



ADOPTED December 15, 2021

LINCOLN
MPO 2050
LONG RANGE
TRANSPORTATION
PLAN UPDATE

The Long Range Transportation Plan (LRTP) **sets a vision** for Lincoln and Lancaster County's transportation future and **establishes funding priorities** based on extensive analysis, community input, and ongoing coordination with the Project Oversight Planning Committee, the Community Committee, the Metropolitan Planning Organization (MPO) Technical Committee, and the MPO Officials Committee.

The Lincoln on the Move ¼ cent sales tax and Highway Allocation Bonds are *helping to construct many important transportation projects in the near term*. However, transportation funding will drop significantly in 2026 when these funding sources expire. Without additional revenue, the transportation needs of Lincoln and Lancaster County cannot be fully funded, requiring *difficult decisions about the use of limited funds*. Additional funding sources should be pursued to meet system needs and community expectations.

Given the funding limitations and consistent input from the community, the LRTP prioritizes funding to **take care of the existing transportation system**. The LRTP identifies the priority projects that can reasonably be expected over the 29-year planning horizon within the fiscally constrained plan, recognizing that revenues are not keeping pace with inflating maintenance and construction costs. It also lays the foundation for how additional revenue could be used to meet the community's transportation vision.



















Why Transportation Matters

Transportation is a **basic human need** that affects quality of life every day. Nearly every life decision is impacted by our transportation options; from small decisions like, "How will I get to the coffee shop this morning?" to major decisions like, "How far away from my job do I want to live?" Lincoln and Lancaster County residents use transportation to get to work, school, medical facilities, recreational amenities, shopping, and other community and social activities.

A well-connected and efficient transportation network allows access to higher paying and varying job types, a wider selection of housing options, and more convenient health and human services. An integrated multimodal transportation system allows residents the *freedom of personal mobility and choice of how to travel*—whether it's walking, biking, driving, carpooling, or riding public transportation—which helps to attract a vibrant and diverse workforce.

Positioning the Community for Transportation Funding

The Lincoln Metropolitan Planning Organization (MPO) LRTP covers the transportation systems of the Lincoln Metropolitan Planning Area (MPA), encompassing all of Lancaster County, Nebraska. It addresses the transportation needs of the region through 2050.

The Lincoln LRTP follows the federal requirements as specified in the Fixing America's Surface Transportation (FAST) Act, the current federal transportation funding and policy bill. This is important because **compliance with federal requirements must be met for the region to receive federal transportation funding**.

The last Lincoln MPO LRTP was adopted in January 2017. Since that time, City of Lincoln voters approved a 1/4 cent sales tax ("Lincoln on the Move") to fund transportation improvements. In Addition, the City has secured bond funding to expedite funding for additional roadway projects. Many of the high priority transportation projects and rehabilitation work identified in the previous plan have been successfully funded and constructed as a direct result of the additional funding from the sales tax and bond issuances.

Linking Transportation and Land Use Decisions

The Lincoln LRTP has been developed in tandem with PlanForward, the City of Lincoln-Lancaster 2050 County Comprehensive Plan.

Developing the LRTP alongside the Comprehensive Plan allows an integrated land use and transportation planning approach that offers a direct link between the two planning activities. The PlanForward population and employment forecasts and growth scenario form the basis for the future travel demand contemplated in the LRTP.

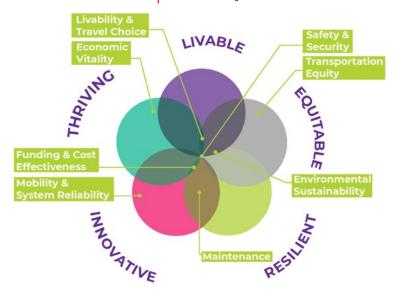
Vision and Goals

Vision: The vision for transportation in Lincoln and Lancaster County is a safe, efficient, and sustainable transportation system that enhances the quality of life, livability, and economic vitality of the community.

Goals: Eight goals for Lincoln and Lancaster County's transportation system have been developed with input from community members. These eight goals are the foundation for performance measures, performance targets, and the recommended funding plan. The transportation goals are supported by 18 policies and many action steps.



