6

REGIONAL TRANSPORTATION INVESTMENTS

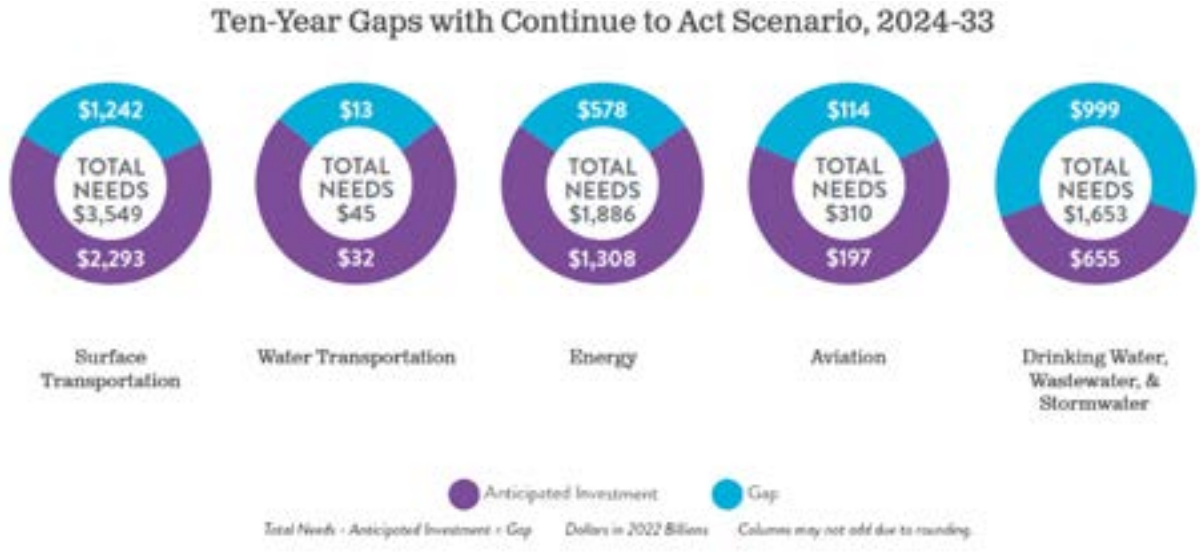
6.1 BACKGROUND

Transportation officials have described the lack of funding for transportation projects in the country as nothing less than a "perfect storm," in which costs have skyrocketed while revenues have stagnated, if not declined. Inflation in the construction industry has outpaced inflation across the broader economy due in part to increased global competition for construction materials such as steel and increasing costs for inputs such as sand and gravel. Furthermore, relatively low fuel prices have kept transit ridership relatively flat while costs to maintain and operate the transit system have increased. Across many transportation-related industries, workforce challenges have made it difficult to fill key positions and to meet the growing demand for construction projects.

Furthermore, transportation revenues have not kept pace with the growth in needs in the transportation system. Decades of auto-oriented, suburban growth have greatly expanded roadway needs, while funding mechanisms to fund such investments have not kept pace. The federal gas tax was last increased in 1993, and it is unlikely to be raised in the near future. Since the last increase in the federal gas tax, vehicles are becoming more fuel efficient–resulting in less revenue from each mile driven on the transportation system. New models for funding federal transportation investment such as fees on "vehicle miles traveled" (VMT) show promise, but raise privacy concerns and have no clear path to being implemented nationally.

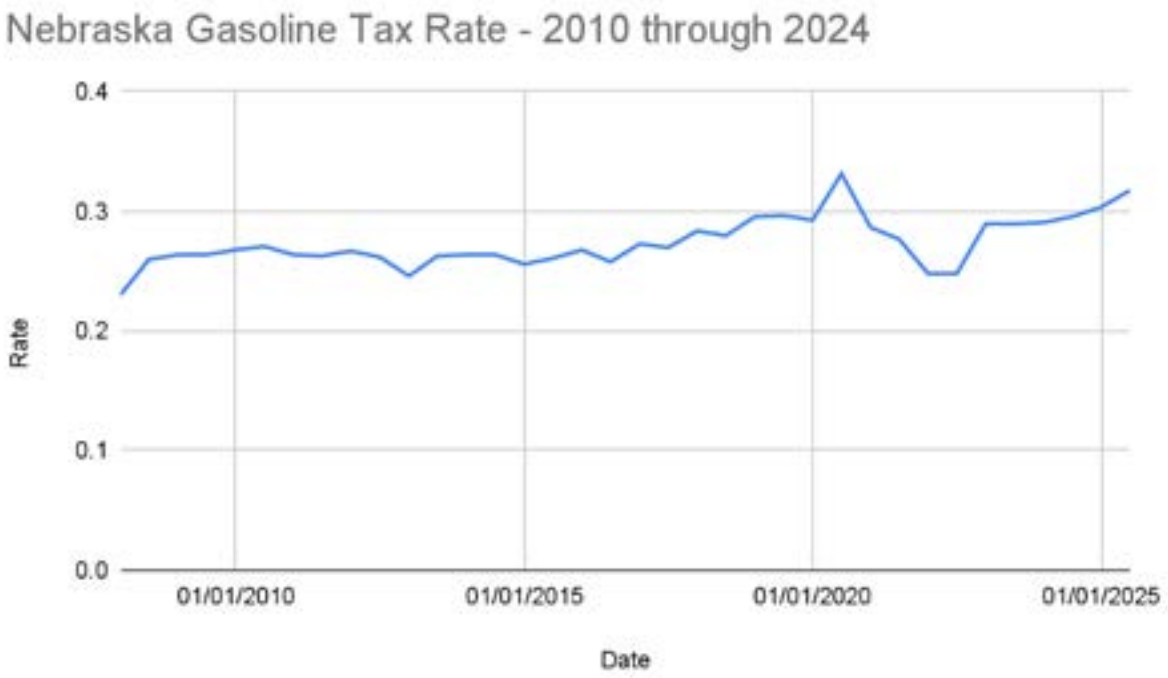
As such, the federal Highway Trust Fund has not been sufficient to fund the transportation programs authorized in the Infrastructure Investment and Jobs Act (IIJA), the latest transportation bill. Transfers of money from the general fund have been required to finance these programs. While the IIJA provided a historic level of investment in the nation's transportation infrastructure, it will expire in 2026. Congress will either need to extend the funding programs in that law, or take up reauthorization of federal transportation legislation.

