7. Fiscally Constrained Plan

Transportation needs and opportunities in Lincoln and Lancaster County are significant. **Chapter 5** presents a compilation of current and future programs and projects to improve the region's transportation system. The revenue forecasts established in **Chapter 6** for the 29-year planning horizon are not adequate to achieve the LRTP goals and meet all the region's transportation needs.

The LRTP strongly encourages the 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 O&M 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 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 ROW constraints
- Placing emphasis on addressing congestion at intersection bottlenecks and leveraging technology to improve the efficiency of major corridors
- Supporting community growth through public-private partnerships
- Supporting both infill development and Lincoln's Climate Action Plan through the continuation of funding for transit service and bicycle and pedestrian infrastructure

This chapter builds from the funding strategy and forms the basis for decisions about how to prioritize and phase transportation improvement projects and programs. The resource allocation used to develop the Fiscally Constrained Plan is detailed in **Table 7.1**.

Table 7.1 Resource Allocation

Project or Program Category	Funding in $M (FY22–50)
NDOT Highways Program	
NDOT Projects	$548.16
Rural Roads Program (Lancaster County)	
Operations & Maintenance	$391.78
Pavement Maintenance & Pipes	$258.31
Roadway Capital Projects (and Bridges)	$187.66
Urban Roads Program (Lincoln)	
System Operations & Maintenance, Minor Intersections	$1,077.46
Road & Bridge Rehabilitation	$515.12
Studies, PE, ROW & Statutorily Required Records	$91.47
Roadway Capital Projects	$499.69
Two Plus One Projects	$16.92
ITS & Technology	$59.36
East Beltway Preservation	$23.04
Rail Crossing Projects	$235.85
Multimodal Program	
Transit	$754.00
Trail Projects	$37.99
Trail Rehabilitation	$19.03
On-Street Bike Projects	$8.93
Pedestrian, Bike Share, and TDM	$51.02
Total	**$4,775.77**

Federal Requirements

The financial analysis presented in this chapter meets the requirements stated in federal transportation regulations. This detailed information should be referenced to guide project implementation for all modes of travel. The project costs and potential funding are estimates and will be revisited several times before the years they represent come to pass. The intent of the Fiscally Constrained Plan is to prepare an approximate, but realistic, estimate of both the total funds available and the total program cost by year of expenditure.

The Code of Federal Regulations describes the elements of a Transportation Financial Plan. The requirements of FAST Act (2015) state that the plan must include the revenues and costs to operate and maintain the roads and associated systems (signals, signage, snow removal, etc.) to allow MPOs to estimate future transportation conditions and promote good stewardship of available funds by using existing infrastructure to the fullest. The Fiscally Constrained Transportation Plan provided in this chapter does serve the MPO Planning Area as best as possible over the next 29 years and is based on the prioritization process of the LRTP planning effort.

Another requirement of federal transportation regulations is to use "year of expenditure" dollars for planning purposes. This requirement accents the reduction in the buying power of the transportation revenues that had not been previously accounted for during the preparation of long range transportation plans.

Project Prioritization Process

Although the LRTP addresses funding for various project types, only Roadway Capital Projects and Trail Projects are prioritized within the LRTP. All other project categories, including Transit, On-Street Bike, Rail Crossings, Road and Bridge Rehabilitation, etc., are prioritized outside the LRTP. These other programs are funded through a "pool" of funding as established in the Resource Allocation step (**Chapter 6**). The Fiscally Constrained Plan includes the top ranked Roadway Capital Projects (for the NDOT Highways Program, the Rural Roads Program, and the Urban Roads Program), Trail Projects, and a pool of funding for the various other transportation programs and project categories.

With limited funding available, the process of prioritizing projects must be comprehensive and strive to identify those projects that will most effectively move the region's transportation system toward fulfilling the vision and achieving the transportation goals. In compliance with federal requirements for performance-based planning, the project prioritization process is structured to identify those projects that will provide the greatest contribution toward meeting the eight transportation goals and associated performance targets. The evaluation criteria used to compare projects are directly related to the goals.

Project Evaluation Committees

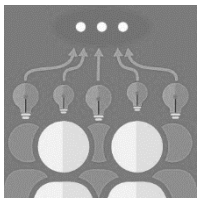
The Roadway Capital Projects and Trails Projects were evaluated with oversight by the Roadway and Trails Evaluation Committees, respectively, both of which are a subset of the POPC.

The Roadway Evaluation Subcommittee included representatives from the Lincoln Planning Department, Lancaster County Engineering, and LTU. The roadway projects were evaluated through a data-driven scoring process, and the Roadway Evaluation Subcommittee was responsible for guiding the process, providing relevant data and project information, and reviewing evaluation results.

The Trails Evaluation Subcommittee included representatives from the Lincoln Planning Department, the Lincoln Parks and Recreation Department, and LTU. Because the data for trail projects are not as robust as those for roadway projects, Trail Evaluation Subcommittee members scored the projects independently, and project scores were averaged. The committee met to discuss the scoring results and presented their recommended scores to the POPC.

Roadway Project Scoring

The Lincoln and Lancaster County Roadway Capital Projects were evaluated and prioritized separately in recognition of the unique transportation needs and priorities in the urban versus rural context. The eight LRTP goals (plus community support) were used as the basis for the data-driven project evaluation for both urban and rural projects. The evaluation criteria are listed in **Table 7.2,** and details about the data and specific metrics used for each criterion are provided in **Appendix F**. Scores for each goal area/criterion are on a 0–1 scale, with 0 being the least favorable and 1 being the most favorable.



During the second phase of community outreach, the public was asked which Urban Roadway Projects (in the City of Lincoln) and which Rural Roadway Projects (in Lancaster County) are of most importance. The results from 203 individual responses were used as the "Community Input" score. NDOT projects within the Lincoln MPO Planning Area boundary were included with the urban roadway projects to simplify the online survey. **Appendix B** includes a summary of the public input on high-priority Roadway Projects, and **Appendix G** includes the scoring results for the Roadway Projects.

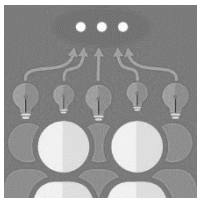
Table 7.2 Roadway Project Evaluation Criteria

Goal Area	Evaluation Criteria
Maintenance	Is the project located on a road that is in poor condition and would therefore serve dual functions of rehabilitating and improving the road?
Mobility and System Reliability	Is the project located on a road that is currently congested or expected to experience congestion in the future?
Livability and Travel Choice	Does the project include multimodal elements?
Safety and Security	Will the project alleviate a known safety problem?
Economic Vitality	Will the project improve access to and/or add value to surrounding land uses? Will the project improve travel on a designated truck route and/or the National Highway System (NHS)?
Environmental Sustainability	Will the project impact the natural, cultural, or built environment?
Transportation Equity	Is the project located in an area with underserved and overburdened communities?
Funding and Cost Effectiveness	How does the cost of the project compare to the benefits?
Community Support	Does the project have strong community support?

Trail Project Scoring

Each Trail Project was given a score ranging from 0 to 1 for each goal. A score of 0 is the least favorable, and a score of 1 is the most favorable rating.

Table 7.3 summarizes the evaluation criteria. Trail Evaluation Subcommittee members were provided with a packet of information to assist with the scoring process, including detailed scoring guidelines for consistency (**Appendix F**).



During the second phase of community outreach, the public was asked which Trail Projects are of most importance. The results from 203 individual responses were used as the "Community Input" score.

Appendix B includes a summary of the public input on high-priority Trail Projects, and **Appendix G** includes the scoring results for the Trail Projects.

Table 7.3 Trail Projects Evaluation Criteria

Goal Area		Evaluation Criteria
	**Maintenance**	Will the project improve the condition of the existing facility?
	**Mobility and System Reliability**	Will the project complete a gap in the trail system?
	**Livability and Travel Choice**	Will the project encourage the use of alternative modes of transportation?
	**Safety and Security**	Will the project alleviate a known safety problem?
	**Economic Vitality**	Will the project improve access to and/or add value to surrounding land uses?
	**Environmental Sustainability**	Will the project protect the natural, cultural, and built environment?
	**Transportation Equity**	Is the project located in an area with underserved and overburdened communities?
	**Funding and Cost Effectiveness**	How does the cost of the project compare to the benefits?
	**Community Support**	Does the project have strong community support?

Evaluation Criteria Weights

The relative importance of the eight goals (plus community input) varies; therefore, weights are assigned to each goal category and corresponding evaluation criteria. Because the relative importance of the goals differs for Urban Roadway Projects, Rural Roadway Projects, and Trail Projects, separate weights are established for the three project categories.

The weights shown in **Table 7.4** were developed using the combined input from the POPC and the Community Committee.

The project score (0–1) for each goal was multiplied by the corresponding weight, resulting in a total project score ranging from 0 to 100.

Table 7.4 Weights by Goal Area and Project Category

Goal Area	Rural Area Roadway Projects (Lancaster County)	Urban Area Roadway Projects (Lincoln)	Trail Projects
Maintenance	22.1	17.8	13.0
Mobility and System Reliability	12.1	12.4	12.2
Livability and Travel Choice	5.8	11.0	13.7
Safety and Security	13.8	13.5	13.1
Economic Vitality	8.9	7.5	5.8
Environmental Sustainability	12.2	12.8	12.4
Transportation Equity	6.7	10.0	12.1
Funding and Cost Effectiveness	13.4	10.0	7.7
Community Support	5.0	5.0	10.0
Total	**100.0**	**100.0**	**100.0**

Fiscally Constrained Plan Elements

The following sections provide information on what can reasonably be funded over the 29-year time horizon of the LRTP within the Fiscally Constrained Plan.

NDOT Highways Program

NDOT has identified 10 capital projects within the Lincoln MPO, totaling over $616 million in needs (2021 dollars). The $548.16 million in state and federal revenues dedicated to the NDOT Highways Program will primarily address asset preservation needs and the I-80-Pleasant Dale to NW 56th Street and West Beltway projects. There is not adequate funding to complete all 10 projects, particularly since the construction cost of the projects will increase over time and the revenue growth is not anticipated to keep pace with the construction cost increases.

The Fiscally Constrained Plan includes three NDOT projects with committed funding:

- South Beltway (under construction) – Project ID 78 ($255 million)
- West Beltway (US 77) from W. Calvert Street to Rokeby Road – Project ID 76 ($51.0 million)
- I-80 -from Pleasant Dale to NW 56th Street – Project ID 71 ($129 million)

Year of Expenditure Costs

The Fiscally Constrained Plan must consider the year of expenditure (YOE) cost of projects. 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 percent annual inflation in the first 5 years and 7 percent annual inflation in the next 5 years. Then the inflation rate is assumed to normalize at 5 percent annual inflation in the remaining years through 2050.

Lancaster County Rural Roads Program

The Rural Roads Program includes three program areas:

- Operations & Maintenance
- Pavement Maintenance & Pipes
- Road & Bridge Capital Projects

A gap analysis conducted for Lancaster County in 2018 identified a significant annual funding gap, which would continue based on the LRTP revenue forecasts and recommended resource allocation.

Road and Bridge Capital Projects

The LRTP identifies 95 capital projects in the County, with project costs totaling over $171 million in 2021 dollars. With approximately $188 million allocated to rural road capital projects, 26 of these projects could be constructed when accounting for construction cost inflation over time. The fiscally constrained rural projects are listed in priority order in **Table 7.5** and shown on **Figure 7.1**. Detailed project evaluation scores are provided in **Appendix G**.

Lancaster County updates its One and Six-Year (1 & 6) Road and Bridge Construction Program annually. While many of the 1 & 6 projects are included in the LRTP Rural Road and Bridge Capital Projects, additional bridge projects may be needed. The 1 & 6 project needs typically fall in the following program areas:

Operations & Maintenance:

- Bridge scour repair
- Bridge pile repair
- Bridge channel repair

Pavement Maintenance & Pipes

- Pipe culvert replacements
- Under 20 concrete box culverts
- Pavement preservation (fog seal, crack seal, chip seal, etc.)
- Pavement overlays
- Pavement overlays and widening

Road & Bridge Capital Projects

- Bridge sized structures
- Grading in preparation for pavement
- New pavement
- Intersection improvements
- Federal aid projects

Table 7.5 Fiscally Constrained Rural Road & Bridge Capital Projects

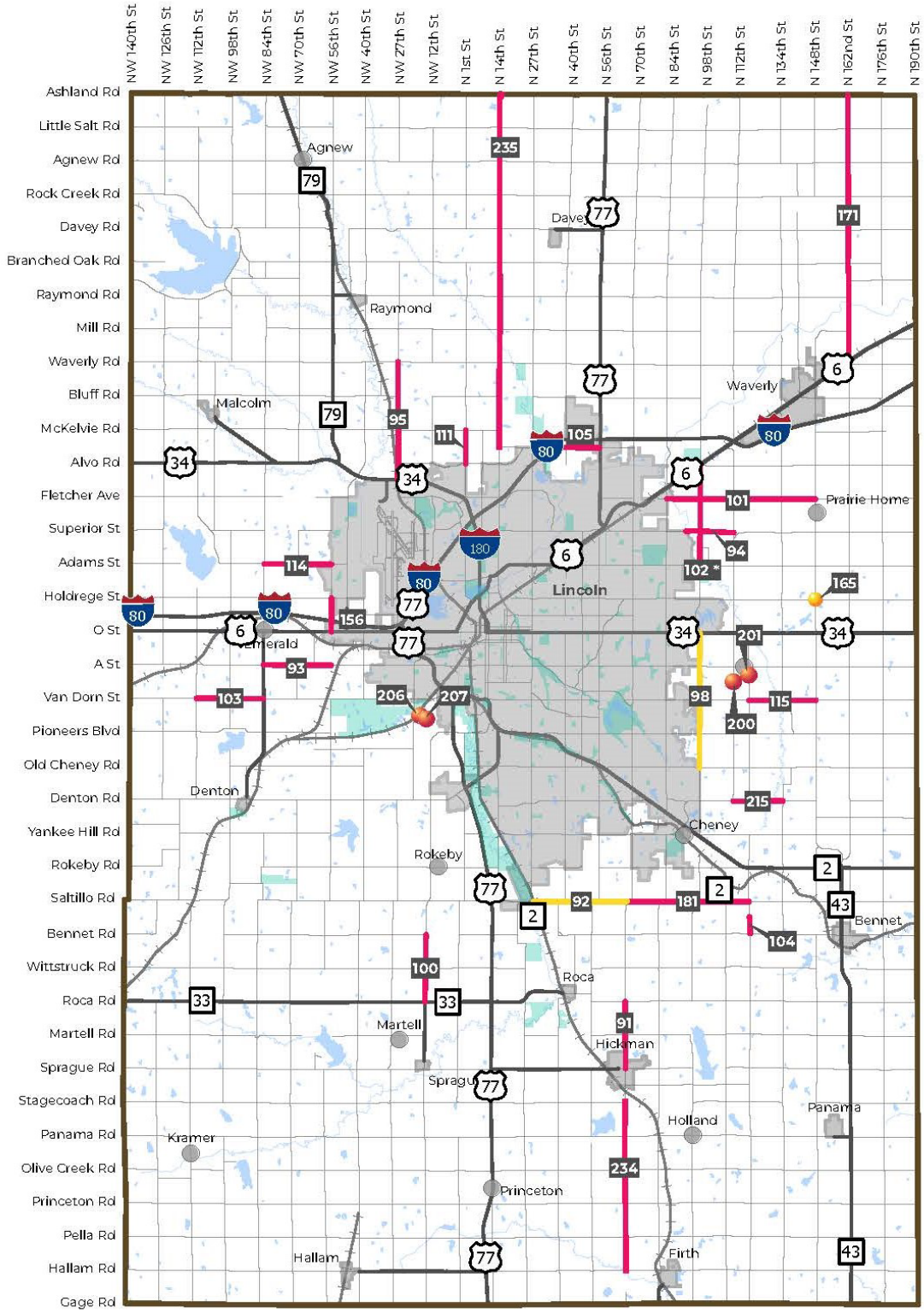
Rank	Project ID	Street Name	Limits	Description	Project Cost (2021$)	Year of Expenditure (YOE)			Refer to Notes Below Table
						YOE	YOE Cost	Cumulative Cost (YOE)	
Committed	165	N 148th Street	Holdrege Street	Intersection improvements	$1,751,100				1
Committed	98	S 98th Street	Old Cheney Road to US-34	Programmed Paving	$17,195,600				1
Committed	92	Saltillo Road	S 27th Street to S 68th Street	Two Lane Widening	$14,804,000				1
	234	S. 68th Street	Firth Road to Stagecoach Road	Two Lane Widening With Shoulders	$10,780,700	2025	$10,780,700	$10,780,700	3
	235	N. 14th Street	Alvo Road to Ashland Road	Pavement and Two Lane Widening with Shoulders	$12,076,200	2025	$12,076,200	$22,856,900	4
1	104	S 120th Street	Bennet Road North 0.5 Miles	Potential Paving	$650,000	2026	$1,046,832	$23,903,732	
2	156	NW 56th Street	W O to W Holdrege Street	Potential Paving	$2,292,000	2026	$2,292,000	$26,195,732	
3	100	SW 14th Street	NE-33 to W Bennet Road	Programmed Paving	$1,300,000	2026	$2,093,663	$28,289,395	
4	103	W Van Dorn Street	SW 112th Street to SW 84th Street	Programmed Paving	$1,300,000	2027	$2,240,219	$30,529,614	
5	105	Arbor Road	N 27th Street to US-77	Paving and Bridge Replacement of Bridge F-201 near N 27th Street	$5,930,000	2029	$11,699,558	$42,229,172	
6	101	Fletcher Avenue	N 84th Street to N 148th Street	Programmed Paving	$6,385,700	2032	$15,145,378	$57,374,550	
7	95	NW 27th Street	Hwy-34 to W Waverly Road	Potential Paving	$4,550,000	2034	$11,897,661	$69,272,212	
8	93	W A Street	SW 84th Street to SW 52nd Street	Programmed Paving	$2,600,000	2035	$7,138,597	$76,410,808	
9	206	SW 16th Street	Bridge O-1 near W Calvert Street	Replace CB	$168,000	2035	$461,263	$76,872,072	
10	94	Havelock Avenue	Stevens Creek to N 112th Street	Potential Paving	$1,820,000	2036	$5,246,869	$82,118,940	
11	207	SW 15th Street	Bridge O-140 near W Stockwell Street	Replace CB	$168,000	2036	$484,326	$82,603,267	

