



APPENDIX H

Environmental Review

1. INTRODUCTION

Stewardship of the natural, social, and cultural environment is a priority for the Lincoln MPO. This Appendix provides an overview of the potential environmental, social, and cultural resources that could prompt further analyses for the proposed transportation system improvements considered for this Plan. The following sections provide a general description of the resources, potential project overlap indicating future assessment needs, and recommended mitigation measures associated with proposed multimodal alternatives. This overview is broad in scope and meant to assist in the prioritization of future projects; specific improvement projects would still require separate resource reviews, as needed, for environmental compliance.

Location of Projects

Lancaster County is located in southeast Nebraska and encompasses an area of 847 square miles or 542,080 acres. Lincoln is the largest city in Lancaster County with an estimated population of 291,082 (US Census Bureau 2020). Twelve other cities and villages are located in the county. The estimated population of Lancaster County is 322,608 (US Census Bureau 2020). Proposed projects occur within urban and rural areas.

Environmental Study Area (ESA)

Each fiscally constrained roadway project under consideration in the Plan was assigned a 120-foot (ft) right-of-way (ROW) regardless of its hierarchy, such as two-lane or four-lane (i.e., 60 feet on either side of the centerline of the alignment). In addition to ROW, a 100-ft buffer was established on both sides of the ROW to represent an area of potential disturbance to natural, social and cultural environment resources (for a total ESA width of 320 ft). For fiscally constrained trail projects, a 100-ft buffer was used around the trail alignment (for a total ESA width of 200 ft).

Federal Requirements

MPOs must adhere to Federal regulations 23 CFR Part 450 Subpart C regarding long-range transportation plans. These regulations include several factors to be considered in the plan development, including the need to protect and enhance the environment. Regulations also state that the MPO will communicate with state and local agencies concerning land use management, natural resources, environmental protection, conservation, and historic preservation during the LRTP planning process. Discussions are to include the identification of potential mitigation measures, including activities that may have the greatest potential to restore and maintain the environmental functions affected by the metropolitan transportation plan. Review of resources and potential mitigation activities should be in consultation with Federal, State, and tribal wildlife agencies, as well as land management and regulatory agencies. This Appendix documents resource assessments conducted to comply with these requirements. The assessments were used to identify additional planning needs, evaluate project prioritization for funding, or identify potential mitigation measures for proposed projects.

Natural Environment

Topography

Lancaster County is located in the Rolling Hills, Valleys, and Plains Topographic Regions. The general topography of the county consists of hilly land with moderate to steep slopes and rounded ridge crests composed mostly of glacial till that has been eroded and mantled by loess. The hills slope towards the Valley regions and gradually flatten near the historic floodplains of creek channels. At the southwest edge of the county, the topography transitions from Rolling Hills to Plains region, the flat land that lies above the valley. Elevations range from a high of 1,520 feet above sea level (asl) in the northwest and southwest part of the county to a low of 1,080 feet asl in the northeast.

Hydrology

Surface water flows in over 400 miles of warm water streams that meander through Lancaster County. Most notably Salt Creek flows from across the county southwest to northeast towards the Platte River. Major Salt Creek tributaries include Middle Creek, Oak Creek, Haines Branch, Beal Slough, and Stevens Creek. Several tributaries of the Nemaha River drain to the southeast in the southeast corner of the county. Many of the streams and their adjoining corridors consist of a variety of floodplain and riparian habitats. The floodplains for these streams account for 13.8% of the land area of the county.

Vegetation

Historically, tallgrass prairies dominated the landscape of Lancaster County; however, only approximately 8,640 acres of native prairie remain and are mostly concentrated in the west-central portion of the county. Forested areas generally occur along stream corridors, within recreational areas, and on city/state properties. Planted trees are also common along residential streets. The Salt Creek basin is designated as a Saline Wetlands biologically unique landscape by the Nebraska Natural Legacy Project's State Wildlife Action Plan (Schneider et al. 2011). Freshwater wetlands occur throughout the county within floodplain depressions, closed depressions, ditch depressions and within stream or riparian corridors. Agricultural land uses surround the City of Lincoln and other urban areas and consist of row crops, pasture, hay land, and other farming operations.

Natural Areas

There are 10 state wildlife management or recreation areas with reservoirs within the county, including Branched Oak, Pawnee, Conestoga Lake, Bluestem, Olive Creek, and Stagecoach. Several other natural areas at the edge of or outside of urban boundaries are managed by the City of Lincoln, Lower Platte South Natural Resources District (LPSNRD), Nebraska Game and Parks Commission (NGPC), and other organizations. These include Pioneers Park, Arbor Lake, Frank Shoemaker Marsh, Marsh Wren, Helmuth Marsh Public Access Area, Nine-Mile Prairie, and several others.

2. RESOURCE ASSESSMENT

METHODOLOGY

For most of the environmental, social, and cultural resources, maps were created in ArcMap to identify potential areas of concern associated with the committed and fiscally constrained projects, as follows: 67 urban roadway, 6 Nebraska Department of Transportation (NDOT) roadway, 1 Railroad Transportation Safety District (RTSD) grade separated crossing, 82 rural roadway, and 29 trail (**Chapter 7**). A few resources required other inventory methods. The ESA boundary for each fiscally constrained roadway (rural and urban areas) and trail project was overlaid onto each resource map to determine potential concerns requiring further investigation. **Table H-1** summarizes the number of projects identified during the resources assessment which are explained further in this Appendix. In general, proposed projects that occur within the future service limit of the City of Lincoln are marked as urban area roadway projects and projects that occur outside the service limit are marked as rural area roadway projects.

Table H-1. Number of Fiscally Constrained and Committed Roadway and Trail Projects Overlapping with Environmental, Social, and Cultural Resources

Resource Reviewed	Rural Area Roadway Projects (Lancaster County)	Urban Area Roadway Projects (Lincoln)	NDOT Roadway Projects	RTSD Project	Trail Projects (Countywide)
Floodplains	51	29	5	0	21
Stream Corridors	43	40	5	0	25
Freshwater Wetlands	59	23	5	0	21
Saline Wetlands	6	1	2	0	4
Northern Long-Eared Bat (and proposed Tricolored Bat)	56	18	5	0	21
Western Prairie Fringed Orchid (and butterfly and bee species proposed for listing)	14	3	1	0	3
Saltwort	13	8	2	0	5
Salt Creek Tiger Beetle	12	2	0	0	3
Salt Creek Tiger Beetle Critical Habitat	3	0	0	0	2
Parks/Open Space	17	37	4	0	18
Trails	9	40	3	0	21
Schools	3	17	1	0	8

Resource Reviewed	Rural Area Roadway Projects (Lancaster County)	Urban Area Roadway Projects (Lincoln)	NDOT Roadway Projects	RTSD Project	Trail Projects (Countywide)
Low Income Populations	5	35	3	1	10
Equity Index – Highest	0	16	0	0	0
Equity Index – Moderate to High	11	8	1	0	11
Equity Index – Moderate	25	16	3	1	12
Equity Index – Low to Moderate	45	14	2	0	6
Equity Index – Lowest	4	4	0	0	0
Historic Sites	4	19	0	0	0
Historic Districts	0	18	0	0	0
Hazardous Materials (Superfund Sites)	14	37	5	1	9

3. NATURAL RESOURCE ASSESSMENTS

The following resource assessments summarize potential impacts needing environmental review for future projects. These resource assessments are based on data from the City of Lincoln/Lancaster County Planning and Development Services Departments utilizing their Natural Resource Geographic Information Systems (NRGIS) dataset (Lincoln-Lancaster County Planning and Development Services Department 2001). The NRGIS dataset was initiated in 2000 to inventory county natural resources and complement a Greenprint Challenge guidance document for Lancaster County and the City of Lincoln (City of Lincoln and Lancaster County 2001).

Water Quality and Watershed Master Plans

The protection of water quality is important because of the need for a reliable drinking water supply, for swimming and recreation, for fish and shellfish consumption, for adequate agricultural production, for fish and wildlife habitat, and other beneficial uses. Clean water is pivotal in the protection of human health and the environment.

Watershed Master Plans were created to provide long-term planning tools and guidance to address water quality, flood management, and stream stability for sustainable urban growth in each major Lancaster County watershed. An important component of water quality management involves monitoring and managing pollutants in stormwater runoff. Stormwater runoff can carry sediment, nutrients, road salts, heavy metals, bacteria, oil, and other pollutants that deteriorate water quality within a watershed or adjacent wetlands.

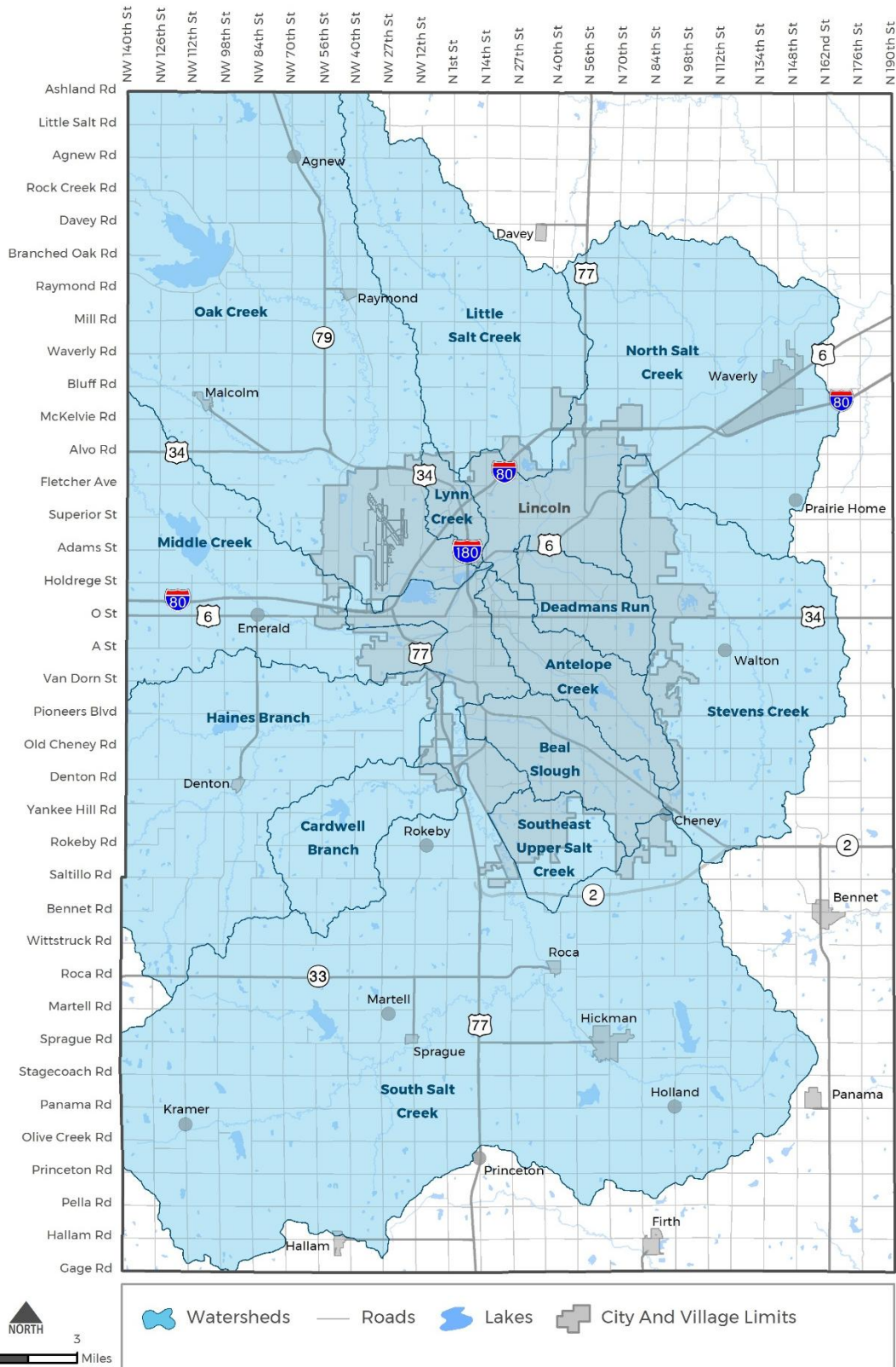
City of Lincoln regulations are in place to address water quality, including post-construction stormwater management, stormwater best management practices, and Stormwater Pollution Prevention Plans (SWPPP) for erosion and sediment control. These regulations were developed to minimize adverse effects of pollutants entering waterways from stormwater runoff associated with the continued development of hard surfaces, such as roads, parking lots, sidewalks, and trails.

The boundary for 13 watershed master plans were provided by the Lincoln City/Lancaster County Planning and Development Services Department (**Figure H-1**). Based on the resource assessment, only 10 roadway and zero trail projects are located outside of a watershed master plan area. The following is a list of the roadway projects outside of watershed master plans.

- 104 (S 120th Street from Bennet Road to 0.5 miles north)
- 118 (Bluff Road from I-80 to N 190th Street)
- 159 (S 148th Street at Yankee Hill Road)
- 166 (S 148th Street at Adams Street)
- 167 (S 148th Street at Havelock Avenue)
- 173 (S 68th Street at Pella Road)
- 189 (N 14th Street at Rock Creek Road)
- 190 (N 14th Street at Agnew Road)
- 278 (Adams Street, 148th to County Line)
- 186 (N 14th Street at Raymond Road)

Additional coordination may be needed to adhere to each watershed master plan. In addition to utilizing the Watershed Master Plans, all future projects would need to develop SWPPP documents for erosion and sediment management.

Figure H-1. Watersheds



Floodplains

Floodplains are defined as the land area adjacent to a stream, river, or other waterbody that is subject to periodic inundation by regular flooding. The floodplain includes the floodway, which consists of the channel and overbank areas, and the flood fringe, which begins at the edge of the floodway and continues outward to the transitional upland fringe. The surface hydrology of floodplains is important because it affects the risk of flooding and flooding can create erosion or sedimentation problems.

To reduce the risk of flooding and flood damage, floodplains are protected by city ordinances, which require a floodplain development permit for construction in the floodplain. A National Pollutant Discharge Elimination System (NPDES) permit is required from the Nebraska Department of Water, Energy, and Environment (NDWEE) for any construction sites greater than 1.0 acre.

Floodplains were identified using Flood Insurance Rate Maps (FIRMs) provided by the Federal Emergency Management Agency (FEMA) (FEMA 2011-2013). These maps identify the base floodplain, which is the area subject to a one percent or greater chance of flooding in any given year (also known as the 100-year flood). Based on the resource assessment, 85 roadway and 21 trail projects are located within the base floodplain (**Table H-2** and **Figure H-2**). These projects may require a floodplain development permit and may be subject to restrictions concerning raises in floodplain surface elevations.

Similar to stream corridors, projects can be designed to avoid or minimize impacts to the base floodplain. Construction grading and future maintenance for trails located in floodplains may require additional consideration due to potential sediment and debris deposit during flood events, movement of the base material due to high water table, and increased vegetative growth. Mitigation may consist of onsite solutions to restore the flood corridor and habitat or offsite solutions to attenuate flood levels or preserve, restore, or establish similar habitat. If unavoidable, changes in floodplain surface elevations within the base floodplain may require submittal of a conditional letter of map revision (CLOMR) to FEMA.

Table H-2. List of Projects Associated with a 100-Year Floodplain

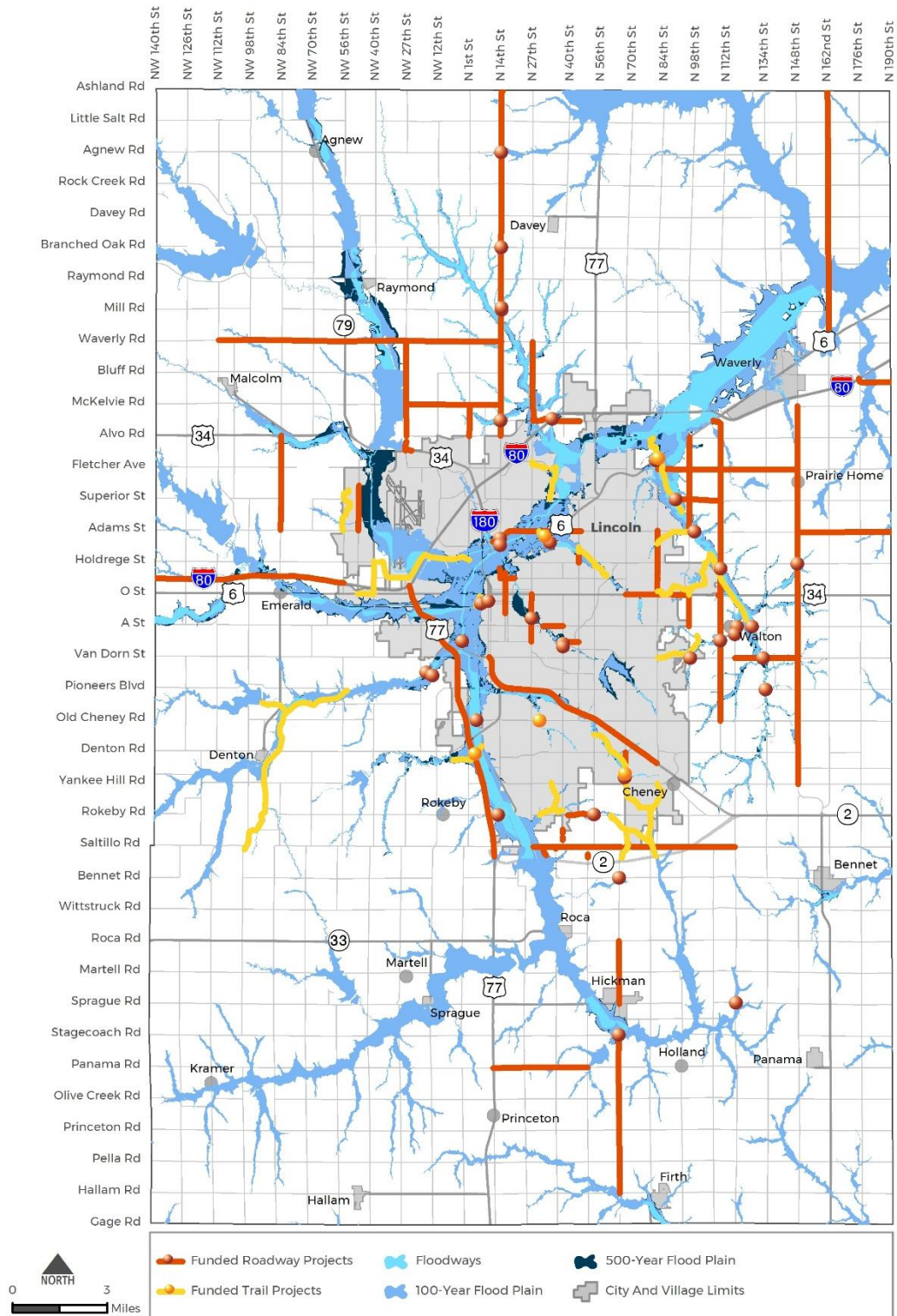
Project ID	Project Roadway / Name (for Trails)	Project Limits	Project Status
2	S 40th Street	Normal Blvd and South Street	Fiscally Constrained
14	NW 48th Street	Adams Street to Cuming Street	Fiscally Constrained
19	O Street (US-34)	Wedgewood Drive to 98th Street	Fiscally Constrained
31	S 70th Street	Pine Lake Road to Yankee Hill Road	Fiscally Constrained
33	N 84th Street	O Street to Adams Street	Fiscally Constrained
37	Cornhusker Hwy (US-6)	N 20th Street to N 33rd Street	Fiscally Constrained
38	Cornhusker Hwy (US-6)	N 11th Street to N 20th Street	Fiscally Constrained
44	O Street (US-34)	84th Street to 120th Street	Fiscally Constrained
68	O Street (US-34)	120th Street to east county line	Fiscally Constrained
71	I-80	Pleasant Dale to NW 56th Street	Committed
72	I-180	I-80 to US-6	Fiscally Constrained
76	West Beltway (US 77)	I-80 to Saltillo Road	Committed

Project ID	Project Roadway / Name (for Trails)	Project Limits	Project Status
82	Nebraska Parkway	S 84th Street to Van Dorn Street	Fiscally Constrained
91	S 68th Street	Hickman to Roca Road	Committed
92	Saltillo Road	S 27th Street to S 68th Street	Committed
94	Havelock Avenue	Stevens Creek to N 112th Street	Fiscally Constrained
95	NW 27th Street	Hwy-34 to W Waverly Road	Fiscally Constrained
96	S 68th Street	Firth Road to Stagecoach Road	Committed
98	S 98th Street	Old Cheney Road to US-34	Committed
99	N 14th Street	Alvo to Ashland	Committed
101	Fletcher Avenue	N 84th Street to N 148th Street	Committed
102	N 98th Street	Holdrege Street to US-6	Fiscally Constrained
105	Arbor Road	N 27th Street to US-77	Fiscally Constrained
109	W Waverly Road	NW 112th Street to NE-79	Fiscally Constrained
110	W Waverly Road	NE-79 to N 14th Street	Fiscally Constrained
111	N 1st Street	Alvo Road to McKelvie Road	Fiscally Constrained
112	N 27th Street	Arbor Road to Waverly Road	Fiscally Constrained
115	Van Dorn Street	S 120th Street to S 148th Street	Fiscally Constrained
116	Panama Road	US-77 to S 54th Street	Fiscally Constrained
117	McKelvie Road	NW 27th Street to N 14th Street	Fiscally Constrained
118	Bluff Road	I-80 to N 190th Street	Fiscally Constrained
130	N 14th Street	Cornhusker Hwy (and N Antelope Valley Pkwy and Oak Creek)	Committed
131	Huntington Avenue	Dead Mans Run	Fiscally Constrained
133	S 27th Street	SE Upper Salt Creek	Fiscally Constrained
134	W South Street	Salt Creek	Fiscally Constrained
138	S 40th Street	Antelope Creek	Fiscally Constrained
139	Rosa Parks Way	K Street and L Street	Fiscally Constrained
143	N 84th Street	Cornhusker Hwy (US-6)	Committed
157	S 148th Street	Yankee Hill Road to O Street	Fiscally Constrained
158	N 148th Street	O Street to McKelvie Road	Fiscally Constrained
165	N 148th Street	Holdrege Street	Committed
171	N 162nd Street	US-6 to Ashland Road	Committed
177	S 68th Street	Stagecoach Road	Fiscally Constrained
180	S 68th Street	Bennett Road	Fiscally Constrained
181	Saltillo Road	S 68th Street to S 120th Street	Fiscally Constrained
182	N 14th Street	Arbor Road	Fiscally Constrained
185	N 14th Street	Mill Road	Fiscally Constrained

