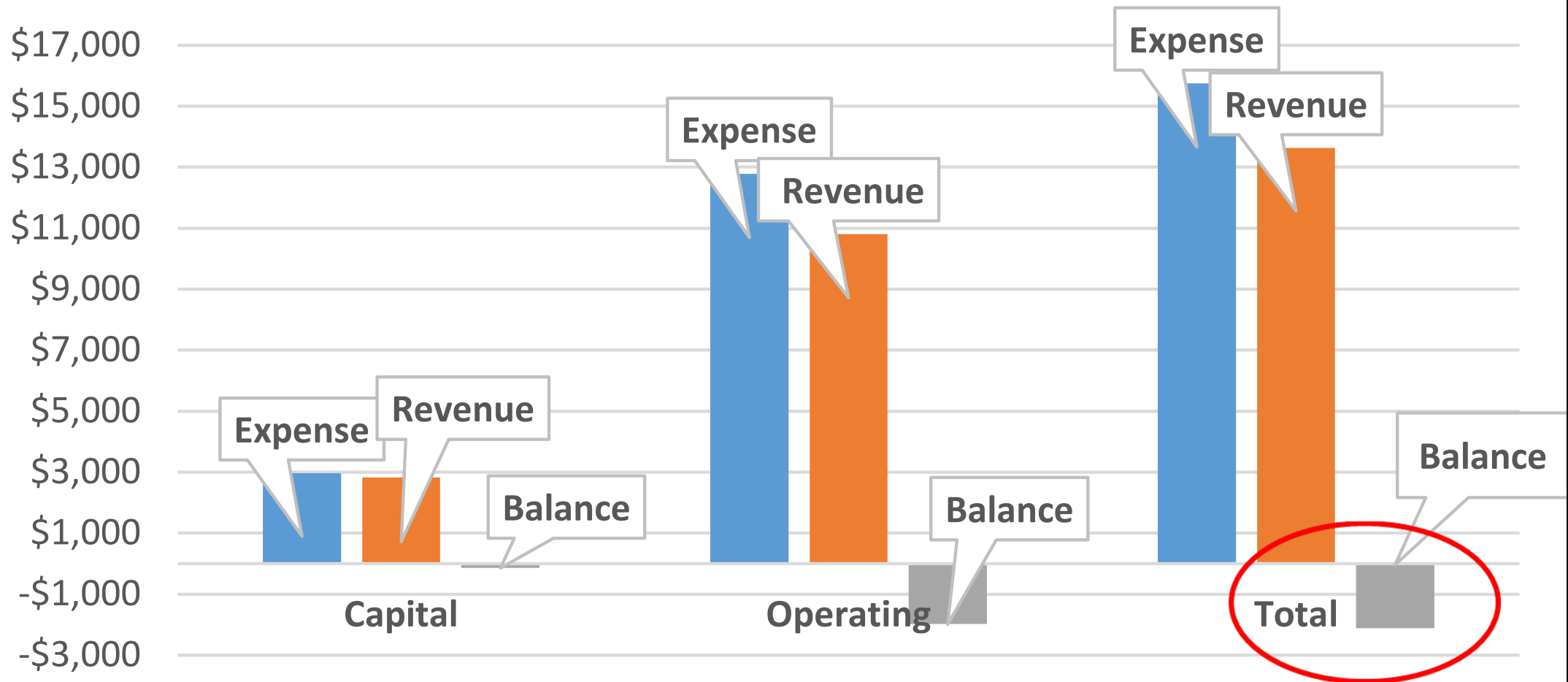
MODOT FINANCIAL CAPACITY: 2020-2045 (YEAR OF EXPENDITURE DOLLARS, MILLIONS)



Chapter 3 – Investment Plan

Metro Financial Capacity 2020-2045

(year of expenditure dollars, millions)



Chapter 3 - Investment Plan

- **\$21.5 billion** for ongoing operations/maintenance, ADA, safety, transit operations
- **\$864 million** (IL) and **\$1.56 billion** (MO) available for major projects through 2045, including:
 - I-270 reconstruction
 - I-64/I-70/I-55/I-44 improvement projects
 - Major bridges – Martin Luther King, Chain of Rocks (I-270), Vandeventer, Jefferson Barracks, MO 364, MO 370
- Northside-Southside Metrolink
- 44 Illustrative projects

Chapter 4 - Air Quality Conformity

- Analysis currently underway
- Final document to be released for public comment in early May

State of the System Supplement

Details the analysis that went into developing *Connected2045*

- Population & employment forecasts
- System Performance Report
- State of the transportation system
 - Preservation
 - Transit
 - Equity and Affordability
 - Bicycle and Pedestrian
 - Safety
 - Congestion management
 - Freight
 - Environment and Air Quality
- Transportation investment plan
 - Project evaluation framework
 - Financial capacity analysis
- Public engagement process



Next Steps

- Public Comment Period - May/June
- Open Houses
 - May 13 (Richmond Heights)
 - May 20 (Collinsville)
- Final plan - June

A cable-stayed bridge is shown at dusk, with its white cables and towers illuminated. The bridge spans across a body of water, and the city skyline is visible in the background with lights reflecting on the water.

Questions?

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