Eight LRTP Goals reinforce the five PlanForward planning themes. The two plans were developed concurrently and reflect a unified vision of how transportation supports the community.



GOALS



A well-maintained transportation system.



An efficient, reliable, and well-connected transportation system that leverages innovation and technology for moving people and freight.



A multimodal system that provides travel options to support a more compact, livable urban environment.



A safe and secure transportation system.



A transportation system that supports economic vitality for residents and businesses.



A transportation system that enhances the natural, cultural, and built environment.



Collaboration in funding transportation projects that maximizes user benefits.



Transportation investments developed through an inclusive process that promotes equitable outcomes.

Transportation Equity is a new goal for the 2050 LRTP. Where underserved and overburdened communities reside, it is vital to guide infrastructure investments that ensure multimodal transportation options are reliable, convenient, and cost-effective.

CURRENT & FUTURE CONDITIONS

Understanding current travel patterns and transportation infrastructure, as well as how travel demand will change in the future, helps to identify what needs improvement.



REGIONAL GROWTH: 2019 - 2050



Source: PlanForward

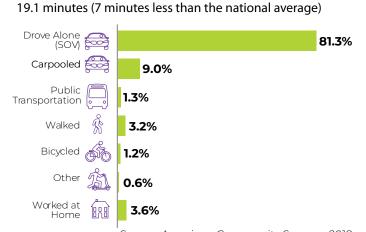
Each day, almost 47,000 people travel to work in Lancaster County from outside the county, while approximately 25,500 County residents travel to work elsewhere. Roughly 127,500 residents both live and work within Lancaster County.



Source: US Census Longitudinal Employer-Household Dynamics (LEHD) Employment for Lancaster County, 2017

MODE SPLIT

Average travel time to work in Lancaster County:



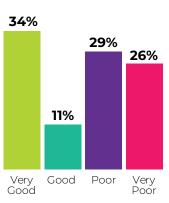
Source: American Community Survey – 2018 5-Year Average Table S0801 occurred to travel demand and patterns experienced during the pandemic. Travel behaviors were significantly changed during the pandemic, and the long-term impact is uncertain at this time. Many companies allowed teleworking, which may have long-term impacts on employment centers and commuting patterns.

The Lincoln MPO 2050 LRTP was completed during the COVID-19 pandemic using pre-

COVID data that do not reflect changes that

ROAD CONDITIONS

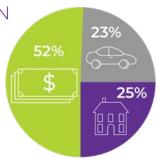
The City of Lincoln and Lancaster County are investing in streets to ensure a better tomorrow. Upkeep and maintenance of street infrastructure has become an increasingly critical need. The City of Lincoln roadway network consists of almost 200 million square feet of paved surfaces with varying surface conditions.



Source: City of Lincoln, 2018

HOUSING + TRANSPORTATION INDEX

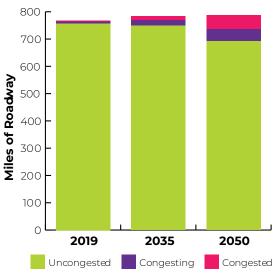
Combined, the cost of housing and transportation in Lancaster County is 48 percent of the average household income, which is slightly higher than the 45 percent benchmark for affordability.



Source: Center for Neighborhood Technology (CNT), 2018

CONGESTION

Today, most of Lincoln's streets are uncongested. If no improvements are made beyond those with committed funding, the levels of congestion would increase over time (from 1% in 2019 to 12% in 2050) as the community grows.



Source: Lincoln MPO Travel Demand Model. 2020

BICYCLE AND PEDESTRIAN NETWORK

Lincoln's biking and walking network supports both recreation and transportation uses and includes:

250+ miles of trails

140 miles of on-street bike routes

2.3 miles of bike lanes

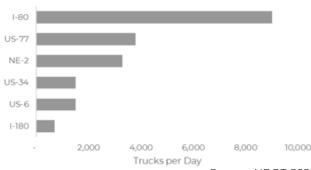
1.3 miles of two-way cycle track

1,500 miles of sidewalk

Source: Lincoln Bike Plan, 2019

MAJOR TRUCK CORRIDORS

These corridors represent a critical portion of the roadway network for trucks to transport freight to market.