Rank	Project ID	Street Name	Limits	Description	Project Cost (2021$)	Year of Expenditure (YOE)			Refer to Notes Below Table
						YOE	YOE Cost	Cumulative Cost (YOE)	
12	201	S 120th Street	Bridge J-138 near A Street	Replace with CBC	$612,000	2037	$1,852,548	$84,455,815	
13	111	N 1st Street	Alvo Road to McKelvie Road	Potential Paving	$1,300,000	2037	$3,935,152	$88,390,967	
14	181	Saltillo Road	S 68th Street to S 120th Street	Two Lane Widening	$2,450,000	2038	$7,787,059	$96,178,026	
15	171	N 162nd Street	US-6 to Ashland Road	Paving	$12,200,000	2026	$12,200,000	$108,378,026	
16	200	S 112th Street	Bridge J-135 near A Street	Replace with CBC	$612,000	2042	$2,364,373	$110,742,399	
17	114	W Adams Street	NW 84th Street to NW 56th Street	Potential Paving	$2,600,000	2043	$10,546,959	$121,289,358	
18	91	S 68th Street	Hickman to Roca Road	Two Lane Widening with Shoulders	$2,000,000	2044	$8,518,698	$129,808,056	
19	115	Van Dorn Street	S 120th Street to S 148th Street	Potential Paving	$2,600,000	2046	$12,209,423	$142,017,479	
20	215	Pine Lake Road	S 112th Street to S 134th Street	Grading and Pavement; bridge Q-110 near S 134th St	$3,188,000	2048	$16,505,121	$158,522,600	
21	102	N 98th Street	Adams Street to US-6	Potential Paving	$5,305,209	2050	$30,281,788	$188,804,388	2

[1] *Committed projects are included in the 2022–2025 Transportation Improvement Program and are assumed to be fully funded and constructed prior to allocation of resources to other Rural Road & Bridge Capital Projects.*
[2] *Project ID 102 is partially funded (approximately 32%) within the Fiscally Constrained Plan.*
[3] *Project ID 234 added to the Fiscally Constrained Plan via MISC22002.*
[4] *Project ID 235 added to the Fiscally Constrained Plan via MISC22012.*

Revised November 2025

Figure 7.1 Fiscally Constrained Rural Road & Bridge Capital Projects



Amended September 2025

City of Lincoln Urban Roads Program

System Operations & Maintenance, Minor Intersections

The cost to maintain and operate the transportation system is increasing. LTU employs 125 people to maintain and operate the transportation system, which includes street sweeping, snow removal, stormwater, ditch and drainage maintenance, culvert maintenance, minor intersection improvements, mowing, crack sealing, pothole repair, signing, and pavement markings, among other tasks. As the cost of materials, wages and healthcare for employees increases, the cost to complete the essential functions of O&M increases. The City of Lincoln has pursued innovation and the use of technology advances to make efficient use of available resources. An estimated $1.08 billion is needed for Lincoln's O&M program through 2050. The LRTP recommends fully funding Lincoln's O&M program.

Road & Bridge Rehabilitation

The Rehabilitation program includes the repair of arterial and residential streets when the pavement conditions deteriorate to an unacceptable level, as well as bridge rehabilitation and signal replacements. A pavement condition rating system is used to help determine which road surfaces are in most need of repair. It is important to note that money invested today in the ongoing maintenance and repair of the street system saves a significant amount of money in the future by avoiding the expanded costs associated with full reconstruction of roadways.

Routine and preventative maintenance activities will be performed, such as localized repairs, crack and joint sealing, and various surface treatments (slurries, sealing, and micro-surfacing). As pavement ages, thin to thick overlays, panel replacements, base stabilization, and repairs will be used to avoid more costly reconstruction if possible.

The LRTP recommends funding the rehabilitation program at a level commensurate with the 2040 LRTP. This recommendation includes $515 million of committed and flexible funds, which equates to approximately 350 lane miles over the 29-year planning horizon when accounting for construction cost inflation. This amount will not fully address Lincoln's road and bridge rehabilitation needs.

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.

LTU is committed to using the available rehabilitation funds efficiently and using the pavement management system as a tool to identify the most effective maintenance treatments. Several additional action steps included in **Chapter 8** are recommended to help offset the shortfall in funding for the rehabilitation program:

- Continue experimentation and innovation to maximize return from available resources.
- Encourage the use of alternative travel modes (biking, walking, and transit) to lessen the demand on the streets.
- Continue to implement the traffic signal coordination (i.e. Green Light Lincoln) and adaptive communication program to maximize the operational efficiency of the existing system, thereby reducing the pace of lane-miles being added to the street network.
- Because streets that are neglected over time require costlier reconstruction, continue to advance preventative maintenance strategies (e.g., pothole

repairs and crack sealing) to extend the life of Lincoln's streets and minimize the lifecycle costs.
- Investigate opportunities for increased rehabilitation funding.

Studies, Preliminary Engineering, ROW & Statutorily Required Records

This program category covers 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. The LRTP recommends fully funding ($91.5 million) continuation of these essential staff functions.

Roadway Capital Projects

The LRTP identifies 105 capital roadway projects with project costs totaling over $1.1 billion in 2021 dollars. The $500 million allocation to roadway capital projects consists solely of committed funds; that is, no flexible funds are included due to the funding shortfall. The $500 million would fund 40 projects when accounting for construction cost inflation. This includes eight projects with committed funding that are anticipated to be constructed within the next four years, and 13 public-private partnership (PPP) projects, which are expected to be constructed during the LRTP planning horizon. **Table 7.6** lists the ranked projects that can be funded within the Fiscally Constrained Plan, including the committed projects and those that will be funded through PPPs. **Figure 7.2** shows the fiscally constrained urban roadway projects.

The Lincoln on the Move ¼ 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. After the ¼ 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.

The Fiscally Constrained Plan must consider the YOE cost of projects. 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 percent annual inflation in the first 5 years, 7 percent annual inflation in the next 5 years. Then the inflation rate is assumed to normalize at 5 percent annual inflation in the remaining years through 2050.

Rather than defaulting to roadway widening to address current and future congestion, the LRTP focuses on intersection improvements and traffic signal coordination. By encouraging flexible and performance-based geometric design processes and best practices, the limited funding available for Roadway Capital Projects can be stretched to address the congestion needs on more corridors. This alternative approach is reflected in the Roadway Capital Projects included in the LRTP.

Two Plus Center Turn Lane Projects: The LRTP recommends allocating approximately $17 million to Two Plus Center Turn Lane projects. These 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. With a typical incremental cost of $2.25 million per mile (2021 dollars), this allocation could fund an estimated 2.4 miles of Two Plus Center Turn Lane Projects when accounting for construction cost inflation. Another 1.8 miles of Two Plus One construction will be constructed as a part of federal aid projects in the next four years. Ten miles out of the 14 miles of identified Two Plus One projects would remain unfunded.

Table 7.6 Fiscally Constrained Urban Roadway Capital Projects

Rank	Project ID	Street Name	Limits	Description	Project Cost (2021$)	Year of Expenditure (YOE)			Refer to Notes Below Table
						YOE	YOE Cost	Cumulative Cost (YOE)	
Committed	121	A Street	S 40th Street to S 56th Street	Intersection improvements 40th, 48th and 50th/Cotner and widening of A Street from 40th to 48th for a center turn lane	$10,500,000				1
Committed	79	S 14th Street/ Warlick/Old Cheney	14th/Warlick/Old Cheney	Intersection improvements	$26,400,000				1
Committed	145	Cotner Boulevard	O Street to Starr Street	Intersection improvements at Starr and Holdrege, pavement repair, and mill and overlay	$6,671,000				1
Committed	141	A Street	S 6th Street to S 17th Street	Intersections improvements at 13th and 17th and widening from 6th to 17th for a center turn lane	$6,586,000				1
Committed	77	W A Street	SW 36th Street to SW 24th Street	2 lanes + intersection improvements	$14,000,000				1
Committed	67	S 40th Street	Yankee Hill Road to Rokeby Road	3 lane section with raised median and turn lanes as appropriate	$14,000,000				1
Committed	143	N 84th Street	Cornhusker Hwy (US-6)	Intersection improvements	$5,584,000				1
Committed	216	Adams Street	N 36th Street to N 49th Street	Widening for a center turn lane and pavement rehabilitation	$3,035,000				1
PPP	10	W Holdrege Street	NW 56th Street to NW 48th Street	2 lanes + intersection improvements	$5,445,000				2
PPP	29	Rokeby Road	S 77th Street to S 84th Street	2 lanes + intersection improvements	$3,500,000				2
PPP	120	A Street	S 89th Street to S 93rd Street	2 lanes with raised median, roundabouts at 89th St and 93rd St	$3,000,000				2
PPP	20	Rokeby Road	S 31st Street to S 40th Street	2 lanes + intersection improvements	$3,000,000				2
PPP	27	Yankee Hill Road	S 40th Street to S 48th Street	2 lanes + intersection improvements	$5,700,000				2
PPP	60	Rokeby Road	S 40th Street to Snapdragon Road	2 lanes + intersection improvements	$2,152,000				2
PPP	81	W Holdrege Street	NW 48th Street to Chitwood Lane (east ¼ mile)	2 lanes + intersection improvements	$2,000,000				2
PPP	120	Yankee Hill Road	S 48th Street to S 56th Street	2 lanes + intersection improvements	$2,200,000				2
PPP	124	S Folsom Street	W Old Cheney Road to ¼ mile south	Paving one lane in each direction with raised center medians; roundabout at the future Palm Canyon Road intersection and intersection improvements at W Old Cheney and S Folsom	$2,400,000				2

Rank	Project ID	Street Name	Limits	Description	Project Cost (2021$)	Year of Expenditure (YOE)			Refer to Notes Below Table
						YOE	YOE Cost	Cumulative Cost (YOE)	
PPP	125	S 40th Street	Rokeby Road to 1/4 south	2 lanes with raised median and roundabout 1/4 mile south of Rokeby Rd	$3,400,000				2
PPP	127	Holdrege Street	87th Street to Cedar Cove	2 lanes with raised median	$2,300,000				2
PPP	128	Holdrege Street	N 104th Street	Roundabout	$1,600,000				2
PPP	129	Saltillo Road	S 70th Street to 1/2 mile east	Roadway and intersection improvements including on S 7th St from Saltillo Rd to Carger Ln	$7,095,000				2
1	130	N 14th Street	Salt Creek to Adams Street	Bridge Rehabilitation/Replacements, intersection improvements, and pedestrian facilities	$29,104,000	2026	$29,104,000	$29,104,000	
2	37	Cornhusker Hwy (US-6)	N 20th Street to N 33rd Street	Intersection Improvements per Corridor Enhancement Plan	$1,200,000	2027	$2,067,895	$31,171,895	
3	41	N 48th Street	Adams Street to Superior Street	4 lanes + intersection improvements	$14,100,000	2029	$27,818,510	$58,990,405	
4	38	Cornhusker Hwy (US-6)	N 11th Street to N 20th Street	Intersection Improvements per Corridor Enhancement Plan	$975,000	2029	$1,923,620	$60,914,025	
5	87	W Holdrege Street	Chitwood Lane to NW 40th Street	2 lanes + intersection improvements	$1,950,000	2029	$3,847,241	$64,761,266	
6	32	O Street (US-34)	Antelope Valley N/S Rdwy. (19th St.) to 46th Street	Intersection Improvements	$6,840,000	2030	$14,439,583	$79,200,849	
7	146	N 70th Street	Havelock Avenue	Remove existing traffic signal and construct roundabout	$2,000,000	2030	$4,222,100	$83,422,949	
8	151	O Street (US-34)	84th Street	Intersection Improvement: dual eastbound left-turn lanes and eastbound right-turn lane and widening to east; maybe northbound right-turn lane	$2,280,000	2031	$5,150,118	$88,573,067	
9	134	W South Street	Salt Creek	Bridge Replacement	$3,200,000	2031	$7,228,235	$95,801,302	
10	142	Fremont Street	Touzalin Avenue	Remove existing traffic signal and construct roundabout	$2,700,000	2032	$6,403,765	$102,205,067	
11	2	S 40th Street	Normal Blvd and South Street	Major intersection area work	$10,000,000	2033	$24,903,530	$127,108,597	
12	33	N 84th Street	O Street to Adams Street	Intersection Improvements	$15,200,000	2036	$43,820,002	$170,928,599	
13	149	S 27th Street	Pine Lake Road	Intersection Improvement: eastbound right-turn lane	$760,000	2036	$2,191,000	$173,119,599	
14	133	S 27th Street	SE Upper Salt Creek	Bridge Replacement	$4,500,000	2037	$13,621,678	$186,741,277	
15	14	NW 48th Street	Adams Street to Cuming Street	2 lanes + intersection improvements	$10,000,000	2039	$33,373,112	$220,114,389	
16	137	N 70th Street	Salt Creek	Bridge Replacement	$3,000,000	2039	$10,011,934	$230,126,323	
17	85	NW 12th Street	Fletcher Avenue to Aster Road with overpass of US-34	2 lanes + Overpass	$9,370,000	2041	$34,475,843	$264,602,166	
18	147	S 56th Street	Cotner Boulevard/ Randolph Street	Remove signal and evaluate roundabout or new signal	$2,750,000	2042	$10,624,226	$275,226,392	

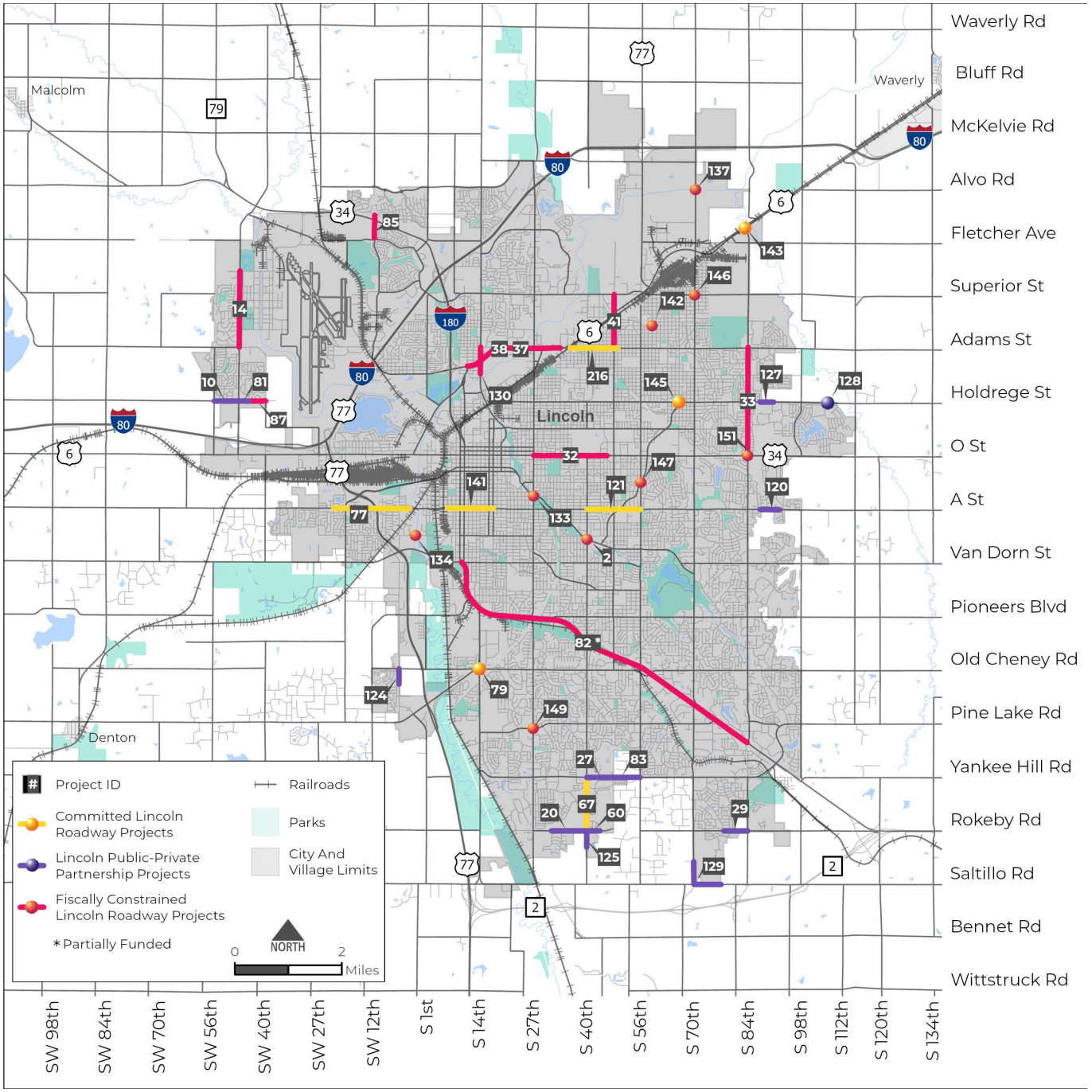
Rank	Project ID	Street Name	Limits	Description	Project Cost (2021$)	Year of Expenditure (YOE)			Refer to Notes Below Table
						YOE	YOE Cost	Cumulative Cost (YOE)	
19	82	Nebraska Hwy 2	S 84th Street to Van Dorn Street	Corridor Improvements (TBD by Corridor Study)	$3,896,000	2050	$273,525,192	$548,751,584	3

