

Lancaster County Transportation Strategy

Jeff McKerrow, PE, PTOE

Nick Weander, PTP, MPA

April 5, 2018



Agenda

- Team Introductions
- Study Goals
- Community Profile
- Existing Conditions
- Preservation and Optimization Baseline Report
 - Existing practices
 - Design Standards
 - Previous Studies
 - Requirements for new development
 - Budget/Revenue structure
- Discussion of Peer Counties
- Next Steps



Study Goals

- Summarize Existing Conditions
- Discuss County Future Goals/Objectives
- Identify Best Management Practices for:
 - Preservation
 - Optimization
 - Growth



Purpose of Study

- Roadmap for how transportation infrastructure will develop in Lancaster County
- Assist Lancaster County with best management strategies
- Why is it important?
 - Informs decisions about where to direct limited resources
 - Furthers county goals and objectives
 - Provides access to future economic activity
 - Addresses immediate needs for infrastructure, with transparency
 - Increases coordination of agencies for maximum use of funding

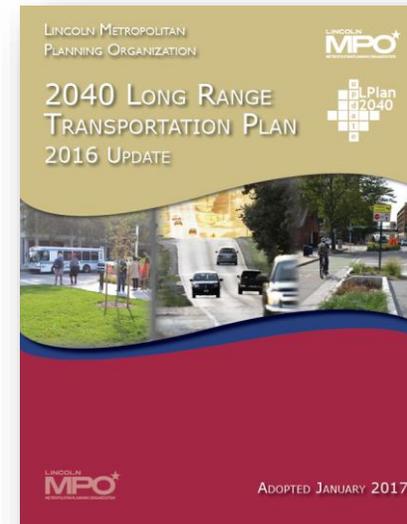


Setting the Stage – Lancaster County

Where Are We?

Where do we want to be?

- 2040 LRTP, 2016 Update:
 - Vision
 - Goals, Objectives, Performance Measures
 - Lancaster County staff – Key Stakeholder
 - Sets high-level goals
- Next Step →



Transportation Goals

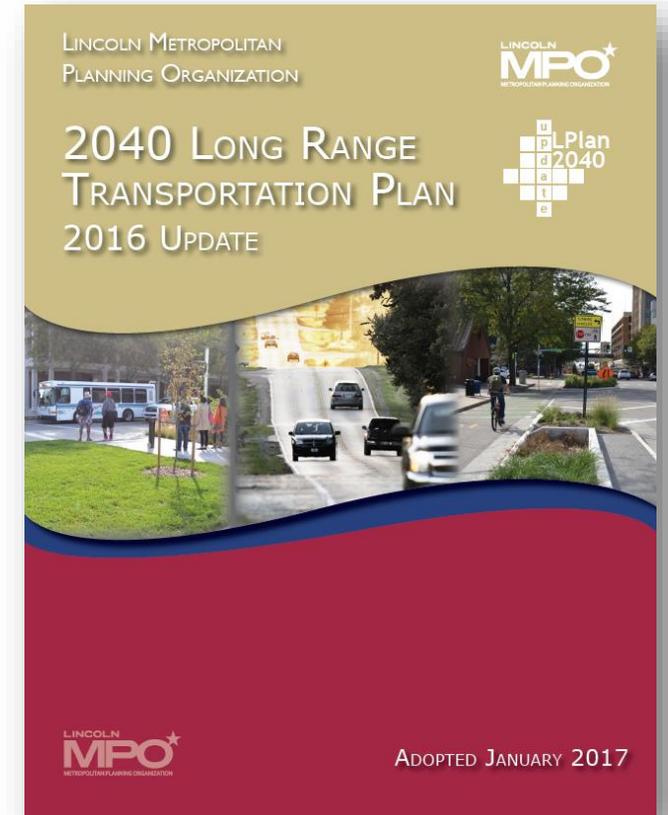
- Goal 1:** Maintain the existing transportation system to maximize the value of these assets.
- Goal 2:** Improve the efficiency, performance and connectivity of a balanced transportation system.
- Goal 3:** Promote consistency between land use and transportation plans to enhance mobility and accessibility.
- Goal 4:** Provide a safe and secure transportation system.
- Goal 5:** Support economic vitality of the community.
- Goal 6:** Protect and enhance environmental sustainability, provide opportunities for active lifestyles, and conserve natural and cultural resources.
- Goal 7:** Maximize the cost effectiveness of transportation.

Lancaster County – Vision

- Specific goals for Lancaster County?
- OR
- Should we use goals from the LRTP?

Regional LRTP Goals

1. *Maintenance*
2. *Mobility and System Reliability*
3. *Livability and Travel Choice*
4. *Safety and Security*
5. *Economic Vitality*
6. *Environmental Sustainability*
7. *Funding and Cost Effectiveness*



Lancaster County – Example Goals

Regional Goals

1. **Maintenance**
2. Mobility and System Reliability
3. Livability and Travel Choice
4. Safety and Security
5. Economic Vitality
6. Environmental Sustainability
7. Funding and Cost Effectiveness

1. Maintenance Goal: Well-maintained roads, bridges, and County infrastructure.

• **Objectives:**

- Maintain roads, bridges and County infrastructure to a state of good repair to maximize the value of Lancaster Co transportation assets.

• **Performance Measures:**

- Percent of roads rehabilitated
- Bridge sufficiency ratings



What Should County Target Be?

- Rehab X percent of roads each year
- Maintain at least X percent of bridges with a sufficiency rating above 80
- Increase the percent of bridges with a sufficiency rating above 50 to 100 percent

Lancaster County – Goals

Regional Goals

1. Maintenance
2. **Mobility and System Reliability**
3. Livability and Travel Choice
4. Safety and Security
5. Economic Vitality
6. Environmental Sustainability
7. Funding and Cost Effectiveness



2. **Mobility and System Reliability**

Goal: An efficient, reliable, and well-connected transportation system for moving people and freight.

■ • **Objectives:**

- Optimize the reliability of the transportation network
- Focus on Farm-to-Market Reliability?

▲ • **Performance Measures:**

- Congested roadways

What Should County Target Be?

- Provide reliable access for key Farm-to-Market routes.

Lancaster County – Goals

Regional Goals

1. Maintenance
2. Mobility and System Reliability
- 3. Livability and Travel Choice**
4. Safety and Security
5. Economic Vitality



sustainability
effectiveness



3. Livability and Travel Choice Goal: A multimodal system that provides travel options to support livable communities.



• Objectives:

- Provide paved shoulders on paved roadways



• Performance Measures:

- Percent of paved roads with paved shoulders

What Should County Target Be?

- Coordinate land use and transportation decisions
- Implement facility recommendations in regional transportation plans, supporting multimodal connections, as appropriate

Lancaster County – Goals

Regional Goals

1. Maintenance
2. Mobility and System Reliability
3. Livability and Travel Choice
4. Safety and Security
- 5. Economic Vitality**
6. Environmental Sustainability
7. Funding and Cost Effectiveness



5. Economic Vitality Goal: A transportation system that support economic vitality for residents and businesses.



• Objectives:

- Improve transportation network for flow of commerce and residents in the County. (Farm to Market routes)
- Improve economic competitiveness of the county by enhancing the transportation system



• Performance Measures:

- Percentage of federally classified roads that are rated good or better.
- Annual freight tonnage movement

What Should County Target Be?