The American Society of Civil Engineers (ASCE) produces an annual report on infrastructure needs across the United States that highlights the funding gap. The 2025 report acknowledges the increased investment from the IIJA, but shows that even if this level of federal support continues beyond 2026 there will still be a shortfall.



Even with federal action, many local and state governments have been raising funds for transportation throughout the country. Since 2015, both Nebraska and Iowa have increased state fuel taxes that are distributed to counties and municipalities through various programs in addition to funding DOT activities. These increases came after local and state officials lamented the lack of resources to maintain roadways and bridges across both states. Both increases–a total of 6 cents per gallon in Nebraska and 10 cents per gallon in Iowa–were in full effect by the end of 2019. However, funding challenges remain at the local level, and communities in the MAPA region have relied on major bond initiatives and developer contributions to supplement these traditional funding sources. New models of local investment, including public-private partnerships and raising revenue from development activities, will continue to be important tools for communities in the MAPA region.

Figure 6.1: Gasoline Tax Rate History in Nebraska



6.2 PROJECT LIST DEVELOPMENT

This chapter focuses on the scenario development process: what should the region build, based on available resources, in order to meet its goals? Scenarios for this plan were evaluated during the Metro Area Travel Improvement Study (MTIS), a collaborative effort between MAPA, NDOT, and local jurisdictions. MAPA also included transit specific scenario planning from MetroNEXT.

Estimations of revenue, operations and maintenance costs, and a complete list of projects identified through the efforts described in this chapter are included in Appendix F.

Metro Area Travel Improvement Study (MTIS)

Scenario Planning in MTIS

As part of MTIS, a range of potential Regional Strategy Packages were identified based on the needs identified in Phase 1 and the potential strategies reviewed in Phase 2. An initial set of six (6) working Strategy Packages was developed based on public and stakeholder input and utilized a menu of available strategies to address the region's forecasted transportation issues.

In general, the initial six strategy packages were intended to test the extremes of potential investment levels by putting high levels of investment in one or two areas, and neglecting other areas to see how these combinations affected the various performance measures. The Strategy Packages were organized based on themes, with one strategy package representing the high-end of investment in most categories (Strategy Package 1) and one strategy package representing the low-end of investment in most categories (Strategy Package 5). Unlike the requirements of the Metropolitan Plan, none of these investment scenarios was fiscally-constrained, or limited to the level of funding that can be "reasonably anticipated" in the next 20 years.

Scenario 1 – High levels of overall investment

This scenario is what improvements over the coming decades would look like if we continued increased funding at the same levels per mode that we currently do. This method ensures that all modes get funding as the system continues to function as it currently does with very little change in the types and intensity of service over what is currently provided.

Scenario 2 – Freeway focused investment

Scenario 2 examines what transportation would be needed by the year 2050 if the region's funding were to be mainly spent on freeway capacity and improvement projects. A key feature of this scenario is a connection in the potential future "Beltway" connecting Platteview Road to US-6.

Scenario 3 – Arterial roadway focused investment

Scenario 2 models what projects would be needed to make a functional system that concentrated on expanding and improving major, non-freeway roads throughout the region.

Scenario 4 – Transit focused investment

This scenario shows the level of transit-oriented investment that would need to be done over the coming decades to keep up with the region's transportation demands. This level of transit investment tested a significant expansion of transit service over current and planned projects.

Scenario 5 – Limited levels of investment

This scenario shows the level of investment that would be needed for the region's transportation system to continue in coming years. There is little to no improvement in travel time or options for any users of the system.

Scenario 6 – Geographic Distribution of Investment

This scenario breaks out the urban, suburban, and rural areas of the MAPA region and focuses investment based on the types of transportation in these areas that reinforces their current land use patterns.

