

# 1. Introduction

The 2050 Lincoln Metropolitan Planning Organization (MPO) Long Range Transportation Plan (LRTP) provides the blueprint for the area's transportation planning process over the next 29 years. This plan also supports the Transportation Goal, Element, and Policies of [PlanForward](#), the Lincoln-Lancaster County 2050 Comprehensive Plan. The transportation planning process is a collaborative effort among the City of Lincoln, Lancaster County, Nebraska Department of Transportation (NDOT), StarTran, and other agencies. The multimodal transportation system was evaluated, and a set of recommendations were made with extensive public input. This LRTP meets all federal requirements and addresses the goals, objectives, and action steps to meet the community's vision for the future.

The LRTP update process is federally required for all MPOs every five years and provides multiple benefits. The regular update offers the community an opportunity to adjust the integration with the Comprehensive Plan, to identify what challenges and opportunities may lay ahead, to reexamine values as they relate to urban travel and development patterns, and to communicate about what they think the transportation system should look like in the future.

The Lincoln MPO 2050 LRTP, in accordance with federal requirements, addresses transportation system needs and provides a set of methods,

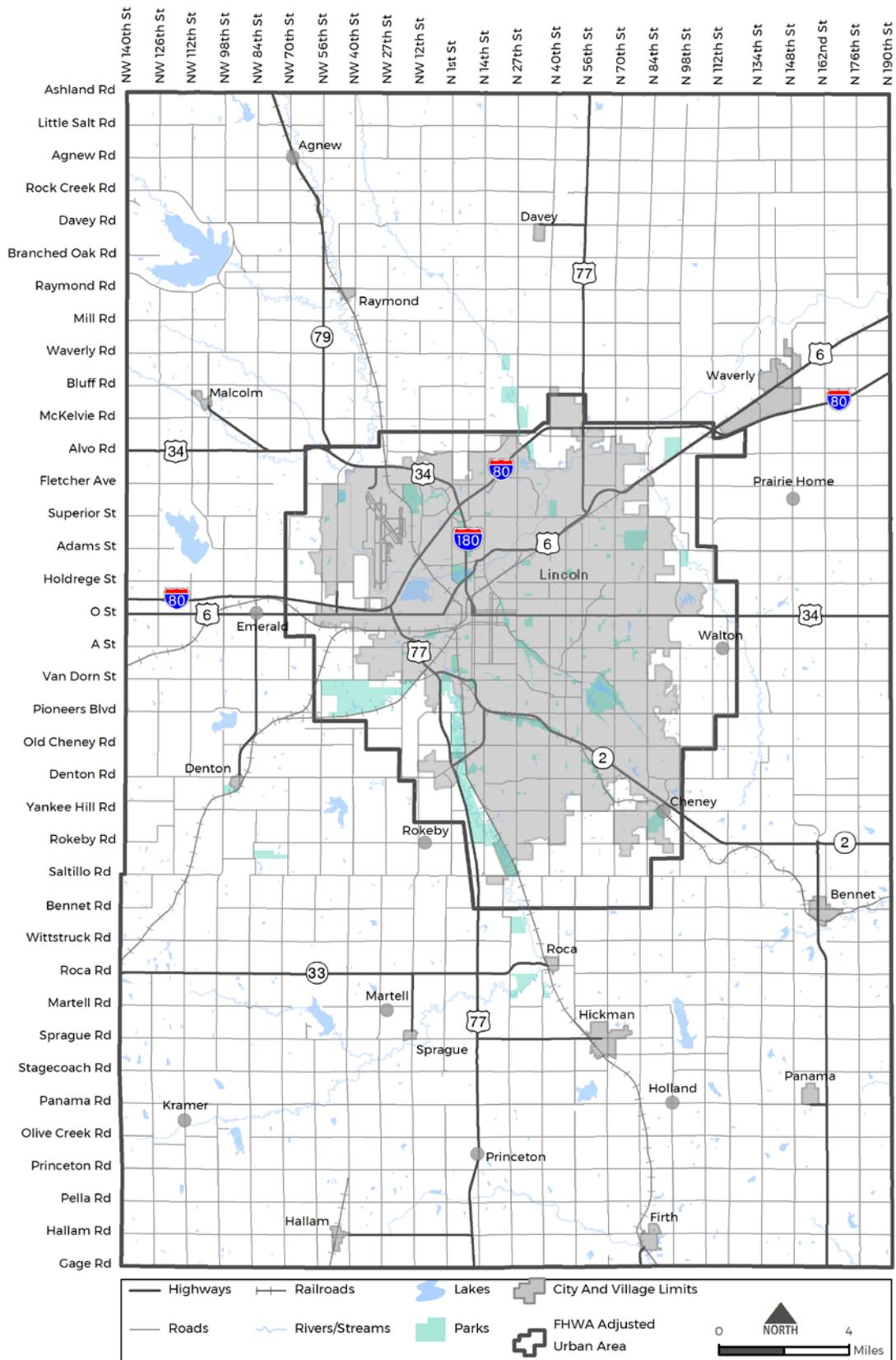
strategies, and actions for developing an integrated, fiscally constrained multimodal transportation system that supports the efficient movement of people and goods.