- Percentage of federally classified roads rated good or better.
- Establish and prioritize Farm-to-Market routes



Lancaster County – Goals

Regional Goals

1. Maintenance
2. Mobility and System Reliability
3. Livability and Travel Choice
4. Safety and Security
5. Economic Vitality
- 6. Environmental Sustainability**
7. Funding and Cost Effectiveness



6. Environmental Sustainability Goal: A transportation system that enhances the natural, cultural, and built environment.



• Objectives:

- Maintain compliance with air quality standards (burn permits)
- Reduce fossil fuel consumption by providing access to alternative modes and fuels
- Avoid, minimize, and mitigate environmental impacts of transportation projects, to the extent reasonably possible



• Performance Measures:

- Number of minimal impact projects completed

What Should County Target Be?

- Vehicle miles of travel (VMT) per capita
- Number of alternative fuel vehicles in fleet
- Number of minimal impact projects completed



Lancaster County – Goals

Regional Goals

1. Maintenance
2. Mobility and System Reliability
3. Livability and Travel Choice
4. Safety and Security
5. Economic Vitality
6. Environmental Sustainability
7. **Funding and Cost Effectiveness**



7. Funding and Cost Effectiveness Goal: Collaboration in funding transportation projects that maximize funding.



• **Objectives:**

- Make the best use of public resources
- Decrease the gap between gaps and needs



• **Performance Measures:**

- Annual transportation funding
- Number of projects

What Should County Target Be?

- Consider implementing other funding mechanisms
- Communication programs to the community for the need for increased funds



Lancaster County – Goals

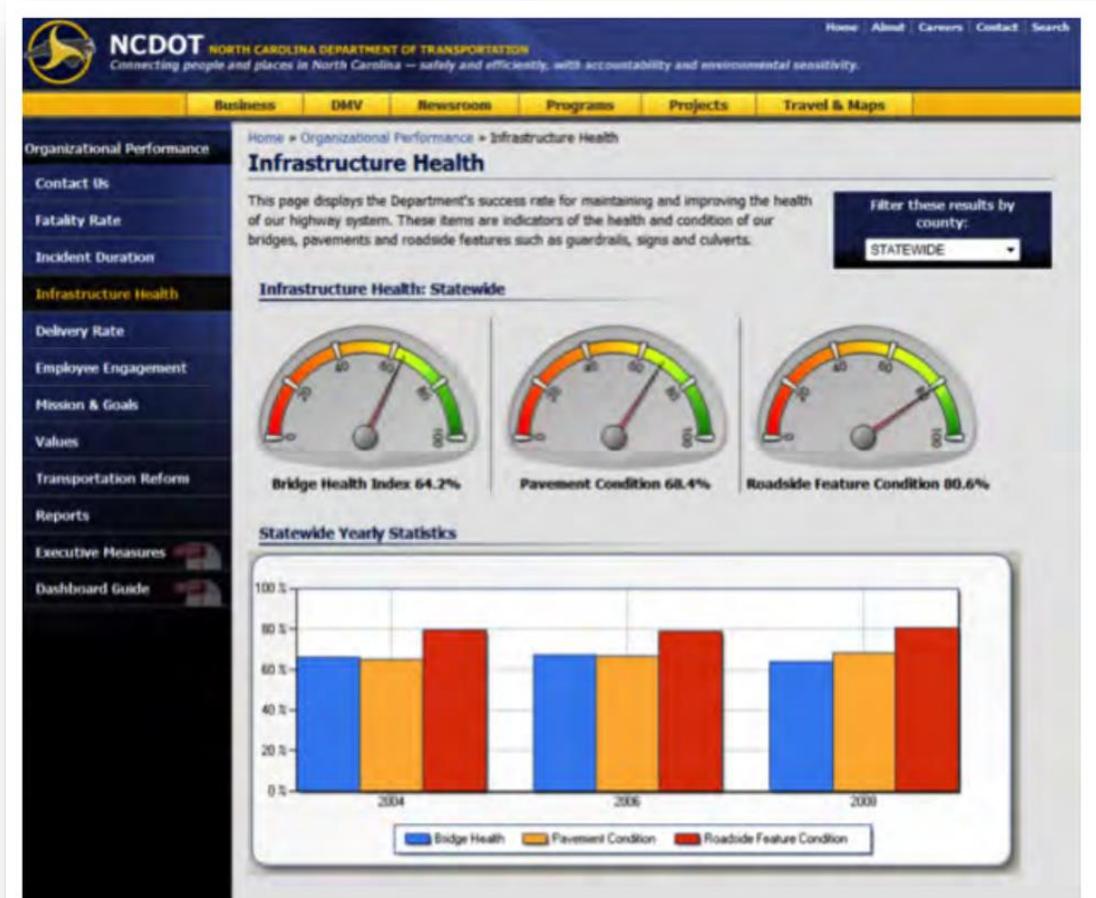
Maintenance Goal: Well-maintained roads, bridges, and County infrastructure

- **Objectives:**
 - Maintain roads, bridges and County infrastructure to a state of good repair to maximize the value of Lancaster Co transportation assets.
- **Performance Measures:**
 - Percent of roads rehabilitated
 - Bridge sufficiency ratings

What Should County Target Be?

- Rehab X percent of roads each year
- Maintain at least X percent of bridges with a sufficiency rating above 80
- Increase the percent of bridges with a sufficiency rating above 50 to 100 percent