Project ID	Project Roadway / Name (for Trails)	Project Limits	Project Status
187	N 14th Street	Branched Oak Road	Fiscally Constrained
190	N 14th Street	Agnew Road	Committed
195	Arbor Road	Bridge F-201 near N 27th Street	Committed
196	N 112th Street	Bridge J-126 near Holdrege Street	Fiscally Constrained
197	Van Dorn Street	Bridge K-37 near S 98th Street	Fiscally Constrained
198	S 56th Street	Bridge P-92 near Rokeby Road	Fiscally Constrained
199	A Street	Bridge J-47 near S 120th Street	Fiscally Constrained
200	S 112th Street	Bridge J-135 near A Street	Fiscally Constrained
201	S 120th Street	Bridge J-138 near A Street	Committed
202	Old Cheney Road	Bridge O-37 near S 1st Street	Fiscally Constrained
203	Van Dorn Street	Bridge J-22 near S 134th Street	Fiscally Constrained
204	Adams Street	Bridge K-123 near N 102nd Street	Fiscally Constrained
205	Havelock Avenue	Bridge K-144 near N 98th Street	Fiscally Constrained
206	SW 16th Street	Bridge O-1 near W Calvert Street	Fiscally Constrained
207	SW 15th Street	Bridge O-140 near W Stockwell Street	Fiscally Constrained
208	Pioneers Blvd	Bridge Q-72 near S 138th Street	Fiscally Constrained
210	A Street	Bridge J-46 near S 134th Street	Fiscally Constrained
216	Adams Street	N 36th Street to N 49th Street	Committed
219	Rokeby Road	Bridge O-44, Yankee Hill S-26, 21-44	Fiscally Constrained
223	N 14th Street	Bridge F-91, Oak W-1	Fiscally Constrained
232	Hickman Road	Bridge R-213, Nemaha S-20	Fiscally Constrained
234	South Beltway Coalition streets	Saltillo Road, S 40th, Jamaica & others	Committed
237	NW 27th Street	Hwy 34	Committed
242	Rokeby Road	Snapdragon to S 52nd St	Committed
243	Rokeby Road	52nd St to 56th St	Committed
246	N 112th Street	O Street to 1/4 mile west	Committed
248	S 70th Street	Bridle Lane	Committed
249	South Street	Normal Blvd to S 48th St	Fiscally Constrained
255	Vine Street	N 14th St to Antelope Valley Pkwy	Fiscally Constrained
256	14th St	Vine St to Salt Creek Roadway	Fiscally Constrained
258	16th Street	F St to X St	Fiscally Constrained
260	A Street	Normal Blvd to S 40th St	Fiscally Constrained
272	S 27th Street	South St to O St	Fiscally Constrained
278	Adams Street	148th to County Line	Fiscally Constrained
279	N 112th Street	O Street (US34) to US 6	Fiscally Constrained
280	NW 84th	W Adams to Alvo Rd (US-34)	Fiscally Constrained

Project ID	Project Roadway / Name (for Trails)	Project Limits	Project Status
282	S 112th Street	Old Cheney to O Street (US-34)	Fiscally Constrained
286	N 48th Street	Holdrege Ave to Leighton Ave	Fiscally Constrained
T-04	Woodlands	Rokeby Rd to S 70th St to Yankee Hill Rd	Fiscally Constrained
T-07	Landmark Fletcher	33rd St & Superior St to 27th St	Fiscally Constrained
T-09	Wilderness Hills	Yankee Hill Rd to Rokeby Rd and S 40th St	Fiscally Constrained
T-11	Waterford	N 84th St to Stevens Creek	Committed
T-13	Cardwell Branch Trail	GPTN Connector to Folsom Trail	Fiscally Constrained
T-18	Deadmans Run Trail	Murdock Trail to Cornhusker Hwy and Railroad grade separation	Fiscally Constrained
T-20	Deadmans Run Trail	N 48th St to Mo Pac Trail	Fiscally Constrained
T-25	S 84th Street Connector	Rokeby Rd to Nebraska Highway 2	Fiscally Constrained
T-27	Greenway Corridor Trail/Haines Branch	Pioneers Park Nature Center to Spring Creek Prairie Audubon Center	Fiscally Constrained
T-28	NW 56th Street Trail	W Adams St to W Superior St	Fiscally Constrained
T-33	Stevens Creek	Murdock trail to Hwy 6	Fiscally Constrained
T-38	Tierra Williamsburg	Old Cheney grade separated crossing	Fiscally Constrained
T-46	Prairie Village Trail	N 84th St to Stevens Creek, South of Adams	Fiscally Constrained
T-47	Van Dorn Trail	S 84th St and Van Dorn to S 106th and MoPac Trail	Fiscally Constrained
T-54	Chris Beutler Trail - Jamaica North Connector	South Haymarket Park to J St/4th St	Fiscally Constrained
T-61	Beal Slough Trail	S 56th St and London Rd to S 70th St and Yankee Hill	Committed
T-74	Oak Creek Trail	Saline Wetlands Nature Center to N 1st St	Fiscally Constrained
T-79	Stevens Creek Trail	Salt Creek Trail to Cornhusker Hwy with grade separation of Cornhusker Hwy	Fiscally Constrained
T-82	Stevens Creek	Waterford Trail to MoPac Trail	Fiscally Constrained
T-84	Lincoln Standing Bear Trail	Rokeby Rd southeast to S 70th St, continue south to just north of Saltillo Rd	Fiscally Constrained
T-85	Oak Creek Trail	NW 40th St Saline Wetlands Nature Center	Fiscally Constrained

Figure H-2. Floodplains



Stream Corridors

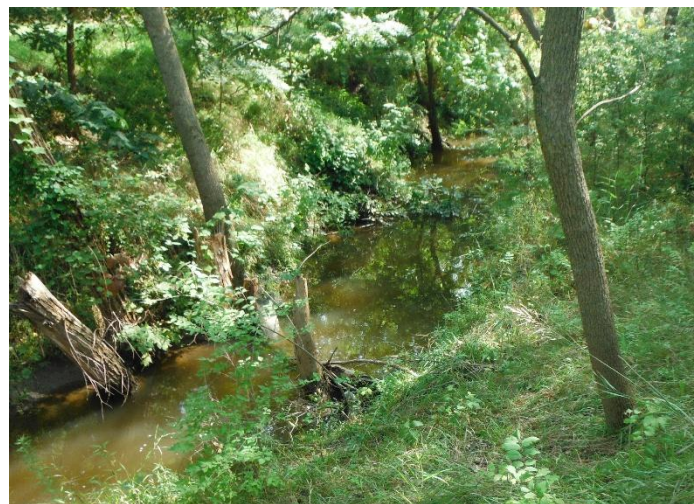
Stream corridors consist of the waterway, its floodplain, and the transitional upland fringe. The corridors generally include diverse habitat types which are supported by a close connection to the hydrology of the waterway. Stream corridors also provide floodwater attenuation and improve water quality by filtering runoff and collecting sediment before it enters the waterway.

Stream corridor ecosystems can be important to wildlife because they provide water, shelter, a source of food, and connections to other habitat areas, especially in the areas surrounding Little Salt Creek where the federally endangered Salt Creek tiger beetle (*Cicindela nevadica lincolniana*) and state endangered saltwort (*Salicornia rubra*) occur.

The City of Lincoln has a building code regulation that limits the placement of buildings or fill within a 60-ft buffer surrounding drainageways (i.e., streams or creeks) and is referred to as the “minimum flood corridor” (LMC Ordinance 26.07.126). Stream channels are also protected under the Clean Water Act which requires compliance with Section 404 regulations for excavation or fill activities.

Stream corridors were identified using the National Hydrography Dataset which is available online (USGS 2020). For this resource review, a 60-ft buffer area was created along all streams within the 3-mile Extraterritorial Jurisdiction (ETJ) of the City of Lincoln to identify the “minimum flood corridor”. Based on the resource assessment, 88 roadway and 25 trail projects cross streams and/or occur within the minimum flood corridor (**Table H-3** and **Figure H-3**).

Project constraints or resource impacts associated with stream corridors would be reduced through avoidance, minimization, and mitigation measures. Project designs would be developed to avoid or minimize fill within the “minimum flood corridor” and to lessen disturbance within the natural habitat. If impacts cannot be avoided or minimized, then mitigation would be developed. Mitigation may consist of on-site solutions to restore the flood corridor and habitat, or off-site solutions to attenuate flood levels or preserve, restore, or establish similar habitat. NDWEE guidelines may require a 30-ft vegetated buffer along impacted channels and be planted with perennial, native species. Impacts to stream channels or wetlands within the corridor would require Section 404 permitting, which also contribute to mitigating or offsetting adverse impacts.



Stream in southeast Lincoln near the Fiscally Constrained Trail Project, Beal Slough Trail (T-61)

Table H-3. List of Projects Associated with a Stream Corridor

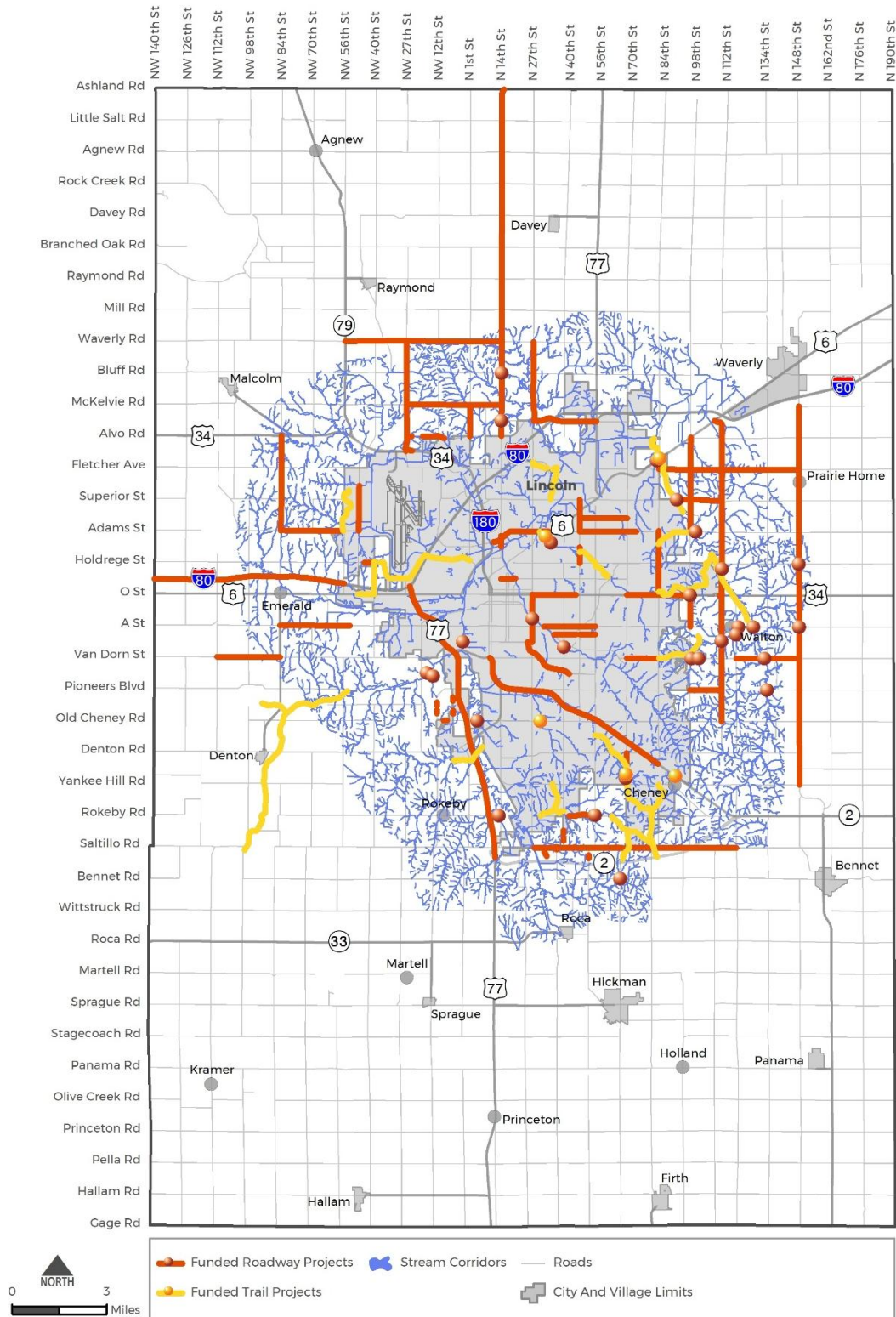
Project ID	Project Roadway / Name (for Trails)	Project Limits	Project Status
12	NW 40th Street	W Holdrege Street to W Vine Street	Fiscally Constrained
14	NW 48th Street	Adams Street to Cuming Street	Fiscally Constrained
19	O Street (US-34)	Wedgewood Drive to 98th Street	Fiscally Constrained
31	S 70th Street	Pine Lake Road to Yankee Hill Road	Fiscally Constrained
32	O Street (US-34)	Antelope Valley N/S Rdwy. (19th St.) to 46th Street	Fiscally Constrained
33	N 84th Street	O Street to Adams Street	Fiscally Constrained
37	Cornhusker Hwy (US-6)	N 20th Street to N 33rd Street	Fiscally Constrained
38	Cornhusker Hwy (US-6)	N 11th Street to N 20th Street	Fiscally Constrained
40	Van Dorn Street	S 70th Street to S 84th Street	Fiscally Constrained
41	N 48th Street	Adams Street to Superior Street	Fiscally Constrained
44	O Street (US-34)	84th Street to 120th Street	Fiscally Constrained
68	O Street (US-34)	120th Street to east county line	Fiscally Constrained
71	I-80	Pleasant Dale to NW 56th Street	Committed
72	I-180	I-80 to US-6	Fiscally Constrained
76	West Beltway (US 77)	I-80 to Saltillo Road	Committed
82	Nebraska Parkway	S 84th Street to Van Dorn Street	Fiscally Constrained
92	Saltillo Road	S 27th Street to S 68th Street	Committed
94	Havelock Avenue	Stevens Creek to N 112th Street	Fiscally Constrained
95	NW 27th Street	Hwy-34 to W Waverly Road	Fiscally Constrained
98	S 98th Street	Old Cheney Road to US-34	Committed
99	N 14th Street	Alvo to Ashland	Committed
101	Fletcher Avenue	N 84th Street to N 148th Street	Committed
102	N 98th Street	Holdrege Street to US-6	Fiscally Constrained
103	W Van Dorn Street	SW 112th Street to SW 84th Street	Fiscally Constrained
105	Arbor Road	N 27th Street to US-77	Fiscally Constrained
110	W Waverly Road	NE-79 to N 14th Street	Fiscally Constrained
111	N 1st Street	Alvo Road to McKelvie Road	Fiscally Constrained
112	N 27th Street	Arbor Road to Waverly Road	Fiscally Constrained
114	W Adams Street	NW 84th Street to NW 56th Street	Fiscally Constrained
115	Van Dorn Street	S 120th Street to S 148th Street	Fiscally Constrained

Project ID	Project Roadway / Name (for Trails)	Project Limits	Project Status
117	McKelvie Road	NW 27th Street to N 14th Street	Fiscally Constrained
121	A Street	S 40th Street to S 56th Street	Committed
130	N 14th Street	Cornhusker Hwy (and N Antelope Valley Pkwy and Oak Creek)	Committed
131	Huntington Avenue	Dead Mans Run	Fiscally Constrained
133	S 27th Street	SE Upper Salt Creek	Fiscally Constrained
134	W South Street	Salt Creek	Fiscally Constrained Fiscally Constrained
138	S 40th Street	Antelope Creek	Fiscally Constrained
143	N 84th Street	Cornhusker Hwy (US-6)	Committed
148	O Street (US-34)	98th Street	Fiscally Constrained
157	S 148th Street	Yankee Hill Road to O Street	Fiscally Constrained
158	N 148th Street	O Street to McKelvie Road	Fiscally Constrained
164	S 148th Street	A Street	Fiscally Constrained
165	N 148th Street	Holdrege Street	Committed
180	S 68th Street	Bennett Road	Fiscally Constrained
181	Saltillo Road	S 68th Street to S 120th Street	Fiscally Constrained
182	N 14th Street	Arbor Road	Fiscally Constrained
183	N 14th Street	Bluff Road	Fiscally Constrained
196	N 112th Street	Bridge J-126 near Holdrege Street	Fiscally Constrained
197	Van Dorn Street	Bridge K-37 near S 98th Street	Fiscally Constrained
198	S 56th Street	Bridge P-92 near Rokeby Road	Fiscally Constrained
199	A Street	Bridge J-47 near S 120th Street	Fiscally Constrained
200	S 112th Street	Bridge J-135 near A Street	Fiscally Constrained
201	S 120th Street	Bridge J-138 near A Street	Committed
202	Old Cheney Road	Bridge O-37 near S 1st Street	Fiscally Constrained
203	Van Dorn Street	Bridge J-22 near S 134th Street	Fiscally Constrained
204	Adams Street	Bridge K-123 near N 102nd Street	Fiscally Constrained
205	Havelock Avenue	Bridge K-144 near N 98th Street	Fiscally Constrained
206	SW 16th Street	Bridge O-1 near W Calvert Street	Fiscally Constrained
207	SW 15th Street	Bridge O-140 near W Stockwell Street	Fiscally Constrained
208	Pioneers Blvd	Bridge Q-72 near S 138th Street	Fiscally Constrained
210	A Street	Bridge J-46 near S 134th Street	Fiscally Constrained

Project ID	Project Roadway / Name (for Trails)	Project Limits	Project Status
219	Rokeby Road	Bridge O-44, Yankee Hill S-26, 21-44	Fiscally Constrained
234	South Beltway Coalition streets	Saltillo Road, S 40th, Jamaica & others	Committed
235	Southwest Village Heights	Folsom, SW 12th & W Old Cheney	Committed
236	W Alvo Road	NW 19th to Tallgrass Parkway	Committed
237	NW 27th Street	Hwy 34	Committed
239	W Holdrege Street	NW 40th St to 1/2 mile west	Committed
241	Van Dorn St	S 104th	Committed
242	Rokeby Road	Snapdragon to S 52nd St	Committed
243	Rokeby Road	52nd St to 56th St	Committed
244	NW 27th Street	Alvo Road	Committed
246	N 112th Street	O Street to 1/4 mile west	Committed
247	Arbor Road	N 56th Street to 1/2 mile west	Committed
248	S 70th Street	Bridle Lane	Committed
251	Fallbrook Road	Super Saver (entrance at Hwy 34)	Fiscally Constrained
252	Fremont Street	N 48th St to N 70th St	Fiscally Constrained
255	Vine Street	N 14th St to Antelope Valley Pkwy	Fiscally Constrained
260	A Street	Normal Blvd to S 40th St	Fiscally Constrained
262	Adams Street	49th St (east of) to 75th St	Fiscally Constrained
264	Sheridan Blvd	Calvert St to South St	Fiscally Constrained
266	Sumner Street	Normal St to Cotner and 48th St to 56th St	Fiscally Constrained
272	S 27th Street	South St to O St	Fiscally Constrained
279	N 112th Street	O Street (US34) to US 6	Fiscally Constrained
280	NW 84th	W Adams to Alvo Rd (US-34)	Fiscally Constrained
281	Pioneers Blvd	98th to 112th	Fiscally Constrained
282	S 112th Street	Old Cheney to O Street (US-34)	Fiscally Constrained
284	W A Street	RR Tracks to SW 84th	Fiscally Constrained
286	N 48th Street	Holdrege Ave to Leighton Ave	Fiscally Constrained
T-03	Woodlands	Jensen Park to Rokeby Rd	Fiscally Constrained
T-04	Woodlands	Rokeby Rd to S 70th St to Yankee Hill Rd	Fiscally Constrained
T-07	Landmark Fletcher	33rd St & Superior St to 27th St	Fiscally Constrained
T-09	Wilderness Hills	Yankee Hill Rd to Rokeby Rd and S 40th St	Fiscally Constrained

Project ID	Project Roadway / Name (for Trails)	Project Limits	Project Status
T-11	Waterford	N 84th St to Stevens Creek	Committed
T-13	Cardwell Branch Trail	GPTN Connector to Folsom Trail	Fiscally Constrained
T-18	Deadmans Run Trail	Murdock Trail to Cornhusker Hwy and Railroad grade separation	Fiscally Constrained
T-20	Deadmans Run Trail	N 48th St to Mo Pac Trail	Fiscally Constrained
T-25	S 84th Street Connector	Rokeby Rd to Nebraska Highway 2	Fiscally Constrained
T-27	Greenway Corridor Trail/Haines Branch	Pioneers Park Nature Center to Spring Creek Prairie Audubon Center	Fiscally Constrained
T-28	NW 56th Street Trail	W Adams St to W Superior St	Fiscally Constrained
T-30	W O Street	SW 40th St to SW 48th St	Committed
T-33	Stevens Creek	Murdock trail to Hwy 6	Fiscally Constrained
T-38	Tierra Williamsburg	Old Cheney grade separated crossing	Fiscally Constrained
T-40	S 91st Street Trail	Nebraska Pkwy grade separated crossing	Fiscally Constrained
T-46	Prairie Village Trail	N 84th St to Stevens Creek, South of Adams	Fiscally Constrained
T-47	Van Dorn Trail	S 84th St and Van Dorn to S 106th and MoPac Trail	Fiscally Constrained
T-61	Beal Slough Trail	S 56th St and London Rd to S 70th St and Yankee Hill	Committed
T-74	Oak Creek Trail	Saline Wetlands Nature Center to N 1st St	Fiscally Constrained
T-79	Stevens Creek Trail	Salt Creek Trail to Cornhusker Hwy with grade separation of Cornhusker Hwy	Fiscally Constrained
T-82	Stevens Creek	Waterford Trail to MoPac Trail	Fiscally Constrained
T-83	S 70th Street	Carger Lane to Nebraska Highway 2	Fiscally Constrained
T-84	Lincoln Standing Bear Trail	Rokeby Rd southeast to S 70th St, continue south to just north of Saltillo Rd	Fiscally Constrained
T-85	Oak Creek Trail	NW 40th St Saline Wetlands Nature Center	Fiscally Constrained
T-86	NW 40th St Connector	O St to Holdrege St	Fiscally Constrained

Figure H-3. Stream Corridors (within 3-mile ETJ)



Freshwater and Saline Wetlands

Wetlands are defined as “those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (33 CFR 328). Wetlands and riparian areas are important because they provide habitat for plants, fish, and wildlife; serve as groundwater recharge areas; provide storage areas for storm and flood waters; serve as natural water filtration areas; and provide protection from wave action, erosion, and storm damage.