Source: NDOT, 2020

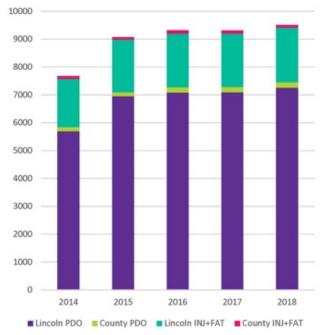
TRANSIT RIDERSHIP

StarTran, the division of the City of Lincoln responsible for public transit, operates 14 fixed bus routes as well as VanLNK and paratransit service. Nationwide, public transit ridership has been declining over the past several years, but the 2.4 million trips served by StarTran in 2019 represent an increase of more than 8 percent from 2016.



SAFETY

Between 2014 and 2018, there were 9,947 crashes resulting in injury (INJ) or fatality (FAT) – approximately 22 percent – and the remaining crashes involved property damage only (PDO). Although the number of crashes has increased in the five-year period, the Allstate Insurance 2019 "America's Best Drivers Report" ranks Lincoln in the top 10 percent of safest driving cities in the country.



Source: Lincoln MPO LRTP Performance Report, 2018



Three Phases of Outreach

	We need to know	How we'll find out	How we'll use the input
Phase I Outreach is focused on listening to the community. Our project team would like to understand the community values, experienced issues and relavant trends	Values Issues Trends	Virtual Public Meeting Focus Groups Website Survey Tools	Inform Goals Inform Network Consideration Inform Land Use Scenarios
Phase 2 Outreach is focused on balancing tradeoffs. Our project team will educate and engage the public in the tradeoff decision-making process to gain consensus.	Tradeoffs Strategies Priorities	Stakeholder Scenario Planning Interactive Tradeoffs Game Virtual Public Meeting Focus Groups Website Survey Tools	Scenario Implementation Plan Strategy and Funding Preferences Project/Programming Prioritization
Phase 3 Outreach will wrap up by confirming with community members that the plan reflects what we heard from the community.	Outcome Validation	Virtual Public Meeting In-Person Public Meetings Draft LRTP On-line Comments County Board City Council	Summary of public comments in LRTP

FOCUS GROUPS

80 people participated in 10 focus groups reflecting the diversity of community interests, disciplines, and needs. The focus groups were convened to discuss the transportation goals, needs, and opportunities within the community and to inform policy and action step development.

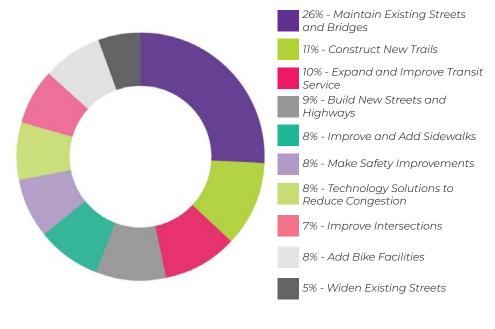
- ▶ Development Community
- ► Transit/Human Services
- Healthy Living & Environmental
- ► Bicycle/Pedestrian Groups
- ► Institutions

- Multicultural and Diversity
- ► Freight Interests
- ► Business Community
- Neighborhood Associations
- Downtown Interests

COMMITTEES

The contents of the LRTP were developed over a 2-year process in close coordination with the LRTP Project Oversight Planning Committee and the Plan Forward Community Committee. At key milestones, the LRTP was presented and discussed with the MPO Technical Committee and the MPO Officials Committee. The Lancaster County Board and Lincoln City Council are the adopting bodies for the Comprehensive Plan and participate in the approval of the LRTP through membership on the MPO Officials Committee.

Community members were asked in a survey, "If you had \$100 to fund transportation improvements in Lincoln, how would you spend it?" With a total of 203 responses, the top choice of the community was to maintain existing streets and bridges. The community's responses, however, reinforced the need for a balanced approach to funding transportation in Lincoln; many participants expressed that all categories are important.