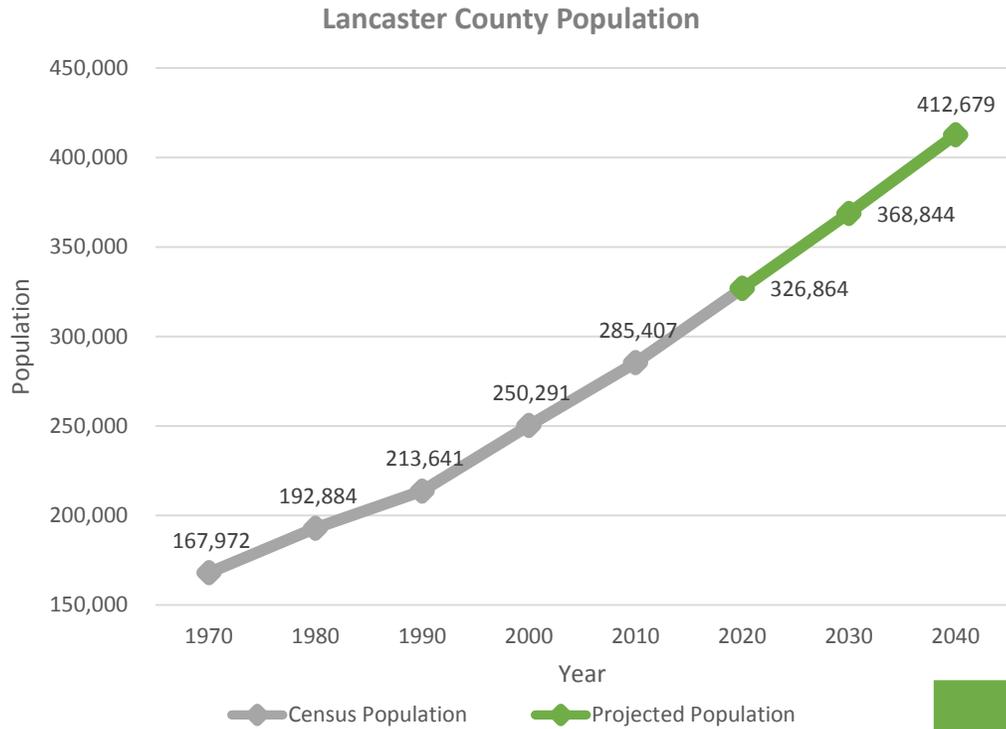
Sample Graphic of Dashboard Results



Lancaster County - Today



Community Profile – Lancaster County



Annual Change in Population Since 2010

Lancaster County	2010	2011	2012	2013	2014	2015	2016	Avg. Annual Growth Rate
Population	286,195	289,945	293,606	297,489	302,097	305,705	309,607	
Change	-	1.31%	1.26%	1.32%	1.55%	1.19%	1.29%	1.32%

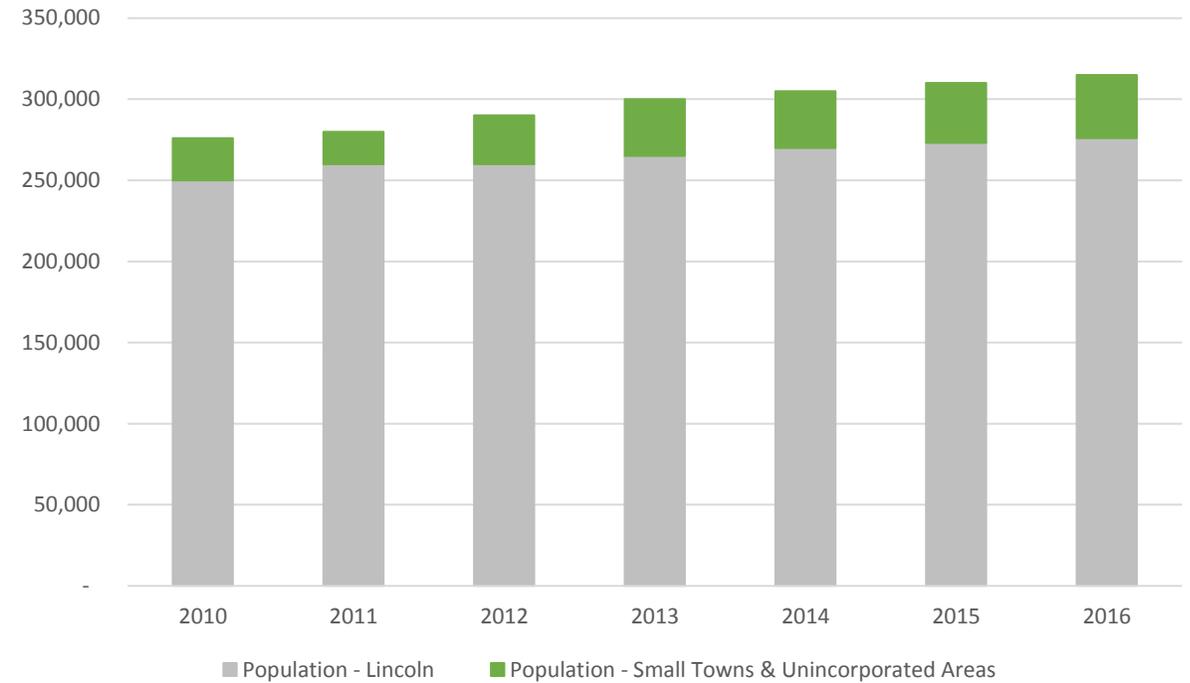
Source: <https://lincoln.ne.gov/city/plan/reports/cpanrev/benchrpt/bench17.pdf>

Community Profile – Lancaster County

Population Trends

Municipality	Historical Change			
	2000	2010	2016	Percent Change
Lincoln	225,581	258,379	273,018	17%
Bennet	570	719	889	36%
Davey	153	154	143	7%
Denton	189	190	229	17%
Firth	564	590	467	21%
Hallam	276	213	246	12%
Hickman	1,084	1,657	1,891	43%
Malcolm	413	382	408	1%
Panama	253	256	262	3%
Raymond	186	167	123	51%
Roca	220	220	195	13%
Sprague	146	142	131	11%
Waverly	2,448	3,277	3,686	34%
Total Population	232,083	266,346	281,688	18%

Ratio of City to County Population



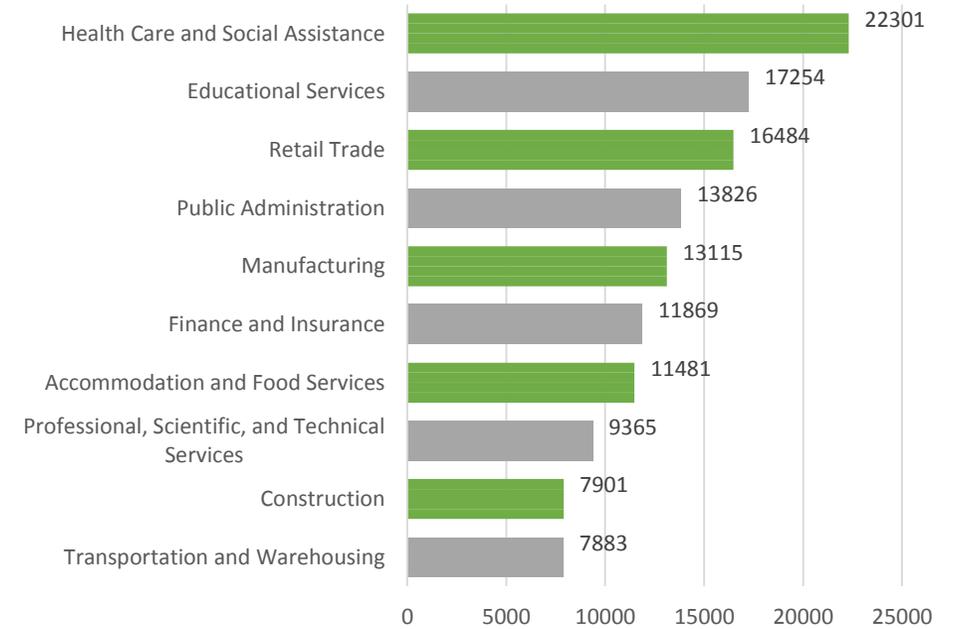
Source: <https://lincoln.ne.gov/city/plan/reports/cpanrev/benchrpt/bench17.pdf>

Employment

Growth in Employment from 1993-2015

Total Employment	Change			Average Annual Change				
	1993 - 2000	2000 - 2010	2010 - 2015	1993 - 2015	1993 - 2000	2000 - 2010	2010 - 2015	1993 - 2015
Lancaster County	20.88%	4.40%	8.67%	37.14%	2.75%	0.43%	1.68%	1.45%
Nebraska State	8.53%	1.31%	6.94%	14.55%	1.18%	0.13%	1.35%	0.62%
U.S. (000's)	18.89%	3.01%	9.13%	25.85%	2.50%	0.30%	1.76%	1.05%

Top 10 Industries in Lancaster, County (Employees)



Travel Flow



- 44,000 travel to Lancaster County to work
- 22,000 leave Lancaster County to work
- 120,000 live and work in Lancaster Co (84%)

SOURCE: US CENSUS LONGITUDINAL EMPLOYER-HOUSEHOLD DYNAMICS (LEHD) FOR LANCASTER COUNTY, 2013.