Eastern Nebraska saline wetlands are found only in Lancaster and southern Saunders counties and are categorized as a measure of their functionality and restoration potential (**Table H-4**). Saline wetlands are unique in that they support salt-adapted plant communities and provide habitat for the federally endangered Salt Creek tiger beetle and state endangered saltwort. Saline wetlands were historically present along the terraces of Salt Creek and its tributaries but have been greatly reduced due to urban development, agriculture, and flood control projects along Salt Creek and its tributaries.

Table H-4. Saline Wetland Categorization

Category	Description
I	These wetlands support salt-loving plants, occur on saline soils, and have high value saline wetland functions or the potential to provide high values following restoration or enhancement measures.
II	These wetlands occur on saline soils but are significantly disturbed or degraded by adjacent land use or altered hydrology. Salt-loving plants may occur as part of the site’s flora, but the degree of degradation would not allow restoration to a higher quality saline character.
III	These wetlands occur on saline soils but support freshwater vegetation. These sites represent former saline wetlands that had an influx of freshwater runoff due to urban or agricultural modifications within the watershed, thus diluting soil salt concentrations.
IV	These freshwater wetlands on non-saline soils occur within the saline wetland study area boundary (additional freshwater wetlands are mapped separately).

All wetlands are protected under Title 117 of the Nebraska Administrative Code as implemented by NDWEE and wetlands meeting the definitions for Waters of the U.S. in the Navigable Waters Projection Rule are protected by Section 404 of the Clean Water Act by the U.S. Army Corps of Engineers (USACE).

Wetlands were identified using the National Wetland Inventory (NWI) (USFWS 2021c), supplemented by NRGIS dataset. Freshwater and saline wetlands were mapped separately because mitigation requirements are often greater for saline wetlands. Based on the resource assessment, 87 roadway and 21 trail projects would cross freshwater wetlands (**Table H-5** and **Figure H-4**), and 9 roadway and 4 trail projects would cross saline wetlands (**Table H-5** and **Figure H-5**). These projects may require a Section 404 permit and may be subject to restrictions concerning temporary and permanent wetland impacts. Similar to stream corridors and floodplains, project designs would be developed to avoid or minimize impacts to wetlands.

If permanent impacts to wetlands are unavoidable and greater than 0.1 acre, then compensatory mitigation may be required with a Section 404 permit issued by USACE, and potentially Water Quality Certification by NDWEE. Compensatory mitigation may be required at a 2:1 or higher ratio depending on the type and quality of wetland

being impacted. Impacts to saline wetlands would require higher mitigation ratios, especially for Category I saline wetlands (Taylor and Krueger 1997).

Table H-5. List of Projects Associated with Freshwater and Saline Wetlands

Project ID	Project Roadway / Name (for Trails)	Project Limits	Project Status	Wetland Category
14	NW 48th Street	Adams Street to Cuming Street	Fiscally Constrained	Freshwater
19	O Street (US-34)	Wedgewood Drive to 98th Street	Fiscally Constrained	Freshwater
31	S 70th Street	Pine Lake Road to Yankee Hill Road	Fiscally Constrained	Freshwater
33	N 84th Street	O Street to Adams Street	Fiscally Constrained	Freshwater
37	Cornhusker Hwy (US-6)	N 20th Street to N 33rd Street	Fiscally Constrained	Freshwater & Saline
40	Van Dorn Street	S 70th Street to S 84th Street	Fiscally Constrained	Freshwater
44	O Street (US-34)	84th Street to 120th Street	Fiscally Constrained	Freshwater
68	O Street (US-34)	120th Street to east county line	Fiscally Constrained	Freshwater
71	I-80	Pleasant Dale to NW 56th Street	Committed	Freshwater
72	I-180	I-80 to US-6	Fiscally Constrained	Freshwater & Saline
76	West Beltway (US 77)	I-80 to Saltillo Road	Committed	Freshwater & Saline
82	Nebraska Parkway	S 84th Street to Van Dorn Street	Fiscally Constrained	Freshwater
91	S 68th Street	Hickman to Roca Road	Committed	Freshwater
92	Saltillo Road	S 27th Street to S 68th Street	Committed	Freshwater
94	Havelock Avenue	Stevens Creek to N 112th Street	Fiscally Constrained	Freshwater
95	NW 27th Street	Hwy-34 to W Waverly Road	Fiscally Constrained	Freshwater
96	S 68th Street	Firth Road to Stagecoach Road	Committed	Freshwater
98	S 98th Street	Old Cheney Road to US-34	Committed	Freshwater
99	N 14th Street	Alvo to Ashland	Committed	Freshwater & Saline
101	Fletcher Avenue	N 84th Street to N 148th Street	Committed	Freshwater
102	N 98th Street	Holdrege Street to US-6	Fiscally Constrained	Freshwater
103	W Van Dorn Street	SW 112th Street to SW 84th Street	Fiscally Constrained	Freshwater
105	Arbor Road	N 27th Street to US-77	Fiscally Constrained	Freshwater
107	W Van Dorn Street	SW 140th Street to SW 112th Street	Fiscally Constrained	Freshwater
109	W Waverly Road	NW 112th Street to NE-79	Fiscally Constrained	Freshwater

Project ID	Project Roadway / Name (for Trails)	Project Limits	Project Status	Wetland Category
110	W Waverly Road	NE-79 to N 14th Street	Fiscally Constrained	Freshwater
111	N 1st Street	Alvo Road to McKelvie Road	Fiscally Constrained	Freshwater
112	N 27th Street	Arbor Road to Waverly Road	Fiscally Constrained	Freshwater & Saline
114	W Adams Street	NW 84th Street to NW 56th Street	Fiscally Constrained	Freshwater
115	Van Dorn Street	S 120th Street to S 148th Street	Fiscally Constrained	Freshwater
116	Panama Road	US-77 to S 54th Street	Fiscally Constrained	Freshwater
117	McKelvie Road	NW 27th Street to N 14th Street	Fiscally Constrained	Freshwater
118	Bluff Road	I-80 to N 190th Street	Fiscally Constrained	Freshwater & Saline
130	N 14th Street	Cornhusker Hwy (and N Antelope Valley Pkwy and Oak Creek)	Committed	Freshwater
131	Huntington Avenue	Dead Mans Run	Fiscally Constrained	Freshwater
133	S 27th Street	SE Upper Salt Creek	Fiscally Constrained	Freshwater
134	W South Street	Salt Creek	Fiscally Constrained	Freshwater
138	S 40th Street	Antelope Creek	Fiscally Constrained	Freshwater
143	N 84th Street	Cornhusker Hwy (US-6)	Committed	Freshwater
157	S 148th Street	Yankee Hill Road to O Street	Fiscally Constrained	Freshwater
158	N 148th Street	O Street to McKelvie Road	Fiscally Constrained	Freshwater
160	S 148th Street	Pine Lake Road	Fiscally Constrained	Freshwater
162	S 148th Street	Pioneers Boulevard	Fiscally Constrained	Freshwater
168	N 148th Street	Fletcher Avenue	Committed	Freshwater
171	N 162nd Street	US-6 to Ashland Road	Committed	Freshwater & Saline
179	S 68th Street	Wittstruck Road	Fiscally Constrained	Freshwater
180	S 68th Street	Bennett Road	Fiscally Constrained	Freshwater
181	Saltillo Road	S 68th Street to S 120th Street	Fiscally Constrained	Freshwater
182	N 14th Street	Arbor Road	Fiscally Constrained	Freshwater
183	N 14th Street	Bluff Road	Fiscally Constrained	Freshwater
185	N 14th Street	Mill Road	Fiscally Constrained	Freshwater
187	N 14th Street	Branched Oak Road	Fiscally Constrained	Freshwater
189	N 14th Street	Rock Creek Road	Fiscally Constrained	Freshwater
190	N 14th Street	Agnew Road	Committed	Freshwater

Project ID	Project Roadway / Name (for Trails)	Project Limits	Project Status	Wetland Category
196	N 112th Street	Bridge J-126 near Holdrege Street	Fiscally Constrained	Freshwater
197	Van Dorn Street	Bridge K-37 near S 98th Street	Fiscally Constrained	Freshwater
198	S 56th Street	Bridge P-92 near Rokeby Road	Fiscally Constrained	Freshwater
199	A Street	Bridge J-47 near S 120th Street	Fiscally Constrained	Freshwater
200	S 112th Street	Bridge J-135 near A Street	Fiscally Constrained	Freshwater
201	S 120th Street	Bridge J-138 near A Street	Committed	Freshwater
202	Old Cheney Road	Bridge O-37 near S 1st Street	Fiscally Constrained	Freshwater
203	Van Dorn Street	Bridge J-22 near S 134th Street	Fiscally Constrained	Freshwater
204	Adams Street	Bridge K-123 near N 102nd Street	Fiscally Constrained	Freshwater
205	Havelock Avenue	Bridge K-144 near N 98th Street	Fiscally Constrained	Freshwater
206	SW 16th Street	Bridge O-1 near W Calvert Street	Fiscally Constrained	Freshwater
208	Pioneers Blvd	Bridge Q-72 near S 138th Street	Fiscally Constrained	Freshwater
210	A Street	Bridge J-46 near S 134th Street	Fiscally Constrained	Freshwater
219	Rokeby Road	Bridge O-44, Yankee Hill S-26, 21-44	Fiscally Constrained	Freshwater
223	N 14th Street	Bridge F-91, Oak W-1	Fiscally Constrained	Freshwater
232	Hickman Road	Bridge R-213, Nemaha S-20	Fiscally Constrained	Freshwater
234	South Beltway Coalition streets	Saltillo Road, S 40th, Jamaica & others	Committed	Freshwater
236	W Alvo Road	NW 19th to Tallgrass Parkway	Committed	Freshwater
242	Rokeby Road	Snapdragon to S 52nd St	Committed	Freshwater
243	Rokeby Road	52nd St to 56th St	Committed	Freshwater
244	NW 27th Street	Alvo Road	Committed	Freshwater
246	N 112th Street	O Street to 1/4 mile west	Committed	Freshwater
247	Arbor Road	N 56th Street to 1/2 mile west	Committed	Freshwater
248	S 70th Street	Bridle Lane	Committed	Freshwater
272	S 27th Street	South St to O St	Fiscally Constrained	Freshwater
278	Adams Street	148th to County Line	Fiscally Constrained	Freshwater
279	N 112th Street	O Street (US34) to US 6	Fiscally Constrained	Freshwater & Saline
280	NW 84th	W Adams to Alvo Rd (US-34)	Fiscally Constrained	Freshwater
281	Pioneers Blvd	98th to 112th	Fiscally Constrained	Freshwater
282	S 112th Street	Old Cheney to O Street (US-34)	Fiscally Constrained	Freshwater

Project ID	Project Roadway / Name (for Trails)	Project Limits	Project Status	Wetland Category
283	N 176th	O Street to Holdrege	Fiscally Constrained	Freshwater
284	W A Street	RR Tracks to SW 84th	Fiscally Constrained	Freshwater & Saline
286	W A Street	RR Tracks to SW 84th	Fiscally Constrained	Freshwater
T-03	Woodlands	Jensen Park to Rokeby Rd	Fiscally Constrained	Freshwater
T-04	Woodlands	Rokeby Rd to S 70th St to Yankee Hill Rd	Fiscally Constrained	Freshwater & Saline
T-07	Landmark Fletcher	33rd St & Superior St to 27th St	Fiscally Constrained	Freshwater
T-09	Wilderness Hills	Yankee Hill Rd to Rokeby Rd and S 40th St	Fiscally Constrained	Freshwater
T-11	Waterford	N 84th St to Stevens Creek	Committed	Freshwater
T-13	Cardwell Branch Trail	GPTN Connector to Folsom Trail	Fiscally Constrained	Freshwater
T-18	Deadmans Run Trail	Murdock Trail to Cornhusker Hwy and Railroad grade separation	Fiscally Constrained	Freshwater
T-20	Deadmans Run Trail	N 48th St to Mo Pac Trail	Fiscally Constrained	Freshwater
T-25	S 84th Street Connector	Rokeby Rd to Nebraska Highway 2	Fiscally Constrained	Freshwater
T-27	Greenway Corridor Trail/Haines Branch	Pioneers Park Nature Center to Spring Creek Prairie Audubon Center	Fiscally Constrained	Saline
T-28	NW 56th Street Trail	W Adams St to W Superior St	Fiscally Constrained	Freshwater
T-30	W O Street	SW 40th St to SW 48th St	Committed	Freshwater
T-33	Stevens Creek	Murdock trail to Hwy 6	Fiscally Constrained	Freshwater
T-38	Tierra Williamsburg	Old Cheney grade separated crossing	Fiscally Constrained	Freshwater
T-46	Prairie Village Trail	N 84th St to Stevens Creek, South of Adams	Fiscally Constrained	Freshwater
T-47	Van Dorn Trail	S 84th St and Van Dorn to S 106th and MoPac Trail	Fiscally Constrained	Freshwater
T-61	Beal Slough Trail	S 56th St and London Rd to S 70th St and Yankee Hill	Committed	Freshwater
T-74	Oak Creek Trail	Saline Wetlands Nature Center to N 1st St	Fiscally Constrained	Saline
T-79	Stevens Creek Trail	Salt Creek Trail to Cornhusker Hwy with grade separation of Cornhusker Hwy	Fiscally Constrained	Freshwater

Project ID	Project Roadway / Name (for Trails)	Project Limits	Project Status	Wetland Category
T-82	Stevens Creek	Waterford Trail to MoPac Trail	Fiscally Constrained	Freshwater
T-83	S 70th Street	Carger Lane to Nebraska Highway 2	Fiscally Constrained	Freshwater
T-84	Lincoln Standing Bear Trail	Rokeby Rd southeast to S 70th St, continue south to just north of Saltillo Rd	Fiscally Constrained	Freshwater
T-85	Oak Creek Trail	NW 40th St Saline Wetlands Nature Center	Fiscally Constrained	Saline
T-86	NW 40th St Connector	O St to Holdrege St	Fiscally Constrained	Freshwater



Saline wetland at Arbor Lake northeast of the City of Lincoln, east of the North 27th Street project from Arbor Road to Waverly Road (Project ID 112).

Figure H-4. Freshwater Wetlands

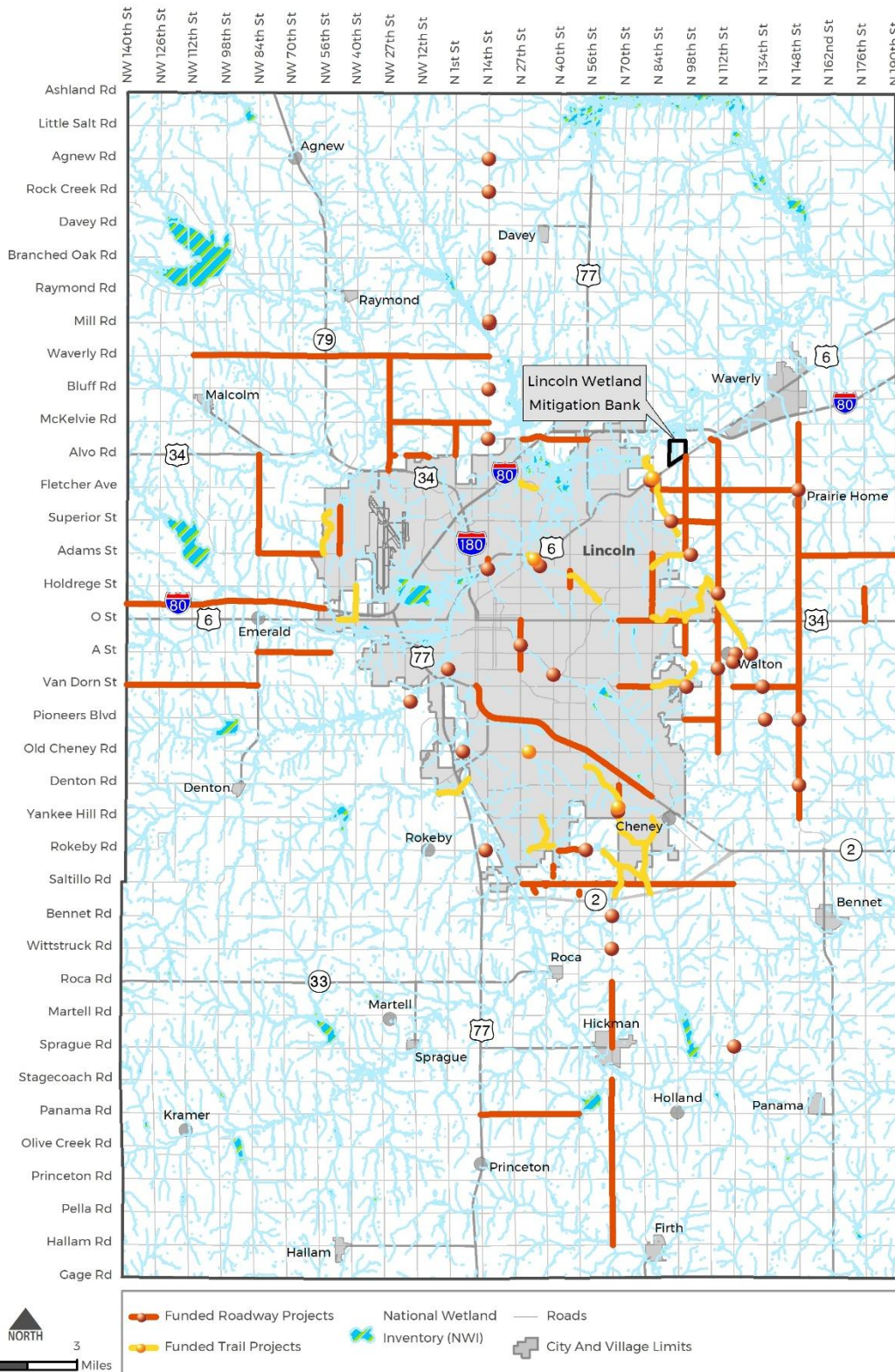
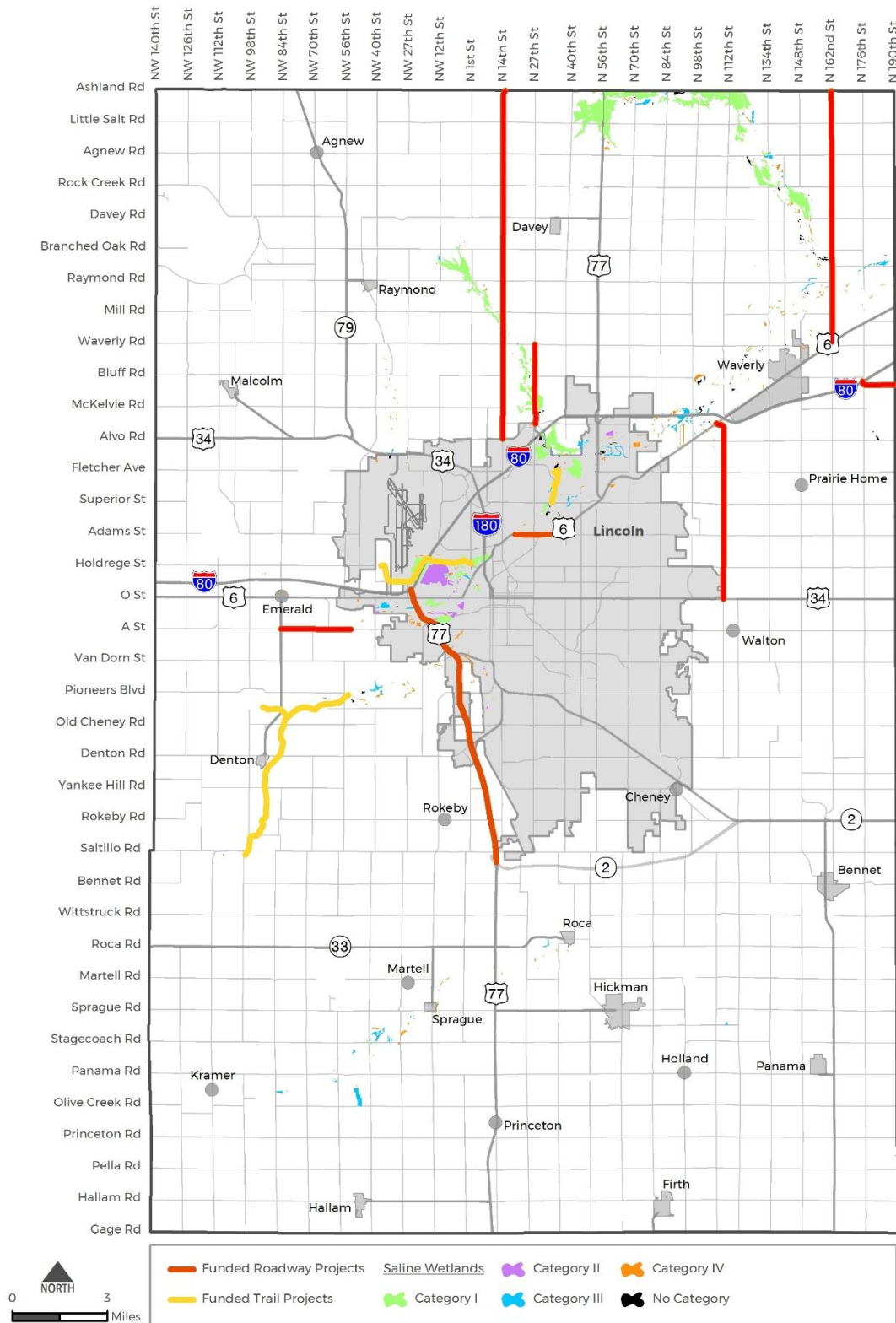


Figure H-5. Saline Wetlands



Compensatory Mitigation: City of Lincoln Wetland Mitigation Bank

The City of Lincoln currently owns a wetland mitigation bank to provide compensatory mitigation offset through credits, as sometimes required by Section 404 permits issued by USACE, and Water Quality Certification requirements by NDWEE. The current bank has available credits for multiple types of freshwater and saline wetlands (**Figure H-6**), per the USACE Regulatory In-lieu Fee and Bank Information Tracking System (RIBITS) website (accessed 9/2/2026). These credits are available for use by the City of Lincoln, as a single-client type of bank and the service area includes all of Lancaster County. Additional wetland banks located in Lancaster County are listed below:

- Blue Heron (owned by Lower Platte South NRD, credits for wetlands, combination public/private use)
- Hobson Yard (owned by Burlington Northern Railroad, credits for freshwater and saline wetlands plus upland buffer, single-client use)
- Rock Creek (owned by NDOT, credits for freshwater and saline wetlands, single-client use)
- Sampson (owned by Sam Sampson, credits wetlands, combination public/private use, service area does not include the south and southeastern edges of Lancaster County)
- Waverly (owned by NDOT, credits for wetlands, single-client use)

These compensatory mitigation banks lack credits for stream impacts and may be a future need depending on the regulatory status and definition of Waters of the United Status (WOTUS). When compensatory mitigation is required, stream impacts are often mitigated through on-site permittee-responsible mitigation with restoration plans included as part of the project.