The LRTP covers the transportation systems of the jurisdictions located within the Lincoln Metropolitan Planning Area (MPA), which encompasses all of Lancaster County, Nebraska. The LRTP considers the interdependent nature of the metropolitan area's multimodal transportation systems by addressing the region's roadway, transit, bicycle, and pedestrian modes in a combined effort.

While the LRTP covers the entire Lincoln MPA (**Figure 1.1**), it includes more detailed transportation planning for areas within the federally designated Urban Area Boundary. The Urban Area Boundary encompasses 160 square miles of area that is anticipated to maintain or develop dense development patterns that require urban services within the time horizon of the LRTP (2050).



Figure 1.1 Lincoln Metropolitan Planning Area



## Metropolitan Planning Organization

The Lincoln MPO is responsible for transportation planning in Lincoln and Lancaster County. The MPO is a policy-making board of local government and transportation authority representatives who review transportation issues and develop transportation plans and programs for the metropolitan area. The MPO works to ensure the directives of federal regulations are incorporated into transportation planning and operations in the County. This organization provides the forum for cooperative decision-making and involvement of principal City and County elected officials. Although these individuals come to the table with multiple, and sometimes competing perspectives, they work together to establish local and regional priorities for the transportation improvements that are eligible to use state and federal funds.

To support the decision-making process, the MPO Officials Committee relies on other committees and staff, such as the MPO Technical Committee, as well as active participation from interested community members, concerned business representatives, interest groups and other voices in the community. The MPO is also responsible for preparing the [Transportation Improvement Program](#) (TIP) and the [Unified Planning Work Program](#) (UPWP). These two documents are short-term coordination and communication resources that help implement the goals of the LRTP.

While the Lincoln MPO plans and develops programs for all of Lancaster County, separate and defined funding sources are used to fund the respective urban and rural transportation programs. Urban sources of funding are used only within the “Urban Area Boundary,” as shown on **Figure 1.1**. Rural

sources of funding are generally planned to be used outside this identified boundary. The Lincoln MPO also determines the distribution of federal funding that is allocated to efficiently develop the transportation system and serve the community as it grows.

## Reason for Planning

The Lincoln MPO 2050 LRTP anticipates many changes over the 29-year planning period. Changing demographics, employment patterns, and technologies will create challenges for provision of transportation services and facilities. The coordinated planning effort between the LRTP and PlanForward strengthens the connection between land use and transportation decisions. Lincoln and Lancaster County face significant financial challenges in the construction of new transportation facilities and the care and maintenance of an expanding and aging system. Technology changes and increasing demands for alternative transportation options will also present new challenges and opportunities to ensure that the transportation system equitably serves the needs of all people within the planning area.