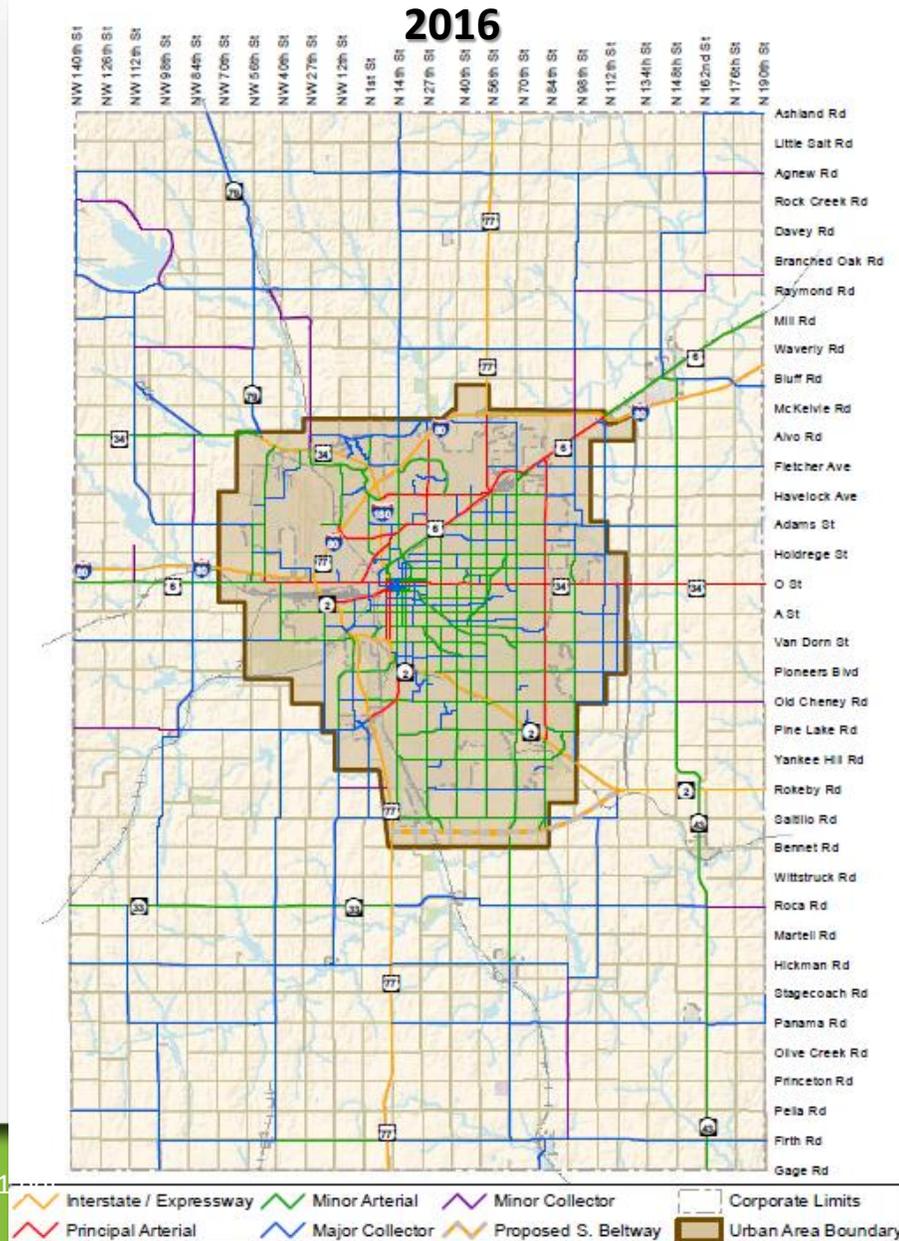
Lancaster County Road and Bridges - Today



Existing Functional Classification

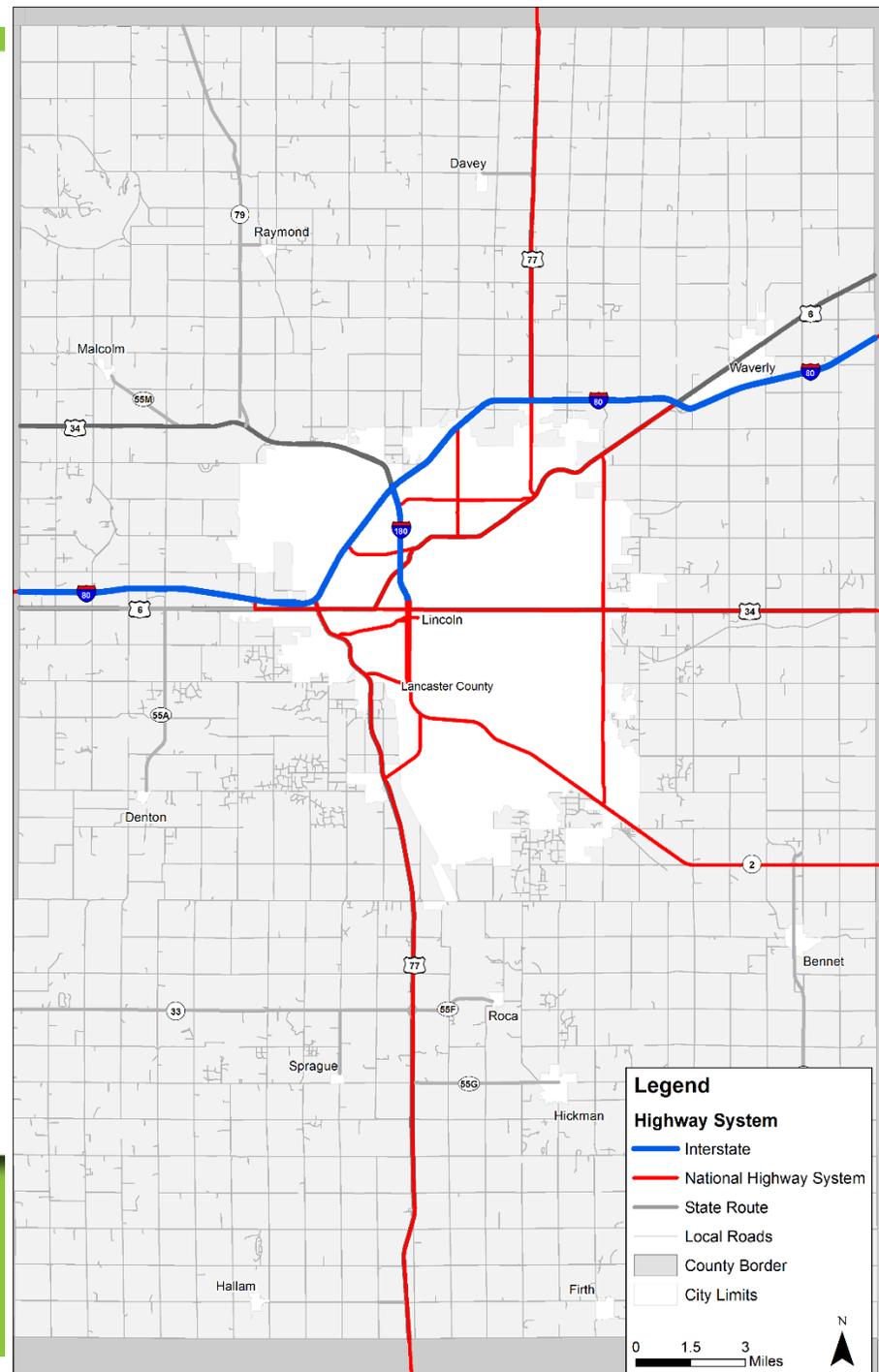
CHANGES IN LAST DECADE:

- Urban Area Boundary expanded
- Little impact to rural areas with change of classification
- All roadways above rural minor collector - eligible for federal-aid
- Designated federal-aid bridges eligible for federal funding

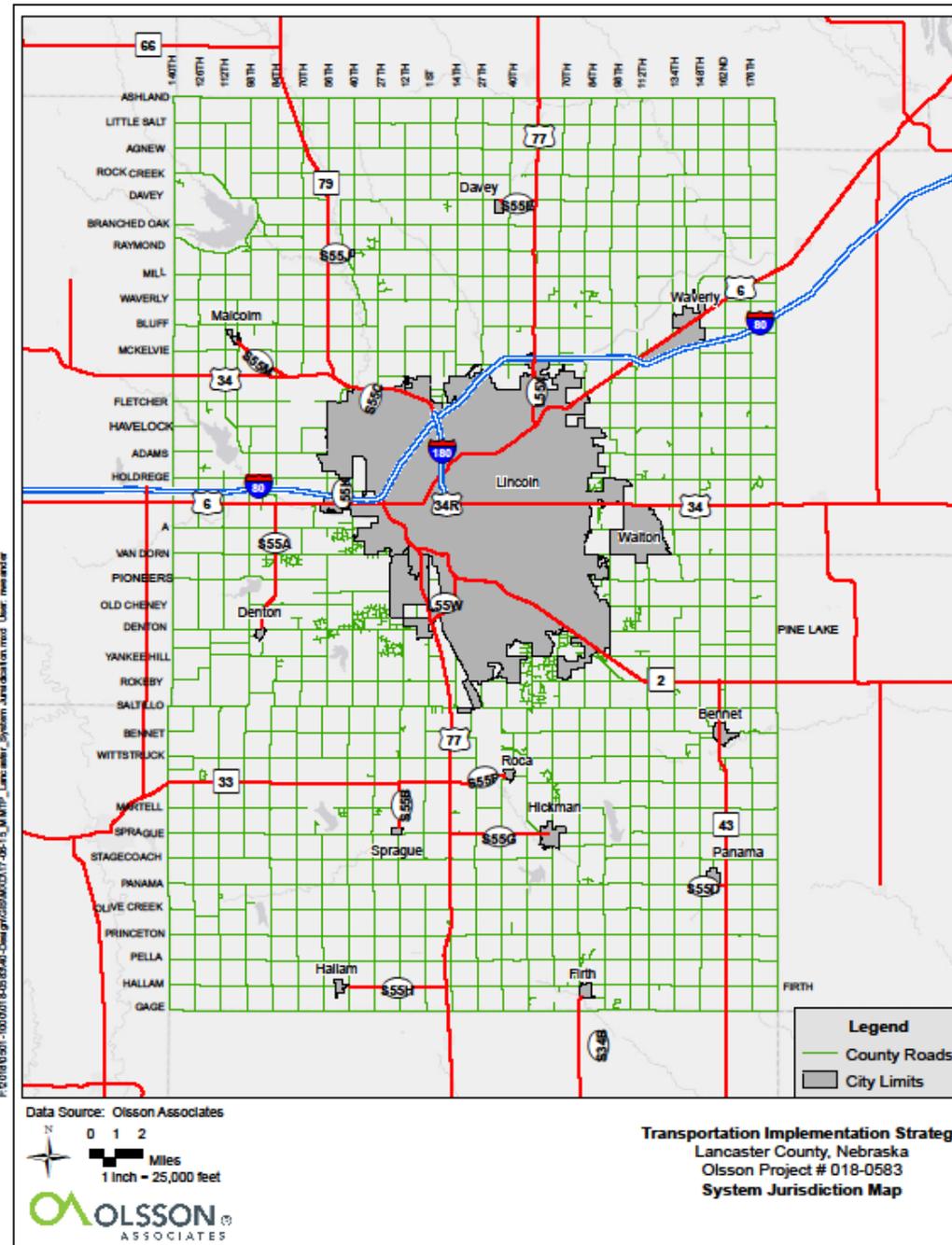


Map 3: Existing Functional Classification

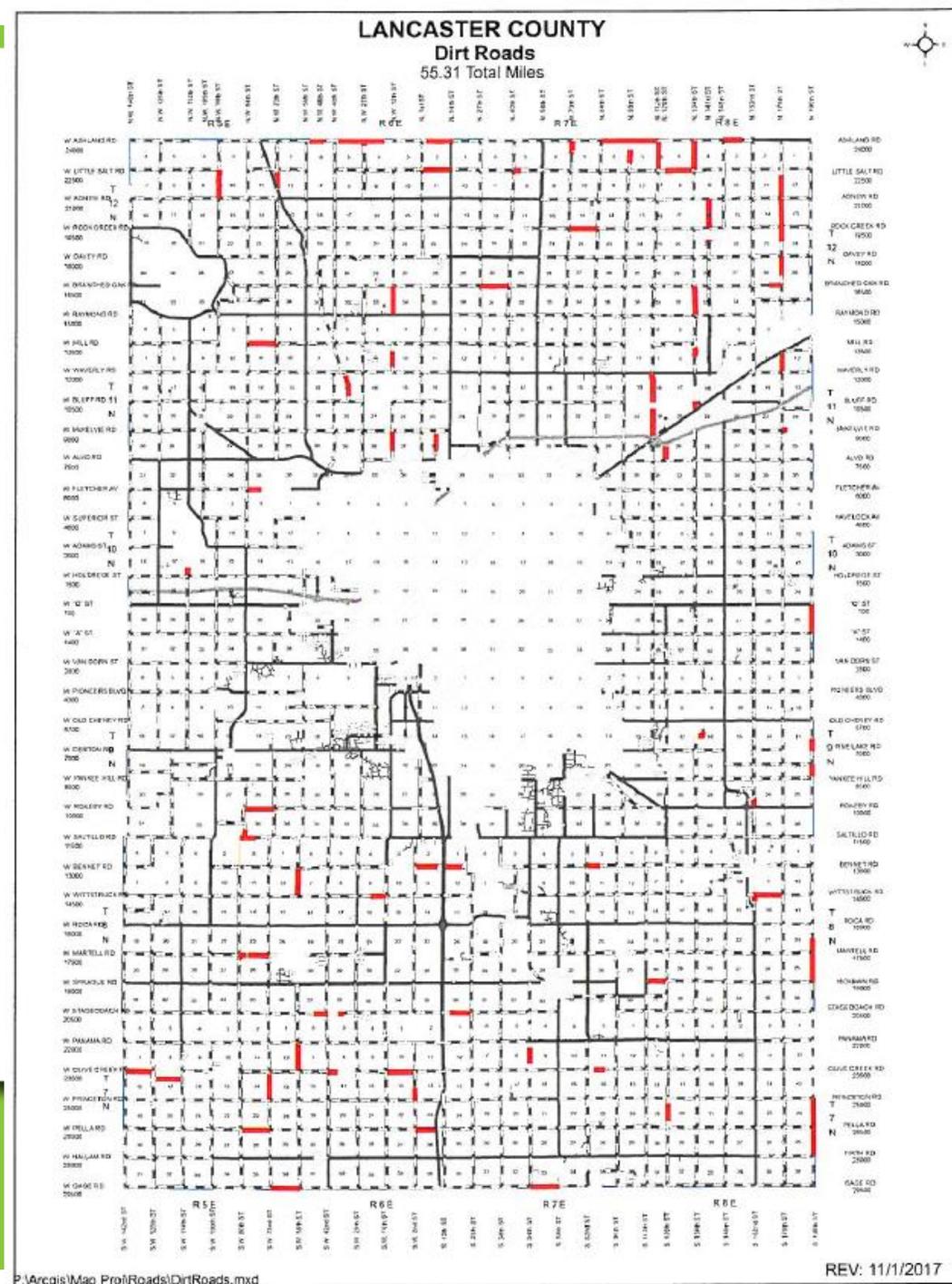