**Figure H-6. Summary of Available and Withdrawn Credits at
City of Lincoln Wetland Mitigation Bank**

Credit Ledger Summary						
Last Transaction: Jan 14,2025						
ATTENTION						
Credit reservations and pending transactions are NOT reflected in the Available Credits total. Potential purchasers MUST contact the Sponsor to verify credit availability.						
Credit Classification	Jurisdiction	Available Credits	Withdrawn Credits	Released Credits	Potential Credits	Percent Released
Wetland						
Saline Wetland Category I	Federal	17.407	.193	17.6	0	-
Saline Wetland Category IV	Federal	116.6162	25.6838	142.3	178.6	79.7%
Saline Wetland Category IV (PEMF/POW)	Federal	2.308	1.892	4.2	0	-
Saline Wetland Category IV (PFOA/PSSA)	Federal	13.1549	1.3451	14.5	0	-

Threatened and Endangered Species

Endangered species are plants or animals that are in danger of extinction throughout all or a significant portion of their range; threatened species are likely to become endangered within the foreseeable future. Conservation of threatened and endangered (T & E) species and their habitats help maintain the diversity and functioning of natural areas. T & E species are protected by the Endangered Species Act and the Nebraska Nongame and Endangered Species Conservation Act, which are administered by U.S. Fish and Wildlife Service (USFWS) and NGPC, respectively. Information on the potential presence of T & E species and their habitat was collected using the Conservation and Environmental Review Tool (CERT) (NGPC 2021) and the Information for Planning and Conservation (IPaC) website (USFWS 2021a).

Table H-6 identifies seven species listed as potentially occurring in Lancaster County or as having the potential to be adversely impacted by project activities. Only four of the species listed in **Table H-6** have mapped ranges extending into Lancaster County. Suitable habitat within a designated range may be limited. For example, the ranges of the northern long-eared bat and western prairie fringed orchid cover all of Lancaster County; therefore, the resource assessment would have indicated that all of the roadway and trail projects occur within the ranges of those two species. However, the northern long-eared bat would likely only occur in areas with tree masses and low urban development, whereas the western prairie fringed orchid would likely only occur in rural areas with native prairie or wet meadows. Therefore, the potential habitats for northern long-eared bats and western prairie fringed orchids are further described in the subsections below relative to tree masses and native prairie. The designated range for the eastern black rail includes the entire state of Nebraska, but is an occasional migrant in Nebraska, which is why it was not separately evaluated within the project review process.

Within the Platte River basin, depletions may adversely affect piping plover and pallid sturgeon in downstream habitats. These effects must be considered even outside occupied range. Conservation measures are generally required by permitting agencies (such as NDOT, NDWEE, and NGPC) to avoid or minimize potential depletions of groundwater associated with the Platte River, which could indirectly reduce the quality or amount of suitable habitat for the piping plover or pallid sturgeon.

Each project utilizing federal-aid funds would be evaluated for potential T & E presence using the Nebraska Biological Evaluation Process (NDOT 2023) to ensure that proper conservation measures are incorporated into the project planning and design to avoid and minimize impacts to T & E species or their habitat. If impacts are not sufficiently mitigated with the use of conservation measures, then further consultation with NGPC and USFWS would be required. When possible, trails would be located outside of sensitive habitats to avoid impacting T & E species. If design and planning considerations involve T & E conservation, then trails can provide educational signage and increase awareness.

Table H-6. Threatened and Endangered Species Listed in Lancaster County

Category	Common Name (Scientific Name)	Status*	Suitable Habitat within Lancaster County**
Birds	Eastern black rail (<i>Laterallus jamaicensis</i>)	FT, ST	Yes
	Piping plover (<i>Charadrius melodus</i>)	FT, ST	No
Fishes	Pallid sturgeon (<i>Scaphirhynchus albus</i>)	FE, SE	No
Invertebrates	Salt Creek tiger beetle (<i>Cicindela nevadica lincolniana</i>)	FE, SE	Yes
Mammals	Northern long-eared bat (<i>Myotis septentrionalis</i>)	FE, SE	Yes
	Saltwort (<i>Salicornia rubra</i>)	SE	Yes
Plants	Western prairie fringed orchid (<i>Platanthera praeclara</i>)	FT, ST	Yes

*FE = Federally Endangered, FT = Federally Threatened, SE = State Endangered, ST = State Threatened

**Ranges were provided by Nebraska Game and Parks Commission (NGPC 2023).



Saltwort growing in salt flats north of the Arbor Road, North 27th Street to US-77 project (Project ID 105).

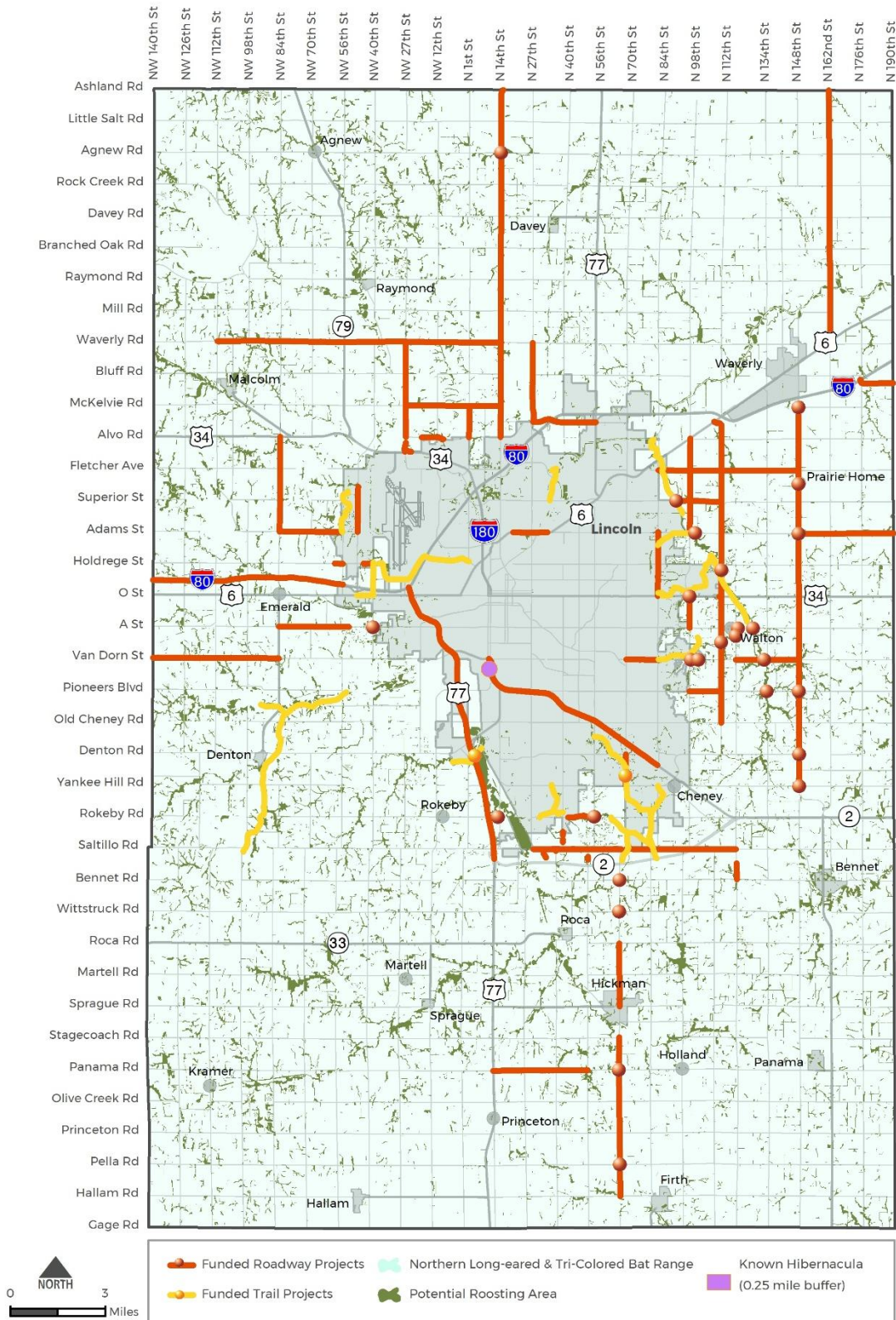
Tree Mass and Northern Long-Eared Bat

Tree masses are defined as various wooded areas, which are mostly located on the periphery of Lincoln, in public parks, or in rural areas. Trees are important because they provide habitat for wildlife, such as the northern long-eared bat, sustain soil stabilization, attenuate wind disturbance, and provide shade. The City of Lincoln has been designated as a “Tree City USA” by the Arbor Day Foundation since 1976 (Arbor Day Website 2021). Hickman and Waverly also hold the distinction as a “Tree City USA” (Arbor Day Website 2021).

Tree mass areas were identified using the NRGIS dataset, which utilized information from updates in 2004 and 2007 (Lincoln Lancaster County Planning and Development Services Department 2001). The dataset primarily maps tree masses in rural, riparian and park settings. Although many residential areas have tree-lined streets, this data was not available for the resource assessment and in general, northern long-eared bats avoid urban areas. Based on the resource assessment, 79 roadway and 21 trail projects cross tree mass areas within the range of the northern long-eared bat (**Table H-7** and **Figure H-7**), which have been identified as potential roosting areas. Additionally, a known hibernacula for the northern long-eared bat requires consideration within a 0.25 mile buffer. One roadway project located on Nebraska Parkway (Project ID 82) is located within the buffer for the hibernacula.

Project construction could indirectly impact tree masses by altering the area hydrology through grade changes or damaging roots through compaction. The use of retaining walls may minimize the effects of extensive grade changes. Where possible, tree removals would be minimized during planning and design. If tree removal is unavoidable and within potential habitat for the northern long-eared bat, then removal needs to avoid pups rearing season (June 1 – July 31) or may need surveys to confirm presence or absence per USFWS guidelines. Additional avoidance or minimization measures may apply throughout the active season, which is April 1 to November 15 in Nebraska.

Figure H-7. Tree Masses and Northern Long-Eared Bat

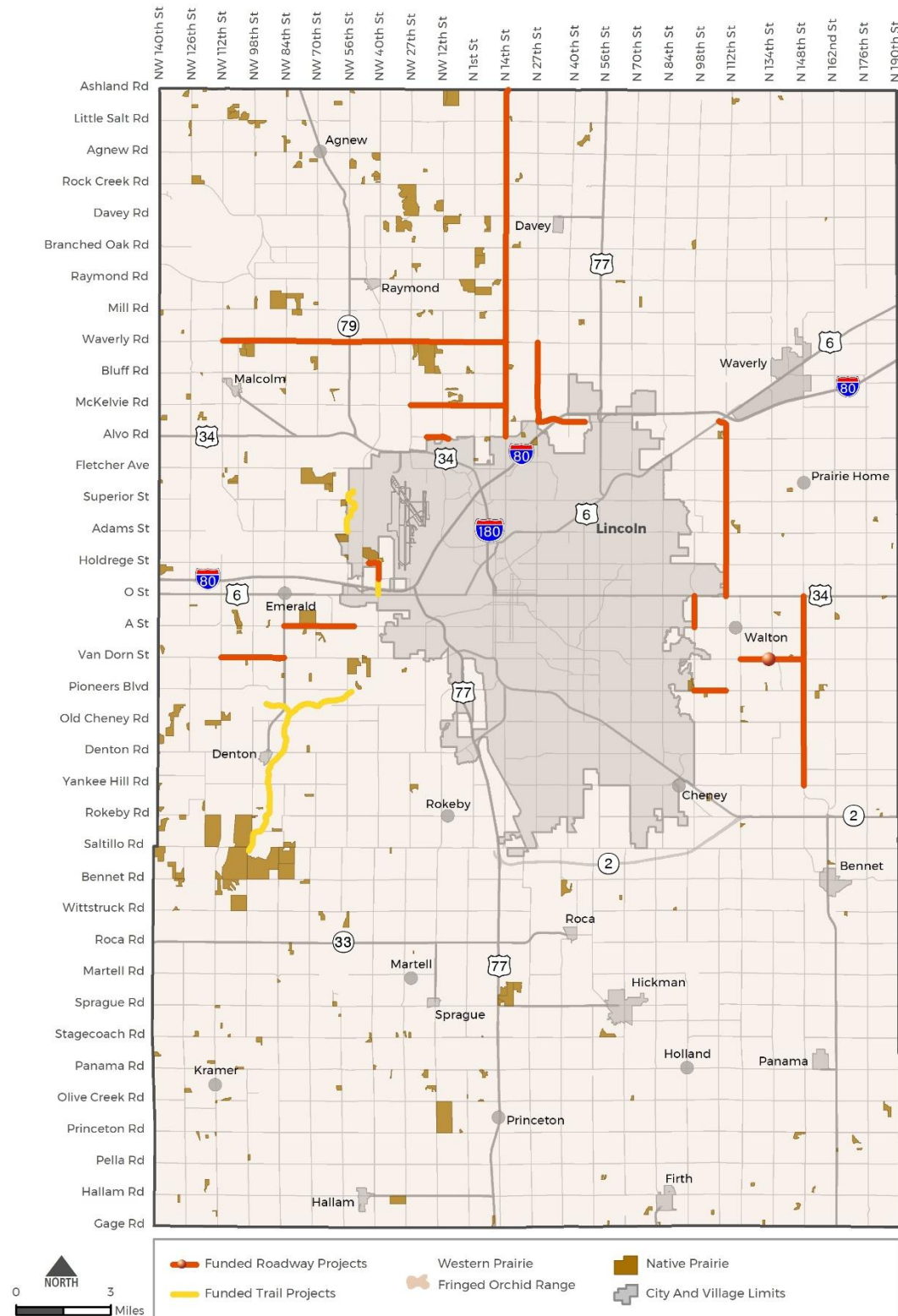


Native Prairie and Western Prairie Fringed Orchid

Native prairie is a grassland ecosystem lacking trees and dominated by native grasses, such as big bluestem, little bluestem, and Indian grass in the eastern Nebraska tallgrass prairie. Prairie grasslands are an important natural resource for wildlife and plant species, such as the western prairie fringed orchid, and provide a variety of ecological benefits, such as protection of water quality through sediment retention, forming and protecting soil, maintaining biodiversity, and providing seasonal habitat for migratory birds. Native prairies are protected by the Fish and Wildlife Coordination Act, which is administered by the NGPC and USFWS.

Native prairies were identified using the NRGIS dataset, which used information from prairie inventories conducted in 1990 and 1997 (Lincoln-Lancaster County Planning and Development Services Department 2001). Based on the resource assessment, 18 roadway and 3 trail projects cross native prairies within the range of the western prairie fringed orchid (**Table H-7** and **Figure H-8**). Similar to other resources, impacts to prairies would be minimized through planning and design, and could be mitigated through prairie restoration efforts. Surveys may be needed during the blooming period (June 15 – July 7) to confirm the presence or absence of western prairie fringed orchids. Additional coordination with USFWS and NGPC would be needed if these plants were present.

Figure H-8. Native Prairie and Western Prairie Fringed Orchid



Saltwort and Salt Creek Tiger Beetle

Saline wetlands and salt flats are generally located in the Salt Creek, Little Salt Creek, and Rock Creek floodplains in central and northcentral Lancaster County. These serve as the basis for the ranges drawn for saltwort and the Salt Creek tiger beetle (SCTB). Based on the resource assessment, 23 roadway and 5 trail projects occur within the range of the saltwort, and 14 roadway and 3 trail projects occur within the range of SCTB (**Table H-7**, **Figure H-9**, and **Figure H-10**).

Impacts to saline wetlands and salt flats would be avoided or minimized through planning and design. Wetland restoration efforts or wetland bank credits could be utilized to mitigate the loss of suitable habitat; habitat suitability would be identified via a wetland delineation with the application of the saline wetland categories (Taylor and Krueger, 1997). Surveys for saltwort and/or SCTB may be conducted to verify presence or absence, otherwise the project proponent may assume presence based on habitat suitability. The potential of “take” of SCTB would need to be evaluated and if “take” is possible, then the level of review and permitting required by USFWS and NGPC would be elevated. The term “take,” as defined by the Endangered Species Act, means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct and is specific to listed wildlife species.

T & E Critical Habitat

The designation of critical habitat by USFWS provides special protection to areas that are considered essential to species conservation. The SCTB is the only T & E species in **Table H-6** with critical habitat occurring in Lancaster County. The SCTB is a sub-species that is endemic (i.e., not found in any other part of the world) to the remnant saline wetland ecosystems within the county. These beetles are an insect predator on saline mudflats and along the muddy stream banks of Salt Creek and its tributaries. Federal agencies are required to avoid destruction or adverse modification of designated critical habitat (USFWS 2017). Critical habitat for SCTB is protected by the Endangered Species Act, which is administered by USFWS, and the Nebraska Nongame and Endangered Species Conservation Act, which is administered by NGPC.

Critical habitat was identified using data provided by USFWS (2021b). Based on the resource assessment, 3 roadway and 2 trail projects cross critical habitat for SCTB (**Figure H-10**). To avoid, minimize or mitigate impacts to SCTB critical habitat, coordination with USFWS would be initiated as early as possible during project planning.