[1] *Committed projects are included in the 2022-2025 Transportation Improvement Program and are assumed to be fully funded and constructed prior to allocation of resources to other Rural Road & Bridge Capital Projects.*

[2] *Public-private partnership (PPP) projects are assumed to be fully funded and constructed during the time horizon of the 2050 LRTP. The public funding sources and specific timing of these projects are uncertain. These projects are listed at the top of the Fiscally Constrained Plan in recognition of the City's commitment to leveraging private investments in these projects to support community growth.*

[3] *Project ID 82 is partially funded (approximately 31%) within the Fiscally Constrained Plan.*

Figure 7.2 Fiscally Constrained Urban Roadway Capital Projects









ITS and Technology

The $59 million allocation to ITS and Technology would allow the continuation of existing programs, including Green Light Lincoln, annual signal equipment upgrades, and some planned technology improvements such as automated traffic signal performance measures. The revenue would not, however, support the large capital costs required to invest in new technologies such as transit and emergency signal priority deployment and advanced traffic management system implementation, nor would this level of funding enable LTU to have a pool of funds to opportunistically invest in emerging technologies in transportation.

East Beltway Preservation

The allocation of $23 million to East Beltway preservation includes contributions from both Lancaster County and the City of Lincoln. This funding could be used to preserve a portion of the 960 acres of land needed for the future corridor. The public identified the East Beltway as one of the highest priority Roadway Capital Projects. Proceeding with construction of a project this size depends on additional funding from the state and/or federal government.

Rail Crossing Program

The RTSD, State Train Mile Tax, and Rail Hazard Elimination fund provide dedicated funding to improve the safety of railroad crossings through the addition of crossing gates and flashers at at-grade crossings, railroad crossing surface upgrades, pedestrian and bicycle crossings, as well as grade separation projects. With approximately $236 million of committed funding, the railroad crossing program is anticipated to address high priority crossing improvements but will not address the full needs of the program. The Fiscally Constrained Plan includes construction of the N. 33rd Street and Cornhusker grade separated railroad crossings

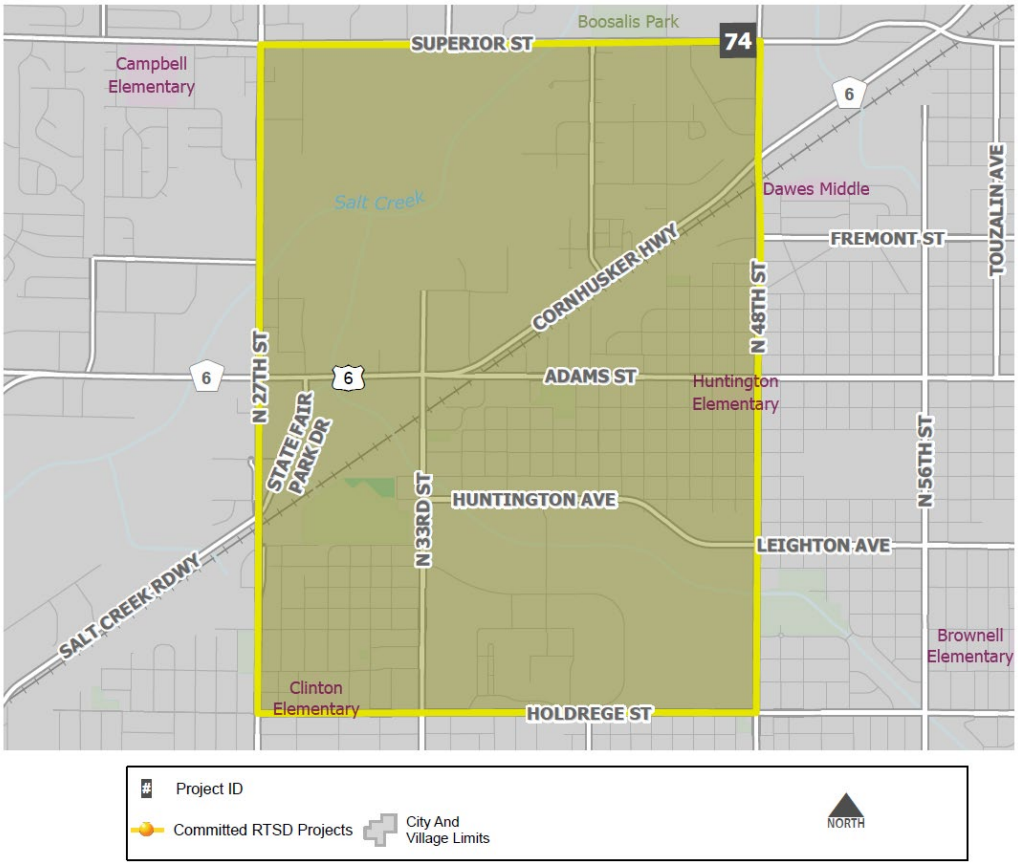
project (Project ID 74, cost estimate of $115.6 million), which is in the current TIP and scheduled for completion by 2029. This project includes intersection improvements (dual westbound left turn lanes) at Cornhusker Highway (US-6) and State Fair Park Drive . The intersection improvements were originally assigned a separate project ID but are now shown under Project ID 74 as they are included in the overall scope of the 33rd/Cornhusker Project. Table 7.7 lists this project, which can be funded within the Fiscally Constrained Plan. Figure 7.3 shows the fiscally constrained RTSD project.

Table 7.7 Fiscally Constrained Railroad Transportation Safety District Projects

Rank	Project ID	Street Name	Limits	Description	Project Cost (2021$)	Year of Expenditure (YOE)			Refer to Notes Below Table
						YOE	YOE Cost	Cumulative Cost (YOE)	
Committed	74	N. 33rd Street	N. 33rd/Cornhusker/ Adams/Fremont; Cornhusker/State Fair Park Drive	Grade separated RR crossings; intersection improvements at Cornhusker Hwy and State Fair Park Drive	$119,842,100				1

[1] *Committed projects are included in the 2023-2026 Transportation Improvement Program and are assumed to be fully funded and constructed prior to allocation of resources to other RTSD Capital Projects.*

Figure 7.3 Fiscally Constrained Railroad Transportation Safety District Projects



Multimodal Program

Transit

Operation of StarTran's bus service is funded through a combination of FTA funds, state transit funds, bus fares, advertising, a UNL agreement, and transfers from the general fund. The transit revenue forecast of $754 million consists of these committed and restricted funds, the vast majority ($742 million) of which directly funds StarTran's capital expenses and operations. The remaining $12 million (in FTA 5310 and 5311 funds) provides grant funding for rural transit, hospitals, and non-profit organizations. Due to funding shortfalls, no flexible funds are allocated to transit. This funding level will allow continuation of StarTran's current service levels; however, it will not enable service extensions (longer hours and Sunday bus service) and may limit local match contributions to major projects seeking federal funds.

A federal RAISE grant was awarded in 2022 for the new Multimodal Transportation Center and the project will incorporate active transportation design elements funded through the Carbon Reduction Program and included in the project cost. The local match will use in-kind contributions and other local funds.

Table 7.8 identifies the funded and priority transit projects. These projects are expected to be funded within the Fiscally Constrained Plan. StarTran is currently in the process of updating the TDP, which may result in adjustments to the transit priorities in the region. Additional transit enhancements (such as next bus information and transit signal priority) will be coordinated through the ITS and Technology program, as funds allow.

Table 7.8 Priority Transit Projects

Project Description	Project Cost (2021$)
Funded/Committed Transit Projects	
Multimodal Transportation Center	$41,746,700
Maintenance Facility Construction/ Relocation	$22,309,500
Purchase Replacement Paratransit Vehicles	$264,000
Transit Enhancements (bus shelters, passenger stops)	$342,000
Security Enhancements (upgrade buildings/shelters)	$40,000
Purchase Replacement Supervisor Vehicles	$50,000
Computer Replacements and Upgrades	$100,000
Shop Equipment Replacements and Upgrades	$125,000
Building Renovations and Improvements	$150,000
Priority Transit Projects	
Purchase Replacement Buses	$34,100,000
Purchase Replacement Paratransit Vehicles	$3,388,000
Transit Enhancements (bus shelters, passenger stops)	$1,080,000
Security Enhancements (upgrade buildings/shelters)	$1,080,000
Purchase Replacement Supervisor Vehicles	$150,000
Computer Replacements and Upgrades	$2,700,000
Shop Equipment Replacements and Upgrades	$540,000
Purchase Replacement Service Vehicles	$270,000
Building Renovations and Improvements	$2,700,000

Trail Projects

Approximately $28 million in revenue is anticipated for Trail Projects through committed or restricted funding sources. Due to funding shortfalls, no flexible funds are allocated to Trail Projects. The LRTP identifies 64 Trail Projects with costs totaling $59 million. The $28 million allocation would fund 31 projects (including 10 Trail Projects with committed funding in the TIP or Capital Improvement Program or other agreements) when accounting for construction cost inflation. Thirty-three projects would remain unfunded.

Table 7.9 lists the priority Trail Projects that are expected to be funded within the time horizon of the LRTP. The priority Trail Projects are depicted on **Figure 7.4**. Some Trail Projects are anticipated to be bundled with fiscally constrained roadway projects, optimizing construction efficiencies. Trail Projects that improve trail crossings of a railroad may be funded with RTSD funds, as described in the Rail Crossing Projects section of this chapter.

The order of projects may change depending on opportunities for funding. Although the YOE costs are not shown in **Table 7.9** to preserve this flexibility, construction cost inflation was accounted for in determining the number of projects within the priority project list. **Appendix G** includes the Trails Project scoring results.

Trail Rehabilitation

The LRTP recommended resource allocation includes $14 million for trail rehabilitation, which could reconstruct approximately 16 miles of trails when accounting for construction cost inflation. With nearly 100 miles of concrete trails that will reach their 50-year life expectancy by 2050, the trail rehabilitation program would be considerably underfunded. In addition to concrete trail reconstruction, trail maintenance program needs include bridge and sign replacements, trail widening to accommodate increasing use, mowing, snow removal, and tree control, among other ongoing maintenance requirements. A trail widening project (Rock Island Trail Widening) would be constructed using federal Carbon Reduction Program funds and appears as a separate project listing in **Table 7.10** and **Figure 7.5**.

Table 7.9 Priority Trail Projects

Project ID	Trail Name	Limits	Description	Project Cost (2021$)	Refer to Notes Below Table
Funded/Committed Trail Projects					
T-45	Landmark Fletcher	Fletcher Ave from N 27th St to N 14th St	Sidepath	$1,815,100	
T-61	Beal Slough Trail	S 56th St and London Rd to S 70th St and Yankee Hill	New Trail	$1,976,600	
T-54	Chris Buetler Trail - Jamaica North Connector	J Street to N Street	New Trail	$250,000	
T-04	Woodlands	Rokeby Rd to S 70th St to Yankee Hill Rd	New Trail	$950,000	
T-09	Wilderness Hills	Yankee Hill Rd to Rokeby Rd and S 40th St	New Trail	$1,200,000	
T-11	Waterford	N 84th St to Stevens Creek	New Trail	$2,742,300	
T-30	W. O Street	SW 40th St to SW 48th St	Sidepath	$260,000	
T-27	Greenway Corridor Trail/Haines Branch	Pioneers Park Nature Center to Spring Creek Prairie Audubon Center	New Trail	$4,500,000	
T-37	Rock Island	Old Cheney grade separated crossing	Grade Separation	$2,286,000	
T-67	Old Cheney Rd	Warlick Blvd to Jamaica North	Sidepath	$250,000	
Trail Projects to be Completed with Fiscally Constrained Roadway Projects					
T-16	N 48th Street Trail	Murdock Trail to Superior St	Sidepath	$200,000	1
T-55	Yankee Hill Road	S 40th St to S 56th St	Sidepath	$350,000	2
T-15	W Holdrege Street Trail	NW 48th St to NW 56th St	Sidepath	$250,000	3
T-39	10th Street Trail	Hwy 2 intersection improvements	Crossing Improvements	$2,200,000	4
Priority Trail Projects					
T-19	Boosalis - Bison Connector	Van Dorn St to S 17th St/Burnam St	Sidepath	$300,000	
T-44	S 14th Street & Yankee Hill Connector (w/RTSD project)	South LPS Property Line to Yankee Hill	Sidepath	$400,000	
T-21	East Campus Trail	Leighton St to Holdrege St	New Trail	$150,000	
T-31	W A Street Connector	A Street from SW 36th to SW 40th; SW 40th from A St to F St	Sidepath	$120,000	
T-48	Air Park Connector - Phase I	NW 13th St to NW 27th St	Sidepath	$600,000	
T-29	South Street	Folsom St to Jamaica Trail	Sidepath	$750,000	
T-20	Deadmans Run Trail	N 48th St to Mo Pac Trail	New Trail	$550,000	
T-66	Yankee Hill Road	S 14th St to S 27th St	Sidepath	$350,000	
T-43	Yankee Hill Rd	S 56th St to S 70th St	Sidepath	$350,000	
T-64	S 70th Street Connector	Old Post Rd to MoPac Trail	Sidepath	$700,000	
T-53	NW 56th Street Trail	W Holdrege to W Partridge	Sidepath	$100,000	
T-18	Deadmans Run Trail	Murdock Trail to Cornhusker Hwy and Railroad grade separation	New Trail and Grade Separation	$300,000	
T-80	NW 12th Street	NW 10th St to W Fletcher Ave	Sidepath	$200,000	
T-35	N 1st Street	N 1st St crossing of Hwy 34	Sidepath	$400,000	
T-49	Air Park Connector - Phase II	NW 27th St to NW 48th St	Sidepath	$900,000	
T-36	NW 12th Street	W Fletcher Ave to Aster St with US 34 grade separated crossing	Sidepath; Grade Separation	$400,000	
T-34	N 48th Street/Bike Park Trail	Superior St to N 56th St	New Trail; Sidepath	$900,000	

1 Project T-16 to be completed with Roadway Capital Project 41 (N 48th Street from Adams Street to Superior Street)
2 Project T-55 to be completed with Roadway Capital Project 27 (Yankee Hill Road from S 40th Street to S 48th Street) and Project 83 (Yankee Hill Road from S 48th Street to S 56th Street)
3 Project T-15 to be completed with Roadway Capital Project 10 (W Holdrege Street from NW 56th Street to NW 48th Street)
4 Project T-39 to be completed with Roadway Capital Project 82 (Nebraska Hwy 2 Corridor Improvements), which is partially funded within the Fiscally Constrained Plan. Inclusion of this crossing improvement project should be considered in the context of the overall corridor improvement needs and available funding.