National Highway System



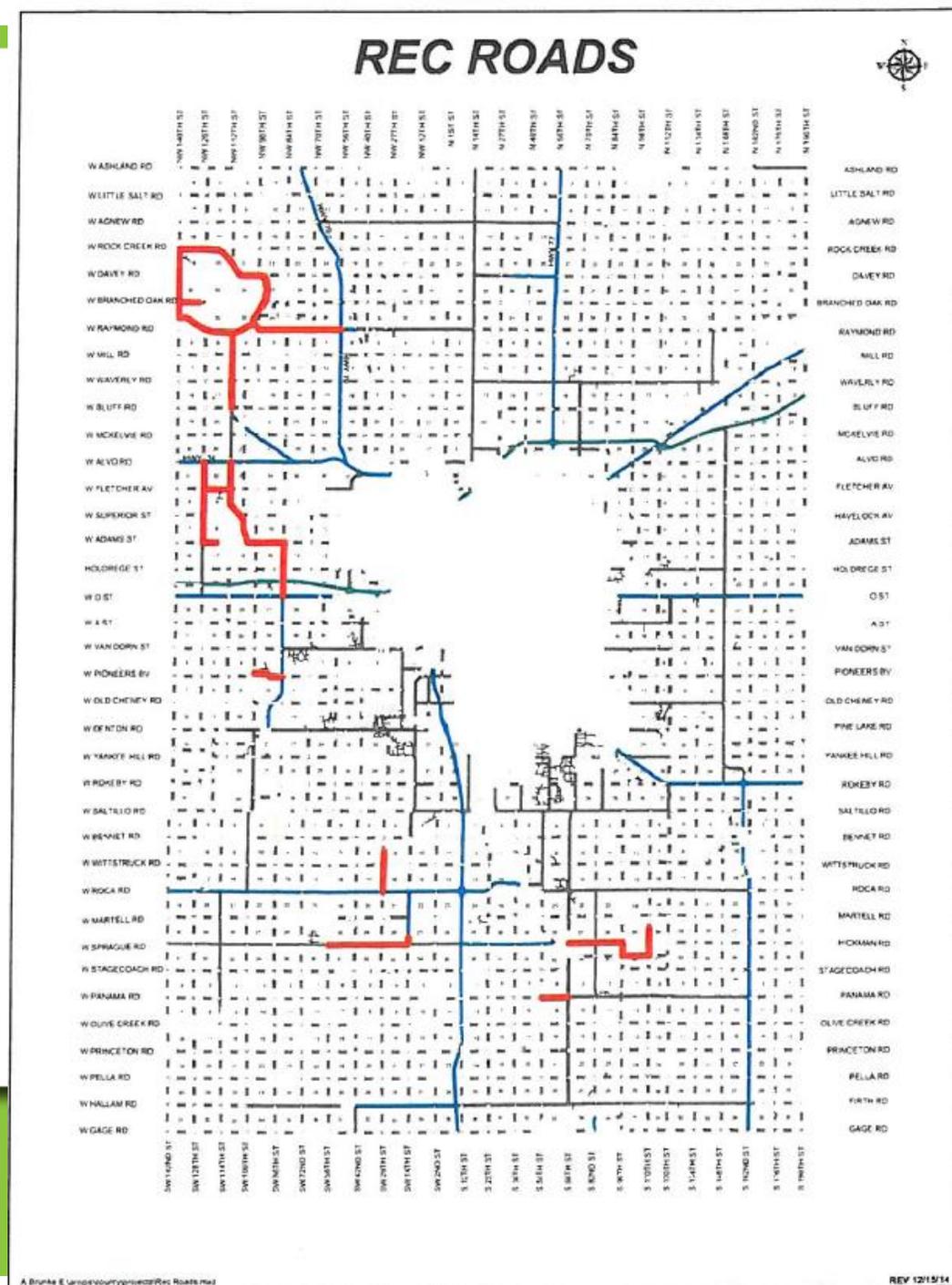
System Jurisdictions



County Dirt Roads



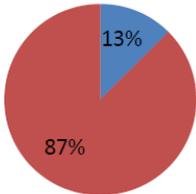
REC Roads



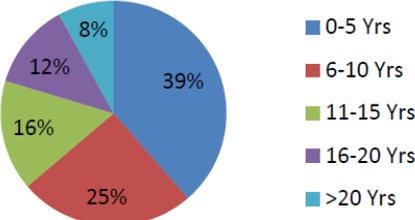
Lancaster System Summary

Paved Roads

■ Subdivisions ■ Main Roads

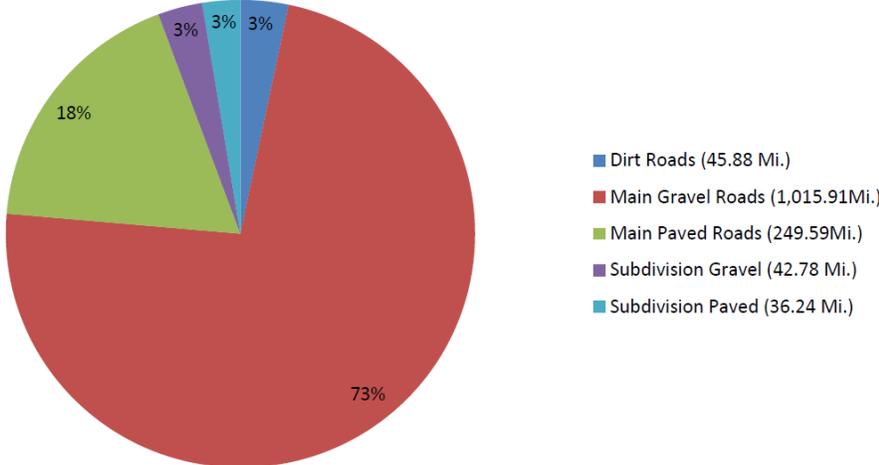