Community Input

Information gathered throughout the LRTP community engagement revealed several recurring themes:

- ► **Technology** generates both excitement and some concern; it should improve travel efficiency but must also improve safety for all users, not just cars.
- ► As Lincoln experiences continued *growth* (both infill development and new development in the fringe areas), the transportation network needs to support evolving travel needs, including access to transportation options like biking, walking, and riding transit.
- ▶ Ongoing *maintenance* remains a top priority for the public.
- ► **Environmental** awareness has emerged as a new key theme of the community, stemming from the Lincoln Climate Action Plan and the community's understanding of transportation's role in achieving sustainability goals.
- ► **Equity** is a desired focus for guiding transportation planning and decisions; access to a transit system and safe streets that accommodate all modes is important for underserved and overburdened communities.
- ► Additional **funding** is needed to construct and maintain the multimodal transportation system.
- ▶ Desire for **Complete Streets** is an emerging theme to support more active transportation, specifically the on-street bike network and trail system.
- ► *Travel patterns* experienced a significant change during the COVID-19 pandemic; although these changes were not perceived to be permanent, some aspects are anticipated to continue, and planning for future travel demands should reflect these shifting behaviors.



FUNDING OUTLOOK

Reasonably Expected Transportation Revenues

Over the next 29-year planning horizon (2022 through 2050), an estimated **\$4.74 billion in transportation revenues** can be reasonably expected for the Lincoln MPO regoin. Approximately \$3.2 billion of the transportation revenue is either restricted to specific types of projects (e.g., Federal Transit Administration funds must be used for transit capital and operations) or committed to specific projects or categories (e.g., 25% of Lincoln on the Move sales tax funds are committed to specific growth projects). The remaining **\$1.5 billion of transportation revenue is flexible** and could be used for a variety of transportation-related purposes to achieve the Lincoln MPO goals.

Surface Transportation Block Grant Program

A portion of the flexible funds (approximately \$239 million) can be used in Lincoln or Lancaster County. The LRTP recommends a **70%** (*Lincoln*)/**30%** (*Lancaster County*) *split for these funds*. This will provide federal funding for construction of priority projects in the urban area, urbanizing area (that will likely be annexed into the City of Lincoln in the future), as well as some critical rural projects.

The Cost of Transportation Projects

While \$4.74 billion over 29 years seems like a lot of money, transportation projects are expensive! Here are some typical costs for transportation improvements:

Many federal state, local and private revenue sources fund the transportation projects and programs included in the LRTP, such as:

- ► City Wheel Tax
- ► Lincoln on the Move ⅓ cent sales tax
- ► General Revenues (Lincoln and Lancaster County)
- Arterial and Trail Impact Fees
- ► Keno lottery funds
- ▶ RTSD funds
- Highway Allocation funds (gas tax)
- ► Bond funds
- ► Federal Surface Transportation Block Grant Program
- ► Federal Funds Purchase Program
- ► State Train Mile Tax
- COVID Relief funds
- ► FTA funds
- Transit fares, advertising, UNL contract
- ► Transportation Alternatives Set Aside
- ► Lower Platte South NRD
- Private contributions

CONSTRUCTION COSTS

Construction costs are expected to increase annually. Based on historic and recent construction cost inflation rates, the LRTP accounts for a temporary rapid increase of 10% annual inflation in the first 5 years and 7% annual inflation in the next 5 years. Then the inflation rate is assumed to normalize at 5% annual inflation in the remaining years through 2050.

That means a project that costs \$1 million today would cost \$5.7 million in 2050!



Funding Strategy The revenue forecasts for the 29-year planning horizon are not

The revenue forecasts for the 29-year planning horizon are not adequate to achieve the goals of LRTP and meet all the region's transportation needs. The LRTP **strongly encourages pursuit of additional revenues** to fund the transportation improvements that are vital to a thriving community. The LRTP funding strategy recognizes the limited funding availability and **strives to optimize the use of the reasonably expected funds** based on input from the LRTP Committees and the community in combination with technical analysis. The LRTP funding strategy focuses on **taking care of the existing system** – fully funding LTU's operations and maintenance program, and prioritizing rehabilitation of critical roads and bridges. The plan recognizes the importance of making the system function as efficiently as possible, while supporting the community growth envisioned in PlanForward. The Urban Area funding strategy includes:

- ► Focusing on operations and maintenance, road and bridge rehabilitation, as well as trail and sidewalk rehabilitation
- Encouraging flexible and performance-based geometric designs that effectively address congestion within funding limitations and right-of-way constraints
- Placing emphasis on addressing congestion at intersection bottlenecks and leveraging technology to improve the efficiency of major corridors
- Supporting community growth with public-private partnerships
- Supporting both infill development and Lincoln's Climate Action
 Plan through continuation of funding for transit service and bicycle and pedestrian infrastructure



Future Funding Considerations

CONTINUATION OF

The revenue forecasts described on page 8 do not account for the continuation of the ¼ cent Lincoln on the Move sales tax throughout the planning period beyond 2025. A continuation of the 1/4 cent sales tax throughout the planning period can result in \$380 million of additional revenue to help address unmet transportation needs. If the sales tax were increased to a 1/2 cent, twice the level of funding and associated improvements could be completed!

GRANT OPPORTUNITIES

In addition to the ongoing funding sources, the Lincoln MPO and its member agencies should continue to proactively pursue other transportation funds, including competitive grants from the federal government and non-profit organizations.

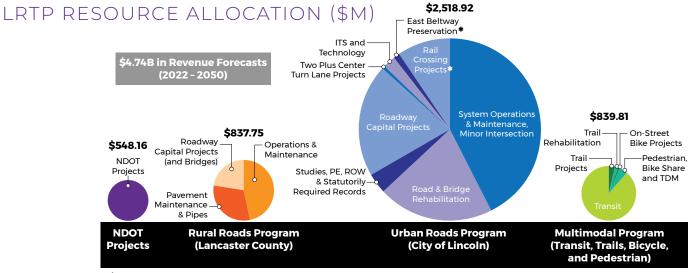
HIGHWAY ALLOCATION FUNDS

The current allocation of highway funding is based on federal revenues generated by gas taxes. These revenues have remained stagnant, and no significant change has been made to state tax on fuel consumption. Funding the transportation system with gas tax revenues will become unsustainable over time as vehicles become more fuel efficient and more people drive electric vehicles.



FISCALLY CONSTRAINED PLAN

While there is a lack of funding to address all the transportation needs in Lincoln and Lancaster County, the funding strategy and recommended resource allocation will optimize available funds and enable a functional transportation system. The following pages highlight what could be completed with anticipated funding and how additional funding could further enhance the transportation system.



^{*} Collaborative programs of Lincoln and Lancaster County

NDOT Highways Program

Overview: NDOT has identified 10 projects within the Lincoln MPO, totaling over \$648 million in needs

Resource Allocation: \$548 million

What can be completed: Address asset preservation needs and the West Beltway and I-80 widening projects

Funding Gap: Funding is not adequate to complete all 10 projects

Lancaster County Rural Roads Program

Overview: Includes three program areas: Capital Projects, Pavement Maintenance & Pipes, and Operations & Maintenance; the LRTP identifies 95 capital projects in the County, with project costs totaling over \$171 million

Resource Allocation: \$837 million total (\$188 million for capital projects)

What can be completed: 26 of the capital projects could be constructed when accounting for construction cost inflation over time (refer to map on page ES-11)

Funding Gap: 69 capital projects would remain unfunded; a gap analysis conducted for Lancaster County in 2018 identified a significant annual funding gap, which would continue based on the LRTP revenue forecasts