Figure H-9. Saltwort

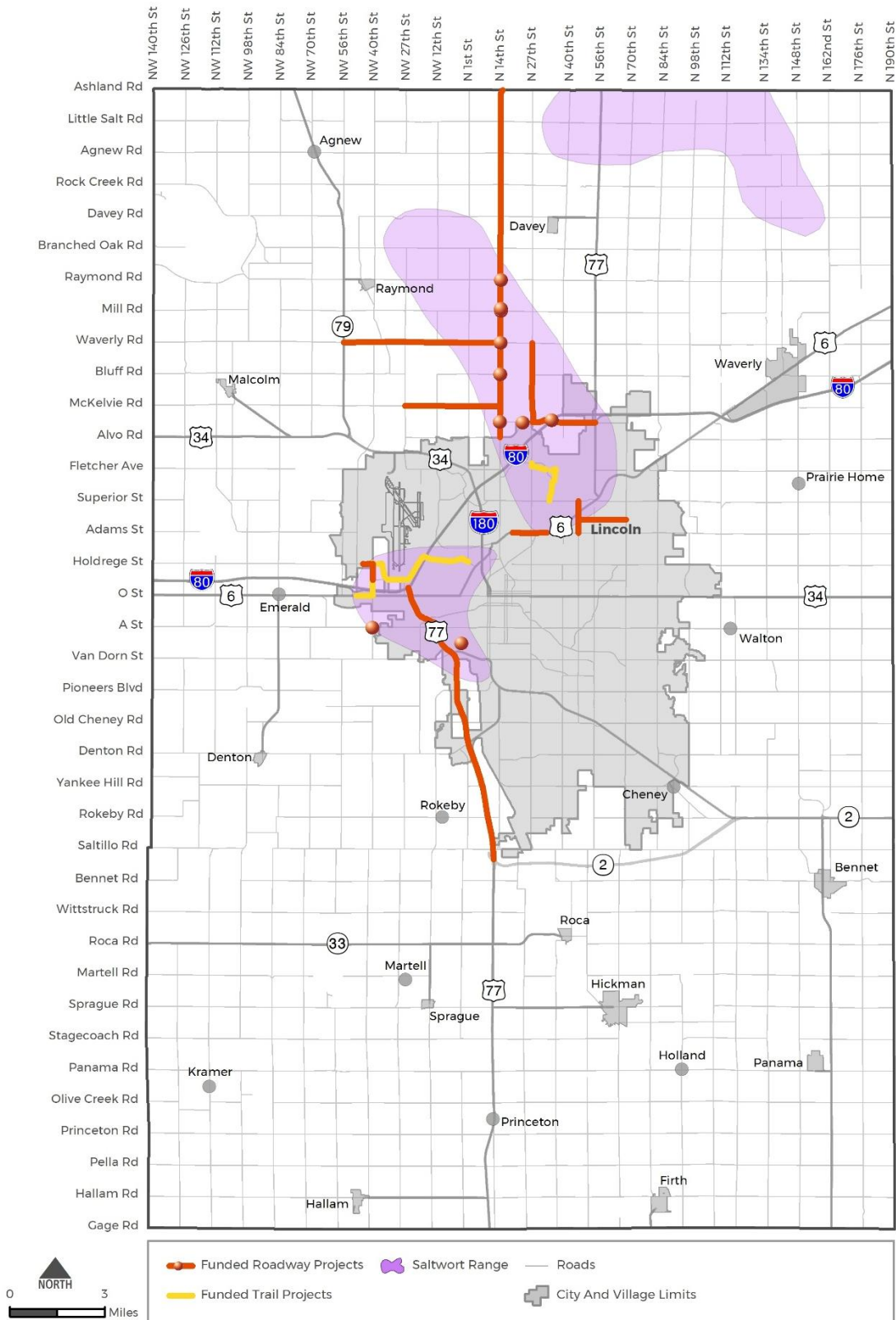


Figure H-10. Salt Creek Tiger Beetle (and Critical Habitat)

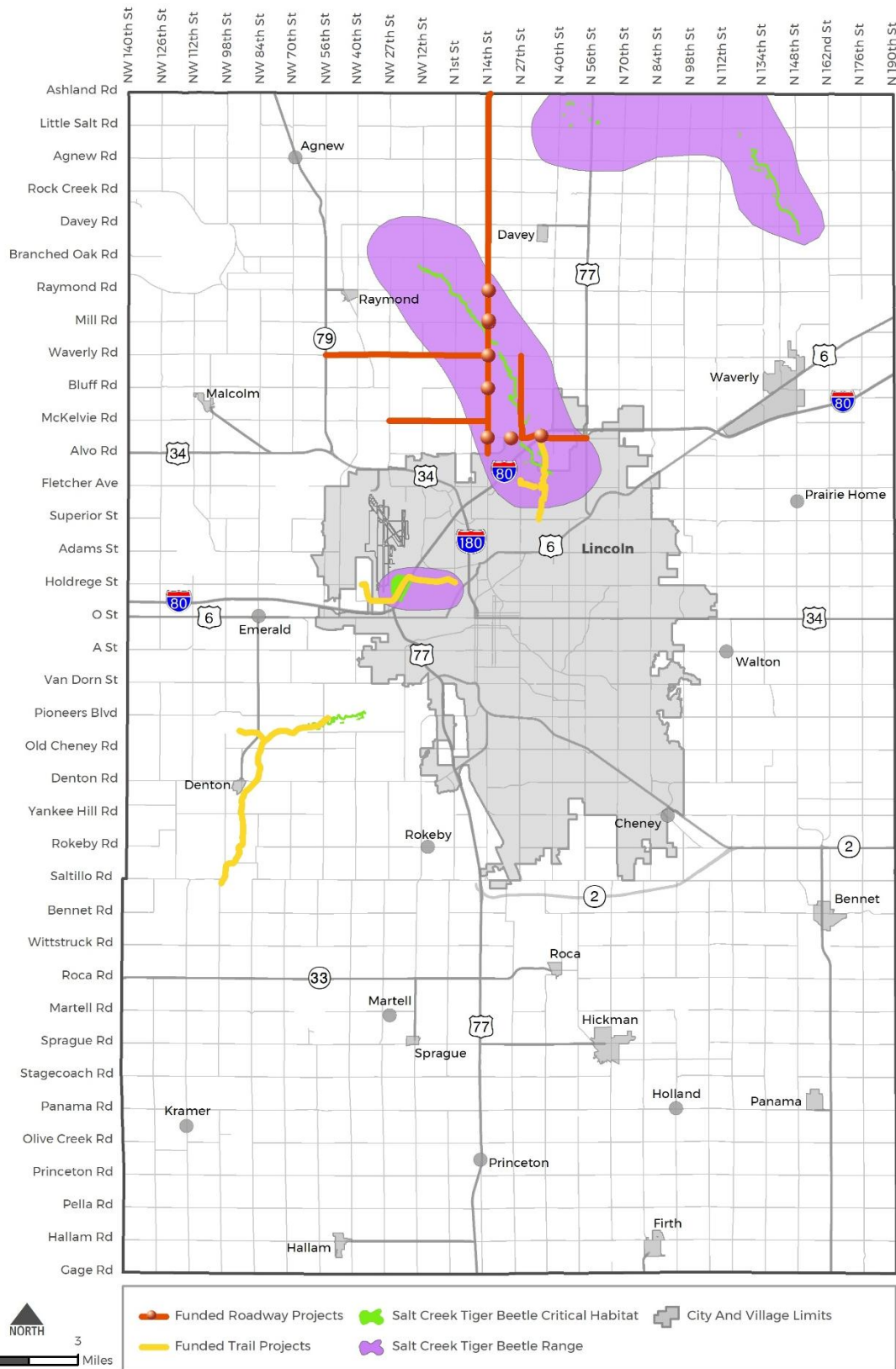


Table H-7. List of Projects Associated with Threatened and Endangered Species

Project ID	Project Roadway / Name (for Trails)	Project Limits	Project Status	Western Prairie Fringed Orchid (and proposed butterfly and bee species)	Saltwort	Salt Creek Tiger Beetle (Critical Habitat denoted as CH)	Northern Long-eared Bat (and proposed Tricolored Bat)
12	NW 40th Street	W Holdrege Street to W Vine Street	Fiscally Constrained	Yes	Yes		Yes
14	NW 48th Street	Adams Street to Cuming Street	Fiscally Constrained				Yes
31	S 70th Street	Pine Lake Road to Yankee Hill Road	Fiscally Constrained				Yes
33	N 84th Street	O Street to Adams Street	Fiscally Constrained				Yes
37	Cornhusker Hwy (US-6)	N 20th Street to N 33rd Street	Fiscally Constrained		Yes		Yes
40	Van Dorn Street	S 70th Street to S 84th Street	Fiscally Constrained				Yes
41	N 48th Street	Adams Street to Superior Street	Fiscally Constrained		Yes		
44	O Street (US-34)	84th Street to 120th Street	Fiscally Constrained				Yes
68	O Street (US-34)	120th Street to east county line	Fiscally Constrained	Yes			Yes
41	N 48th Street	Adams Street to Superior Street	Fiscally Constrained		Yes		
71	I-80	Pleasant Dale to NW 56th Street	Committed				Yes

Project ID	Project Roadway / Name (for Trails)	Project Limits	Project Status	Western Prairie Fringed Orchid (and proposed butterfly and bee species)	Saltwort	Salt Creek Tiger Beetle (Critical Habitat denoted as CH)	Northern Long-eared Bat (and proposed Tricolored Bat)
72	I-180	I-80 to US-6	Fiscally Constrained		Yes		Yes
76	West Beltway (US 77)	I-80 to Saltillo Road	Committed		Yes		Yes
82	Nebraska Parkway	S 84th Street to Van Dorn Street	Fiscally Constrained				Yes
91	S 68th Street	Hickman to Roca Road	Committed				Yes
92	Saltillo Road	S 27th Street to S 68th Street	Committed				Yes
94	Havelock Avenue	Stevens Creek to N 112th Street	Fiscally Constrained				Yes
95	NW 27th Street	Hwy-34 to W Waverly Road	Fiscally Constrained				Yes
96	S 68th Street	Firth Road to Stagecoach Road	Committed				Yes
98	S 98th Street	Old Cheney Road to US-34	Committed	Yes			Yes
99	N 14th Street	Alvo to Ashland	Committed	Yes	Yes	Yes (CH)	Yes
101	Fletcher Avenue	N 84th Street to N 148th Street	Committed				Yes
102	N 98th Street	Holdrege Street to US-6	Fiscally Constrained				Yes
103	W Van Dorn Street	SW 112th Street to SW 84th Street	Fiscally Constrained	Yes			Yes
104	S 120th Street	Bennet Road North 0.5 Miles	Fiscally Constrained				Yes

Project ID	Project Roadway / Name (for Trails)	Project Limits	Project Status	Western Prairie Fringed Orchid (and proposed butterfly and bee species)	Saltwort	Salt Creek Tiger Beetle (Critical Habitat denoted as CH)	Northern Long-eared Bat (and proposed Tricolored Bat)
105	Arbor Road	N 27th Street to US-77	Fiscally Constrained	Yes	Yes	Yes (CH)	Yes
107	W Van Dorn Street	SW 140th Street to SW 112th Street	Fiscally Constrained				Yes
109	W Waverly Road	NW 112th Street to NE-79	Fiscally Constrained	Yes			Yes
110	W Waverly Road	NE-79 to N 14th Street	Fiscally Constrained	Yes	Yes	Yes	Yes
111	N 1st Street	Alvo Road to McKelvie Road	Fiscally Constrained				Yes
112	N 27th Street	Arbor Road to Waverly Road	Fiscally Constrained	Yes	Yes	Yes (CH)	Yes
114	W Adams Street	NW 84th Street to NW 56th Street	Fiscally Constrained				Yes
115	Van Dorn Street	S 120th Street to S 148th Street	Fiscally Constrained	Yes			Yes
116	Panama Road	US-77 to S 54th Street	Fiscally Constrained				Yes
117	McKelvie Road	NW 27th Street to N 14th Street	Fiscally Constrained	Yes	Yes	Yes	Yes
118	Bluff Road	I-80 to N 190th Street	Fiscally Constrained				Yes

Project ID	Project Roadway / Name (for Trails)	Project Limits	Project Status	Western Prairie Fringed Orchid (and proposed butterfly and bee species)	Saltwort	Salt Creek Tiger Beetle (Critical Habitat denoted as CH)	Northern Long-eared Bat (and proposed Tricolored Bat)
134	W South Street	Salt Creek	Fiscally Constrained		Yes		
148	O Street (US-34)	98th Street	Fiscally Constrained				Yes
157	S 148th Street	Yankee Hill Road to O Street	Fiscally Constrained	Yes			Yes
158	N 148th Street	O Street to McKelvie Road	Fiscally Constrained				Yes
159	S 148th Street	Yankee Hill Road	Fiscally Constrained				Yes
160	S 148th Street	Pine Lake Road	Fiscally Constrained				Yes
162	S 148th Street	Pioneers Boulevard	Fiscally Constrained				Yes
166	N 148th Street	Adams Street	Fiscally Constrained				Yes
169	N 148th Street	Prairie Home	Fiscally Constrained				Yes
171	N 162nd Street	US-6 to Ashland Road	Committed				Yes
173	S 68th Street	Pella Road	Fiscally Constrained				Yes
176	S 68th Street	Panama Road	Fiscally Constrained				Yes

Project ID	Project Roadway / Name (for Trails)	Project Limits	Project Status	Western Prairie Fringed Orchid (and proposed butterfly and bee species)	Saltwort	Salt Creek Tiger Beetle (Critical Habitat denoted as CH)	Northern Long-eared Bat (and proposed Tricolored Bat)
179	S 68th Street	Wittstruck Road	Fiscally Constrained				Yes
180	S 68th Street	Bennett Road	Fiscally Constrained				Yes
181	Saltillo Road	S 68th Street to S 120th Street	Fiscally Constrained				Yes
182	N 14th Street	Arbor Road	Fiscally Constrained		Yes	Yes	
183	N 14th Street	Bluff Road	Fiscally Constrained		Yes	Yes	
184	N 14th Street	Waverly Road	Fiscally Constrained		Yes	Yes	
185	N 14th Street	Mill Road	Fiscally Constrained		Yes	Yes	
186	N 14th Street	Raymond Road	Fiscally Constrained		Yes	Yes	
190	N 14th Street	Agnew Road	Committed				Yes
195	Arbor Road	Bridge F-201 near N 27th Street	Committed		Yes	Yes	
196	N 112th Street	Bridge J-126 near Holdrege Street	Fiscally Constrained				Yes
197	Van Dorn Street	Bridge K-37 near S 98th Street	Fiscally Constrained				Yes

Project ID	Project Roadway / Name (for Trails)	Project Limits	Project Status	Western Prairie Fringed Orchid (and proposed butterfly and bee species)	Saltwort	Salt Creek Tiger Beetle (Critical Habitat denoted as CH)	Northern Long-eared Bat (and proposed Tricolored Bat)
198	S 56th Street	Bridge P-92 near Rokeby Road	Fiscally Constrained				Yes
199	A Street	Bridge J-47 near S 120th Street	Fiscally Constrained				Yes
200	S 112th Street	Bridge J-135 near A Street	Fiscally Constrained				Yes
201	S 120th Street	Bridge J-138 near A Street	Committed				Yes
203	Van Dorn Street	Bridge J-22 near S 134th Street	Fiscally Constrained	Yes			Yes
204	Adams Street	Bridge K-123 near N 102nd Street	Fiscally Constrained				Yes
205	Havelock Avenue	Bridge K-144 near N 98th Street	Fiscally Constrained				Yes
208	Pioneers Blvd	Bridge Q-72 near S 138th Street	Fiscally Constrained				Yes
210	A Street	Bridge J-46 near S 134th Street	Fiscally Constrained				Yes
219	Rokeby Road	Bridge O-44, Yankee Hill S-26, 21-44	Fiscally Constrained				Yes
223	N 14th Street	Bridge F-91, Oak W-1	Fiscally Constrained		Yes	Yes	
234	South Beltway Coalition streets	Saltillo Road, S 40th, Jamaica & others	Committed				Yes

Project ID	Project Roadway / Name (for Trails)	Project Limits	Project Status	Western Prairie Fringed Orchid (and proposed butterfly and bee species)	Saltwort	Salt Creek Tiger Beetle (Critical Habitat denoted as CH)	Northern Long-eared Bat (and proposed Tricolored Bat)
236	W Alvo Road	NW 19th to Tallgrass Parkway	Committed	Yes			Yes
237	NW 27th Street	Hwy 34	Committed				Yes
238	W Holdrege Street	NW 56th St to the west	Committed				Yes
239	W Holdrege Street	NW 40th St to 1/2 mile west	Committed	Yes	Yes		Yes
241	Van Dorn St	S 104th	Committed				Yes
242	Rokeby Road	Snapdragon to S 52nd St	Committed				Yes
243	Rokeby Road	52nd St to 56th St	Committed				Yes
245	Arbor Road	Alvo Road	Committed		Yes	Yes	
246	N 112th Street	O Street to 1/4 mile west	Committed				Yes
247	Arbor Road	N 56th Street to 1/2 mile west	Committed		Yes	Yes	Yes
252	Fremont Street	N 48th St to N 70th St	Fiscally Constrained		Yes		
277	N 148th St	McKelvie Rd	Fiscally Constrained				Yes
278	Adams Street	148th to County Line	Fiscally Constrained				Yes
279	N 112th Street	O Street (US34) to US 6	Fiscally Constrained	Yes			Yes
280	NW 84th	W Adams to Alvo Rd (US-34)	Fiscally Constrained				Yes
281	Pioneers Blvd	98th to 112th	Fiscally Constrained	Yes			Yes

Project ID	Project Roadway / Name (for Trails)	Project Limits	Project Status	Western Prairie Fringed Orchid (and proposed butterfly and bee species)	Saltwort	Salt Creek Tiger Beetle (Critical Habitat denoted as CH)	Northern Long-eared Bat (and proposed Tricolored Bat)
282	S 112th Street	Old Cheney to O Street (US-34)	Fiscally Constrained				Yes
284	W A Street	RR Tracks to SW 84th	Fiscally Constrained	Yes			Yes
285	W A Street	SW 40th Street	Fiscally Constrained		Yes		Yes
T-03	Woodlands	Jensen Park to Rokeby Rd	Fiscally Constrained				Yes
T-04	Woodlands	Rokeby Rd to S 70th St to Yankee Hill Rd	Fiscally Constrained				Yes
T-07	Landmark Fletcher	33rd St & Superior St to 27th St	Fiscally Constrained		Yes	Yes	Yes
T-09	Wilderness Hills	Yankee Hill Rd to Rokeby Rd and S 40th St	Fiscally Constrained				Yes
T-11	Waterford	N 84th St to Stevens Creek	Committed				Yes
T-13	Cardwell Branch Trail	GPTN Connector to Folsom Trail	Fiscally Constrained				Yes
T-25	S 84th Street Connector	Rokeby Rd to Nebraska Highway 2	Fiscally Constrained				Yes
T-27	Greenway Corridor Trail/Haines Branch	Pioneers Park Nature Center to Spring Creek Prairie Audubon Center	Fiscally Constrained	Yes		CH	Yes

Project ID	Project Roadway / Name (for Trails)	Project Limits	Project Status	Western Prairie Fringed Orchid (and proposed butterfly and bee species)	Saltwort	Salt Creek Tiger Beetle (Critical Habitat denoted as CH)	Northern Long-eared Bat (and proposed Tricolored Bat)
T-28	NW 56th Street Trail	W Adams St to W Superior St	Fiscally Constrained	Yes			Yes
T-30	W O Street	SW 40th St to SW 48th St	Committed		Yes		Yes
T-33	Stevens Creek	Murdock trail to Hwy 6	Fiscally Constrained				Yes
T-46	Prairie Village Trail	N 84th St to Stevens Creek, South of Adams	Fiscally Constrained				Yes
T-47	Van Dorn Trail	S 84th St and Van Dorn to S 106th and MoPac Trail	Fiscally Constrained				Yes
T-61	Beal Slough Trail	S 56th St and London Rd to S 70th St and Yankee Hill	Committed				Yes
T-74	Oak Creek Trail	Saline Wetlands Nature Center to N 1st St	Fiscally Constrained		Yes	Yes	Yes
T-79	Stevens Creek Trail	Salt Creek Trail to Cornhusker Hwy with grade separation of Cornhusker Hwy	Fiscally Constrained				Yes
T-82	Stevens Creek	Waterford Trail to MoPac Trail	Fiscally Constrained				Yes
T-83	S 70th Street	Carger Lane to South Beltway	Fiscally Constrained				Yes
T-84	Lincoln Standing Bear Trail	Rokeby Rd southeast to S 70th St and south to Saltillo	Fiscally Constrained				Yes

Project ID	Project Roadway / Name (for Trails)	Project Limits	Project Status	Western Prairie Fringed Orchid (and proposed butterfly and bee species)	Saltwort	Salt Creek Tiger Beetle (Critical Habitat denoted as CH)	Northern Long-eared Bat (and proposed Tricolored Bat)
T-85	Oak Creek Trail	NW 40th St Saline Wetlands Nature Center	Fiscally Constrained		Yes	Yes (CH)	Yes
T-86	NW 40th St Connector	O St to Holdrege St	Fiscally Constrained	Yes	Yes		Yes

Proposed Species

Species proposed for listing are included in this discussion because both USFWS and NGPC highly encourage project proponents to evaluate potential impacts to proposed species to ensure project delays do not occur if and when a species becomes officially listed. There are three invertebrate species and one mammal species that are currently proposed for federal listing (**Table H-8**). Each species and its potential suitable habitat are briefly described below.

Monarch butterflies are commonly found in Nebraska in the summer for stopover sites during migration and for breeding. Monarch butterflies require the presence of milkweed to reproduce and other flowering plants to forage for nectar. Suitable habitats may be found in roadside ditches, open fields, prairies, and even residential flower gardens. The larval (i.e., caterpillar) life stage is more vulnerable and is specific to milkweed plants.

Suckley's cuckoo bumble bee is an obligate social parasite and a nectar generalist. Suckley's cuckoo bumble bees are dependent on host species, of which only two species have been confirmed hosts: western bumble bee (*Bombus occidentalis*) and Nevada bumble bee (*Bombus nevadensis*). Only mated females overwinter. Foraging adults can be found in a variety of vegetation cover including grasslands, woodlands, and urban areas. Host nests are often located in abandoned underground holes of various habitat types, such as meadows, fallow fields, croplands, urban areas, and forests. Host species have the potential to occur in Lancaster County; therefore, there is potential for this species to also be present.

Western regal fritillaries require violet host plants in large, intact grasslands for reproduction. Adults forage on a variety of herbaceous flowers with nectar resources. Native prairies within Lancaster County may contain violets and other flowering plants; therefore, suitable reproductive habitat is likely present. Larvae (i.e., caterpillars) overwinter in general vegetation and then become active in the spring and feed exclusively on the leaves of violets (*Viola* spp.). Therefore, the larval life stage is more vulnerable and is specific to locations with host violet plants.

Suitable habitat for the above pollinator species is likely present within Lancaster County and would largely be associated with native prairies; therefore, the project prioritization review results would be similar to the western prairie-fringed orchid. The adults of these species could also be present in any area with flowering plants (e.g., pollinator-friendly landscaping); however, the mobility of the adults reduces the probability of accidental death from project activities. Thus, further consideration relative to project prioritization review process was not warranted.