SP 1 HIGH LEVELS OF BALANCED INVESTMENT

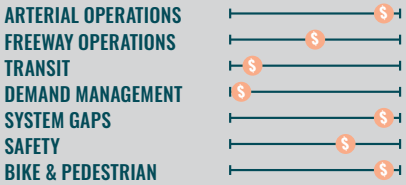
High level of investments on freeway and arterial system addressing all operational needs. Significant transit investment and TDM implementation Highest-benefit gaps. Parallel routes improved.

SP 2 FREEWAY-FOCUSED IMPROVEMENTS

Focuses improvements on freeway system. Highest priority arterial system improvements only. Limited transit system expansion. No arterial gap investments

SP 3 ARTERIAL-FOCUSED IMPROVEMENTS

Focuses improvements on arterial system. Enhance existing transit routes. Bottleneck only on freeway system. Highest-benefit parallel routes improved.

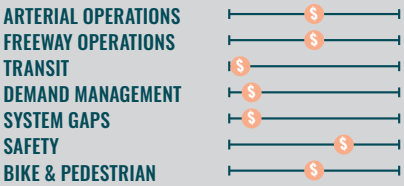


SP 4 SYSTEM MANAGEMENT & TRANSIT FOCUS

Targeted arterial and freeway investments only. Highest-level of transit investment. System management and TDM implementation.

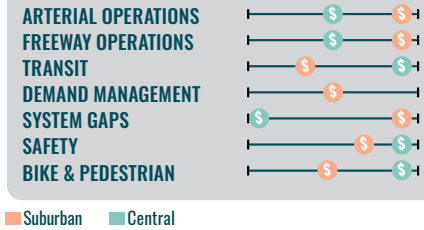
SP 5 LIMITED LEVELS OF INVESTMENT

Relatively low investment levels in arterial and freeway systems. No additional non-roadway investments.



SP 6 GEOGRAPHIC DISTRIBUTION SCENARIO

Provide different strategies in "Central City" and "Suburban" parts of the metro area. Recognizes the different streetscape and development patterns typically present in the older and newer portions of the urban area.



Menu of Options

The following multimodal strategies were developed and assessed to determine their potential impact on the existing and planned transportation system and regional performance measures:

FREEWAY CAPACITY IMPROVEMENTS
A comprehensive program to add capacity to an entire freeway corridor.

ARTERIAL/NON-FREEWAY CAPACITY IMPROVEMENTS
A set of roadway improvements to add capacity to an arterial corridor.

MANAGED LANE CONCEPTS
Strategies that maximize throughput of highway facilities or defined lanes by giving incentives for travelers to use the roadway more efficiently.

TRAFFIC SIGNAL IMPROVEMENTS
More effective signal timings, coordination, and new technologies to decrease intersection delay.

RAMP METERING
Managing or regulating traffic entering the freeway system via ramps during peak periods with the objective of improving mainline freeway operations and safety.

INTELLIGENT TRANSPORTATION SYSTEMS STRATEGIES
Use of technology and traffic management to improve traffic conditions, minimize delay and improve safety.

TRANSPORTATION DEMAND MANAGEMENT STRATEGIES
Strategies that aim to manage how and when people travel in order to use the transportation system more efficiently.

TRANSIT IMPROVEMENT STRATEGIES
A range of potential improvements to bus and rail transit, including more frequent service and new transit technologies.

SAFETY IMPROVEMENT STRATEGIES
Enforcement, pavement treatment and marking options, roadway geometry improvements, and technology options.

SYSTEM PRESERVATION STRATEGIES
Achieve a state-of-good-repair by prioritizing projects that address timely and cost-beneficial asset rehabilitation.

PEDESTRIAN & BICYCLE STRATEGIES
A range of options from pavement markings to new bicycle and pedestrian-dedicated facilities that aim to improve the safety and efficiency of bicycle and pedestrian travel.

Investing in the Region's State of Good Repair

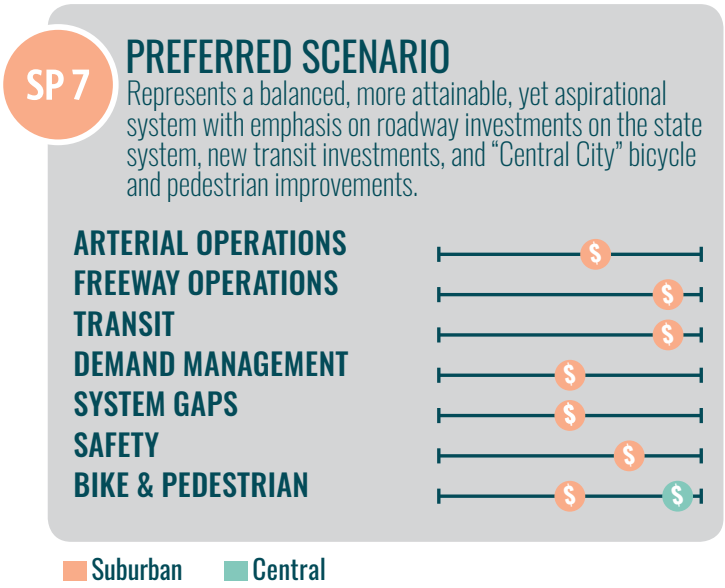
Maintaining our current transportation system and assets in a state-of-good-repair is a regional goal. This includes roads, bridges, and transit assets. To understand the resources required to maintain the transportation system, a potential system preservation investment program that meets regional goals was developed. The preservation program was based on current and forecasted asset conditions in the study area, and included identifying preservation costs associated with the potential maintenance program. The investment levels required between 2017 and 2040 to preserve the MTIS system for all strategy packages include:

- $816 million for pavement preservation ($141 million in Iowa, $675 million in Nebraska)
- $450 million for bridge preservation ($75 million in Iowa, $375 million in Nebraska)
- $1.071 billion for transit system operations and maintenance
- $522 million for transit system capital replacement

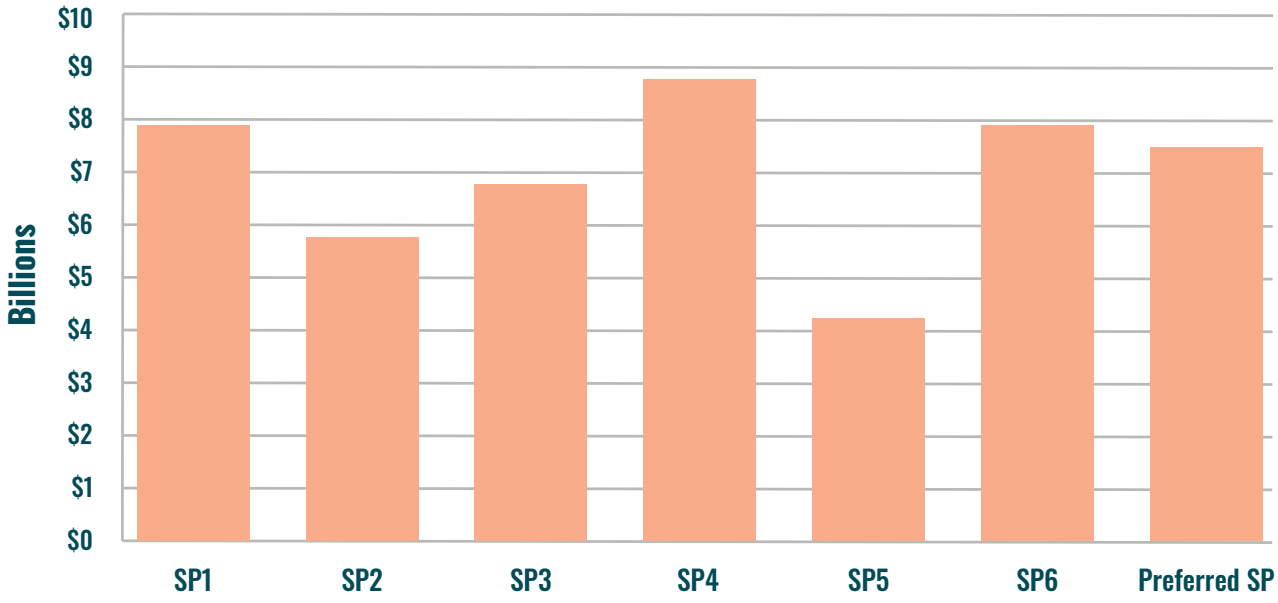
The financial requirements associated with the system preservation program are included in the overall investment needs of all strategy packages. However, it is important to recognize that the MTIS system only accounts for 46% of total arterial, collector, and freeway lane miles in the region. As such these estimates demonstrate the level of investment needed to achieve a state of good repair on the region's major roadways, but are significantly less than the total investment required to preserve and maintain the existing transportation system into the future.