Paved Roads by last paved Date



COUNTY ROAD SYSTEM COMPOSITION

County Roads By Type

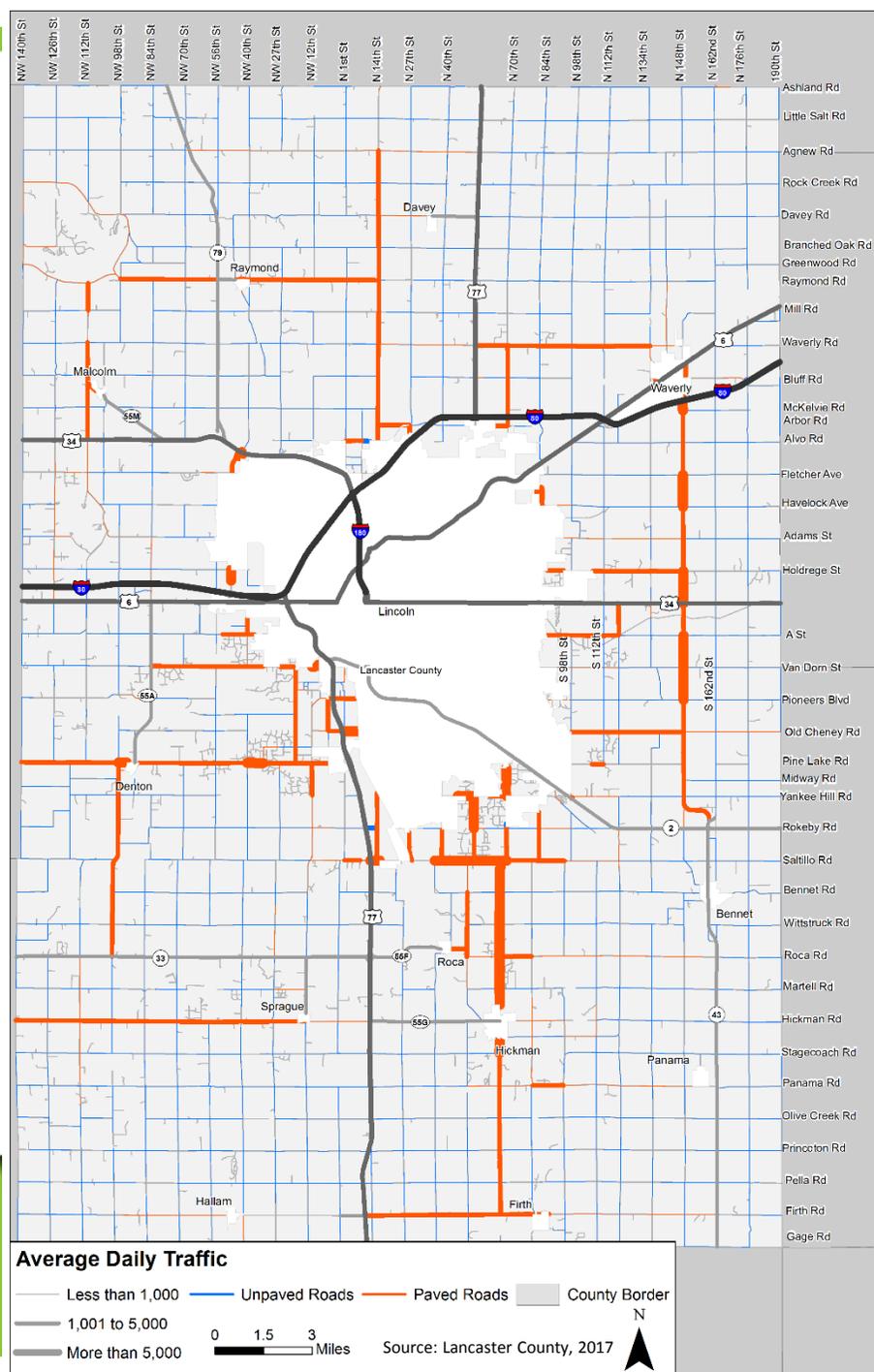


Age of Main Paved Roads*

*Based on Overlay Year

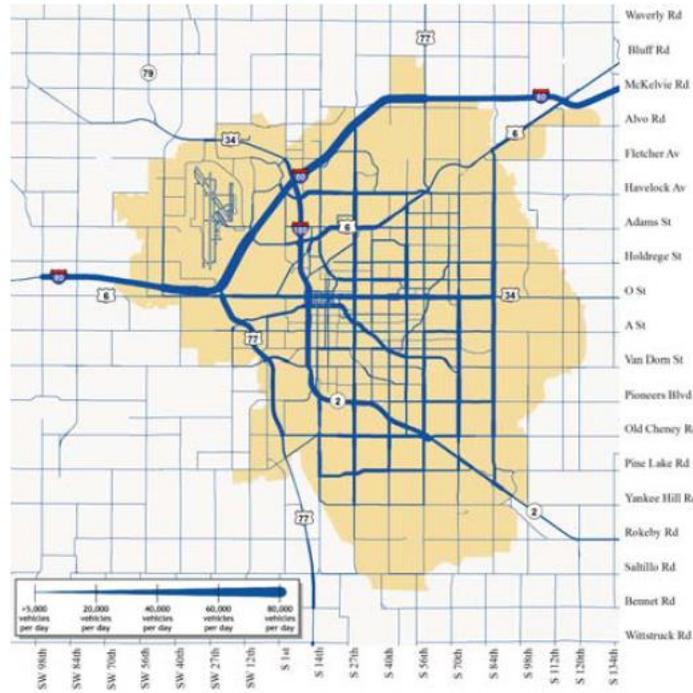
Age (Years)	Miles	Percent
0-5 Yrs	96.27	38.6%
6-10 Yrs	62.69	25.2%
11-15 Yrs	39.63	15.9%
16-20 Yrs	30.73	12.3%
>20 Yrs	19.94	8.0%