Figure 7.4 Priority Trail Projects

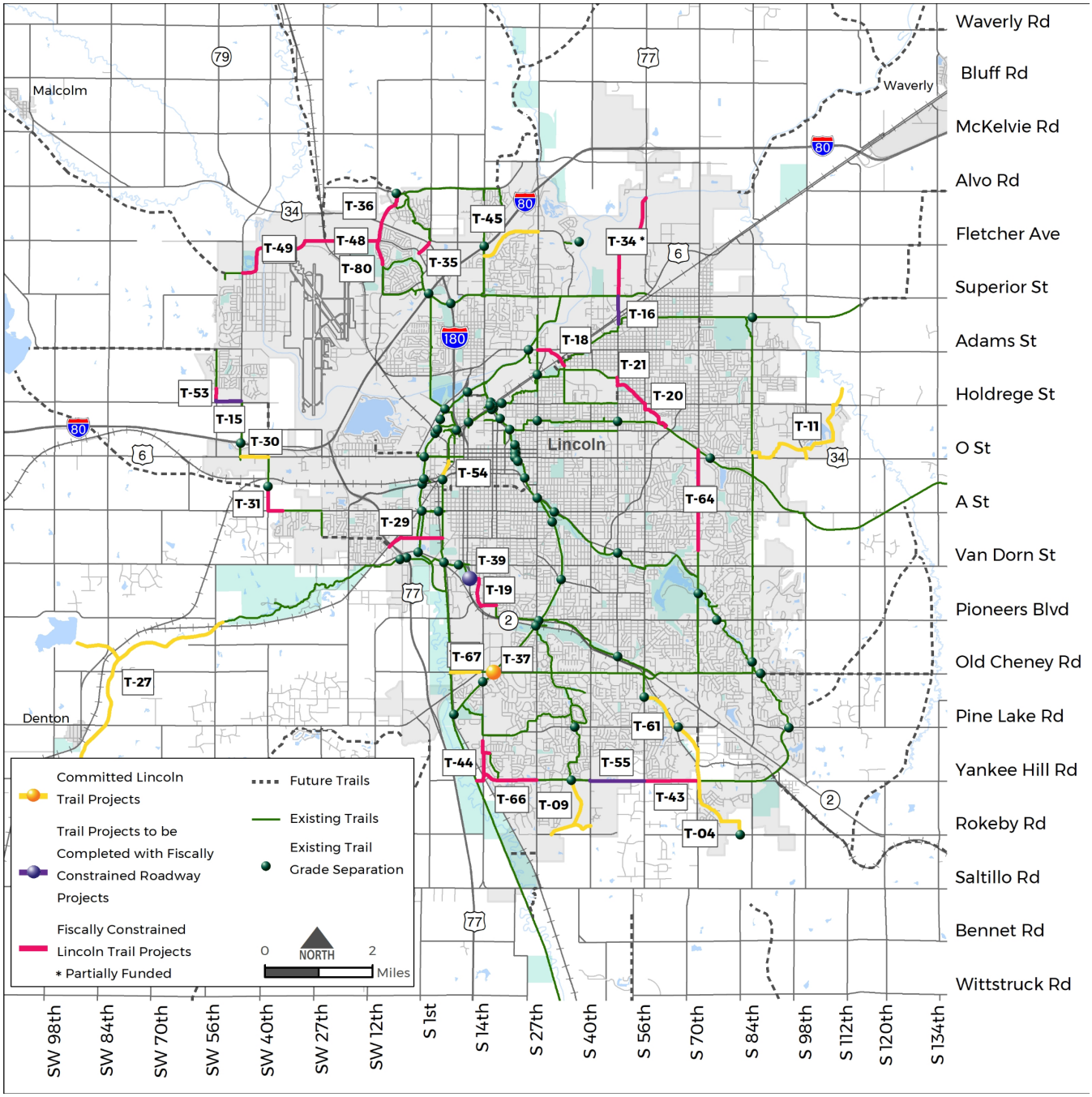
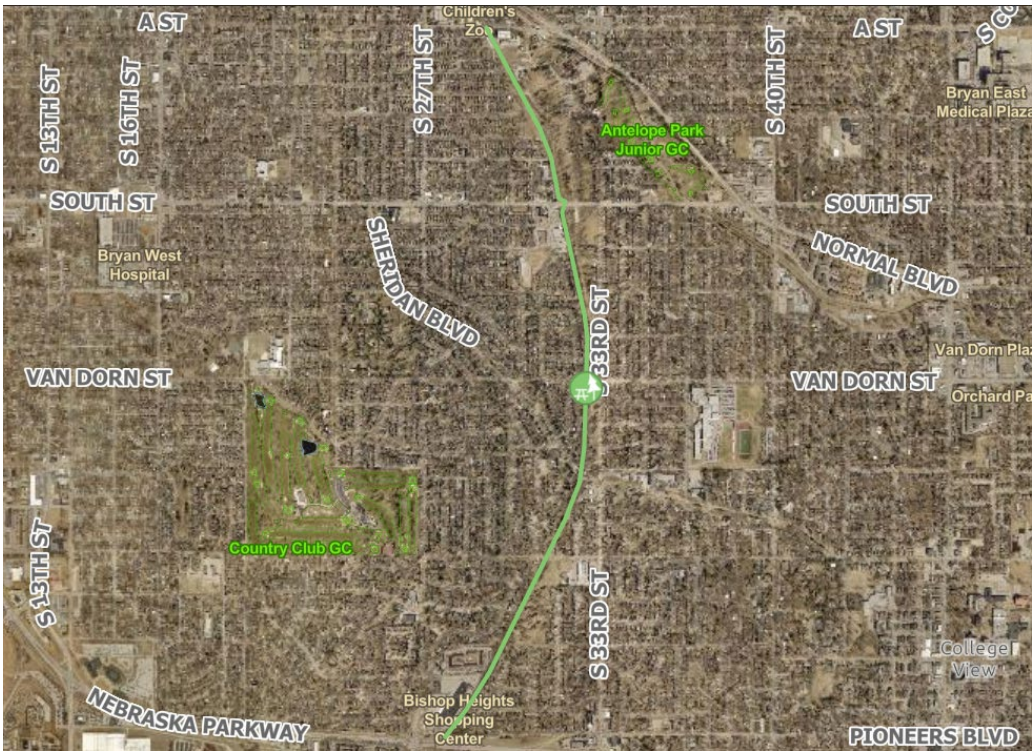


Table 7.10 Trail Widening Projects

Trail Name	Limits	Description	Project Cost (2021$)
Funded/Committed Trail Widening Projects			
Rock Island	A Street to Boosalis Trail	Widen 8' trail to 12'	$2,546,700

Figure 7.5 Trail Widening Projects



On-Street Bike Projects

The Lincoln Bike Plan was adopted in February 2019. Since no committed funding source has historically been provided for implementation of the on-street bike network, the LRTP resource allocation includes a nominal allocation of $8.93 million of flexible funds to the on-street bike program, which could be used to stripe approximately 35 miles of bike lanes, accounting for construction cost inflation. However, this amount falls well short of the funding needed to implement the more than 100 miles of proposed bikeways (some of which are more capital-cost intensive than bike lane striping) and the intersection crossing improvements identified in the Lincoln Bike Plan.

The specific On-Street Bike Projects to be completed with available funds will be selected based on the analysis and prioritization documented in the Lincoln Bike Plan. Where possible, On-Street Bike Projects should be bundled with roadway improvement projects. **Table 7.11** identifies projects that are candidate On-Street Bike Projects that could be constructed with roadway projects in the Fiscally Constrained Plan. As these roadway projects progress through preliminary and final design, consideration should be given for inclusion of the corresponding Bike Plan project(s). Additional candidate on-street bike projects not associated with roadway projects are identified within a project grouping.

Grouped Projects are small-scale transportation projects that while not

considered regionally significant, still contribute to meeting the goals of the regional transportation system as allowed under 23 CFR § 450.326(h). The Grouped Project designation is used to more efficiently advance these small projects through the planning and implementation process. Individual costs of Group Projects are not included, though the collective costs are included in the LRTP financial analysis. All of the grouped on-street bike projects with costs below $1,000,000 are considered "group projects" and only listed in full in the TIP, once there is funding dedicated for their implementation. Grouped Projects can be added to the TIP by administrative modification rather than a formal amendment process.

Pedestrian, Bike Share, and TDM

The recommended resource allocation assumes a minimum $1 million annual general fund transfer to the sidewalk rehabilitation program. With the $37 million allocation to this program, an estimated 46 miles of sidewalk could be replaced, accounting for construction cost inflation.

The TDM portion of this program may include partnerships with employers to support biking, walking, and transit commuting; flexible work hours; and remote work options. Continued operation and maintepnance of the existing BikeLNK bike share program is also recommended to continue. The TDM program could also consider partnerships with Transportation Network Companies (TNC) such as Uber or Lyft, as well as car share options and expansion of the bike share and scooter programs, to support shared mobility options in Lincoln.

Table 7.11 On-Street Bike Projects

Project Grouping for Standalone On-Street Bike Projects	Various locations throughout the Lincoln MPO region	Total Cost: $1,000,000	Individual cost no more than $1 million. Examples include but are not limited to: Shared, Striped, Separated, and/or Buffered Bike Lanes, Sidepaths, and Associated Intersection and Crossing Enhancements

On-Street Bike Projects to be Constructed with Fiscally Constrained Roadway Projects							
Roadway Project ID	**Street**	**Project Limits**	**Bike Plan Project ID**	**Street**	**From**	**To**	**Description**
10	W Holdrege Street	NW 56th Street to NW 48th Street	153	W Holdrege St	W Patridge Ln	NW 40th St	Sidepath
77	W A Street	SW 36th Street to SW 5th Street	47	W A St	SW 40th St	S Folsom St	
				W A St	S Folsom St	Multi-use Path	
124	S Folsom Street	W Old Cheney Road to 1/4 mile south	159	S Folsom St	W Denton Rd	Pioneers Blvd	Sidepath
141	A Street	S 6th Street to S 17th Street	24	S 8th St	A St		Intersection Enhancements
			132	S 11th St	A St		Intersection Enhancements
			142	A St	S 4th St	S 11th St	Sidepath
81	W Holdrege Street	NW 48th Street to Chitwood Lane (east 1/4 mile)	153	W Holdrege St	W Patridge Ln	NW 40th St	Sidepath
14	NW 48th Street	Adams Street to Cuming Street	99	NW 48th St	W Seward St	W Knight Dr	Sidepath
				NW 48th St	W Holdrege St	W Seward St	Sidepath

32	O Street (US-34)	Antelope Valley N/S Rdwy. (19th St.) to 46th Street	133	35th St	O St		Intersection Enhancements
			73	N 44th St	O St	R St	Separated Bike Lane
				N 44th St	O St		Intersection Enhancements
			50	S 29th St	Randolph St	R St	Shared Lane
				29th St	O St		Intersection Enhancements
37	Cornhusker Hwy (US-6)	N 20th Street to N 33rd Street	151	Cornhusker Hwy	N 27th St	Trail	Sidepath
41	N 48th Street	Adams Street to Superior Street	105	N 48th St	Fremont St	End	Sidepath
				N 48th St	Cornhusker Hwy/RR		Intersection Enhancements
			102	N 48th St	Judson St	Hartley St	Sidepath
82	Nebraska Hwy 2	S 84th Street to Van Dorn Street	23	High St	Nebraska Hwy 2	S 12th St	Shared Lane
				High St	Nebraska Hwy 2		Intersection Enhancements
			121	Southwood Dr	Nebraska Hwy 2		Intersection Enhancements
85	NW 12th Street	Fletcher Avenue to Aster Road with overpass of US-34	112	NW 13th St	W Fletcher Ave		Intersection Enhancements

Future Congestion Levels

The 2035 and 2050 Lincoln MPO regional travel demand models were run with the Urban and Rural Roadway Capital Projects included in the Fiscally Constrained Plan, as well as the South Beltway and West Beltway. NDOT added one additional State project (ID 71) to the fiscally constrained project list after modeling for congestion had been completed and is therefore not included. The resulting congestion levels are summarized on **Figure 7.6** and mapped on **Figure 7.7** and **Figure 7.8** for 2035 and 2050, respectively.

With the Fiscally Constrained Roadway Capital Projects in place, 95 percent of the system (within the model area) is expected to be uncongested in 2035 (volume to capacity ratio less than 0.8), and 88 percent uncongested in 2050. All roads outside the model area will remain uncongested.

Figure 7.6 Congestion Levels

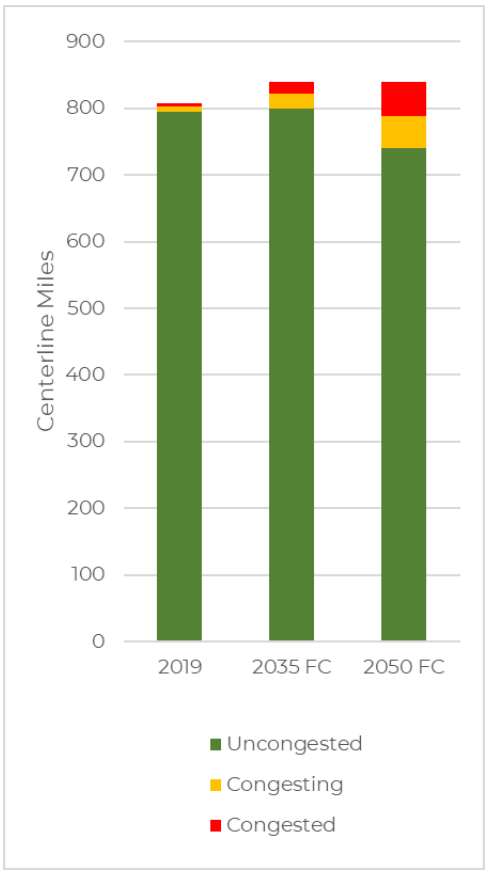


Figure 7.7 2035 Congestion Levels (Fiscally Constrained Plan)