Developing the Preferred Investment Scenario

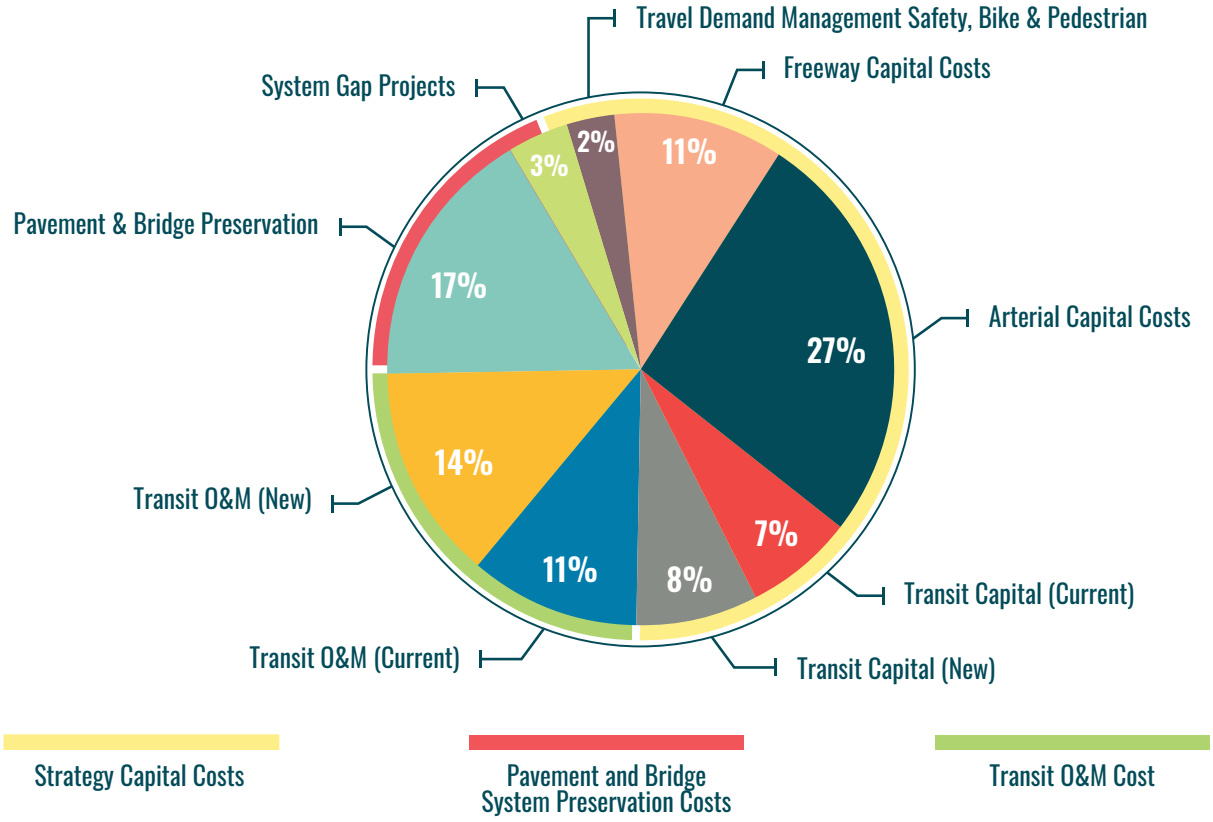
MAPA held several series of public and stakeholder meetings to evaluate preferences for the first six scenarios. Based on the feedback from these meetings, Strategy Package 7 was developed. Strategy Package 7 is sensitive to different types of regional land use, balances investments across modes, invests in system preservation and management, and was developed based on the guiding principles and an assessment of the individual projects and strategies. It includes a robust investment in transit that includes Bus Rapid Transit (BRT) corridors to provide more connections to employment centers and other destinations. Strategy Package 7 was selected as the preferred strategy package and represents an aggressive, yet reasonably attainable plan based on existing tools for raising new transportation revenues.



REGIONAL PACKAGE COST ESTIMATES



PREFERRED STRATEGY PACKAGE ANTICIPATED COSTS



MAPA's 2040 Long Range Transportation Plan (LRTP) forecasted transportation funding levels for the Omaha-Council Bluffs metro area through 2040, and these estimates were used to identify the funding gap and to consider alternative funding and financing sources that may bridge that gap. Based on this analysis it was clear that the anticipated transportation revenues from traditional sources through 2040 do not cover the cost of the preferred strategy package.