PlanForward refreshes the outlook for growth and land use in the City and County. Increased emphasis on mixed use redevelopment and infill within the existing City will add density and concentrate it in areas along major transportation and utility corridors. While the density increases proposed in this plan are relatively modest, they are significant to the process of planning transportation infrastructure. The Plan anticipates a community of complete neighborhoods with housing options in a variety of settings and walkable, bikeable and transit access to commercial centers and entertainment. This approach leads to improved access for all transportation modes in existing neighborhoods, safe connections for all users, and construction of new neighborhoods with Complete Streets and accessible amenities over the next several decades.

As Lincoln and Lancaster County's population continues to grow, there will be greater demand for additional transportation infrastructure. With aging infrastructure and increasing construction costs to provide sustainable and resilient infrastructure, transportation funding is strained to meet the needs for repair, replacement, and growth. This is due to several factors, including vehicle fuel efficiency, gas-tax rates not increasing with inflation or vehicle technologies, project cost inflation, and other federal and state resources not raising enough funds to meet the current and future network demands.

This Plan continues to address funding issues by making the existing system more efficient, directing strategic investment in the growth of the transportation network, and providing a transportation network that encourages active transportation vehicles as a reliable and equitable form of commuting. Continued

discussion about the purpose and approach to increasing transportation funding remains a community priority.

## Compliance with Federal Regulations

The Lincoln LRTP has been prepared under the direction of the Lincoln MPO in accordance with federal, state, and local transportation planning guidelines and policies. The LRTP addresses both the long range transportation needs of the City of Lincoln and Lancaster County and the federal requirements for preparing a Long Range

Transportation Plan as specified in the Fixing America's Surface Transportation (FAST) Act, the current federal transportation funding and policy bill.

FAST Act carries forward many of the principles and accomplishments of previous legislation and builds on and refines many existing efforts. This legislation also introduced new measures to meet the many challenges facing our transportation system, such as improving safety, reducing traffic congestion, improving efficiency in freight movement, increasing intermodal connectivity, and protecting the environment. A list of planning requirements that the Lincoln MPO follows can be found on

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The FAST Act is the most current authorization for surface transportation investment in the United States. It builds on previous national transportation bills, such as the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA); the Transportation Equity Act for the 21st Century of 1998 (TEA-21); Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU); and Moving Ahead for Progress in the 21st Century (MAP-21). Together these established a new agenda for maintaining and investing in the nation's transportation infrastructure.



### Performance-Based Planning:

Performance-based planning is a strategic approach to transportation planning that analyzes data to determine how effectively transportation investments are working toward achieving the identified transportation goals. The FAST Act emphasizes performance-based planning, establishes performance measures and targets, and identifies seven national goals that states and MPOs are to work toward. Agencies seeking federal funds must demonstrate their progress toward achieving regional, state, and national goals. States and MPOs that do not demonstrate adequate progress toward achieving the goals will be required to take corrective action, which may involve actions required by the MPOs. This LRTP update incorporates performance measures (detailed in **Chapter 2**) that relate to local and national goals.

**Fiscally Constrained Plan:** All MPO LRTPs must be fiscally constrained; that is, an LRTP must include sufficient financial information to confirm that projects in the document can

be implemented using committed or available revenue sources. The Lincoln LRTP fiscally constrained plan (detailed in **Chapter 7**) uses a transparent evaluation process to consider the potential for transportation projects to contribute to the region's transportation goals and performance targets, in combination with reasonably expected revenue forecasts through 2050.

The LRTP also includes an illustrative plan documenting the region's transportation needs that exceed those that are reasonably expected to be funded by 2050. The LRTP guides investment of federal, state, and local transportation funds toward the most beneficial projects for the planning area. It reflects the community's vision for the future transportation system and includes strategies, projects, and funding allocations to realize that vision.