Rail Crossing Program

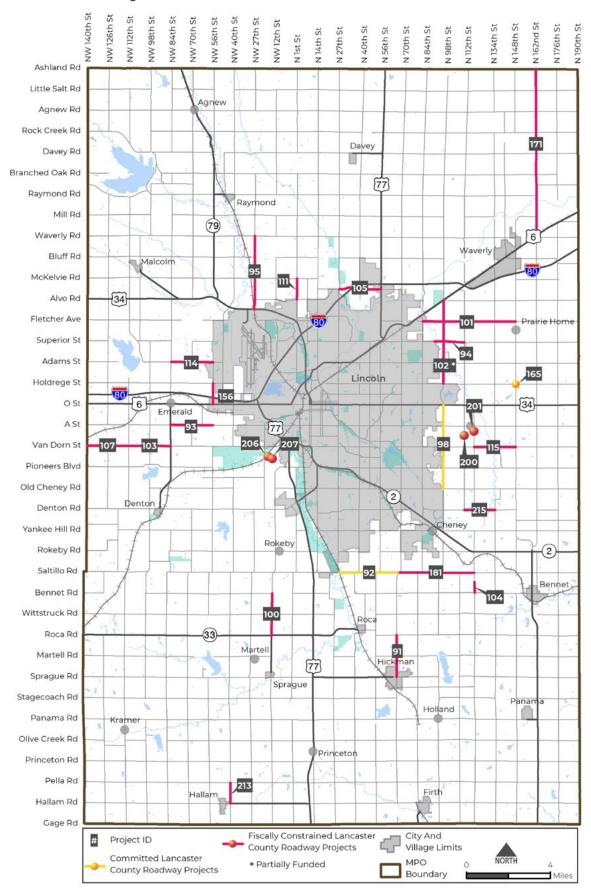
Overview: The Railroad Transportation Safety District (RTSD) and State Train Mile Tax revenue provide dedicated funding to improve the safety of railroad crossings

Resource Allocation: \$236 million

What can be completed: High priority crossing improvements **Funding Gap:** Funding will not address full needs of the program

The construction cost of projects will increase over time, and the revenue growth is not anticipated to keep pace with the construction cost increases.

Fiscally Constrained Rural Road & Bridge Capital Projects



FISCALLY CONSTRAINED PLAN

City of Lincoln Urban Roads Program

Without additional revenue sources, several important transportation urban area project and program categories will not have adequate funding. Additional revenue sources, such as continuation of the Lincoln on the Move sales tax, would significantly help to meet the community's transportation needs.

OPERATIONS & MAINTENANCE

Overview: Lincoln Transportation and Utilities (LTU) employs 125 people to maintain and operate the transportation system, including street sweeping, snow removal, stormwater, mowing, crack sealing, pothole repair, signing, and pavement markings

Resource Allocation: \$1.08 billion

What can be completed: Fully funds the O&M program through 2050

Funding Gap: None

ROAD & BRIDGE REHABILITATION

Overview: Repair of arterial and residential streets when the pavement conditions deteriorate to an unacceptable level, bridge rehabilitation, signal replacements

Resource Allocation: \$515 million

What can be completed: Commensurate funding with the 2040 LRTP; equates to approximately 350 lane miles rehabilitated

Funding Gap: Funding will not fully address Lincoln's road and bridge rehabilitation needs

STUDIES, PRELIMINARY ENGINEERING, ROW & STATUTORILY REQUIRED RECORDS

Overview: Pre-project level engineering studies, responses to non-project specific public inquiries, engineering standards and guidelines, staff coordination with private sector growth proposals, and legal requirements for record keeping

Resource Allocation: \$91 million

What can be completed: Fully funds continuation of these essential staff functions through 2050

Funding Gap: None

ROADWAY CAPITAL PROJECTS

Overview: The LRTP identifies 105 capital roadway projects with project costs totaling over \$1 billion

Resource Allocation: \$500 million

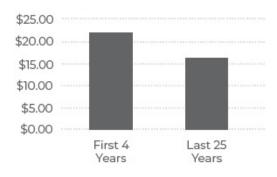
What can be completed: 40 projects, including 8 projects with committed funding (expected to be built within the next four years) and 13 public-private partnership projects (refer to map on page 13)