Suitable habitat for the tricolored bat consists of the interior of dense forested areas within leaf clusters of live or recently dead trees; therefore, the project prioritization review results would be the similar to the northern long-eared bat. Thus, further consideration relative to project prioritization review process was not warranted.

Table H-8. Species Proposed for Listing in Lancaster County

Category	Common Name (Scientific Name)	Status	Range within Lancaster County*
Invertebrates	Monarch butterfly (<i>Danaus plexippus</i>)	Proposed Federally Threatened	Yes
	Suckley's cuckoo bumble bee (<i>Bombus suckleyi</i>)	Proposed Federally Endangered	Yes
	Western regal fritillary (<i>Argynnis idalia occidentalis</i>)	Proposed Federally Threatened	Yes
Mammals	Tricolored bat (<i>Perimyotis subflavus</i>)	Proposed Federally Endangered	Yes

*Ranges were provided by Nebraska Game and Parks Commission (NGPC 2023).

Bald and Golden Eagles

Bald eagles utilize mature, forested riparian areas along large rivers and lakes throughout the state. There are several areas within Lancaster County with suitable habitat for bald eagles, such as at Branched Oak Lake and along Salt Creek. Golden eagles use shortgrass and mixed-grass prairie habitat in western Nebraska; therefore, no golden eagle habitat is present in Lancaster County.

Bald and golden eagles have specific protection under the Bald and Golden Eagle Protection Act (BGEPA), administered by USFWS. This act prohibits the “taking” or possession of bald or golden eagles or their parts, feathers, nests, or eggs. The BGEPA also protects bald eagles from disturbance that may interfere with their normal behavior or cause abandonment of nests.

Specific habitat and ranges were not available for the roadway and trail project resource assessments; however, it is likely that much of the City of Lincoln future service limit area does not contain suitable habitat for bald eagles because of the urban setting.

If bald eagles or bald eagle nests are found within 0.5 miles of a project area, then certain conservation measures, such as presence/absence surveys or limited activities within 660 feet of nests during the breeding season, would be implemented to help avoid impacts. A qualified biologist would conduct a survey prior to construction to determine the presence or absence of nesting/roosting eagles or nests. The implementation of surveys ensures that no bald eagles nesting within the project area would be directly displaced from their active nest by construction activities. NDOT has developed an Avian Protection Plan (APP) to help avoid and minimize project impacts to bald eagles. The NDOT APP is a useful reference because it includes standard evaluation procedures and protocols for compliance with BGEPA (NDOT 2018).

Migratory Birds

Migratory birds are species that travel from one habitat to another at specific times of the year and often over long distances. These birds are important components of the ecosystems they migrate to and from because they help balance the food web, disperse seeds, and function in plant pollination. According to the USFWS IPaC website (USFWS 2021a), over 25 species of migratory birds could utilize trees, shrub-scrub, wetland, stream, and grassland habitats within Lancaster County for breeding and nesting. Bridges and large culverts also provide habitat for various species of swallows.

Most migratory birds in Nebraska are provided protection under Nebraska Revised Statute §37-540, which prohibits take and destruction of nests or eggs of protected birds (as defined in Nebraska Revised Statute §37-237.01). The Migratory Bird Treaty Act (MBTA) also provides protection against the taking of migratory birds, which includes shooting, wounding, killing, trapping, capturing and collecting. Incidental take of protected birds is prohibited by the state statute. Construction activities that would result in the “taking” of migratory birds, eggs, young, and/or active nests, should be avoided. Although the provisions for protected birds are applicable year-round, most migratory bird nesting activity in Nebraska is from April 1 to September 1 and from February 1 to July 15 for raptors. Nonnative species such as European starlings, rock (feral) pigeons, house sparrows, and mute swans, as well as upland gamebirds such as grouse, turkey and quail, are not included in the definition of protected birds in Nebraska nor the MBTA.

While specific habitat and species ranges have not been evaluated, general considerations can be applied to all of the fiscally constrained roadway and trail projects to avoid or minimize impacts to migratory birds.

To avoid impacts to these species, construction activities would include certain conservation measures. Removal of vegetation in suitable nesting areas would occur outside the primary nesting season (i.e., April 1 to September 1) and when no birds are actively nesting (note: some may be ground nesting birds). Work on bridges or culverts would also occur outside the primary nesting season. If removal of potential nesting habitat cannot be avoided during the primary nesting season, then a qualified biologist would survey prior to construction to determine the presence or absence of breeding birds and active nests. The NDOT APP is a useful reference because it includes standard evaluation procedures and protocols for compliance with MBTA (NDOT 2018).

4. SOCIOECONOMIC ENVIRONMENT

Public Use Properties

Parks and recreation resources are important community facilities that warrant consideration in the planning process. These public use areas include parks, open space areas, trails, and some school playgrounds that offer opportunities for recreation.

The Department of Transportation Act (DOT Act) of 1966 includes a special provision, Section 4(f), which stipulates that the Federal Highway Administration (FHWA) and other DOT agencies cannot approve the use of land from publicly owned parks, recreation areas, wildlife and waterfowl refuges, and public or private historical sites (Cultural Environment discusses historic sites) unless the following conditions apply:

- There is no feasible and prudent avoidance alternative to the use of land; and
- The action includes all possible planning to minimize harm to the property resulting from such use;

OR

- The Administration determines that the use of the property will have a *de minimis* impact.

In certain cases, school playgrounds may be considered Section 4(f) properties. Project activities that restrict access may also be considered a “use” under Section 4(f).

Recreation resources developed with federal funding through the Land and Water Conservation Fund (LWCF) are protected under Section 6(f) of the LWCF Act, which prohibits the conversion of these properties to anything other than public outdoor recreation uses.

Parks, Open Space, and Trails

Parks, open space areas, and bike trail locations were identified using GIS data provided by the Lincoln City Planning and Development Services Department. State recreation areas and wildlife management areas owned by NGPC are also included as parks or open spaces that open to the public for recreation. These resources were evaluated as potential Section 4(f) properties. Based on the resource assessment, 71 roadway and 24 trail projects potentially cross identified parks and trails (**Table H-9**, **Figure H-11**, and **Figure H-12**). **Figure H-11** also highlights two parks of interest that are located outside of the Lincoln city limits, Nine Mile Prairie and Spring Creek Prairie, which are owned by the University of Nebraska and Audubon Society, respectively. These are marked because they are not only potential Section 4(f) properties because they are open to the public, but also important areas of undisturbed tall grass prairie plant communities. These areas are also included in **Figure H-8** for native prairie but are not labeled. Phase 1 of the public engagement received meaningful comments highlighting these two natural resource areas, which are included in **Table H-13**.

Schools

While some school properties may not meet Section 4(f) criteria, the resource assessment identified all school locations using GIS data provided by the Lincoln City Planning and Development Services Department. Based on the resource assessment, 21 roadway and 8 trail projects are located near school properties and may need Section 4(f) consideration (**Table H-9** and **Figure H-13**).

Projects would require assessment of impacts on the activities, features and attributes of the 4(f) resource. Depending on the type and size of the impact, and the type and size of the 4(f) resource a number of options may be available to minimize harm to the property and resolve the impact, including programmatic evaluations, de minimis determinations, exceptions, and Individual 4(f) evaluations.

Table H-9. List of Projects Associated with Parks, Open Space, and Trails

Project ID	Project Roadway / Name (for Trails)	Project Limits	Project Status	Parks/ Open Space	Trails	Schools
2	S 40th Street	Normal Blvd and South Street	Fiscally Constrained		Yes	
12	NW 40th Street	W Holdrege Street to W Vine Street	Fiscally Constrained	Yes		
14	NW 48th Street	Adams Street to Cuming Street	Fiscally Constrained	Yes	Yes	
19	O Street (US-34)	Wedgewood Drive to 98th Street	Fiscally Constrained	Yes	Yes	
31	S 70th Street	Pine Lake Road to Yankee Hill Road	Fiscally Constrained	Yes	Yes	
32	O Street (US-34)	Antelope Valley N/S Rdwy. (19th St.) to 46th Street	Fiscally Constrained	Yes	Yes	
33	N 84th Street	O Street to Adams Street	Fiscally Constrained	Yes	Yes	
35	S 9th Street	Van Dorn Street to South Street	Fiscally Constrained	Yes	Yes	
37	Cornhusker Hwy (US-6)	N 20th Street to N 33rd Street	Fiscally Constrained	Yes	Yes	
40	Van Dorn Street	S 70th Street to S 84th Street	Fiscally Constrained	Yes	Yes	
41	N 48th Street	Adams Street to Superior Street	Fiscally Constrained	Yes	Yes	Yes
44	O Street (US-34)	84th Street to 120th Street	Fiscally Constrained	Yes	Yes	

Project ID	Project Roadway / Name (for Trails)	Project Limits	Project Status	Parks/ Open Space	Trails	Schools
68	O Street (US-34)	120th Street to east county line	Fiscally Constrained	Yes		
72	I-180	I-80 to US-6	Fiscally Constrained	Yes	Yes	
76	West Beltway (US 77)	I-80 to Saltillo Road	Committed	Yes	Yes	
82	Nebraska Parkway	S 84th Street to Van Dorn Street	Fiscally Constrained	Yes	Yes	
96	S 68th Street	Firth Road to Stagecoach Road	Committed	Yes		Yes
98	S 98th Street	Old Cheney Road to US-34	Committed	Yes	Yes	
102	N 98th Street	Holdrege Street to US-6	Fiscally Constrained	Yes	Yes	
111	N 1st Street	Alvo Road to McKelvie Road	Fiscally Constrained	Yes	Yes	
112	N 27th Street	Arbor Road to Waverly Road	Fiscally Constrained	Yes	Yes	
114	W Adams Street	NW 84th Street to NW 56th Street	Fiscally Constrained	Yes	Yes	
116	Panama Road	US-77 to S 54th Street	Fiscally Constrained	Yes		
121	A Street	S 40th Street to S 56th Street	Committed	Yes	Yes	
131	Huntington Avenue	Dead Mans Run	Fiscally Constrained		Yes	Yes
133	S 27th Street	SE Upper Salt Creek	Fiscally Constrained	Yes	Yes	
134	W South Street	Salt Creek	Fiscally Constrained		Yes	
138	S 40th Street	Antelope Creek	Fiscally Constrained		Yes	
141	A Street	S 6th Street to S 17th Street	Committed			Yes
142	Fremont Street	Touzalin Avenue	Fiscally Constrained		Yes	

Project ID	Project Roadway / Name (for Trails)	Project Limits	Project Status	Parks/ Open Space	Trails	Schools
151	O Street (US-34)	84th Street	Fiscally Constrained		Yes	
152	S 84th Street	A Street	Fiscally Constrained		Yes	
157	S 148th Street	Yankee Hill Road to O Street	Fiscally Constrained	Yes		
158	N 148th Street	O Street to McKelvie Road	Fiscally Constrained	Yes		
165	N 148th Street	Holdrege Street	Committed	Yes		
174	S 68th Street	Princeton Road	Committed			Yes
181	Saltillo Road	S 68th Street to S 120th Street	Fiscally Constrained			Yes
199	A Street	Bridge J-47 near S 120th Street	Fiscally Constrained	Yes		
200	S 112th Street	Bridge J-135 near A Street	Fiscally Constrained	Yes		
201	S 120th Street	Bridge J-138 near A Street	Committed	Yes		
202	Old Cheney Road	Bridge O-37 near S 1st Street	Fiscally Constrained	Yes	Yes	
216	Adams Street	N 36th Street to N 49th Street	Committed	Yes	Yes	Yes
219	Rokeby Road	Bridge O-44, Yankee Hill S-26, 21-44	Fiscally Constrained	Yes	Yes	
234	South Beltway Coalition streets	Saltillo Road, S 40th, Jamaica & others	Committed			Yes
235	Southwest Village Heights	Folsom, SW 12th & W Old Cheney	Committed	Yes		
236	W Alvo Road	NW 19th to Tallgrass Parkway	Committed	Yes		
237	NW 27th Street	Hwy 34	Committed			
238	W Holdrege Street	NW 56th St to the west	Committed	Yes		
239	W Holdrege Street	NW 40th St to 1/2 mile west	Committed	Yes	Yes	
240	W Pioneers Blvd	SW 2nd St	Committed	Yes		

Project ID	Project Roadway / Name (for Trails)	Project Limits	Project Status	Parks/ Open Space	Trails	Schools
241	Van Dorn St	S 104th	Committed	Yes		
242	Rokeby Road	Snapdragon to S 52nd St	Committed	Yes		
245	Arbor Road	Alvo Road	Committed	Yes		
248	S 70th Street	Bridle Lane	Committed	Yes		
249	South Street	Normal Blvd to S 48th St	Fiscally Constrained		Yes	
251	Fallbrook Road	Super Saver (entrance at Hwy 34)	Fiscally Constrained	Yes		
252	Fremont Street	N 48th St to N 70th St	Fiscally Constrained	Yes	Yes	
253	10th Street	Van Dorn St to K St	Fiscally Constrained	Yes	Yes	Yes
255	Vine Street	N 14th St to Antelope Valley Pkwy	Fiscally Constrained	Yes	Yes	Yes
256	14th St	Vine St to Salt Creek Roadway	Fiscally Constrained		Yes	Yes
257	R Street	N 12th St to N 16th St	Fiscally Constrained		Yes	Yes
258	16th Street	F St to X St	Fiscally Constrained		Yes	Yes
259	13th Street	A St to K St	Fiscally Constrained		Yes	
260	A Street	Normal Blvd to S 40th St	Fiscally Constrained	Yes	Yes	
262	Adams Street	49th St (east of) to 75th St	Fiscally Constrained	Yes	Yes	Yes
264	Sheridan Blvd	Calvert St to South St	Fiscally Constrained	Yes	Yes	Yes
265	48th Street	Cotner Blvd to O St	Fiscally Constrained			Yes
266	Sumner Street	Normal St to Cotner and 48th St to 56th St	Fiscally Constrained	Yes	Yes	Yes
267	Touzalin Ave	Adams St to Havelock Ave	Fiscally Constrained	Yes	Yes	

Project ID	Project Roadway / Name (for Trails)	Project Limits	Project Status	Parks/ Open Space	Trails	Schools
268	Havelock Avenue	Touzalin Ave to N 70th St	Fiscally Constrained		Yes	
271	S 27th Street	NE Parkway to South St	Committed	Yes	Yes	
275	O Street and Music District Streetscape	9th, 10th, 11th, 14th, O and P Streets	Committed	Yes	Yes	Yes
276	Downtown Corridors Phase 2	9th (west and east sides), R to K, S to N, 10th (west side), S to north of O	Committed	Yes	Yes	Yes
279	N 112th Street	O Street (US34) to US 6	Fiscally Constrained	Yes	Yes	
282	S 112th Street	Old Cheney to O Street (US-34)	Fiscally Constrained	Yes	Yes	
286	N 48th Street	Holdrege Ave to Leighton Ave	Fiscally Constrained	Yes	Yes	Yes
T-03	Woodlands	Jensen Park to Rokeby Rd	Fiscally Constrained	Yes	Yes	Yes
T-04	Woodlands	Rokeby Rd to S 70th St to Yankee Hill Rd	Fiscally Constrained	Yes	Yes	
T-07	Landmark Fletcher	33rd St & Superior St to 27th St	Fiscally Constrained		Yes	Yes
T-09	Wilderness Hills	Yankee Hill Rd to Rokeby Rd and S 40th St	Fiscally Constrained	Yes	Yes	
T-11	Waterford	N 84th St to Stevens Creek	Committed	Yes	Yes	Yes
T-13	Cardwell Branch Trail	GPTN Connector to Folsom Trail	Fiscally Constrained	Yes	Yes	
T-18	Deadmans Run Trail	Murdock Trail to Cornhusker Hwy and Railroad grade separation	Fiscally Constrained	Yes	Yes	
T-20	Deadmans Run Trail	N 48th St to Mo Pac Trail	Fiscally Constrained	Yes	Yes	Yes
T-25	S 84th Street Connector	Rokeby Rd to Nebraska Highway 2	Fiscally Constrained	Yes		
T-27	Greenway Corridor Trail/Haines Branch	Pioneers Park Nature Center to Spring Creek Prairie Audubon Center	Fiscally Constrained	Yes		

Project ID	Project Roadway / Name (for Trails)	Project Limits	Project Status	Parks/ Open Space	Trails	Schools
T-28	NW 56th Street Trail	W Adams St to W Superior St	Fiscally Constrained	Yes	Yes	Yes
T-30	W O Street	SW 40th St to SW 48th St	Committed		Yes	
T-33	Stevens Creek	Murdock trail to Hwy 6	Fiscally Constrained	Yes	Yes	
T-37	Rock Island	Old Cheney grade separated crossing	Committed	Yes	Yes	
T-38	Tierra Williamsburg	Old Cheney grade separated crossing	Fiscally Constrained		Yes	
T-40	S 91st Street Trail	Nebraska Pkwy grade separated crossing	Fiscally Constrained		Yes	
T-42	Mo Pac Trail	S 84th Street grade separated crossing	Fiscally Constrained	Yes	Yes	
T-46	Prairie Village Trail	N 84th St to Stevens Creek, South of Adams	Fiscally Constrained	Yes	Yes	Yes
T-47	Van Dorn Trail	S 84th St and Van Dorn to S 106th and MoPac Trail	Fiscally Constrained	Yes	Yes	
T-54	Chris Beutler Trail - Jamaica North Connector	South Haymarket Park to J St/4th St	Fiscally Constrained		Yes	
T-61	Beal Slough Trail	S 56th St and London Rd to S 70th St and Yankee Hill	Committed	Yes	Yes	
T-74	Oak Creek Trail	Saline Wetlands Nature Center to N 1st St	Fiscally Constrained	Yes	Yes	
T-82	Stevens Creek	Waterford Trail to MoPac Trail	Fiscally Constrained	Yes		
T-83	S 70th Street	Carger Lane to Nebraska Highway 2	Fiscally Constrained			Yes
T-84	Lincoln Standing Bear Trail	Rokeby Rd southeast to S 70th St, continue south to just north of Saltillo Rd	Fiscally Constrained			Yes
T-86	NW 40th St Connector	O St to Holdrege St	Fiscally Constrained		Yes	