Other federal regulation emphasis areas include:

**Strategic Highway Safety Plan (SHSP):** NDOT published the [Strategic Highway Safety Plan, 2017-2021](#). It maintains the same five Critical Emphasis Areas as the previous plan and added a new one to address crashes involving older drivers, most of which are outside the scope of an LRTP. The transportation planning process includes an ongoing traffic safety evaluation, looking at the [Crash Data Analysis](#) from the City of Lincoln and NDOT for the planning area. The process involved identifying high crash rate locations, considering the types of crashes, and then evaluating improvements where feasible. The crash information was used as part of the 2050 LRTP project selection process.

**Existing Transportation Facilities:** The LRTP must include a discussion of strategies to improve the performance of existing facilities. Many recommendations in this Plan include projects/programs focused on improving the current system and providing new connections to the existing multimodal system that will improve its performance. Furthermore, maintenance of the current

system remains a key element addressed in the LRTP funding approach. Projects that would address congestion on existing roadways were identified through the Congestion Management Process included in **Appendix E**.

**Agency Consultation and Environmental Mitigation:** An MPO must document in the LRTP how agencies in the following areas are consulted with in the transportation planning process: environmental protection, wildlife management, land management, and historic preservation. A discussion of potential environmental mitigation activities must be included in consultation with federal, state and tribal wildlife, land management, and regulatory agencies. Potential environmental impacts and mitigation measures were included in the evaluation of multimodal alternatives. The process for consulting with agencies and considering environmental mitigation is described in **Chapter 8** and further discussed in **Appendix H – Environmental Overview**.

In summary, this transportation plan is to meet or exceed the principles of federal regulation planning provisions in addressing the changing transportation needs and many challenges facing the Lincoln MPA.



## Plan Update Process

The LRTP update process includes an integrated sequence of tasks that produce a comprehensive and compliant transportation planning document. Project oversight from participating agencies helps to develop the foundational goals (**Chapter 2**) and deliver a purposeful public engagement process (**Chapter 3**). The existing model of current and future travel demands is updated with robust traffic counts and the recommended growth scenario (**Chapter 4**) created by the PlanForward update process. The range of multimodal transportation project needs are then updated (**Chapter 5**) using the best

available data to consider future opportunities and challenges. Projected funding amounts and sources are also updated for the planning period to guide development of investment alternatives (**Chapter 6**). Public input provided throughout the planning process is used to recommend a preferred funding approach that is applied to the prioritized list of projects and to develop the fiscally constrained plan (**Chapter 7**) supported by an implementation plan (**Chapter 8**) needed to complete projects, keep the plan current, and align transportation policies with additional action steps documented in the plan.



## Integration of Modal Plans

The Lincoln MPO LRTP integrates mode-specific master plans and other transportation-focused plans to fully address the pedestrian, bicycle, transit, rail, and roadway needs. Plans incorporated into the LRTP include:

- Lincoln's Vision for a Climate-Smart Future, February 2021
- Congestion Management Process, May 2020
- Lincoln School Zone Standards, April 2020
- Lincoln Bike Plan (On-Street Bicycle Facilities Plan), May 2019
- NDOT State Freight Plan, November 2017 (revised February 2021)
- Lincoln Transit Development Plan, April 2016
- Lincoln Traffic Management Master Plan, November 2015
- Lincoln Travel Options Strategy, December 2013
- Lincoln Airport Master Plan, August 2007

## Contributing Agencies and Committees

The FAST Act requires that the MPO establish a cooperative planning process in consultation with other agencies, including federal, state, and local agencies; transit and human service providers; and other interested parties. In addition to outreach to the general public (as described in **Chapter 3**), this LRTP planning process has been completed in coordination with the following entities:

- Lincoln-Lancaster County Planning Department
- Lincoln Transportation and Utilities (LTU): Transportation Department, StarTran
- Lancaster County Engineer’s Office
- Lincoln Parks & Recreation Department
- Lincoln-Lancaster County Health Department
- Lincoln Urban Development Department
- Nebraska Department of Transportation (NDOT)
- Federal Highway Administration (FHWA)
- Federal Transit Administration (FTA)

The contents of this LRTP have been developed over a nearly two-year process in close coordination with the LRTP Oversight Planning Committee (composed of representatives from the previously listed entities) and the Community Committee established to support the PlanForward update. The Community Committee provided review and input for both the Comprehensive Plan and LRTP update processes. At key milestones and decision points in the planning process, the LRTP was presented and discussed with the MPO Technical Committee and the MPO Officials Committee. **Appendix A** includes a complete list of committee meetings.

## Completed Projects

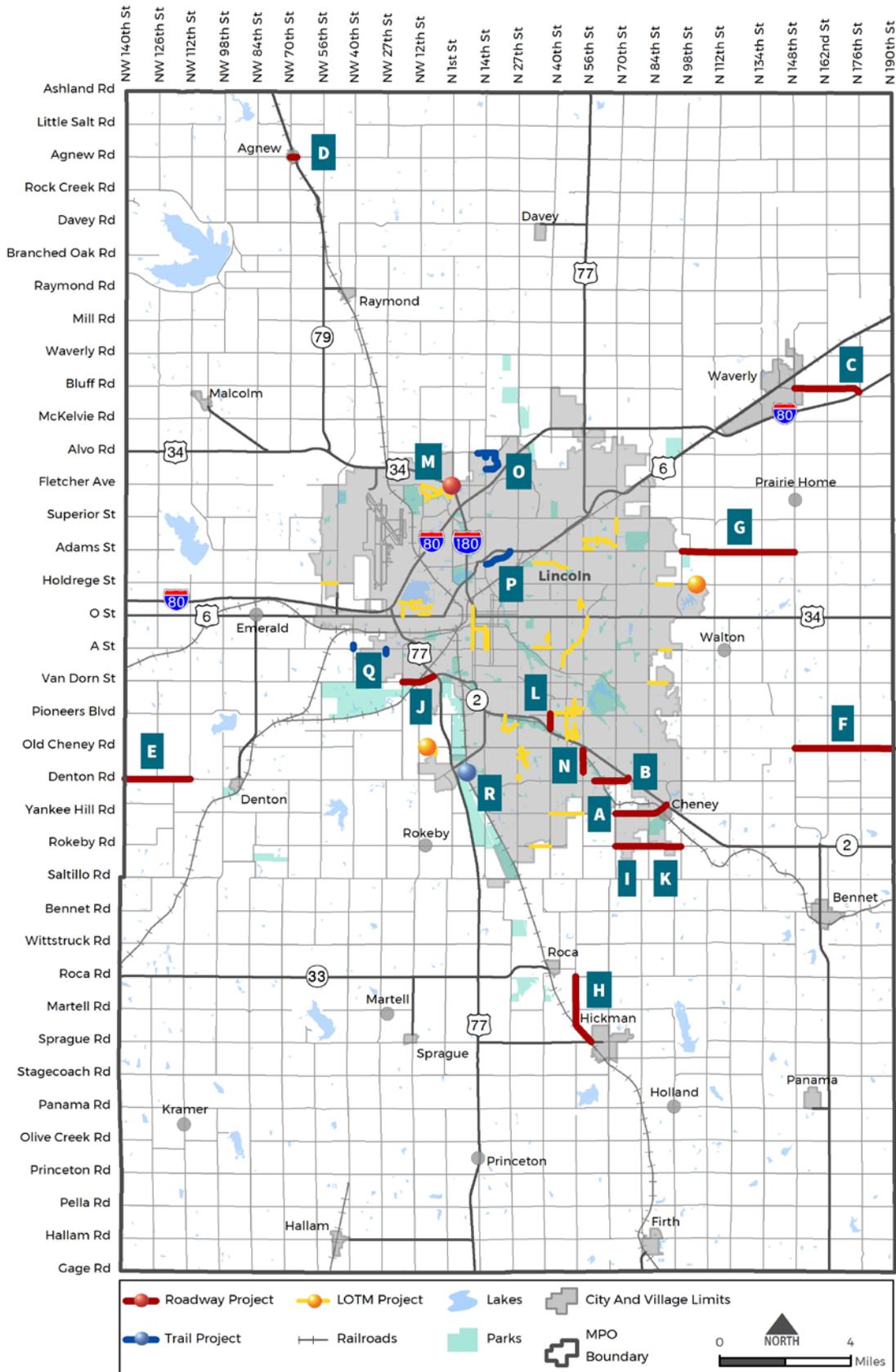
### Projects from 2040 LRTP

Since 2017, multiple high priority transportation projects identified in the 2040 LRTP have been successfully funded and constructed as well. The benefits of an organized and community supported transportation planning process are seen in the initiation of multimodal project such as VanLNK, BikeLNK and ScooterLNK, as well as the completion of major projects throughout Lincoln and Lancaster County, listed in **Table 1.1** and depicted on **Figure 1.2**.

**Table 1.1 Major Projects Completed Since 2017 LRTP**

<b>A</b>	Yankee Hill Road Widening with Trail	<b>J</b>	Van Dorn Street Repaving + Intersection
<b>B</b>	Pine Lake Road Widening	<b>K</b>	Rokeyby Road Paving + Intersection
<b>C</b>	Bluff Road Paving	<b>L</b>	S. 40th Street 2+1
<b>D</b>	W. Agnew Road Paving	<b>M</b>	Highway 34 and W. Fletcher Road Intersection
<b>E</b>	W. Denton Road Paving	<b>N</b>	S. 56th Street Widening
<b>F</b>	Old Cheney Road Paving	<b>O</b>	Stonebridge Trail
<b>G</b>	Adams Street Paving	<b>P</b>	Salt Creek Levee Trail