Funding Gap: 64 projects would remain unfunded

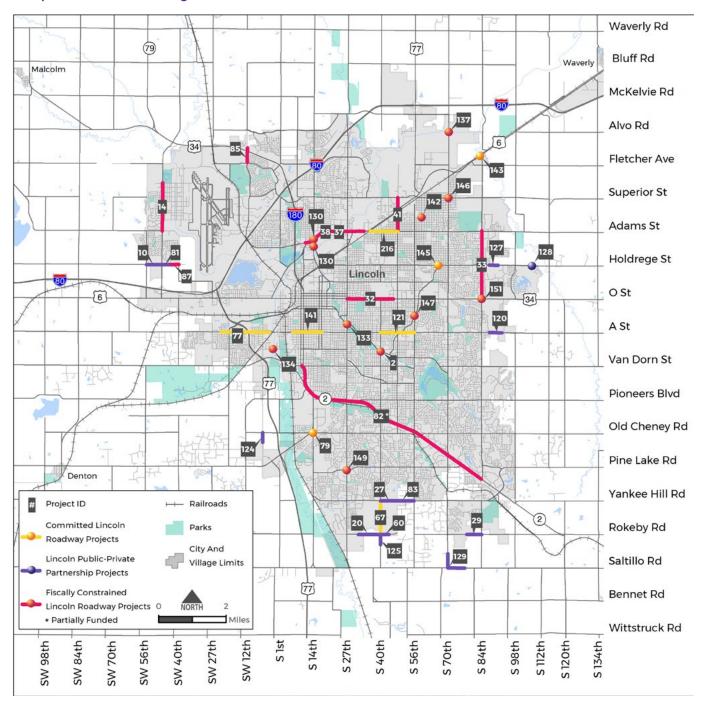
The cost to maintain and operate the transportation system is increasing. As the cost of materials, wages and healthcare for employees increases, the cost to complete the essential functions of operations and maintenance (O&M) increases. Fully funding the O&M program requires a higher proportion of the projected revenues than anticipated in the previous LRTP.

The Lincoln on the Move 1/4 cent sales tax and the Highway Allocation Bond will allow the city to construct more projects in the first four years of the plan, with an average funding level of nearly \$22 million per year for capital projects. As shown on the chart below, after the 1/4 cent sales tax sunsets in 2025, the average funding level for capital projects would be reduced to \$16 million per year, reducing the number of projects that can be completed annually in the last 25 years of the plan

Annual Average Funding for Roadway Capital Projects (\$M)



Fiscally Constrained Urban Roadway Capital Projects



TWO PLUS CENTER TURN LANE PROJECTS

Overview: Two Plus Center Turn Lane projects are typically done opportunistically in conjunction with roadway rehabilitation projects, and the incremental cost to add the center turn lane is funded through this program Resource Allocation: \$17 million

What can be completed: 2.4 miles of Two Plus One Projects plus 1.8 miles of Two Plus One construction that will be constructed as a part of federal aid projects in the next four years

Funding Gap: Ten miles out of the 14 miles of identified Two Plus One projects would remain unfunded



ITS AND TECHNOLOGY

Overview: This program includes Green Light Lincoln, annual signal equipment upgrades, and technology improvements such as automated traffic signal performance measures

Resource Allocation: \$59 million

What can be completed: Continuation of existing programs

Funding Gap: Funding will not support the large capital costs required to invest in new technologies such as transit and emergency signal priority deployment and advanced traffic management systems

EAST BELTWAY PRESERVATION

Overview: This program banks funding to purchase right-of-way for the future East Beltway, which the public identified as one of the highest priority roadway capital projects

Resource Allocation: \$23 million (includes contributions from both Lincoln and Lancaster County)

What can be completed: Funding could be used to preserve a portion of the 960 acres of land needed for the future corridor

Funding Gap: Proceeding with construction of a project this size depends on additional funding from the state and/or federal government

Multimodal Program TRANSIT

Overview: Operation of StarTran's bus service is funded through a combination of Federal Transit Administration funds, state transit funds, bus fares, advertising, the University of Nebraska – Lincoln, and transfers from the general fund

Resource Allocation: \$754 million (including \$12 million of federal grant funds for rural transit and non-profit organizations)

What can be completed: Continuation of StarTran's current service levels and maintenance and replacement of fleet and bus stop amenities

Funding Gap: Funding will not enable service extensions (longer hours and Sunday bus service) and may limit local match contributions to major projects seeking federal funds