Figure H-11. Parks / Open Space

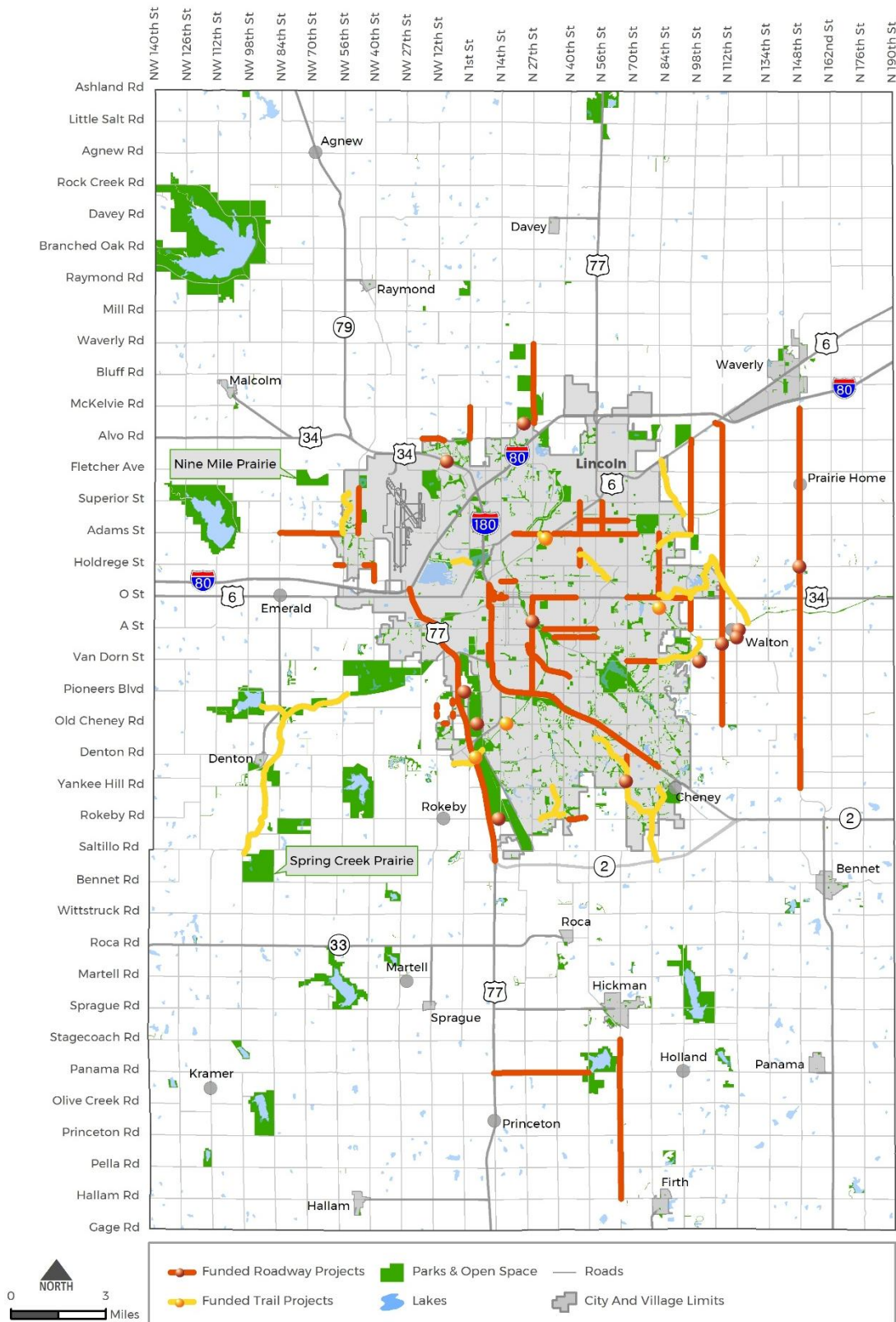


Figure H-12. Trails

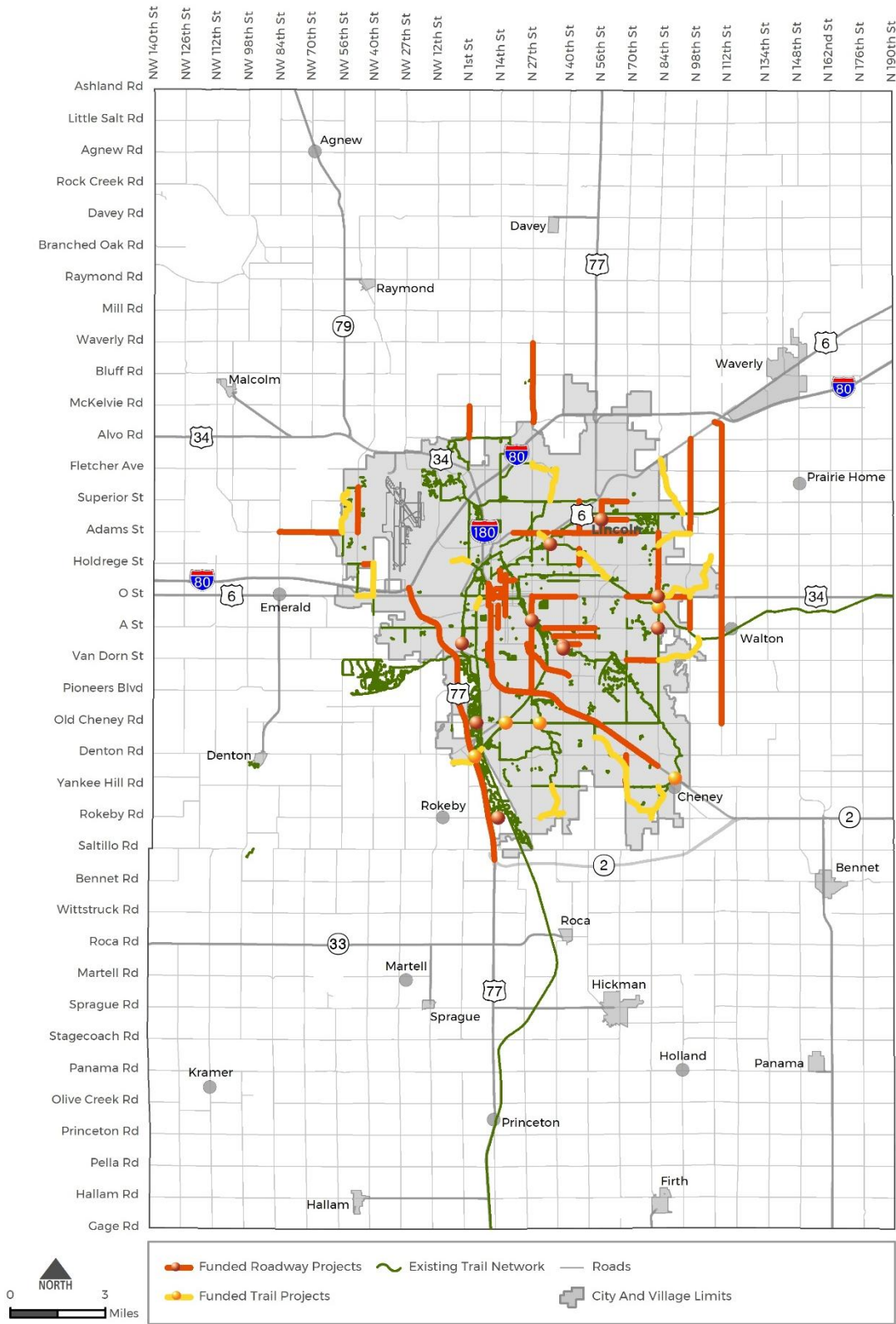
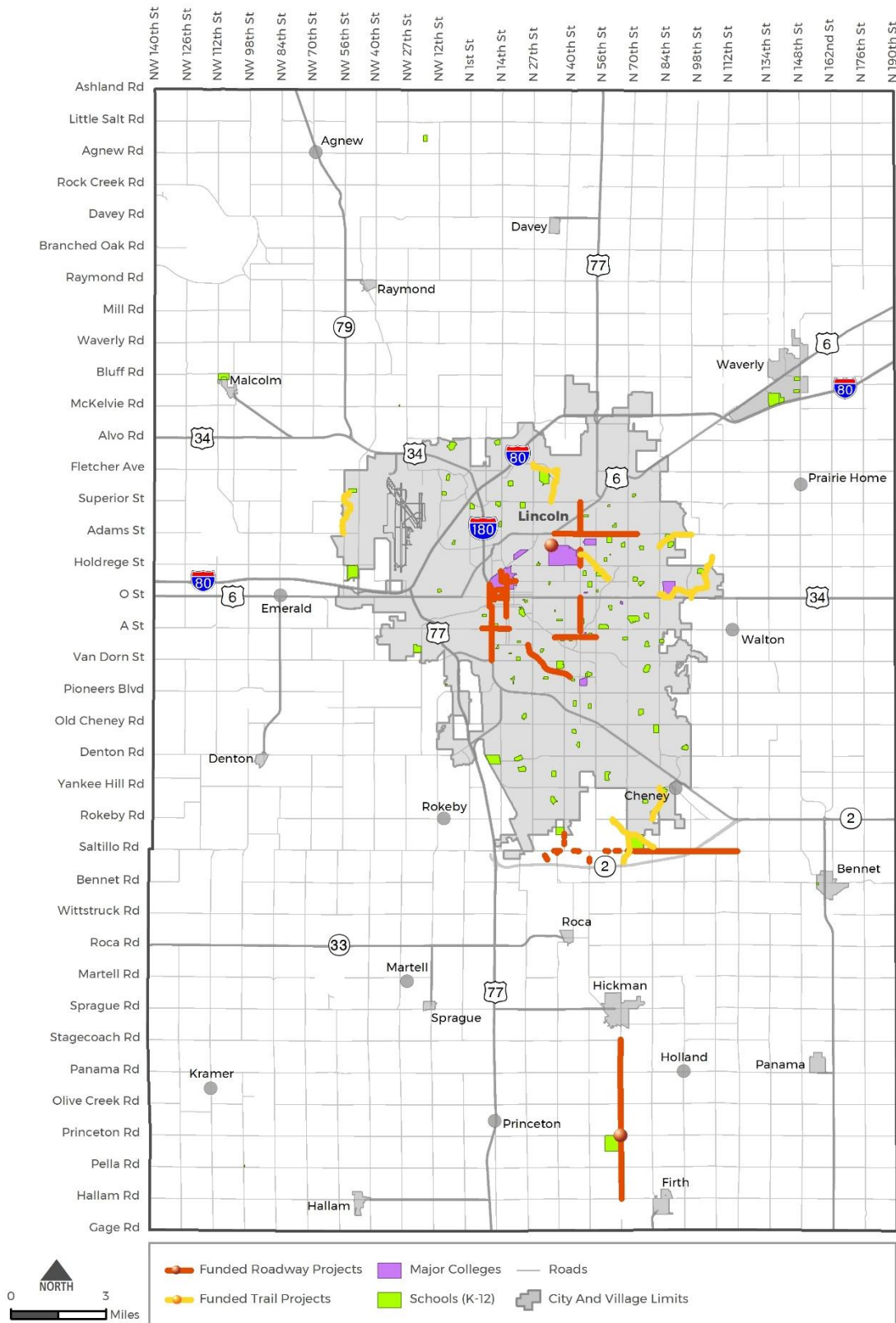


Figure H-13. Schools



Community Impacts Assessment and Transportation Accessibility

Community Impact Assessments (CIAs) are completed for individual projects to evaluate how transportation and infrastructure projects affect the quality of life, mobility, and social structures of local populations. These assessments provide the necessary information to comply with the following federal laws:

- **Title VI of the Civil Rights Act of 1964 (Title VI):** Ensures that individuals are not excluded from participation in, denied the benefit of, or subjected to discrimination under any program or activity receiving Federal financial assistance on the basis of race, color, or national origin (42 United States Code [USC] 2000d et seq.).
- **National Environmental Policy Act of 1969 (NEPA):** Requires analysis to determine the potential effects on the quality of the human environment.
- **Federal-Aid Highway Act of 1970 (23 USC 109(h)):** Requires project development to consider public interests with respect public services and the costs of eliminating or minimizing adverse effects on the human environment.
- **Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970:** Establishes a uniform policy for the fair and equitable treatment of persons displaced as a direct result of projects.

The information reviewed by CIAs assists in minimizing or mitigating harm from transportation alterations to vulnerable populations; therefore, this environmental overview also included a review of low-income households as part of the population and demographics characteristics summary. The demographic and economic character of each Census Block Group was compared with that of Lancaster County and the City of Lincoln using 2020 Census of Population and Housing and 5-year American Community Surveys (ACS) data from 2023.

Census Block Group data was used to determine whether or not roadway or trail projects occur within low-income areas. A conservative threshold to identify the Low-Income Populations was established by determining the city and county thresholds and using the lower percentage of the two measures as the threshold for block groups. The US Census Bureau lists the median household income for Lancaster County and the City of Lincoln as \$60,527 and \$57,746, respectively (US Census Bureau 2019). These are both lower than the median income listed for Nebraska by the 2019 ACS 1-year estimate, which was \$63,229. The Low-Income Population threshold was determined by the US Census (5-year ACS average values) poverty rate statistic, which was 12.9% for Lancaster County and 13.5% for the City of Lincoln; therefore, the assessment threshold was the lower of the two at 12.9%. To put this into perspective, the US Census poverty threshold for a two adult and two children household was \$25,926 and a one adult household (under 65 years old) was \$13,300.

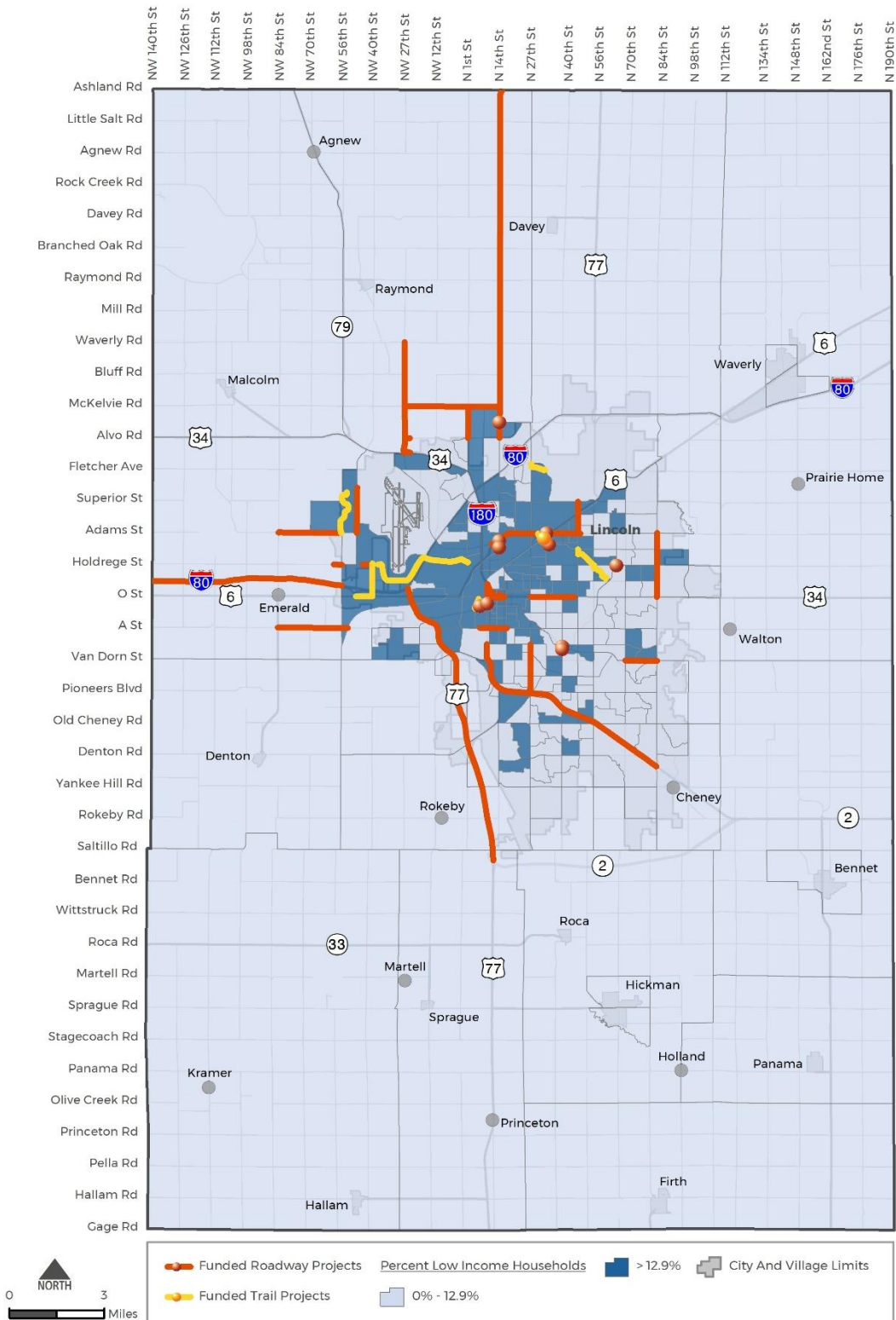
Table H-10. Demographic Characteristic Definitions

Term	FHWA Definition
Low-Income Person	A person whose median household income is at or below the U.S. Department of Health and Human Services (DHHS) poverty guidelines. (Note – DHHS does not publish tabulations of the number of people below the DHHS poverty guidelines. The federal poverty thresholds are used for calculating all official poverty population statistics and are updated annually by the Census Bureau. The best approximation for the number of people below the DHHS poverty guidelines in a particular area is the number of persons below the Census Bureau poverty thresholds in that area.)
Low-Income Population	Any readily identifiable group of low-income persons who live in geographic proximity, and, if circumstances warrant, geographically dispersed/transient persons (such as migrant workers or Native Americans) who will be similarly affected by a proposed FHWA program, policy, or activity.

Based on the resource assessment, 44 roadway and 10 trail projects occur within a block group below the low-income population threshold (**Figure H-14**).

Projects located in areas that exceed the thresholds may need additional project-specific coordination and require public outreach to determine potential adverse effects. If low-income populations are present, then compensatory mitigation may be needed. For example, if a detour limits accessibility to essential services or resources, such as groceries, then conservation measures may need to provide affordable and/or alternative modes of transportation.

Figure H-14. Low-Income Populations



Limited Transportation Options

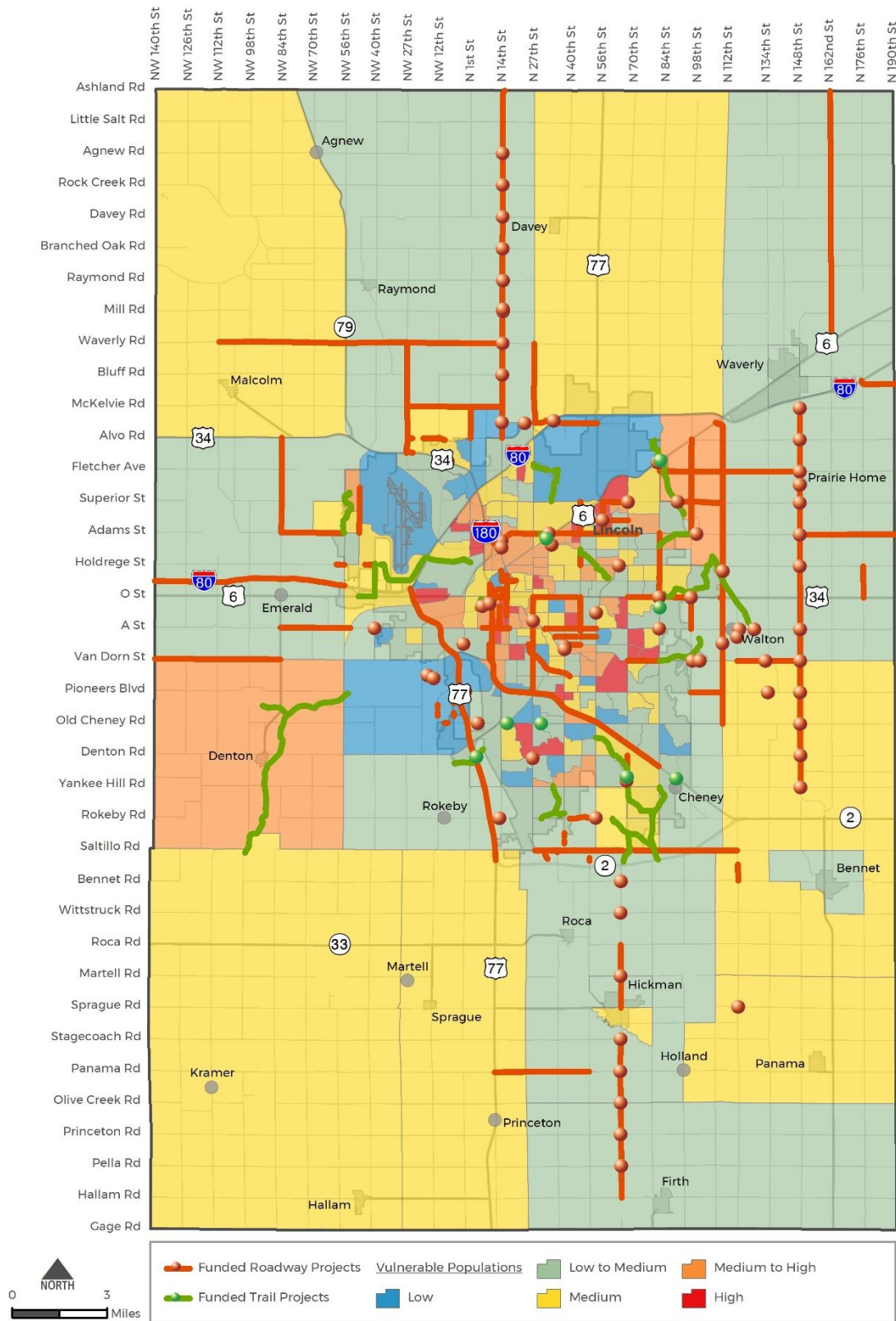
The broader goal of improving transportation options for underserved and overburdened communities by directing transportation investments accordingly intends to reduce the existing disparity between population groups. The Lincoln MPO established five socioeconomic indicators (older adults, youth, people with disabilities, zero vehicle households, low-income) to evaluate the goal of implementing a multimodal transportation system that expands access to opportunities and enhances connections for communities with limited transportation options. The data associated with each of these indicators were combined to establish a visual representation of an index value. **Figure H-15** displays projects over the census blocks within the MPO represented as “low” to highest” relative to populations areas with limited transportation options. Based on the resource assessment, 16 roadway and zero trail projects occur within block groups designated as “high,” whereas 25 roadway and 11 trail projects occur within block groups designated as “moderate to high” (**Figure H-15**).

Right-of-Way (ROW) Impacts and Mitigation

A brief overview pertaining to potential tree removal within the right-of-way (ROW) is provided for consideration given recent public concern on roadway widening projects with the City of Lincoln. The Lincoln Parks and Recreation Department Community Forestry Section is responsible for all trees on public property; therefore, LTU coordinates with the department when developing plans for roadway widening projects. Although tree removal within the roadway ROW does not directly impact adjacent property owners, they are perceived as an adverse impact because there is a loss of an amenity relative to shade and aesthetic.

Replacement tree planting would be a suitable mitigation measure, especially for trees removed within the ROW; however, special consideration should be given to the location and variety of re-planted trees. For example, several alternatives to replace ash trees (*Fraxinus* spp.) are provided by the Lincoln Parks and Recreation Department Community Forestry unit to minimize the spread and adverse impacts of the emerald ash borer (*Agrilus planipennis*) (Lincoln Parks and Recreation, 2026; Lincoln Emerald Ash Borer Response and Recovery Plan, 2018). The emerald ash borer was confirmed in the City of Lincoln in August 2018. The Lincoln Parks and Recreation Department provides a cost-share assistance program to plant street trees in the ROW adjacent to their property, which can also be used to mitigate losses due to street widening projects or after tree removals due to safety or tree-type (i.e., invasive or diseased) concerns. LTU is in the process of implementing tree protection plans on projects, when possible, and is working towards the development of a tree replacement plan or policy to assist in mitigating residential tree removals (from the public ROW).

Figure H-15. Vulnerable Populations



5. CULTURAL ENVIRONMENT

The cultural environment consists of historic resources, including historic standing structures, historic districts, and archeological sites. These resources are important because they add value to a community's sense of culture and provide a tangible link with the past.

Historic resources encompass man-made features and physical remains of past human activity. These resources are generally at least 50 years old (properties constructed in 1976 or earlier), and include buildings, bridges, railroads, roads, other structures, landmarks, and archeological sites. Section 106 of the National Historic Preservation Act of 1966 requires evaluation of project effects on historic properties that are on, or eligible for, the National Register of Historic Places (NRHP). Criteria for determinations of eligibility are set forth in 36 Code of Federal Regulations (CFR) Part 60.4 (70) and are described in National Register Bulletin How to Apply the National Register Criteria for Evaluation (36 CFR Part 60). For a property to be determined eligible, it must meet at least one of the NRHP criteria for historic significance and retain a high degree of historic integrity.