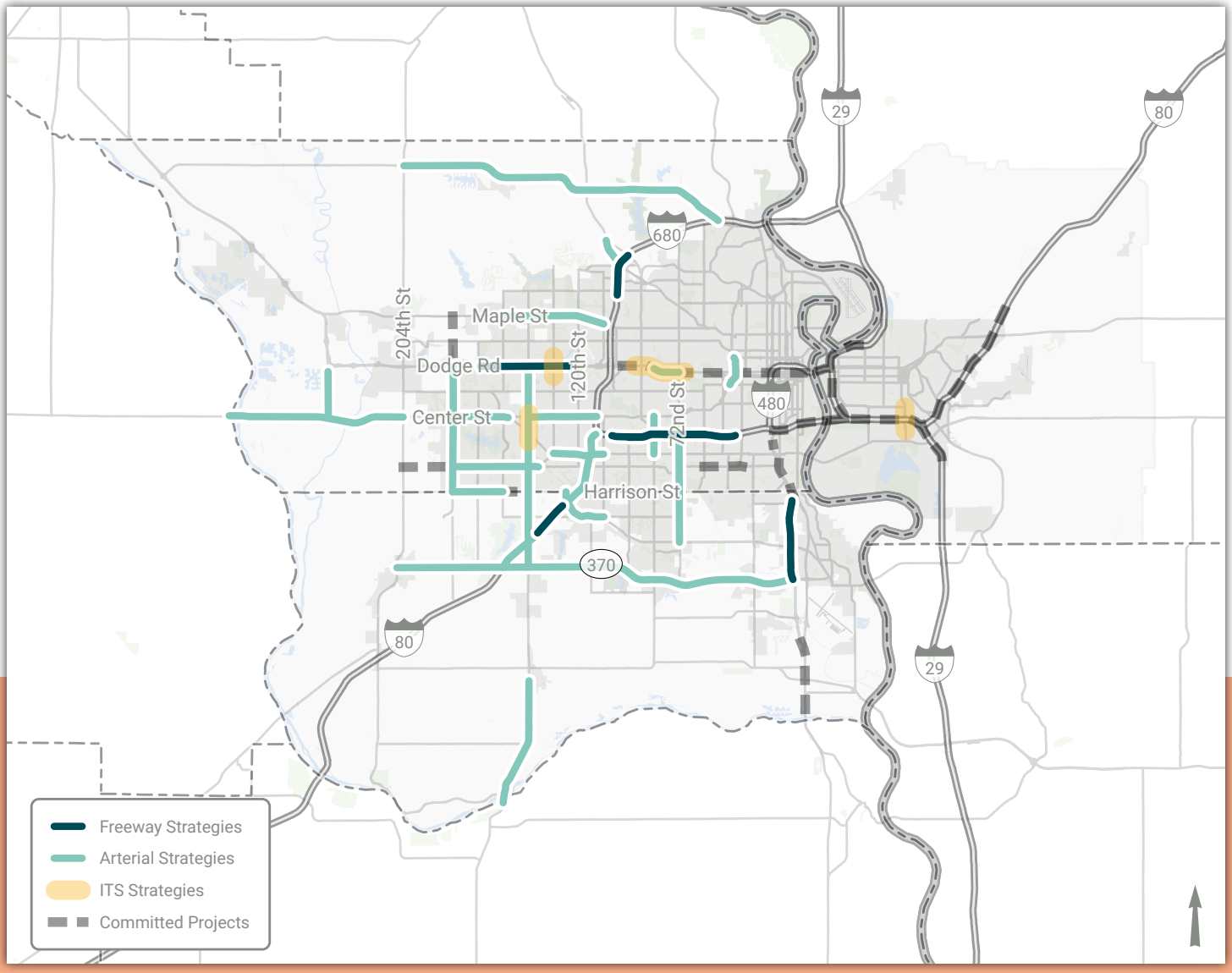
However, key differences existed between the two states. For example, anticipated revenues in the Iowa portion of MAPA's TMA were anticipated to be sufficient to fund the investments in Scenario Package 7. This is largely due to the limited size of the MTIS network in Iowa, and the significant planned improvements to that system, particularly the Council Bluffs Interstate System project, which is now complete and occurred early in the planning period for MTIS. As such it was assumed that the available transportation funding would be invested in the preservation of other federal-aid eligible roadways beyond the limited MTIS system. However, the Nebraska portion of the MAPA region is expected to have a transportation funding shortfall by 2040. The gap between costs and anticipated funding is significant. The region's transportation "funding capacity", or the percentage of funding levels compared to plan costs, is 42%. A summary of this shortfall forecast through MTIS is shown in the table below.

Mode/Category	Costs	Funding	Funding Gap	Funding Capacity
Roadway Capital	$3,187	$2,016	-$2,221	48%
Roadway Preservation	$1,050			
Transit Capital	$1,064	$396	-$668	37%
Transit O&M	$1,738	$579	-$1,159	33%
TOTAL	**$7,040***	**$2,991**	**-4,049**	**42%**

In order to meet the fiscal planning requirements, MAPA's Metropolitan Transportation Plan and to build off scenario planning that occurred in the MTIS, the program of official projects in this plan more closely resembles "Scenario 5 – Limited levels of investment" rather than the Preferred Scenario. This illustrates that significant, new transportation revenues for communities in the MAPA region will be required in order to implement the MTIS Preferred Scenario and achieve the performance targets in that plan. In the section that follows, there are maps of investments planned in Scenario Package 5 and the Preferred Scenario (SP7).

**numbers are in the 1,000,000 (millions)*

Figure 6.2: MTIS Limited Levels of Investment Scenario Package (SP5)



No additional transit investment beyond existing transit service was forecast in Scenario Package 5