TRAIL REHABILITATION

Overview: Nearly 100 miles of concrete trails will reach their 50-year life expectancy by 2050 requiring rehabilitation; program also includes bridge and sign replacements, trail widening to accommodate increasing use, mowing, snow removal, and tree control

Resource Allocation: \$14 million

What can be completed: Reconstruct approximately 16 miles of trails

Funding Gap: Program would be considerably underfunded

ON-STREET BIKE PROJECTS

Overview: The Lincoln Bike Plan identifies over 100 miles of proposed bikeways plus intersection crossing improvements

Resource Allocation: \$6.5 million

What can be completed: Approximately 35 miles of bike lane striping (a relatively low cost improvement type compared to some Bike Plan recommendations)

Funding Gap: Program would be considerably underfunded

PEDESTRIAN, BIKE SHARE, AND TRANSPORTATION DEMAND MANAGEMENT

Overview: Program includes sidewalk rehabilitation, pedestrian crossing improvements, the bike share program, and the transportation demand management (TDM) program

Resource Allocation: \$37 million

What can be completed: Replacement of 46 miles of sidewalk and continuation of the bike share program

Funding Gap: Funding will not address all of the pedestrian and TDM program needs

TRAIL PROJECTS

Overview: The LRTP identifies 64 trail projects with costs totaling \$59 million

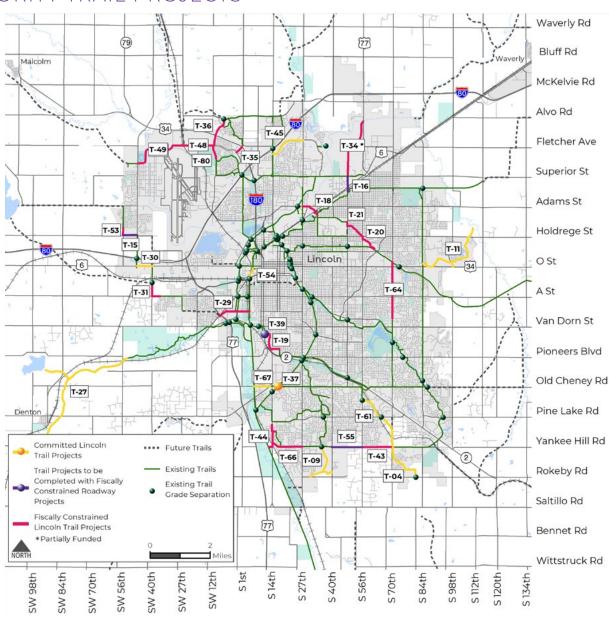
Resource Allocation: \$28 million

What can be completed: 31 projects (including 10 trail projects with committed funding that will be built within the next four years) (refer to map below)

Funding Gap: 33 projects would remain unfunded



PRIORITY TRAIL PROJECTS





ADOPTION

Technical analysis has been combined with public involvement efforts to propose the 2050 LRTP in September and October 2021. The LRTP was updated following the final phase of public involvement and was recommended to the MPO Technical Committee for review and action. Following this committee's approval, the Lincoln MPO LRTP was adopted by the MPO Officials Committee. Prior to adoption, the PlanForward 2050 (the comprehensive plan for Lincoln and Lancaster County), which includes the transportation goal, element, and policies based on the LRTP, was adopted by the Lincoln City Council and the Lancaster County Commissioners with minor revisions to the transportation element.

Call to Action

Transportation is vital to the quality of life for Lincoln and Lancaster County residents. Input from the community has helped to craft transportation goals and identify needs across the region. The revenue forecasts will not be enough to address all of the transportation needs; however, the funding strategy strives to make the most of available funding and respond to the community's strong focus on taking care of the existing system. The LRTP strongly encourages pursuit of additional revenues to fund the transportation improvements that are vital to a thriving community.

The Lincoln MPO works through the MPO Technical and Officials Committees to update projects and funding projections as needed to keep the plan current. The recommended resource allocation, policies, and action steps provide the guiding direction for transportation investments during the next five years until the LRTP will be updated again. The LRTP document and records of all amendments will be maintained online and can be reviewed at:

www.lincoln.ne.gov/City/ Departments/Planning-Department/MPO/LRTP

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