<b>H</b>	S. 54th Street Paving	<b>Q</b>	A Street Connectors (SW 40 <sup>th</sup> St.: A St. to F St & SW 27 <sup>th</sup> St.: Shane Dr. to A St.)
<b>I</b>	Rokeyby Road Widening	<b>R</b>	Rock Island Connection

Figure 1.2 Major Projects Completed Since 2017 LRTP



## Lincoln on the Move

Transportation planning helps the region set a vision for the transportation system and establish funding priorities. The last Lincoln MPO LRTP was adopted in January 2017. That planning process and the community conversation it included led the Citizens' Transportation Coalition to recommend a ¼ cent local sales tax to help address some of the funding gap with \$33 million annually through 2025. Successful voter approval of the [Lincoln on the Move](#) ballot question in 2019 has enabled LTU to address three priority areas: Existing Street Improvements, Growth Projects, and one Railroad Transportation Safety District project at 33<sup>rd</sup> and Cornhusker Highway. Between October 2019 and September 2021, a total of 16 street improvement projects and 11 new growth projects will have been completed, were under construction, or were soliciting bids as a direct result of this additional funding. Ten of the 16 street improvement projects are multi-road, neighborhood projects located in different areas of Lincoln. These projects are also shown on **Figure 1.2**.

## Green Light Lincoln



[Green Light Lincoln](#), a

program led by LTU, focuses on

improving traffic signal system elements for intersection detection, signal displays and phasing, intelligent transportation systems (ITS), and traffic monitoring and incident management. Green Light Lincoln improves overall transportation system reliability and performance by decreasing travel delay and smoothing traffic flow. The citywide program has completed four phases of system optimization and traffic signal upgrades through 2020. These investments are helpful in providing safe roadways for all users and improving the efficiency of the transportation network. In many cases, the useful life of existing infrastructure is extended further by the signal upgrades.