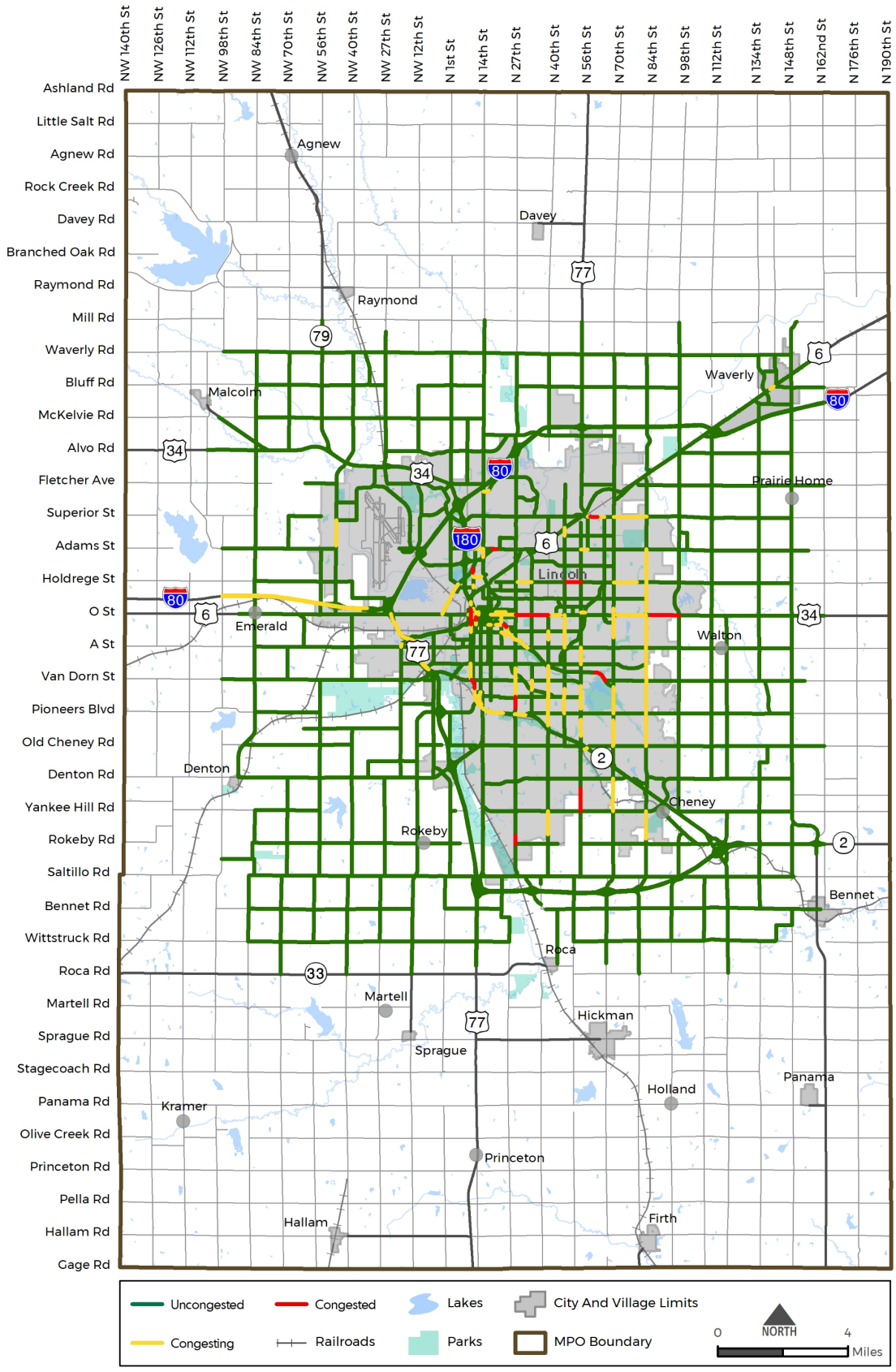
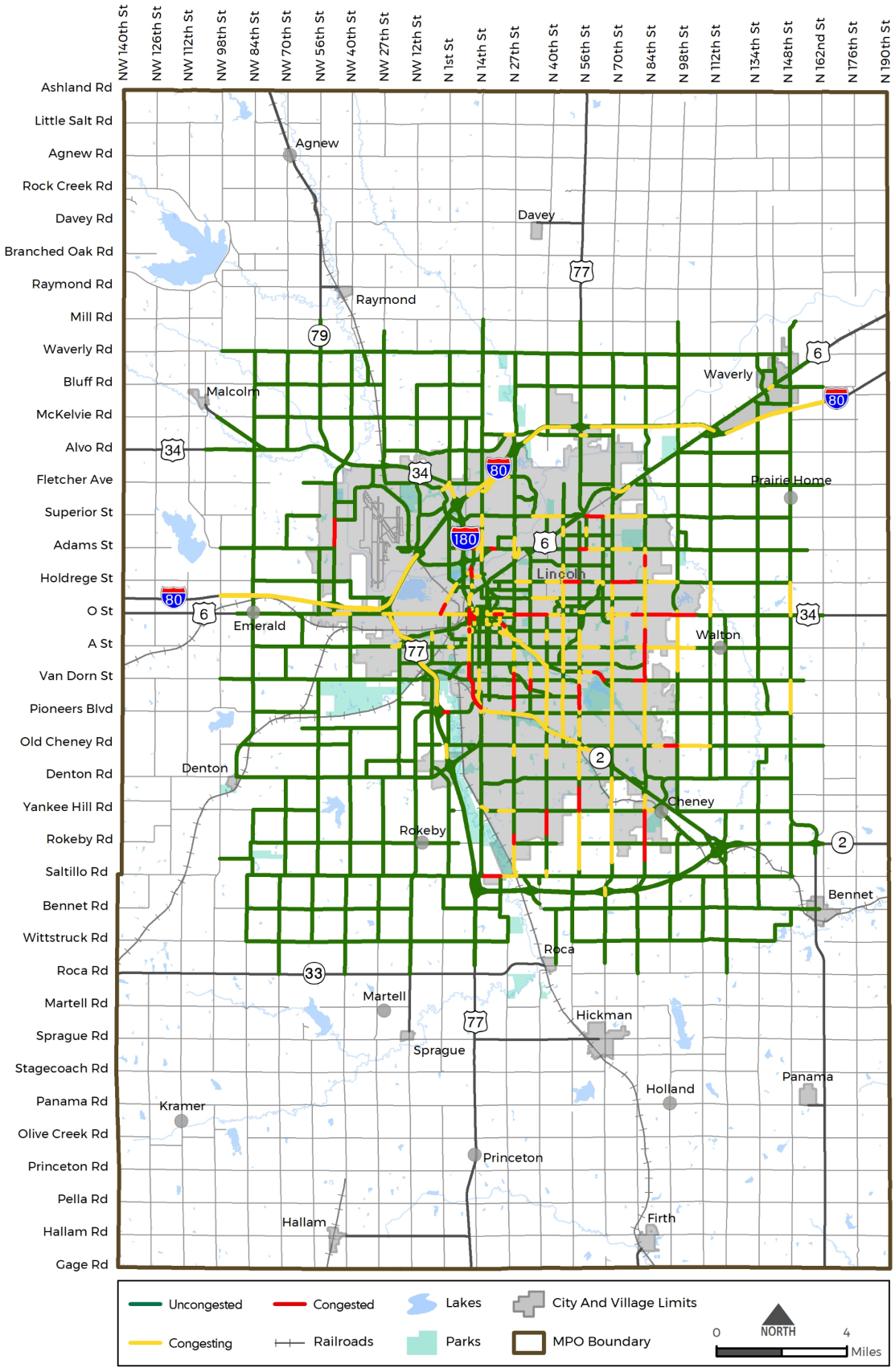


Figure 7.8 2050 Congestion Levels (Fiscally Constrained Plan)



The travel model is not, however, an effective tool to measure the benefits of the traffic signal coordination and intersection improvements identified in the Fiscally Constrained Plan (e.g., Highway 2, 84th Street, O Street) show "congested" conditions on **Figure 7.7** and **Figure 7.8**. However, the traffic signal coordination and intersection improvements along these corridors are not accounted for in the travel demand model. Congestion levels are expected to be reduced with these cost-effective improvements.

Table 7.12 provides a comparison of daily travel time – vehicle hours of travel (VHT) – for the Existing + Committed network and the Fiscally Constrained Plan network in 2035 and 2050. VHT describes all of the hours of travel experienced daily by all vehicles throughout the road system, and reduction in VHT indicates travel time savings experienced by users with implementation of the Fiscally Constrained Plan. These results highlight the benefits of the different project types in the Fiscally Constrained Plan, which attributes 327 hours of travel time savings in 2035 and 1,475 hours of travel time savings in 2050.

Table 7.12 Daily Travel Time

Network	Daily VHT
2035 Existing + Committed	180,208
2035 Fiscally Constrained	179,881
2050 Existing + Committed	220,201
2050 Fiscally Constrained	218,726

Air Quality

The projects and decisions contained within the Lincoln MPO 2050 LRTP can influence local air quality. Estimated vehicle emissions of select air pollutants that are typically related to mobile transportation sources were assessed for the LRTP.

Because Lancaster County is currently in attainment or unclassifiable for the National Ambient Air Quality Standards (NAAQS) under the Clean Air Act, the air quality evaluation was primarily for informational, planning and stewardship purposes, not for regulatory compliance. For example, the City of Lincoln Climate Action Plan has an "80 by 50" goal to reduce net GHG emissions 80 percent by year 2050—the LRTP can inform on the progress being made toward the goal in the transportation sector.

The air quality evaluation was based on traffic data developed through the MPO's regional travel models. NDOT added one additional State project (ID 71) to the fiscally constrained project list after modeling for congestion had been completed and is therefore not included in air quality analysis. The current US Environmental Protection Agency Motor Vehicle Emission Simulator software (MOVES3) was used to develop pollutant emission data.

Evaluation Overview

The evaluation for air pollution emissions included five traffic situations covering the entire MPO area: 2020 current conditions, "existing plus committed" (without any new planned projects) conditions (E+C) for 2035 and 2050, and the future fiscally constrained road networks (FC) planned by the MPO for 2035 and 2050. Air pollutant emissions data for each of these situations for the entire traffic model network were calculated using MOVES3. Because of the potential atypical traffic volumes and patterns experienced in calendar year 2020 due to COVID, the 2020 emissions analysis used 2019 traffic data from the regional model (believed to be more typical) but calculated for calendar year 2020.

The evaluation examined four air pollutants of concern commonly associated with motor vehicles: particulate matter less than 2.5 microns in diameter ($PM_{2.5}$), two precursor pollutants for ozone (volatile organic compounds [VOC] and oxides of nitrogen [NOx]), and overall GHGs expressed as carbon dioxide (CO_2) equivalents. These pollutants are of concern for several reasons:

- Particulate Matter: $PM_{2.5}$, a complex mix of very small solid particles and liquid droplets, is a concern because it can be inhaled deeply into the lungs and can interfere with lung function or lead to other health effects. $PM_{2.5}$ can aggravate asthma, diminish lung capacity, and cause lung or heart problems. Particulate matter can also cause haze. Sources of particulate

matter include smoke, diesel engine exhaust and road dust. Particulate matter can be a localized concern near the sources or can cause regional concerns through dispersion. This evaluation included $PM_{2.5}$ emissions from tailpipes, brake wear and tire wear.

- Ozone and Precursors: A strong oxidizing agent, ozone can damage cells in lungs and vegetation and can cause eye irritation and coughing. Ozone is not emitted directly; rather, it is formed by chemical reactions between other precursor pollutants in the atmosphere. VOC and NOx in the presence of sunlight and certain weather conditions can form ground-level ozone. So, ozone concentrations can be affected through the concentrations of the precursor pollutants. Automotive sources of ozone precursors include vehicle exhaust, fuel evaporation, and vehicle refueling. Ozone is a regional concern because it takes time for ozone to form and the pollutants can drift some distance in that time. Ozone generally is most problematic in summer. Combined with GHG emissions and climate change, warmer temperatures in the future may lead to higher ozone concentrations.
- Greenhouse gases: CO_2 is the largest component of vehicle GHG emissions. Other prominent transportation-related GHGs include methane and nitrous oxide. Water vapor is the most abundant GHG and makes up approximately two-thirds of the natural greenhouse effect. GHGs are a concern in terms of global climate change. Human-generated GHG emissions can contribute to climate change through the burning of fossil fuels and other activities. For this evaluation, overall GHG emissions from vehicles have been quantified in terms of an equivalent amount of CO_2 emissions (CO_2 equivalents, or CO_2e).

MOVES3 Modeling

MOVES3 was the software used to develop two groups of vehicle air pollutant emission results for the four air pollutants described previously. The first group of results was a representative set of average pollutant emission rates in grams per mile traveled for various vehicle speeds for years 2020, 2035 and 2050. A weekday in May was selected as an intermediate condition as a basis for comparison. The second group of results was a set of cumulative daily totals of emissions for a weekday in May for the five traffic situations described previously.

MOVES3 requires a considerable amount of technical data for input to generate these results. Some of the needed data can be difficult and costly to develop specifically for a region/locality, so it is often not readily available. The MPO has developed data for vehicle miles of travel (VMT) and average vehicle speeds for the road networks through the traffic models, which were used in MOVES3 modeling. However, other input data were not available locally so the necessary inputs were derived from the MOVES3 national dataset. “National scale” MOVES3 runs for Lancaster County provided input data for the vehicle mix and some VMT distribution. MOVES3 national data were also used for inputs such as fuel types and weather conditions.

The air quality evaluation is intended to illustrate general trends for the MPO region. Changes to any of the inputs would affect the emission results to some extent.

Pollutant Emissions Results

For the first group of emission results, graphs of pollutant emission rates versus vehicle speeds were developed for the three years of interest (**Figure 7.9**) to illustrate how emissions can vary with changes in traffic congestion levels. Note that this figure represents averaged results for the entire vehicle fleet for a single set of weather conditions. Other conditions may provide different rates but would be expected to show similar patterns. The graphs illustrate that traffic flow improvements (higher speeds) generally reduce emissions.

Future years are expected to see lower emission rates due to federal emission regulations and improvements in vehicle technologies (**Figure 7.9**). As older vehicles are replaced with newer ones, lower emissions are expected. Because of this, total vehicle

emission levels in future years may be lower even with more vehicles and VMT. The change in emission rates from 2020 to 2050 will be greatest for VOC and smallest for GHGs. The emission rates for 2035 and 2050 are very similar so the differences in total emissions between these years will be due mainly to differences in VMT.

For a simpler comparison of emission rates, a set of overall composite average rates were calculated. **Table 7.14** lists average emission rates of the entire region and all of the various traffic conditions during the course of the example day. **Table 7.13** results are condensed from a full day and include more weather conditions than the single hour shown on **Figure 7.11.**

Table 7.13 Composite Vehicle Pollutant Emission Rates

Pollutant	2020 (g/mile)	2035 (g/mile)	2050 (g/mile)
$PM_{2.5}$	0.018	0.0081	0.0075
NOx	0.63	0.24	0.21
VOC	0.076	0.018	0.015
GHGs as CO2	473	362	342

For the second group of emission results, total daily emissions from the MPO road network for an average May weekday was calculated (**Figure 7.10**). Note that the emission amounts at other times would differ due to several factors—time of year, temperature, day of week, VMT, level of congestion, etc. The evaluation was intended to illustrate general trends (**Table 7.14**).

For PM2.5, NOx and VOC, total emissions in 2050 are calculated to be substantively lower than 2020 even with more VMT (**Figure 7.10**). Cleaner vehicles with lower emission factors will be important improvements in the near term (to 2035). Beyond 2035, the gains from cleaner traditional vehicles will lessen.

GHG emissions are expected to be higher in 2035 and 2050 than in 2020 because the expected growth in VMT will more than overtake the expected reduction in GHG emission rates. Note that these results do not include widespread use of electric vehicles or other emerging technologies that currently are not well defined.

Table 7.14 Composite Daily Pollutant Total Emissions (tons per day)

Pollutant	2020	2035 E+C	2035 FC	2050 E+C	2050 FC
PM2.5	0.12	0.07	0.07	0.08	0.08
NOx	4.3	2.1	2.1	2.3	2.3
VOC	0.52	0.16	0.16	0.16	0.16
GHGs as CO2	3,241	3,264	3,263	3,718	3,700
LRTP Daily VMT (miles)	6,220,000	8,179,000	8,183,000	9,869,000	9,835,000

Figure 7.9 Example Pollutant Emission Rates for Lincoln Arterial Streets (May weekday during 11AM hour)

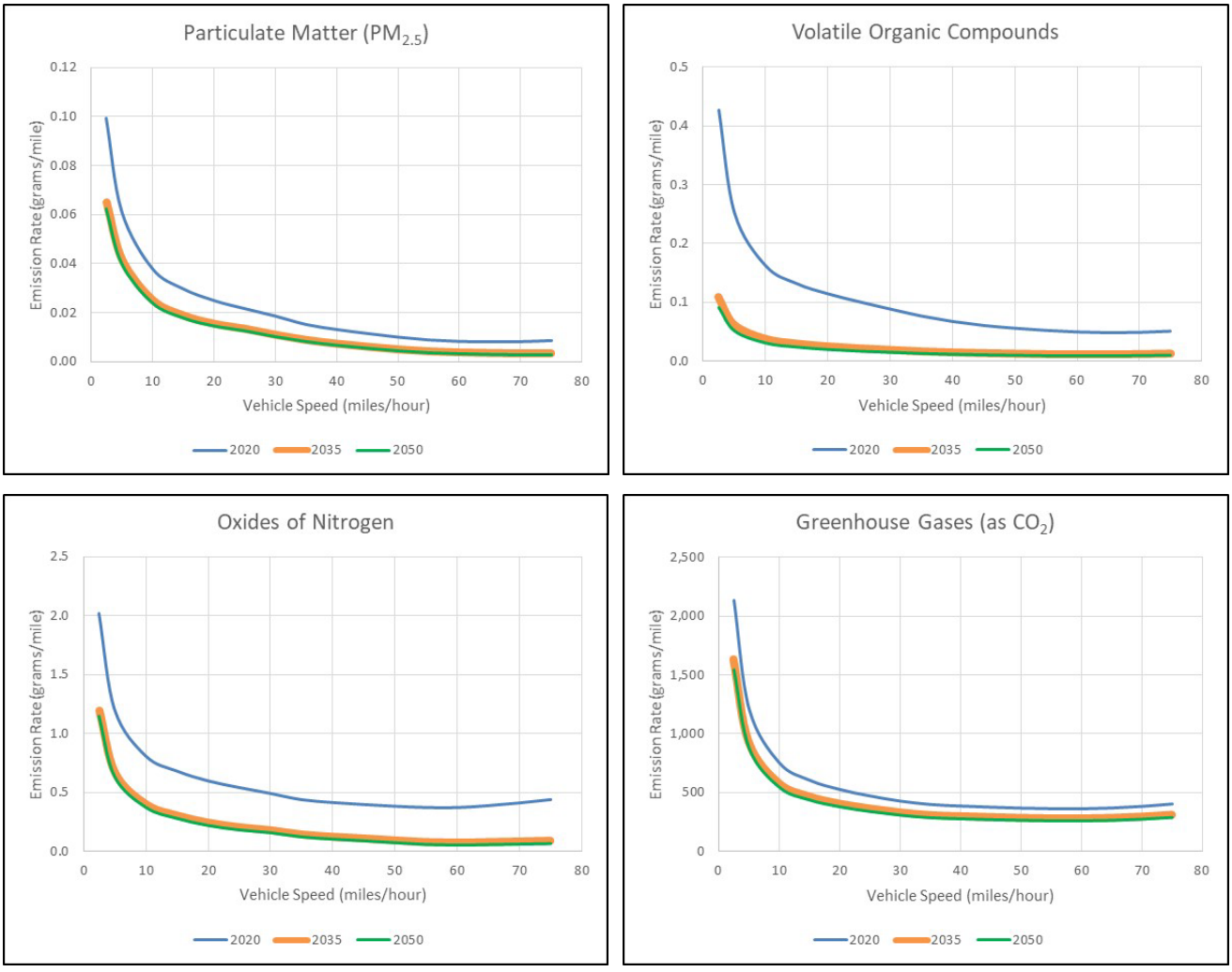
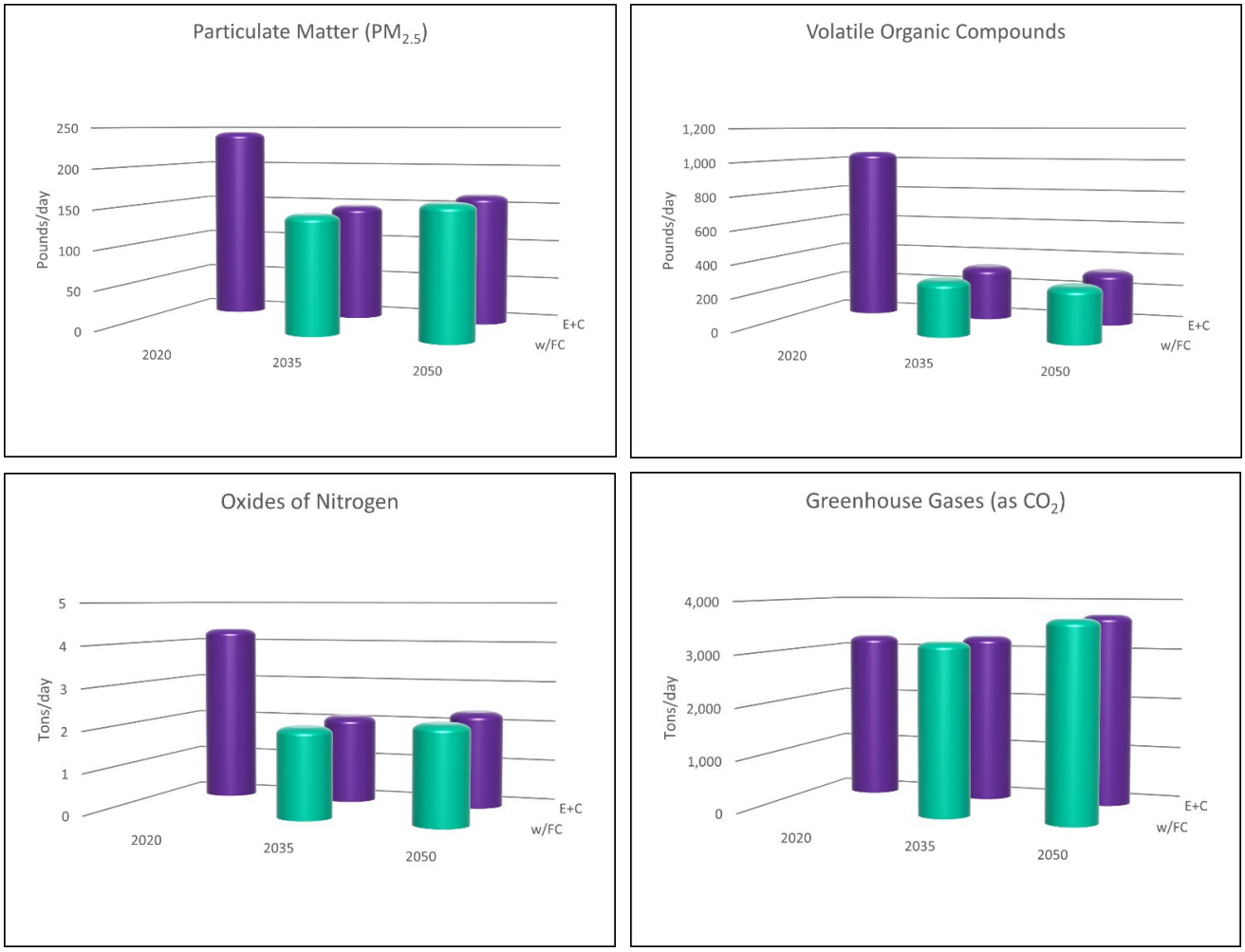