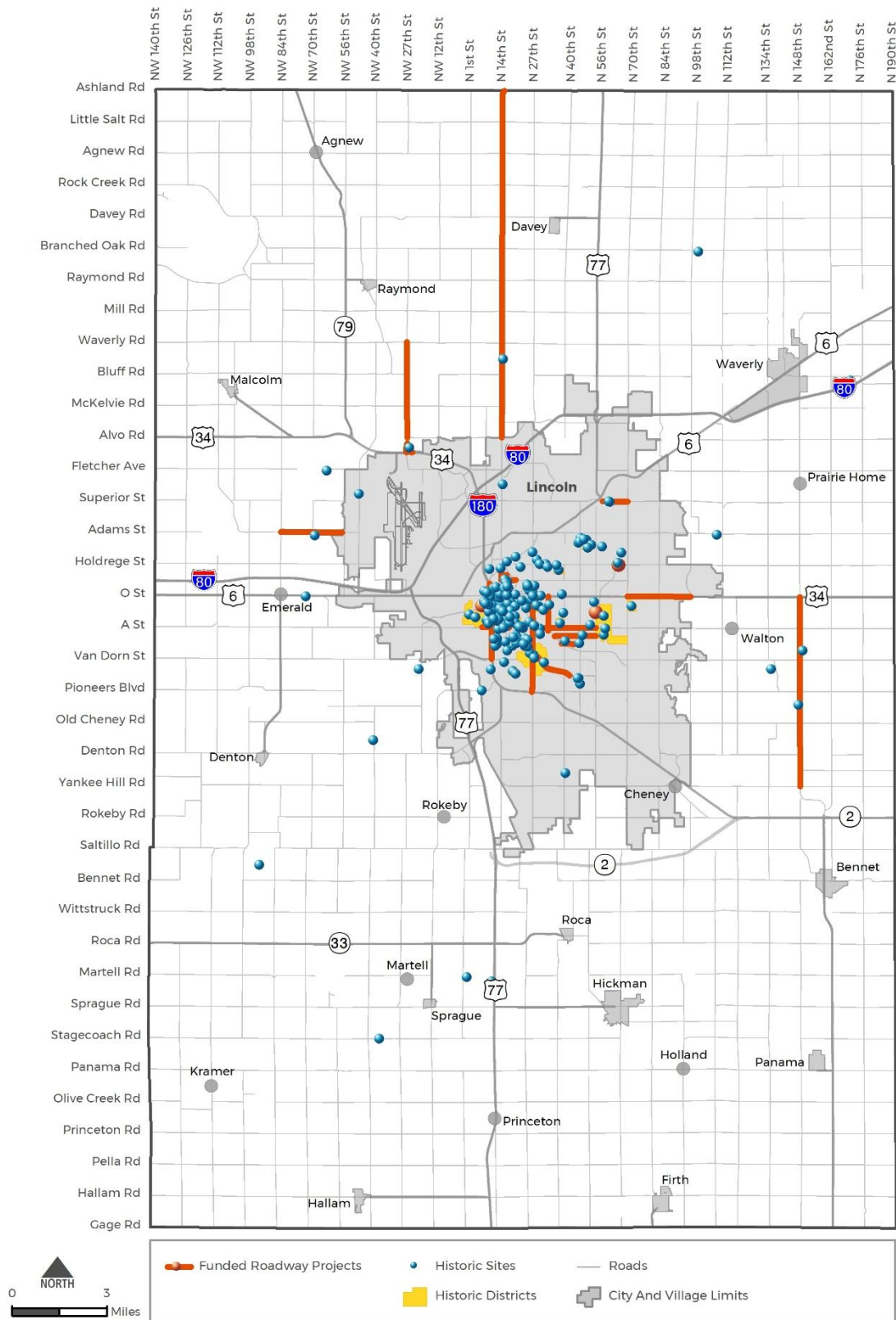
- Historic significance may be present in one of four categories: (1) important historic events; (2) significant people in history; (3) significant architecture, design, or property type; and (4) potential to yield important historic information.
- Historic integrity is characterized by one of seven aspects defined by the NRHP: (1) location, (2) design, (3) setting, (4) materials, (5) workmanship, (6) feeling, and (7) association. In general, a property will always possess several, and usually most, of these aspects.

Records searches were conducted with the City of Lincoln, Nebraska State Historic Preservation Office (SHPO), and Nebraska State Historical Society Highway Archeology Division to identify known historic sites, historic districts, and archeological sites previously surveyed, recommended NRHP eligible, listed in the NRHP, or listed as local landmarks.

Historic Sites and Districts

The records search identified 209 historic sites and 26 historic districts located within Lancaster County. Based on the resource assessment, 23 roadway and zero trail projects cross historic sites (**Table H-11** and **Figure H-16**), and 18 roadway and zero trail projects cross historic district areas. These sites would also be considered Section 4(f) properties (see **Socioeconomic Environment**).

Figure H-16. Historic Sites and Districts



Archeological Sites

The locations of archeological sites are not readily available to the public and would be addressed when a specific project moves forward. Each project would require consultation with Nebraska SHPO during planning, including possible surveys for historic standing structures and archeological sites, and assessment of eligibility.

Avoidance and minimization of impacts, and mitigation if needed, would be situational and likely different for each project, but could consist of vibration restrictions or modifications to design plans to avoid specific structures or areas. Proximity alone does not constitute adverse impact, and well-designed improvements and especially system maintenance can benefit historic resources, especially neighborhood districts. Similarly, trails may have no adverse impact or even be beneficial to the livability of historic residential areas and revitalization of commercial areas.

Table H-11. List of Projects Associated with Historic Sites and Districts

Project ID	Project Roadway / Name (for Trails)	Project Limits	Project Status	Historic Sites	Historic Districts
19	O Street (US-34)	Wedgewood Drive to 98th Street	Fiscally Constrained		Yes
95	NW 27th Street	Hwy-34 to W Waverly Road	Fiscally Constrained	Yes	
99	N 14th Street	Alvo to Ashland	Committed	Yes	
114	W Adams Street	NW 84th Street to NW 56th Street	Fiscally Constrained	Yes	
121	A Street	S 40th Street to S 56th Street	Committed	Yes	Yes
139	Rosa Parks Way	K Street and L Street	Fiscally Constrained	Yes	Yes
141	A Street	S 6th Street to S 17th Street	Committed	Yes	Yes
145	Cotner Boulevard	O Street to Starr Street	Committed	Yes	
147	S 56th Street	Cotner Boulevard/Randolph Street	Fiscally Constrained		Yes
157	S 148th Street	Yankee Hill Road to O Street	Fiscally Constrained	Yes	
237	NW 27th Street	Hwy 34	Committed	Yes	
249	South Street	Normal Blvd to S 48th St	Fiscally Constrained	Yes	
253	10th Street	Van Dorn St to K St	Fiscally Constrained	Yes	Yes
255	Vine Street	N 14th St to Antelope Valley Pkwy	Fiscally Constrained	Yes	Yes
256	14th St	Vine St to Salt Creek Roadway	Fiscally Constrained	Yes	
257	R Street	N 12th St to N 16th St	Fiscally Constrained	Yes	Yes
258	16th Street	F St to X St	Fiscally Constrained	Yes	Yes
259	13th Street	A St to K St	Fiscally Constrained	Yes	Yes

Project ID	Project Roadway / Name (for Trails)	Project Limits	Project Status	Historic Sites	Historic Districts
260	A Street	Normal Blvd to S 40th St	Fiscally Constrained		Yes
264	Sheridan Blvd	Calvert St to South St	Fiscally Constrained	Yes	Yes
266	Sumner Street	Normal St to Cotner and 48th St to 56th St	Fiscally Constrained	Yes	Yes
268	Havelock Avenue	Touzalin Ave to N 70th St	Fiscally Constrained	Yes	Yes
271	S 27th Street	NE Parkway to South St	Committed - local funds	Yes	Yes
272	S 27th Street	South St to O St	Fiscally Constrained	Yes	Yes
275	O Street and Music District Streetscape	9th, 10th, 11th, 14th, O and P Streets	Committed	Yes	Yes
276	Downtown Corridors Phase 2	9th (west and east sides), R to K, S to N, 10th (west side), S to north of O.	Committed	Yes	Yes

Hazardous Materials

The intent of this hazardous materials review is to identify projects with existing hazardous materials concerns relative to significant present or potential hazard to human health and safety or to natural resources if released into the environment. The magnitude of a project impact from an identified site depends on several factors, including the distance between a potential source of a hazardous material and the project; regulatory status of the identified sites (e.g., active or inactive); known or suspected releases into soil, surface water or groundwater; the hydrogeologic relationship of the source of contamination to the project; and the depth and/or duration of construction. Although specific project reviews would be more comprehensive, this review only considered federal superfund sites with known locations, as obtained from the NDWEE interactive facilities map (NDWEE 2026). Superfund designations are determined by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

For this resource review, a one-mile buffer area was created around each facility point to identify potential projects that could be impacted by the superfund site. This is a standard radius for hazardous materials reviews to consider potential effects of superfund sites, which may require additional review or subsurface sampling and evaluation. Based on the resource assessment, 57 roadway and 9 trail projects (**Table H-12** and **Figure H-17**) cross the one-mile buffer of superfund sites.

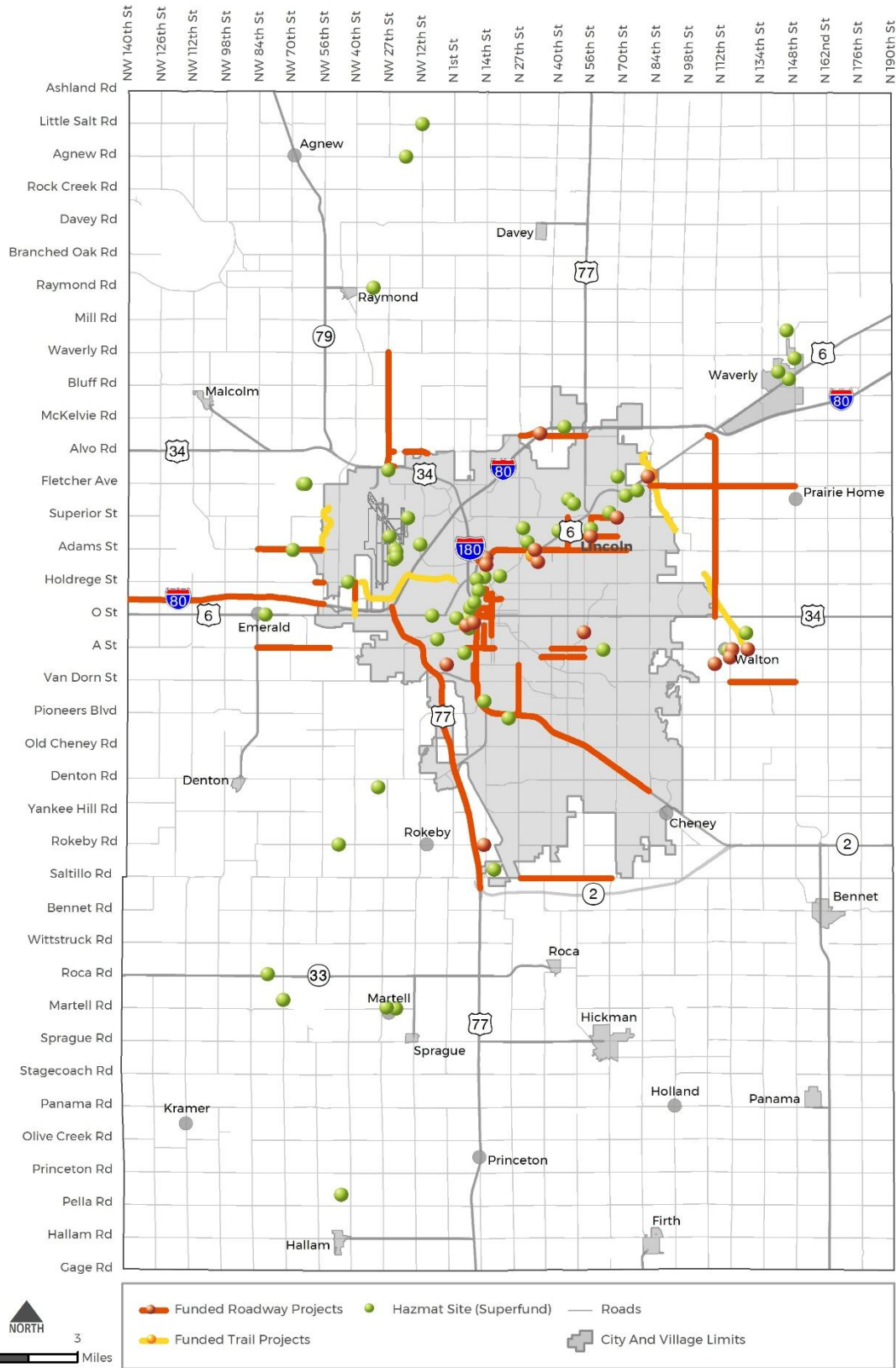
Table H-12. List of Projects Associated with Superfund Sites

Project ID	Project Roadway / Name (for Trails)	Project Limits	Project Status
12	NW 40th Street	W Holdrege Street to W Vine Street	Fiscally Constrained
35	S 9th Street	Van Dorn Street to South Street	Fiscally Constrained
37	Cornhusker Hwy (US-6)	N 20th Street to N 33rd Street	Fiscally Constrained
38	Cornhusker Hwy (US-6)	N 11th Street to N 20th Street	Fiscally Constrained
41	N 48th Street	Adams Street to Superior Street	Fiscally Constrained
44	O Street (US-34)	84th Street to 120th Street	Fiscally Constrained
68	O Street (US-34)	120th Street to east county line	Fiscally Constrained
71	I-80	Pleasant Dale to NW 56th Street	Committed
72	I-80	Pleasant Dale to NW 56th Street	Committed
74	N 33rd Street	N 33rd/Cornhusker/Adams/Fremont	Committed
76	West Beltway (US 77)	I-80 to Saltillo Road	Committed
82	Nebraska Parkway	S 84th Street to Van Dorn Street	Fiscally Constrained
92	Saltillo Road	S 27th Street to S 68th Street	Committed
95	NW 27th Street	Hwy-34 to W Waverly Road	Fiscally Constrained
101	Fletcher Avenue	N 84th Street to N 148th Street	Committed
105	Arbor Road	N 27th Street to US-77	Fiscally Constrained
114	W Adams Street	NW 84th Street to NW 56th Street	Fiscally Constrained
115	Van Dorn Street	S 120th Street to S 148th Street	Fiscally Constrained
121	A Street	S 40th Street to S 56th Street	Committed
130	N 14th Street	Cornhusker Hwy (and N Antelope Valley Pkwy and Oak Creek)	Committed
131	Huntington Avenue	Dead Mans Run	Fiscally Constrained
134	W South Street	Salt Creek	Fiscally Constrained
139	Rosa Parks Way	K Street and L Street	Fiscally Constrained
141	A Street	S 6th Street to S 17th Street	Committed
142	Fremont Street	Touzalin Avenue	Fiscally Constrained
143	N 84th Street	Cornhusker Hwy (US-6)	Committed
146	N 70th Street	Havelock Avenue	Fiscally Constrained
147	S 56th Street	Cotner Boulevard/Randolph Street	Fiscally Constrained

Project ID	Project Roadway / Name (for Trails)	Project Limits	Project Status
195	Arbor Road	Bridge F-201 near N 27th Street	Committed
199	A Street	Bridge J-47 near S 120th Street	Fiscally Constrained
200	S 112th Street	Bridge J-135 near A Street	Fiscally Constrained
201	S 120th Street	Bridge J-138 near A Street	Committed
210	A Street	Bridge J-46 near S 134th Street	Fiscally Constrained
216	Adams Street	N 36th Street to N 49th Street	Committed
219	Rokeby Road	Bridge O-44, Yankee Hill S-26, 21-44	Fiscally Constrained
236	W Alvo Road	NW 19th to Tallgrass Parkway	Committed
237	NW 27th Street	Hwy 34	Committed
238	W Holdrege Street	NW 56th St to the west	Committed
239	W Holdrege Street	NW 40th St to 1/2 mile west	Committed
244	NW 27th Street	Alvo Road	Committed
247	Arbor Road	N 56th Street to 1/2 mile west	Committed
252	Fremont Street	N 48th St to N 70th St	Fiscally Constrained
253	10th Street	Van Dorn St to K St	Fiscally Constrained
255	Vine Street	N 14th St to Antelope Valley Pkwy	Fiscally Constrained
256	14th St	Vine St to Salt Creek Roadway	Fiscally Constrained
257	R Street	N 12th St to N 16th St	Fiscally Constrained
258	16th Street	F St to X St	Fiscally Constrained
259	13th Street	A St to K St	Fiscally Constrained
262	Adams Street	49th St (east of) to 75th St	Fiscally Constrained
266	Sumner Street	Normal St to Cotner and 48th St to 56th St	Fiscally Constrained
267	Touzalin Ave	Adams St to Havelock Ave	Fiscally Constrained
268	Havelock Avenue	Touzalin Ave to N 70th St	Fiscally Constrained
271	S 27th Street	NE Parkway to South St	Committed
275	O Street and Music District Streetscape	9th, 10th, 11th, 14th, O and P Streets	Committed
276	Downtown Corridors Phase 2	9th (west and east sides), R to K, S to N, 10th (west side), S to north of O	Committed
279	N 112th Street	O Street (US34) to US 6	Fiscally Constrained
284	W A Street	RR Tracks to SW 84th	Fiscally Constrained

Project ID	Project Roadway / Name (for Trails)	Project Limits	Project Status
T-18	Deadmans Run Trail	Murdock Trail to Cornhusker Hwy and Railroad grade separation	Fiscally Constrained
T-28	NW 56th Street Trail	W Adams St to W Superior St	Fiscally Constrained
T-33	Stevens Creek	Murdock trail to Hwy 6	Fiscally Constrained
T-54	Chris Beutler Trail - Jamaica North Connector	South Haymarket Park to J St/4th St	Fiscally Constrained
T-74	Oak Creek Trail	Saline Wetlands Nature Center to N 1st St	Fiscally Constrained
T-79	Stevens Creek Trail	Salt Creek Trail to Cornhusker Hwy with grade separation of Cornhusker Hwy	Fiscally Constrained
T-82	Stevens Creek	Waterford Trail to MoPac Trail	Fiscally Constrained
T-85	Oak Creek Trail	NW 40th St Saline Wetlands Nature Center	Fiscally Constrained
T-86	NW 40 th St Connector	O St to Holdrege St	Fiscally Constrained

Figure H-17. Superfund Sites



6. AGENCY COORDINATION

The following environmental, socioeconomic, and cultural agencies were provided an opportunity to review the draft report to allow for review and comment, as part of SAFETEA-LU compliance. A summary of comments received is provided in **Table H-13**, along with one public comment received in the Phase 1 engagement that was specific to natural resources.

Environmental Agencies

1. US Army Corps of Engineers
2. US Fish and Wildlife Service
3. USDA Natural Resource Conservation Service
4. Nebraska Game and Parks Commission
5. Nebraska Department of Water, Energy, and Environment
6. Nebraska Environmental Trust
7. Conservation Nebraska
8. City of Lincoln Sustainability / Resilient Lincoln
9. Mayor's Resilient Roundtable
10. Lincoln Parks and Recreation Department
11. Lincoln Watershed Management Division of Transportation and Utilities Department
12. Lincoln Public Schools (Sustainability Coordinator)
13. Lincoln Community Forestry Advisory Board
14. Lincoln Pedestrian Bicycle Advisory Committee
15. Lincoln-Lancaster County Ecological Advisory Committee
16. Lower Platte South NRD
17. Lower Platte River Corridor Alliance
18. The Nature Conservancy Nebraska Field Office
19. University of Nebraska Foundation (Nine-Mile Prairie Director)
20. Wachiska Audubon Society
21. Audubon Great Plains
22. Nebraska Chapter Sierra Club
23. Nebraska Chapter Bluestem Group
24. Friends of Wilderness Park
25. Great Plains Trails Network

Socioeconomic and Cultural Agencies

1. Lincoln-Lancaster County Board of Health
2. Lancaster County Human Services
3. Lincoln Housing Authority
4. NE Commission for the Blind and Visually Impaired
5. Cause Collective Lincoln (previously Human Services Federation)
6. NeighborWorks Inc.
7. Malone Center
8. The Indian Center
9. Nebraska Commission on Latino-Americans (previously the Mexican American Commission)
10. Asian Community and Cultural Center
11. El Centro de las Americas
12. Nebraska Commission on Indian Affairs
13. Community Action Partnership
14. Center for People in Need
15. Aging Partners
16. Good Neighbor Community Center
17. Nebraska State Historical Society / State Historic Preservation Officer
18. Historic Preservation Planner, Lincoln-Lancaster County Planning and Development Services Department
19. Ponca Tribe
20. Cultural Centers of Lincoln
21. Las Voces
22. League of Human Dignity
23. Disability Rights Nebraska
24. Nebraska Transition College
25. Autism Family Network
26. UNL Services for Students with Disabilities
27. Arc of Lincoln

Table H-13. Agency Review Comments and Responses

Author	Page Ref.	Comment	Response
EXAMPLE: Nebraska State Historic Preservation Office	N/A	Thank you for inviting us to participate in this long range plan. We tend to only get involved when plans come under development, and I think we will probably have to wait in this case too. We do appreciate you thinking of us.	No edit
N/A	N/A	Natural resources like Nine Mile Prairie and Spring Creek Prairie (plus NGPC State Wildlife Management Areas) are listed within the Comp Plan but not shown on the maps. The same is true in the LRTP. Are these resources really being considered for potential impacts if they are not even on the maps reviewing road and trail projects?	Nine Mile Prairie and Spring Creek Prairie were included for both the native prairie (Figure H-8) and parks (Figure H-11) reviews within the project prioritization process. The NGPC State Wildlife Management Areas were also included in the parks review within the project prioritization process. The two prairie areas were also labeled on Figure H-11 to emphasize their inclusion in the review.

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