Figure 6.3: MTIS Preferred Scenario Package (SP7): Roadway Improvements

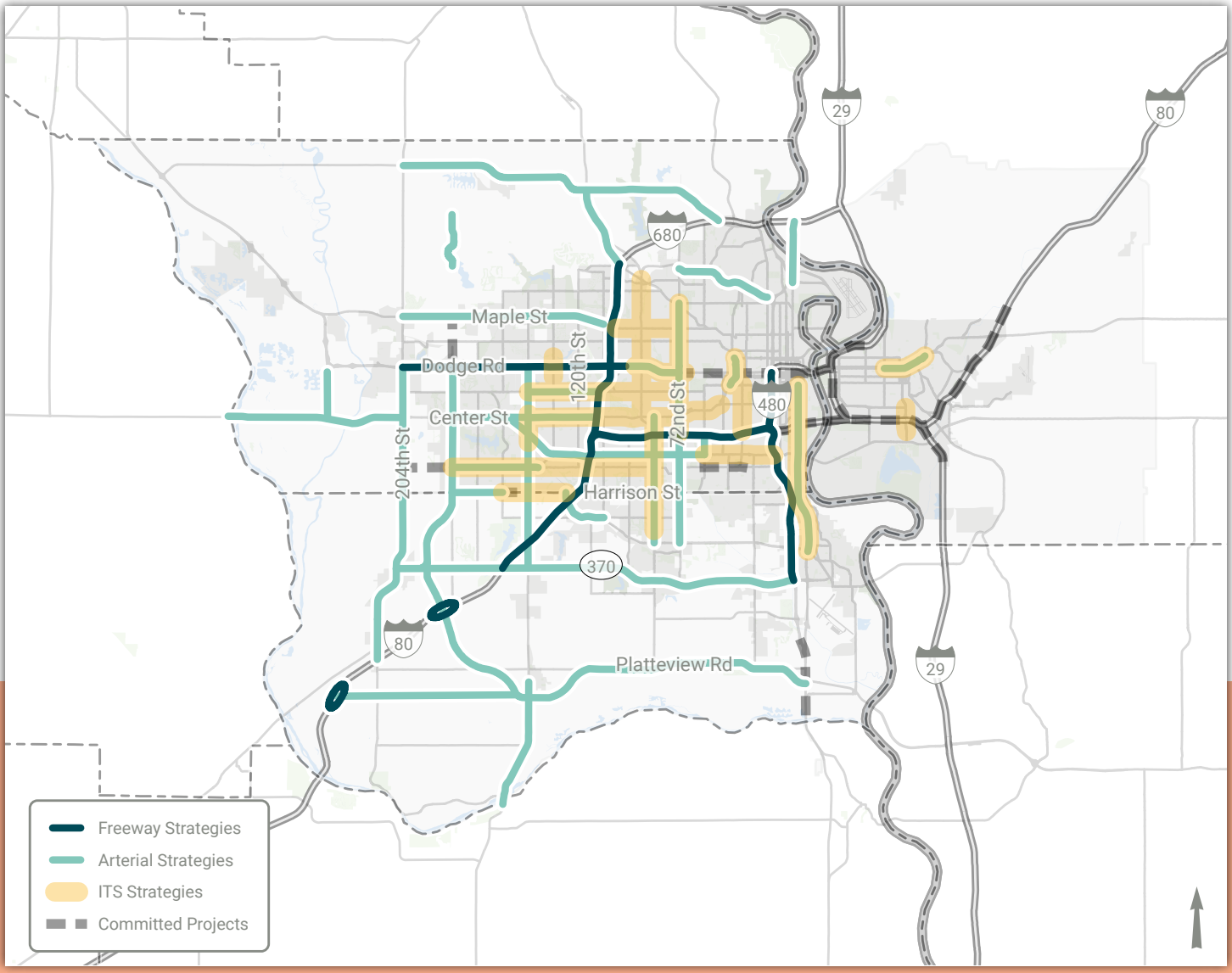
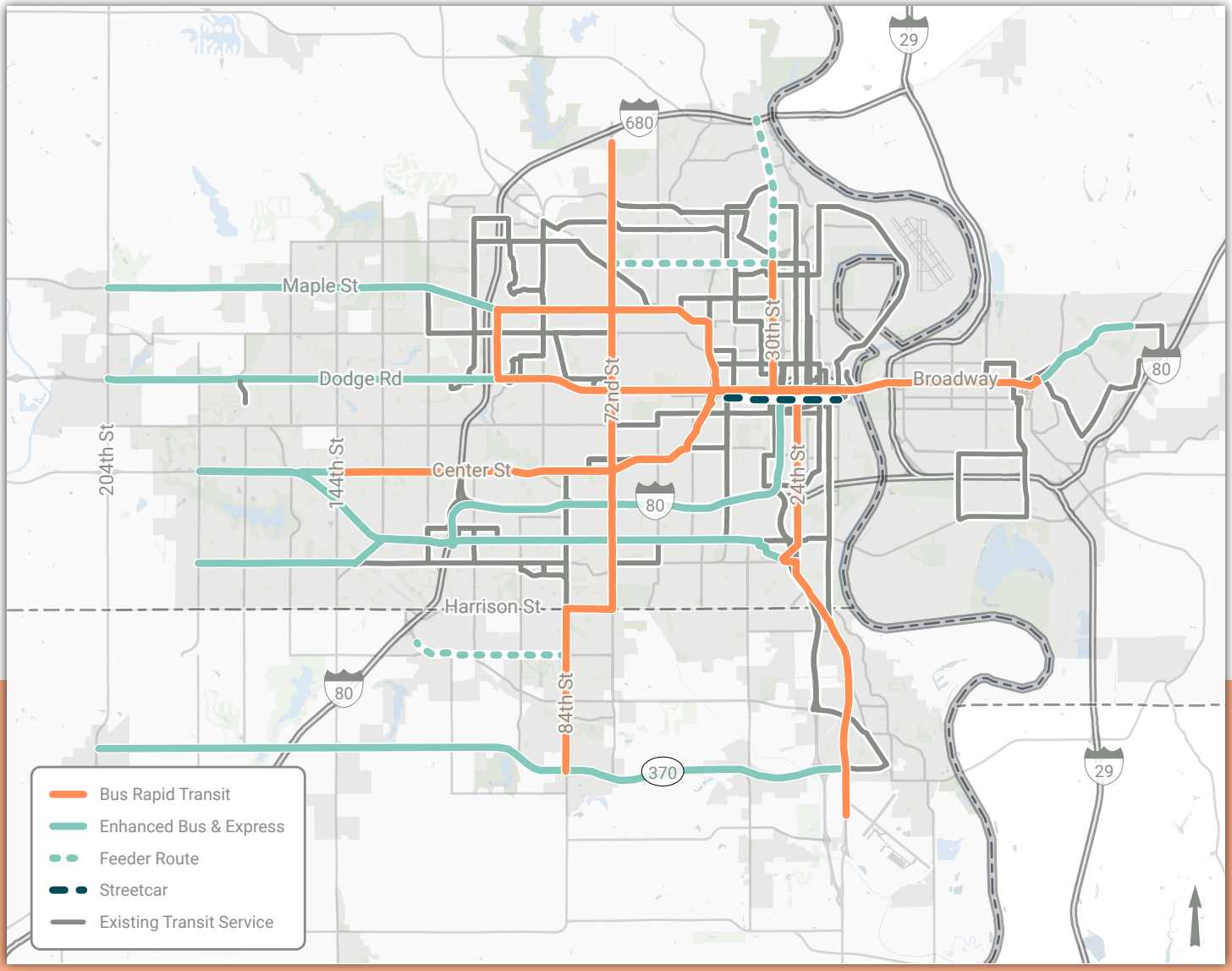