Figure 7.10 Typical Weekday Pollutant Emission Totals for Fiscally Constrained Road Network



E+C is existing plus committed projects
w/FC is with Fiscally Constrained projects

Environmental Justice and Equity

Federal requirements that protect low-income and minority populations from adverse impacts of transportation projects have additional value when combined with a wider scope of criteria that define an underserved and overburdened communities. EJ reflects the intent of minimizing or mitigating harm from transportation investments to vulnerable populations. The broader goal of providing Transportation Equity within a community intends to reduce the existing disparity between population groups by improving conditions for underserved and overburdened communities by directing transportation investments accordingly. NDOT added one additional State project (ID 71) to the fiscally constrained project list after screening for Environmental Justice was completed and is therefore not included.

Environmental Justice

Federal requirements, such as Title VI of the Civil Rights Act and Executive Order 12898, are in place to help protect low-income and minority populations from adverse effects of federal actions, such as federally-funded transportation projects. Adverse effects to

low-income and minority persons associated with a transportation project could occur during construction despite the completed project providing an overall benefit or the completed project could result in disproportionately high adverse socioeconomic effects. **Appendix H** includes the expanded review of the socioeconomic environment and mitigation strategies for EJ.

A project-specific EJ analysis (during the NEPA/design phase of project development) provides the necessary tools to minimize or mitigate harm from transportation investments to vulnerable populations, whereas this review provided the opportunity to evaluate potential effects (beneficial or adverse) to prioritize and fund future projects. Block groups within Lancaster County with the percent of minority and/or low-income persons greater than countywide or citywide total percent were identified as minority or low-income populations. Projects located in these block groups would likely require project-specific EJ analysis to determine disproportionately high adverse effects, beneficial effects, or if outreach would be needed to comply with NEPA.

Of the 44 fiscally constrained Urban Roadway Projects, 31 projects are located in or through potential minority populations and five are located in or through low-income populations. These projects generally consist of safety, resurfacing, and intersection improvements with lower potential of permanent ROW impacts that could contribute to adverse economic impacts and little to no potential to alter the access to transportation options or neighborhood continuity. The projects are not likely to isolate, exclude, or separate minority or low-income individuals within a given community or from the broader community; a factor that can negatively impact equity of adjacent communities. These types of projects may have temporary adverse effects during construction, which can be appropriately mitigated with public involvement (including translation services, if warranted) and compensatory conservation measures, but would ultimately increase the quality of transportation within the block group for all individuals. Larger-scale projects such as a grade-separated railroad crossing and new four-lane freeway may be more likely to impact minority and low-income populations and would be subject to more in-depth NEPA and EJ analysis because of the potential to physically divide properties, displace people or property improvements, or alter transportation access (during construction or after the completed project).

Of the 26 fiscally constrained Rural Roadway Projects, six projects are located in or through potential minority populations and zero are located in or through low-income populations. These projects generally consist of paving roads and could have low to moderate permanent ROW impacts, but would otherwise be similar to the urban improvement projects relative to EJ concerns. The lack of rural roadway projects in block groups with low-income populations is an artifact of there being no block groups outside the City of Lincoln designated as low-income.

Of the 31 fiscally constrained Trail Projects, 27 projects are located in or through potential minority populations and one is located in or through low-income populations. Other than concerns similar to the urban improvement projects, trails can provide a low-cost transportation alternative and increase connectivity to essential services, which would benefit minority and low-income persons. The presence of existing trails accessible within one-mile of most of the low-income block groups explains why so few new trail projects are proposed in low-income block groups. Increasing connectivity to trails by expanding the on-street bike network within these block groups is a cost-effective action step.

By completing project-specific EJ analysis and appropriate public involvement outreach consistent with federal funding requirements, the Fiscally Constrained Plan (including ID 71) will not have an adverse impact to EJ communities. Projects prioritized for the Fiscally Constrained Plan have the capability of satisfying the three fundamental EJ principles as set forth by regulations including:

1. Avoid, minimize or mitigate disproportionately high and adverse human health and environmental effects, including social and economic

effects, on minority and low-income populations.

2. Ensure the full and fair participation by all potentially affected communities in the transportation decision making process.
3. Prevent the denial of, reduction of, or significant delay in the receipt of benefits by minority and low-income populations.

Equity

A Community Vision provides the broad framework for considering transportation investments, and "Equity" was included with the Community Vision expressed in PlanForward. It reinforced an equitable process that ensured all community members had equal opportunity to participate in the MPO's decision-making process. The 2050 LRTP advanced this Vision by adding a new Transportation Equity goal described in **Chapter 2.** This step expressly places equity into the LRTP processes of weighting projects described in this Chapter (**Table 7.4**) and measuring progress made toward the Transportation Equity, which is also described in **Chapter 2**. Unlike the explicit federal requirements established for measuring EJ, the Lincoln MPO has limited guidance for establishing methods for measuring transportation equity. The Lincoln MPO updates the LRTP every five-years, which will allow the methods of measuring equity to be adjusted over time.

Planning stakeholders distinguished the Transportation Equity goal from EJ requirements as the intentional investment of transportation funding to reduce transportation infrastructure disparities between populations considering a range of socioeconomic criteria. The Lincoln MPO had to establish the criteria and methods for completing this evaluation.

The method of aggregating census blocks by population/households for seven socioeconomic criteria is described in **Appendix H** and led to the development of the Equity Index developed for **Chapter 4** (**Figure 4.5**). The Equity Index will be used to measure progress made over time toward reducing disparities for transit access, on-street bike/trail network access, commute time, and pavement condition between population groups. Defining the baseline for these measures was an important step in accommodating the Community Vision of equitable transportation outcomes for all residents.

The fiscally constrained projects listed in this Chapter were established through the project weighting process considering eight LRTP goals. Projects that are included present the highest scores considering all goals, including Transportation Equity. Projects located within block groups of the highest Equity Index score (i.e., highest portion of underserved and overburdened communities) received the maximum score for the Transportation Equity goal. If the scoring committee determined that the project could have a positive or negative impact on those communities within or adjacent to the block group, the score could be adjusted. An example of a negative impact could be adding new lanes

to an existing roadway that would reduce the connectivity between housing and schools or essential services. An example of a positive impact could be a grade separated crossing in a block group with a lower Equity Index score that will improve network safety, access, and commute reliability for adjacent block groups with a higher Equity Index. **Chapter 6** provides important information about committed and restricted funds (**Figure 6.1**) and the resource allocation scenarios chosen for funding projects. This comprehensive scoring process and the selected investment scenario maximize the potential benefit of funding available for projects that will improve equitable transportation outcomes.

In addition to the fiscally constrained projects, the LRTP directs available flexible funding to meet other program needs established by the Lincoln MPO, including operation and maintenance of existing roads and trails, completion of on-street bike projects, and expanded and transit operations. These investments are not listed in the fiscally constrained project lists, yet they will contribute to achieving the Transportation Equity goal in combination with Transportation Equity policy and action steps included in **Chapter 8**.



A project within the Fiscally Constrained Plan that highlights some challenges of measuring equitable outcomes based on Equity Index scores is the N. 33rd Street and Cornhusker grade separated railroad crossings project (Project ID 74, cost estimate of $110.4 million). Funding available for this project comes from local and federal sources established specifically for railroad safety improvements that cannot be spent for other purposes. This project location is within a block group that has a low to moderate Equity Index score, which indicates fewer underserved and overburdened residents/ households in the block group will benefit from the project than if the same project was completed in a block group with a high Equity Index score. Block groups located directly south, west, and east presented High Equity Index scores. The magnitude of this regionally significant, multimodal project will generate positive improvements for transportation safety, access, and reliability for block groups adjacent to the immediate project area and beyond. These challenges reinforce the need to continue evaluating the Transportation Equity performance measures listed in **Chapter 2** and assess the ongoing work to make intentional investment of transportation funding to reduce transportation infrastructure disparities between populations considering a range of socioeconomic criteria.

Illustrative Plan

Transportation needs in Lincoln and Lancaster County are significant, and 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 following sections detail the NDOT, Rural Road, and Urban Road Capital Projects, as well as the Trail Projects that would remain unfunded through 2050.

Roadways

NDOT Highway Projects

Ten NDOT highway capital projects were scored using the Lincoln urban area roadway criteria and weighting. The rankings of these projects (as listed in **Table 7.15**) reflect where they fall based on the Lincoln MPO's priorities. However, it is recognized that the timing of these projects will depend on the statewide priorities and funding availability. Seven of the 10 projects are shown in the Illustrative Plan on **Figure 7.11** (the other three – the South Beltway, the West Beltway, and I-80 - Pleasant Dale to NW 56th Street – have committed funding and are included in the Fiscally Constrained Plan).

Lancaster County Rural Road & Bridge Capital Projects

All remaining Rural Road & Bridge Capital Projects (including the additional 69 lower ranked projects that are not included in the Fiscally Constrained Plan) are included as Illustrative (unfunded) projects in the LRTP. These projects are depicted on **Figure 7.12** and detailed in **Table 7.16**.

Lincoln Urban Roadway Capital Projects

All remaining Urban Roadway Capital Projects (including an additional 64 lower ranked projects that are not included in the Fiscally Constrained Plan) are included as Illustrative (unfunded) projects in the LRTP. These projects are depicted on **Figure 7.13** and detailed in **Table 7.17**.

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Table 7.15 Illustrative Plan (Unfunded) NDOT Highway Projects

Project ID	Street Name	Limits	Description	Project Cost (2021$)
44	O Street (US-34)	84th Street to 120th Street	4 lanes + intersection improvements	$17,900,000
34	US-6 (Sun Valley)	Cornhusker Hwy (US-6) to WO St.(US-6)	4 lanes + turn lanes	$20,400,000
73	US-34	US-34 and Fletcher Avenue	New interchange	$31,900,000
72	I-180	I-80 to US-6	Reconstruction + bridges	$51,200,000
1	I-80	I-80 and I-180	Major interchange work	$52,300,000
68	O Street (US-34)	120th Street to east county line	4 lanes + intersection improvements	$37,000,000
70	US-34	NE-79 to Malcolm Spur	4 lanes + intersection improvements	$15,300,000
Illustrative Plan (Unfunded) Total				**$226,000,000**

Figure 7.11 Illustrative Plan (Unfunded) NDOT Highway Projects

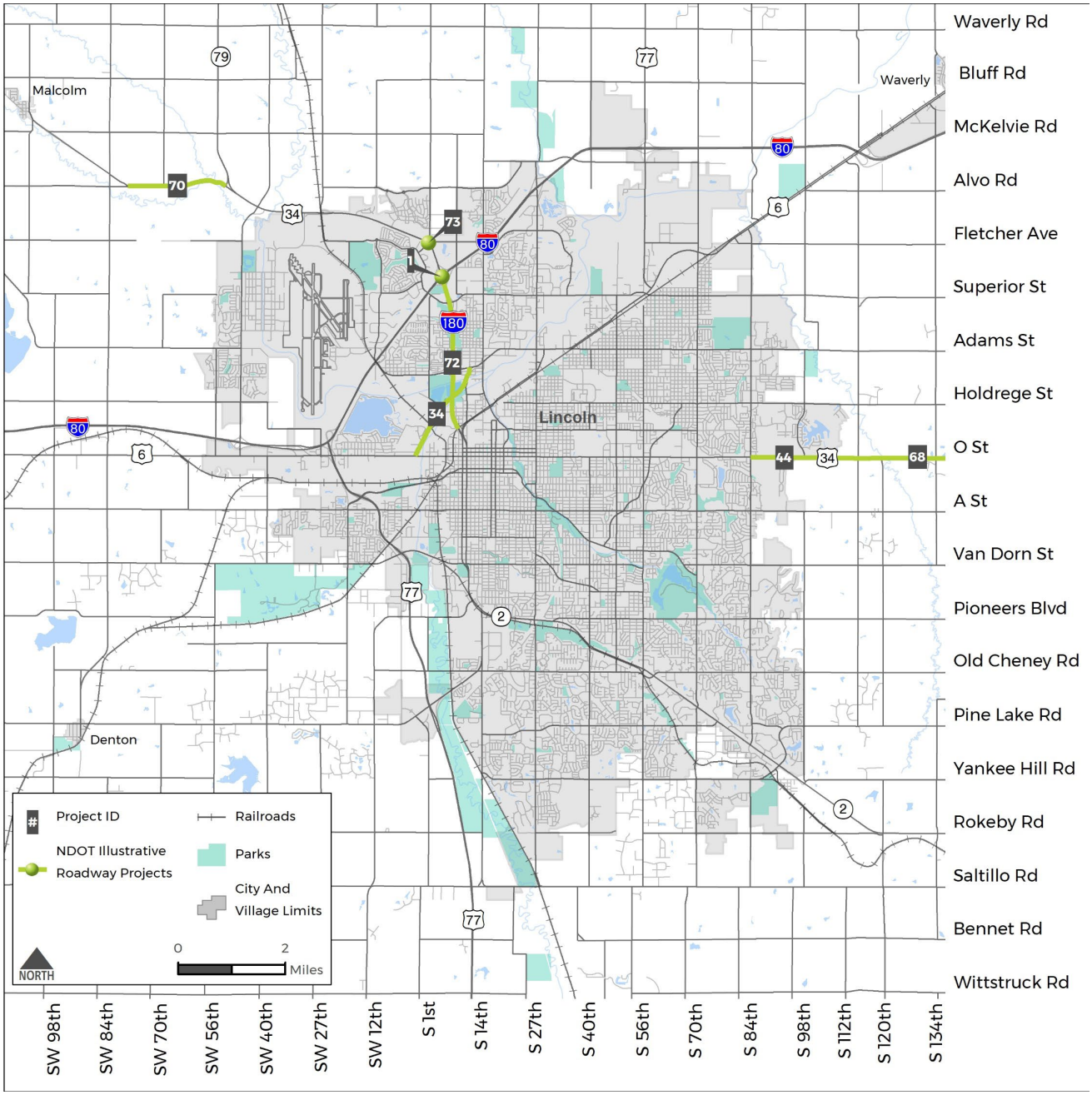


Table 7.12 Illustrative Plan (Unfunded) Rural Road & Bridge Capital Projects

Rank	Project ID	Street Name	Limits	Description	Project Cost (2021$)
	107	W Van Dorn Street	SW 140th Street to SW 112th Street	Potential Paving	$1,300,000
16[1]	108	S 1st Street	Old Cheney Road to Pioneers Boulevard	Programmed Paving	$1,000,000
25	182	N 14th Street	Arbor Road	Intersection improvements	$650,000
26	211	S 46th Street	Bridge S-59 near Bennet Road	Replace CB	$925,000
27	116	Panama Road	US-77 to S 54th Street	Potential Paving	$3,900,000
28	158	N 148th Street	O Street to McKelvie Road	Two Lane Widening	$4,018,000
29	110	W Waverly Road	NE-79 to N 14th Street	Potential Paving	$6,500,000
30	197	Van Dorn Street	Bridge K-37 near S 98th Street	Replace CBC	$652,000
31	118	Bluff Road	I-80 to N 190th Street	Potential Paving	$1,430,000
32	109	W Waverly Road	NW 112th Street to NE-79	Potential Paving	$5,200,000
33	161	S 148th Street	Old Cheney Road	Intersection improvements	$650,000
34	178	S 68th Street	Martel Road	Intersection improvements	$650,000
35	202	Old Cheney Road	Bridge O-37 near S 1st Street	Bridge Replacement	$3,465,000
36	163	S 148th Street	Van Dorn Street	Intersection improvements	$650,000
37	162	S 148th Street	Pioneers Boulevard	Intersection improvements	$650,000
38	157	S 148th Street	Yankee Hill Road to O Street	Two Lane Widening	$4,900,000
40	159	S 148th Street	Yankee Hill Road	Intersection improvements	$650,000
41	167	N 148th Street	Havelock Avenue	Intersection improvements	$650,000
42	169	N 148th Street	Prairie Home	Intersection improvements	$1,300,000
43	117	McKelvie Road	NW 27th Street to N 14th Street	Potential Paving	$3,900,000
44	97	N 14th Street	Waverly Road to Raymond Road	Two Lane Widening	$1,000,000
45	175	S 68th Street	Olive Creek Road	Intersection improvements	$650,000
46	99	N 14th Street	Arbor Road to Waverly Road	Two Lane Widening	$1,250,000
47	160	S 148th Street	Pine Lake Road	Intersection improvements	$650,000
48	176	S 68th Street	Panama Road	Intersection improvements	$650,000
49	170	N 148th Street	Alvo Road	Intersection improvements	$650,000
50	179	S 68th Street	Wittstruck Road	Intersection improvements	$650,000
51	198	S 56th Street	Bridge P-92 near Rokeby Road	Replace with CBC	$1,460,000
52	174	S 68th Street	Princeton Road	Intersection improvements	$650,000
53	166	N 148th Street	Adams Street	Intersection improvements	$650,000
54	177	S 68th Street	Stagecoach Road	Intersection improvements	$650,000
55	164	S 148th Street	A Street	Intersection improvements	$650,000
56	196	N 112th Street	Bridge J-126 near Holdrege Street	Bridge Replacement	$1,571,000
57	208	Pioneers Blvd	Bridge Q-72 near S 138th Street	Bridge Replacement	$1,188,000
58	168	N 148th Street	Fletcher Avenue	Intersection improvements	$650,000
59	203	Van Dorn Street	Bridge J-22 near S 134th Street	Bridge Replacement	$1,060,000
60	199	A Street	Bridge J-47 near S 120th Street	Replace with CCS	$739,000
61	173	S 68th Street	Pella Road	Intersection improvements	$650,000
62	191	N 14th Street	Raymond Road to Agnew Road	Two Lane Widening	$2,000,000
63	112	N 27th Street	Arbor Road to Waverly Road	Potential Paving	$3,250,000
64	190	N 14th Street	Agnew Road	Intersection improvements	$650,000
65	180	S 68th Street	Bennett Road	Intersection improvements	$650,000
66	205	Havelock Avenue	Bridge K-144 near N 98th Street	Bridge Replacement	$2,079,000
67	210	A Street	Bridge J-46 near S 134th Street	Bridge Replacement	$1,237,000
68	189	N 14th Street	Rock Creek Road	Intersection improvements	$650,000
69	187	N 14th Street	Branched Oak Road	Intersection improvements	$650,000
70	204	Adams Street	Bridge K-123 near N 102nd Street	Bridge Replacement	$1,940,000

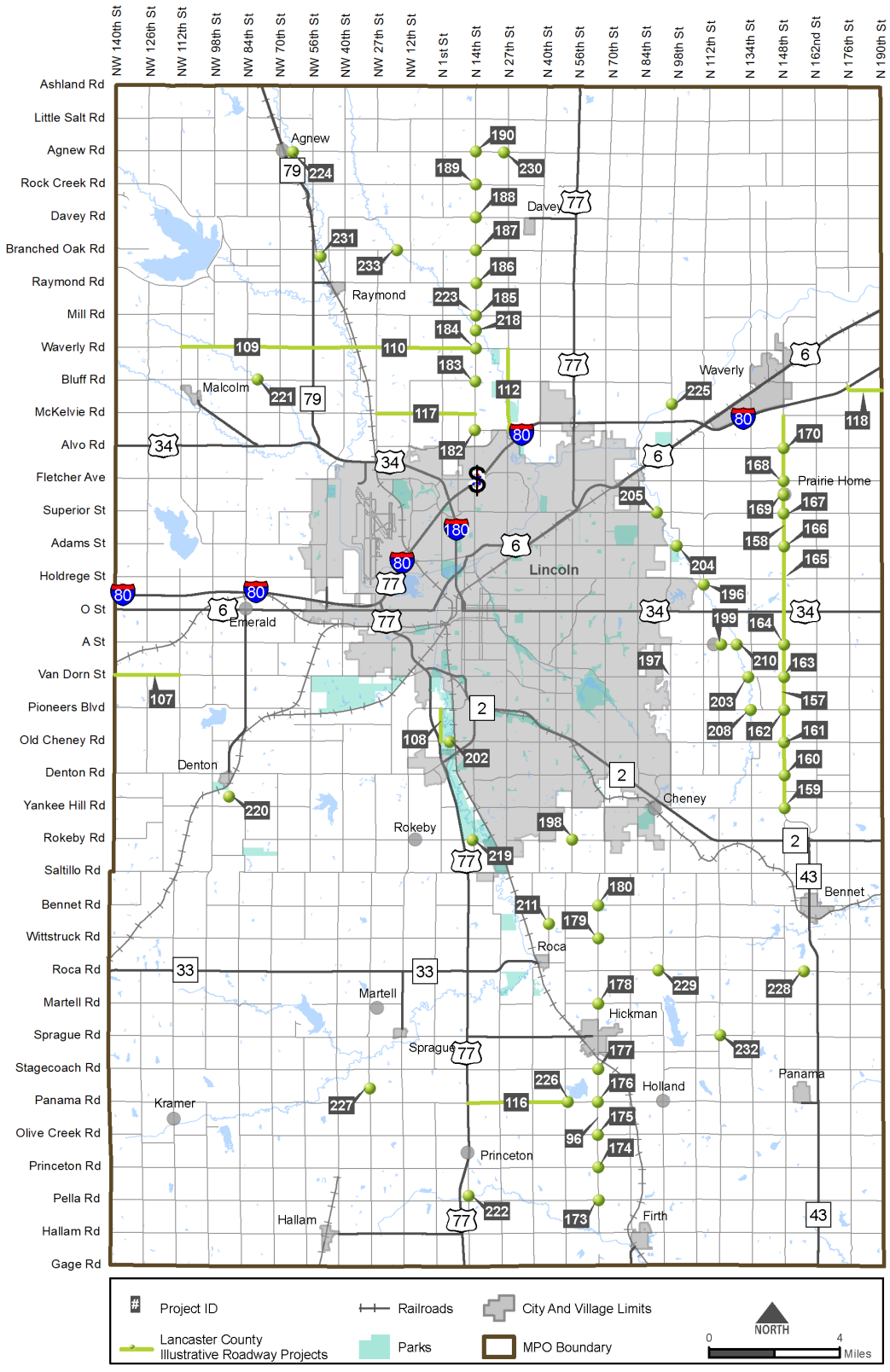
Rank	Project ID	Street Name	Limits	Description	Project Cost (2021$)
71	186	N 14th Street	Raymond Road	Intersection improvements	$650,000
72	188	N 14th Street	Davey Road	Intersection improvements	$650,000
73	184	N 14th Street	Waverly Road	Intersection improvements	$650,000
74	185	N 14th Street	Mill Road	Intersection improvements	$650,000
75	183	N 14th Street	Bluff Road	Intersection improvements	$650,000
76	192	N 14th Street	Agnew Road to Ashland Rd	Two Lane Widening	$1,000,000
N/A[2]	218	N 14th Street	Bridge F-88, Oak W-12, 18-15	Concrete Slab Bridge	$1,175,000
N/A[2]	219	Rokeby Road	Bridge O-44, Yankee Hill S-26, 21-44	Drainage Structure Replacement	$65,000
N/A[2]	220	SW 91st Street	Bridge N-114, Denton IN-22, 18-02	Bridge Replacement	$475,000
N/A[2]	221	W Bluff Road	Bridge E-171, Elk S-14	Concrete Box Culvert	$550,000
N/A[2]	222	S 12th Street	Bridge W-104, Buda W-24	Concrete Box Culvert	$275,000
N/A[2]	223	N 14th Street	Bridge F-91, Oak W-1	Concrete Box Culvert	$275,000
N/A[2]	224	W Agnew Road	Bridge D-88, West Oak S-12 21-40, East of Nebraska Hwy 79	Concrete Slab Bridge	$2,255,000
N/A[2]	225	N 98th Street	Bridge G-222, North Bluff W-24 21-41, North of I-80	Bridge Replacement	$2,560,000
N/A[2]	226	Panama Road	Bridge X-129, South Pass S-4 21-43, East of S 54th St	Concrete Slab Bridge	$1,800,000
N/A[2]	227	SW 29th Street	Bridge W-50 Buda W-4 21045, South of W Stagecoach Rd	Bridge Replacement	$620,000
N/A[2]	228	Roca Road	Bridge R-184, Nemaha S 15, East of S 148th Street	Bridge Replacement	$580,000
N/A[2]	229	Roca Road	Bridge S-180, Saltillo S 14, East of S 82nd Street	Bridge Replacement	$870,000
N/A[2]	230	Agnew Road	Bridge C-284, Little Salt S-12	Concrete Box Culvert	$430,000
N/A[2]	231	NW 19th Street	Bridge C-262, Little Salt IN-28	Bridge Replacement	$650,000
N/A[2]	232	Hickman Road	Bridge R-213, Nemaha S-20	Concrete Box Culvert	$430,000
N/A[2]	233	W Branched Oak Road	Bridge C-253, Little Salt S-28	Bridge Replacement	$620,000
Illustrative Plan (Unfunded) Total					**$89,444,000**

[1] *Although it scored high enough to be in the Fiscally Constrained Plan, Project ID 108 is shown in the Illustrative Plan due to uncertainty of the Old Cheney configuration at the West Beltway (closure versus overpass); therefore, the need for this project will be determined at a later date.*

[2] *Projects 218 – 229 are included in Lancaster County's 1 and 6 Year Plan. These projects are included in the LRTP Illustrative Plan but have not been scored.*

Amended November 2022

Figure 7.12 Illustrative Plan (Unfunded) Rural Road & Bridge Capital Projects



Amended November 2022

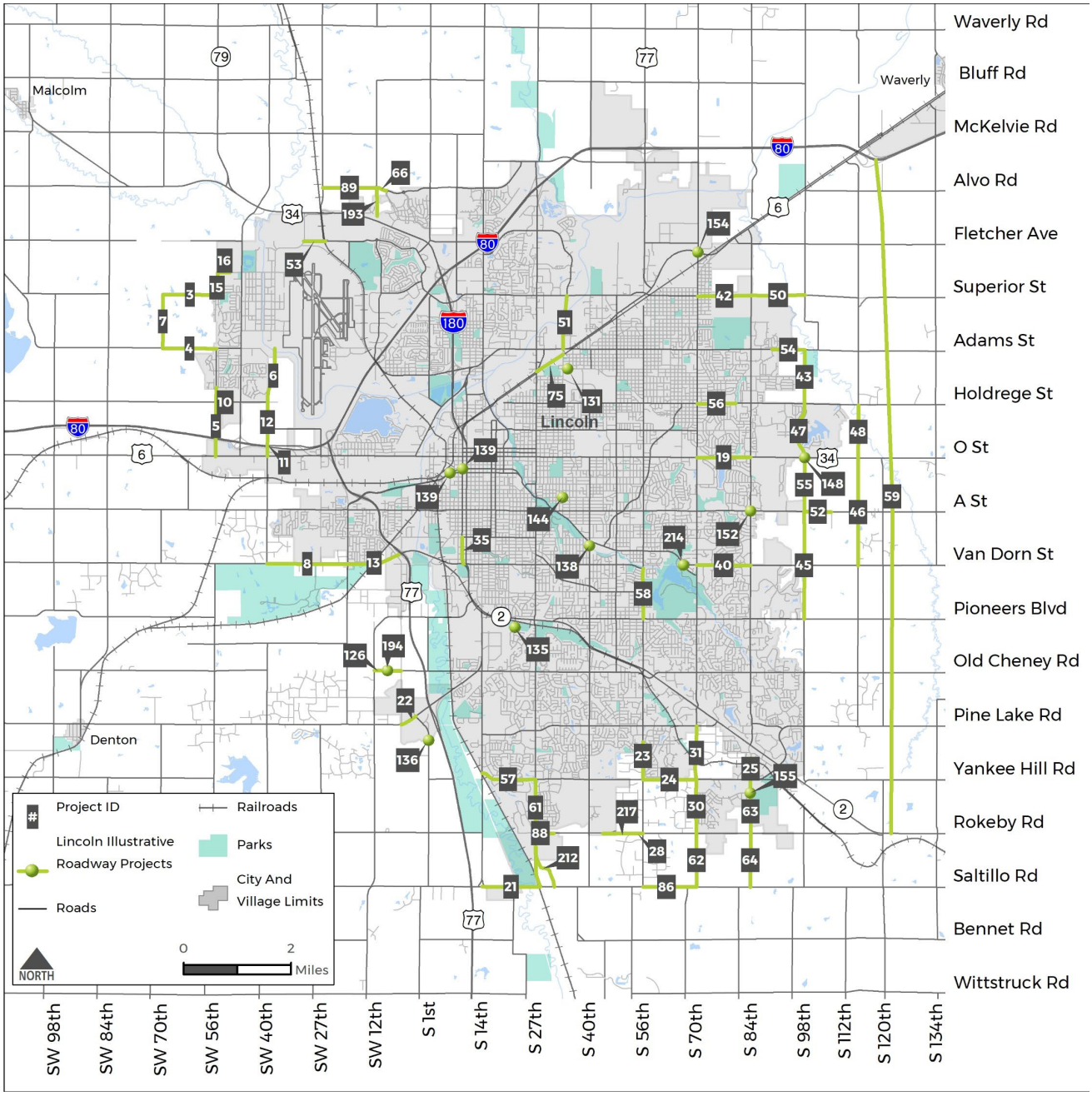
Table 7.17 Illustrative Plan (Unfunded) Urban Roadway Capital Projects