Figure 6.4: MTIS Preferred Scenario Package (SP7): Transit Improvements



MTIS Project Corridor Highlights

Some of the key roadway projects can be grouped by corridors. These represent clusters of projects where the travel characteristics share significant issues. The corridors are regionally significant projects where targeted funding will have high-value returns toward system performance.

Note that some of the projects included in the corridors are "illustrative," meaning that additional funding will be required to fully implement the project. In order to advance a project from concept to construction, a funding source must be identified. Projects included in the MTP as illustrative must be amended into the fiscally-constrained MTP before they are eligible to utilize Federal aid dollars toward the project development (NEPA / Preliminary Design) process.

WEST DODGE ROAD CORRIDOR (US 6/204th Street to 72nd Street - some portions of this corridor are illustrative)

- Highest tier of travel delays and congestion
- High freight usage
- Selected widening (8 lanes west of I-680)
- Innovative intersection at 90th Street
- Potential ramp metering
- Current express bus service with potential to expand BRT or enhanced bus service with suburban park and rides

HIGHWAY 370 CORRIDOR (US 6/N31 to US 75/Kennedy Freeway - some portions of this corridor are illustrative)

- High to moderate travel delays and congestion
- High to moderate freight usage
- Low travel reliability
- Widen to 6 lanes
- Innovative intersections
- Future express bus corridor potential

72ND AND 84TH STREETS SOUTH OF I-80 (Illustrative portions)

- Highest tier of travel delays and congestion
- Low travel reliability
- High freight usage
- Widen 72nd Street from I-80 to Harrison Street to 6 lanes
- Innovative intersections
- Access control
- Future BRT corridor potential

WEST CENTER ROAD, 180th STREET to I-680; INDUSTRIAL ROAD to 108th STREET (Illustrative portions)

- Highest tier of travel delays and congestion
- Low travel reliability
- High to moderate freight usage
- Selected widening
- Innovative intersections and ITS improvements
- Future BRT corridor potential

MetroNEXT Transit Development Strategy

Developed in 2021 and adopted in 2022, MetroNEXT is a strategy for enhancing public transportation throughout the region. The plan considered three scenarios for the future of transit in the area:

A. Enhancing Rider Amenities,

B. Improving Frequency and Extending Hours, and

C. Expanding Service to New Areas

Scenario A focused on expanding the Omaha Rapid Bus Transit (ORBT) network, a new Park and Ride location, new and updated bus shelters and signage, and service frequency improvements.

Scenario B prioritized increasing the frequency of service, generally improving how often buses arrive and extending how late they run.

Scenario C considered adding transit access to areas currently underserved within Omaha, primarily with new routes in West Omaha, but also enhanced service to Eppley Airport.

Metro also looked at expanding service to regional partners with optional service additions based on interest. These include new service in Sarpy County, northern Douglas County, and Council Bluffs.

These scenarios and options were scored based on how well they meet the goals of MetroNEXT. The public weighed in via a survey that asked them to rate each proposal from one to five on how well each scenario addresses regional transit needs, with one being very well and 5 being not at all. Scenario B ultimately scored highest:

The final plan is a hybrid of the three scenarios based on public feedback. Major investments, particularly new ORBT service and additional routes, are included in the list of investments in this Metropolitan Transportation Plan.

Figure 6.5: Final MetroNEXT Projects