Rank	Project ID	Street Name	Limits	Description	Project Cost (2021$)
21	58	S 56th Street	Van Dorn Street to Pioneers Boulevard	4 lanes + intersection improvements	$13,200,000
22	214	Normal Boulevard	Van Dorn Street	Intersection improvements	$750,000
23	31	S 70th Street	Pine Lake Road to Yankee Hill Road	4 lanes + intersection improvements	$14,000,000
24	138	S 40th Street	Antelope Creek	Bridge Replacement	$2,500,000
25	35	S 9th Street	Van Dorn Street to South Street	3 lanes + intersection improvements	$5,300,000
26	155	S 84th Street	Yankee Woods Drive	Roundabout	$2,750,000
27	56	Holdrege Street	N 70th Street to N 80th Street	4 lanes + intersection improvements	$10,000,000
28	136	S 1st Street	Cardwell Branch Salt Creek	Bridge Replacement	$850,000
29	139	Rosa Parks Way	K Street and L Street	Bridge Rehab and Preventive Maintenance	$3,400,000
30	57	Yankee Hill Road	S 14th Street to S 27th Street	Additional 2 lanes	$7,200,000
31	12	NW 40th Street	W Holdrege Street to W Vine Street	2 lanes + intersection improvements	$3,500,000
32	154	Cornhusker Hwy (US-6)	N 70th Street / Railroad viaduct	Intersection/viaduct reconfiguration	$10,000,000
33	144	S 33rd Street	D Street	Remove existing traffic signal and construct mini roundabout	$1,000,000
34	152	S 84th Street	A Street	Intersection Improvements: dual northbound left turn lanes and NB right turn lane	$1,520,000
35	19	O Street (US-34)	Wedgewood Drive to 98th Street	Intersection Improvements	$6,080,000
36	42	Havelock Avenue	N 70th Street to N 84th Street	2 lanes + intersection improvements	$7,000,000
37	5	NW 56th Street	W Partridge Lane to W "O" Street	2 lanes + intersection improvements	$9,000,000
38	131	Huntington Avenue	Dead Mans Run	Bridge Replacement	$3,500,000
39	40	Van Dorn Street	S 70th Street to S 84th Street	Intersection Improvements	$4,560,000
40	11	NW 40th Street	W Vine Street to US-6, including I-80 Overpass	Overpass	$11,250,000
41	24	Yankee Hill Road	S 56th Street to S 70th Street	2 lanes + intersection improvements	$6,900,000
42	6	NW 38th Street	W Adams Street to W Holdrege Street	2 lanes + intersection improvements	$7,200,000
43	51	N 33rd Street	Cornhusker Hwy to Superior Street	4 lanes + int. impr. & bridge	$20,000,000
44	75	Salt Creek Roadway	State Fair Park Dr to Cornhusker Hwy	6 lanes + intersection improvements	$26,000,000
45	15	NW 56th Street	W Cuming Street to W Superior Street	2 lanes + intersection improvements	$2,900,000
46	23	S 56th Street	Thompson Creek Boulevard to Yankee Hill Road	4 lanes + intersection improvements	$9,800,000

Rank	Project ID	Street Name	Limits	Description	Project Cost (2021$)
47	148	O Street (US-34)	98th Street	Construct roundabout with S 98th Street project OR when signal otherwise warranted	$2,750,000
48	8	W Van Dorn Street	SW 40th Street to Coddington Avenue	2 lanes + intersection improvements	$10,500,000
49	135	Southwood Drive	Beal Slough	Bridge Replacement	$2,200,000
50	193	NW 12th Street	W Alvo Road to Missoula Road	2 lanes + turn lanes	$2,400,000
51	7	NW 70th Street	W Superior Street to W Adams Street	2 lanes + intersection improvements	$7,000,000
52	61	S 27th Street	Yankee Hill Road to Saltillo Road	2 lane realignment + int. impr.	$14,100,000
53	48	N 112th Street	Holdrege Street to US-34	2 lanes + intersection improvements	$7,000,000
54	63	S 84th Street	Yankee Hill Road to Rokeby Road	4 lanes + intersection improvements	$14,000,000
55	21	Saltillo Road	S 14th Street to S 27th Street	2 lanes + intersection improvements, reconstruction to address flooding	$7,600,000
56	55	S 98th Street	US-34 (O Street) to A St	4 lanes + intersection improvements	$14,000,000
57	28	Rokeby Road	S 48th Street to S 56th Street	2 lanes + intersection improvements	$3,500,000
58	217	Rokeby Road	Snapdragon Road to S 48th Street	2 lanes + intersection improvements	$10,330,000
59	25	S 84th Street	Amber Hill Road to Yankee Hill Road	4 lanes + intersection improvements	$5,700,000
60	212	27th Street Realignment	Saltillo Road to Rokeby Road	New Two Lane Road	$20,200,000
61	86	Saltillo Road	S 56th Street to S 70th Street	2 lanes + intersection improvements	$7,000,000
62	3	W Superior Street	NW 70th Street to NW 56th Street	2 lanes + intersection improvements	$7,000,000
63	22	W Denton Road	Amaranth Lane to S Folsom Street	2 additional lanes	$2,200,000
64	46	S 112th Street	US-34 to Van Dorn Street	2 lanes + intersection improvements	$14,000,000
65	52	A Street	S 98th Street to 105th Street	2 lanes + intersection improvements	$3,500,000
66	59	East Beltway	Nebraska Hwy 2 to I-80	New 4 lane divided highway	$315,000,000
67	47	N 98th Street	Holdrege Street to O Street	Additional 2 lanes	$7,500,000
68	54	Adams Street	N 90th Street to N 98th Street	2 lanes + intersection improvements	$4,300,000
69	45	S 98th Street	A Street to Pioneers Boulevard	4 lanes + intersection improvements	$28,000,000
70	4	W Adams Street	NW 70th Street to NW 56th Street	2 lanes + intersection improvements	$7,000,000
71	13	W Van Dorn Street	Coddington Avenue to US-77	2 lanes + intersection improvements	$6,900,000
72	53	W Fletcher Avenue	NW 31st Street to NW 27th Street	2 lanes + intersection improvements	$2,800,000
73	30	S 70th Street	Yankee Hill Road to Rokeby Road	2 lanes + intersection improvements	$14,000,000

Rank	Project ID	Street Name	Limits	Description	Project Cost (2021$)
74	66	W Alvo Road	NW 12th Street to Tallgrass Parkway	2 lanes + intersection improvements	$1,300,000
74	126	W Old Cheney Road	S Folsom Street to SW12th Street	2 lanes with raised median	$3,500,000
76	194	W Old Cheney Road	SW 9th Street	Roundabout	$900,000
77	88	Rokeby Road	S 27th Street to S 31st Street	2 lanes + intersection improvements	$2,400,000
78	64	S 84th Street	Rokeby Road to Saltillo Road	4 lanes + intersection improvements	$14,000,000
79	62	S 70th Street	Rokeby Rd to Saltillo Rd	4 lanes + intersection improvements	$14,000,000
80	50	Havelock Avenue	N 84th Street to N 98th Street	2 lanes + intersection improvements	$7,000,000
81	17	NW 12th Street	Aster Road to Missoula Road	2 lanes + turn lanes	$2,300,000
82	16	W Cuming Street	NW 56th Street to NW 52nd Street	2 lanes + intersection improvements	$1,600,000
83	43	N 98th Street	Adams Street to Holdrege Street	2 lanes + intersection improvements	$7,000,000
84	89	W Alvo Road	NW 27th Street to NW 12th Street	2 lanes + intersection improvements	$7,100,000
Illustrative Plan (Unfunded) Total					**$791,740,000**

Figure 7.13 Illustrative Plan (Unfunded) Urban Roadway Capital Projects



Trails

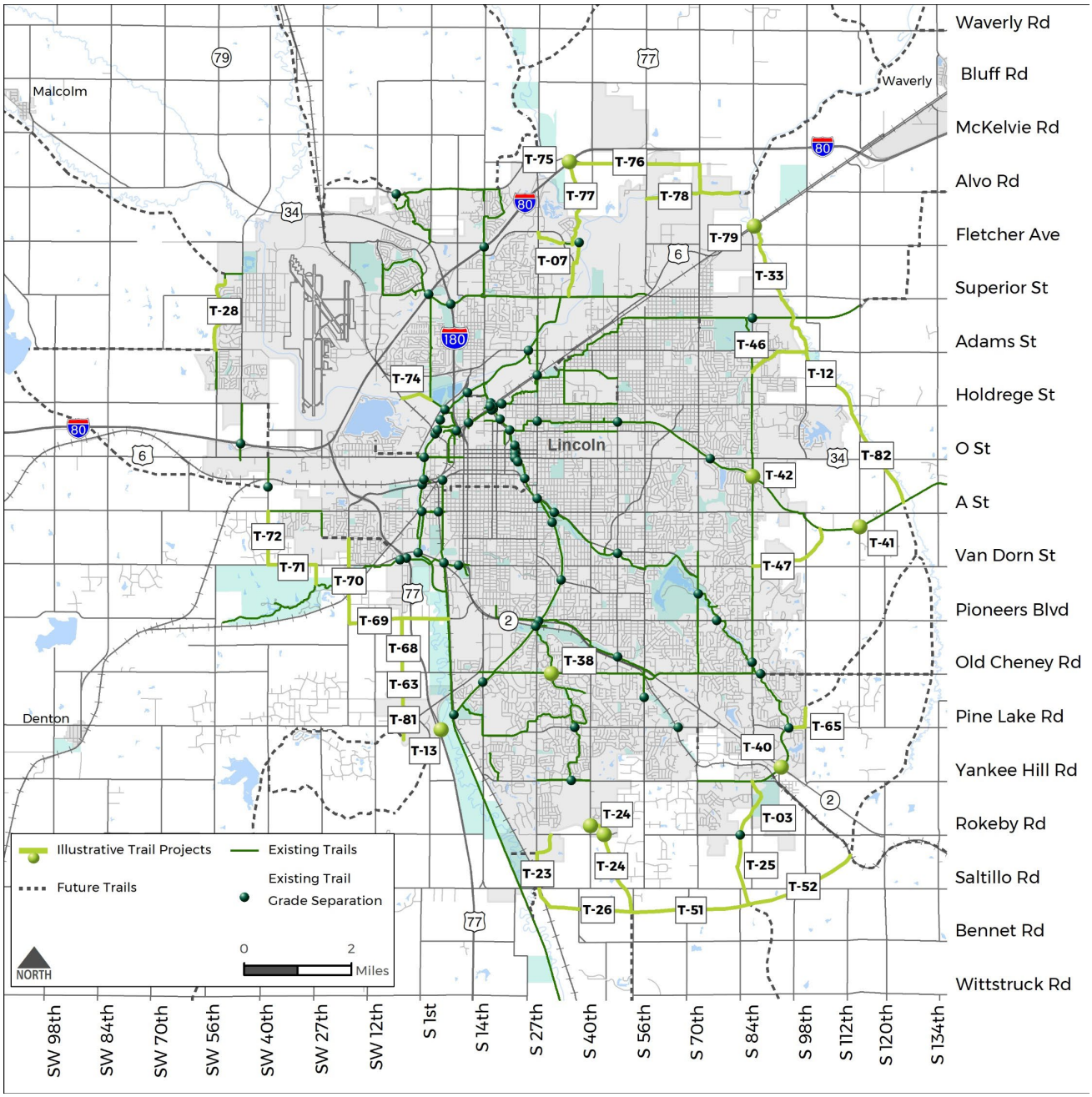
The remaining Trail Projects that are not expected to be funded within the 2050 Fiscally Constrained Plan are included as Illustrative projects in the LRTP, as depicted on **Figure 7.15** and listed in **Table 7.18**. The timing and priority of these projects may change depending on opportunities for funding.

Table 7.18 Illustrative Plan (Unfunded) Trail Projects

Project ID	Trail Name	Limits	Description	Project Cost (2021$)
T-07	Landmark Fletcher	33rd St & Superior St to 27th St	New Trail; Sidepath	$700,000
T-28	NW 56th Street Trail	W Adams St to W Superior St	New Trail	$600,000
T-75	Arbor Road Trail	N 14th St to I-80 with grade separation at I-80	Sidepath and Grade Separation	$600,000
T-76	Arbor Road Trail	I-80 to Salt Creek Trail	Sidepath	$2,400,000
T-38	Tierra Williamsburg	Old Cheney grade separated crossing	Grade Separation	$1,200,000
T-77	Little Salt Creek Trail	Arbor Rd to Landmark Fletcher	New Trail	$2,000,000
T-79	Stevens Creek Trail	Salt Creek Trail to Cornhusker Hwy with grade separation of Cornhusker Hwy	New Trail	$1,000,000
T-47	Van Dorn Trail	S 84th St and Van Dorn to S 106th and MoPac Trail	New Trail	$1,200,000
T-26	South Beltway Trail - Phase I	S 27th St to S 56th St	New Trail	$1,500,000
T-74	Oak Creek Trail	Saline Wetlands Nature Center to N 1st St	New Trail	$300,000
T-78	Salt Creek Trail	N 56th St to Stevens Creek	New Trail	$900,000
T-13	Cardwell Branch Trail	GPTN Connector to Folsom Trail	New Trail	$800,000
T-65	Pine Lake Rd/S 98th St	Billy Wolff Trail to Napa Ridge Dr	Sidepath	$300,000
T-63	Folsom Street	W Old Cheney south 1/2 mile	Sidepath	$65,000
T-71	Van Dorn St	SW 40th St to Prairie Corridor Trail	Sidepath	$500,000
T-23	S 27th Street Connector	Rokeby Rd to South Beltway	New Trail	$800,000
T-40	S 91st Street Trail	Hwy 2 grade separated crossing	Grade Separation	$2,200,000
T-25	S 84th Street Connector	Rokeby Rd to South Beltway	New Trail	$700,000
T-72	SW 40th St	Van Dorn St to W A Street	Sidepath	$350,000
T-46	Prairie Village Trail	N 84th St to Stevens Creek, South of Adams	New Trail; Sidepath	$500,000
T-24	S 56th Street Connector	Rokeby Rd to South Beltway	New Trail	$1,200,000
T-33	Stevens Creek	Murdock trail to Hwy 6	New Trail	$1,000,000
T-82	Stevens Creek	Waterford Trail to MoPac Trail	New Trail	$1,700,000
T-70	Coddington Ave	Pioneers Blvd to South St	Sidepath	$650,000
T-41	Mo Pac Trail	S 112th Street grade separated crossing	Grade Separation	$1,210,000
T-42	Mo Pac Trail	S 84th Street grade separated crossing	Grade Separation	$1,700,000
T-81	Folsom Street Connector	1/2 mile north of W Denton Rd to Cardwell Branch Trail	Trail	$800,000

Project ID	Trail Name	Limits	Description	Project Cost (2021$)
T-12	Stevens Creek	Murdock Trail to Waterford Trail	New Trail	$1,300,000
T-68	Folsom St	Old Cheney to Pioneers Blvd	Sidepath	$350,000
T-69	Pioneers Blvd	Jamaica North Trail to Coddington Ave	Sidepath	$700,000
T-51	South Beltway Trail - Phase II	S 56th St to S 84th St	New Trail	$3,500,000
T-03	Woodlands	Jensen Park to Rokeby Rd	New Trail	$500,000
T-52	South Beltway Trail - Phase III	S 84th Street to Hwy 2	New Trail	$3,500,000
Illustrative Plan (Unfunded) Total				**$36,725,000**

Figure 7.14 Illustrative Plan (Unfunded) Trail Projects



Transit

The Illustrative Plan includes full implementation of the future phases of improvements identified in the TDP. The following transit projects and services are included as Illustrative (unfunded) projects. The Illustrative Plan will be updated upon completion of the TDP update in 2022.

Multimodal Transportation Center

A Multimodal Transportation Center (MMTC) will provide a high level amenity for StarTran bus riders, bicyclists who desire to use transit when they travel, pedestrians as an information center and travel hub, and other transportation providers. A MMTC would also provide a strong and permanent statement of intent on the part of Lincoln to become a multimodal friendly community.

The MMTC would function as a bus transfer center, StarTran administrative office, bicycle storage facility, bike share facility, and likely offer space for supportive retail and taxi stands benefitting all of the City of Lincoln. The proposed location for a MMTC would be in downtown Lincoln to improve connections between people and centers of employment, education, and services. Such a center would support more convenient, safe, and easy bus passenger transfers. Having a transfer facility with administrative and operational staffing would also discourage criminal activity and attract more transit riders.

Maintenance Facility and CNG Fueling Station

StarTran will need a new bus maintenance and storage facility. Currently, the bus maintenance and a significant portion of the bus storage facility are well beyond the reasonable building life. The facility, built in the 1930s, is located within the South Haymarket Neighborhood Plan area. The area would be redeveloped into a mixed residential/commercial district.

StarTran has applied for $19.9 million under FTA Grants for Buses and Bus Facilities Program to fund design and construction of a new bus maintenance and storage facility. The first phase of this project includes construction of a CNG fueling facility.

Other Transit Enhancements

The TDP identifies additional transit enhancements including:

- An expansion plan for increasing service on key routes and adding vehicles
- Bus Rapid Transit in high use corridors such as O Street and 27th Street
- Technology improvements to enhance customer knowledge and trip planning with passenger information systems
- Consideration of private transportation options such as Uber or Lyft to enhance customer travel and to transport customers at the end of the bus line to their final destinations
- Consideration of different fuel types and propulsion systems such as electric buses as a means of reducing GHG emissions and lowering fuel costs
- Study of the potential for using existing rail corridors, such as Highway 2 and Cornhusker Highway, for light rail
- Consideration of intercity transportation between Lincoln and Omaha