Average Daily Traffic

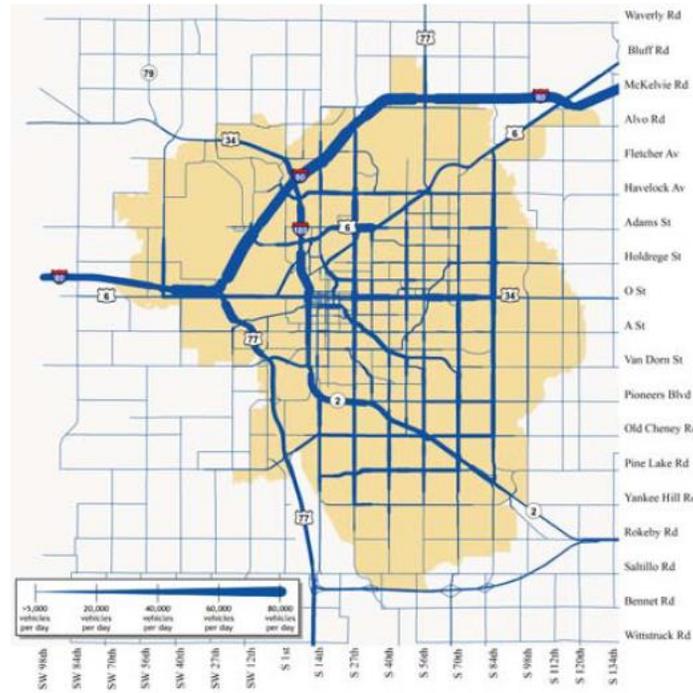


Traffic Growth Impact from Lincoln

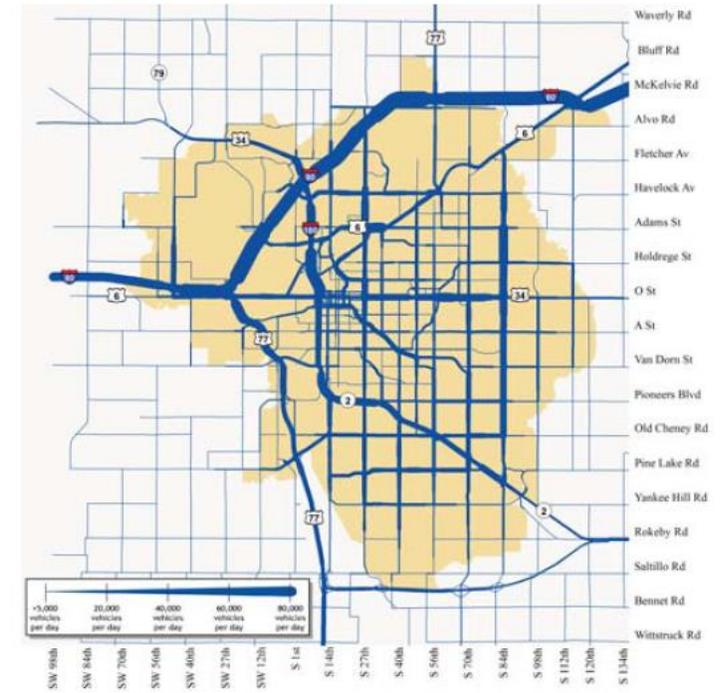
EXISTING (2015)



2026 (E+C)



2040 (E+C)



Pavement – Lancaster County

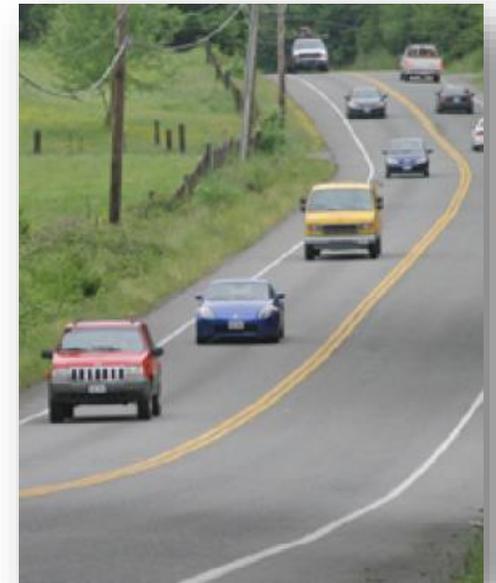
- 250 Miles – Mainline Road
 - 30.79 miles eligible for SRR funding
 - 36 miles within subdivisions
- Current Needs (2017 assessment)
 - 79 mile requiring overlay with a rating <80 @ \$360k/mile
 - 21 miles of 79 mi. with a rating <50
 - Current Traffic over 400 trips/day - threshold for requiring paving
 - 6 miles @ \$530k/mile

Asphalt Condition Rating Scale

0 to 29 = Reconstruction / Replacement

30 to 79 = Overlay

80 to 100 = Routine Maintenance



Lancaster County Bridges - Today



Definitions

Bridge Sufficiency Rating: An overall rating of a bridge's fitness for the duty it performs. Scale of 1-100, where below 50 is eligible for replacement

Scour: Erosion of soil surrounding a bridge foundation, caused by fast moving water.

Structurally deficient : If deck, superstructure, substructure or culvert is rated in "poor" condition. Or if load carrying capacity is significantly below current design standards; or if a waterway frequently overtops the bridge during floods.

Definitions

Functionally Obsolete : Bridge that is no longer by design functionally adequate for its task. I.e., not enough traffic lanes or not enough clearance for oversized vehicles. Not related to its structural nature.

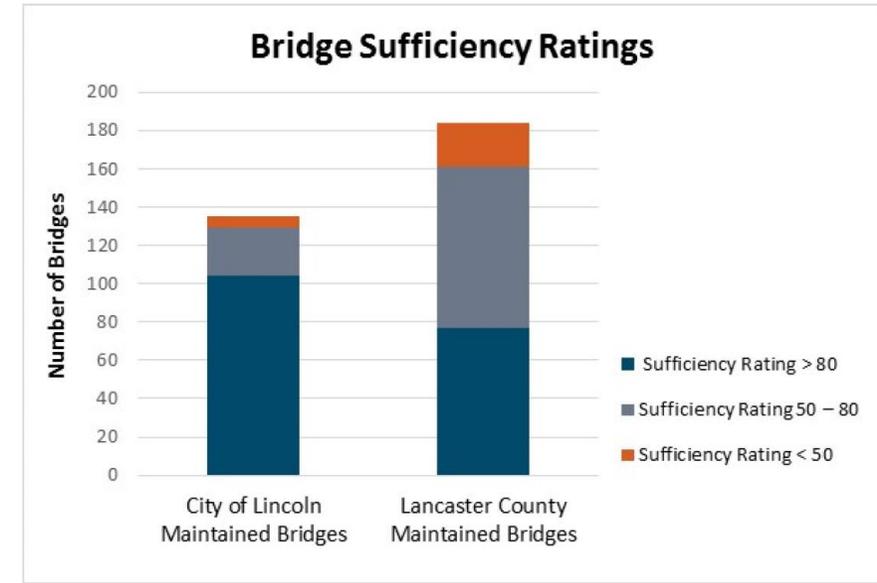
Fracture Critical Bridges: Lacking structural capacity or redundancy to prevent failure in event one structural element fails.

Posted Bridges: Bridges that, due to their condition or design, do not have the structural capacity to safely carry the state legal loads.

Culvert: Become 'bridges' after spanning 20 feet

Bridges - Today

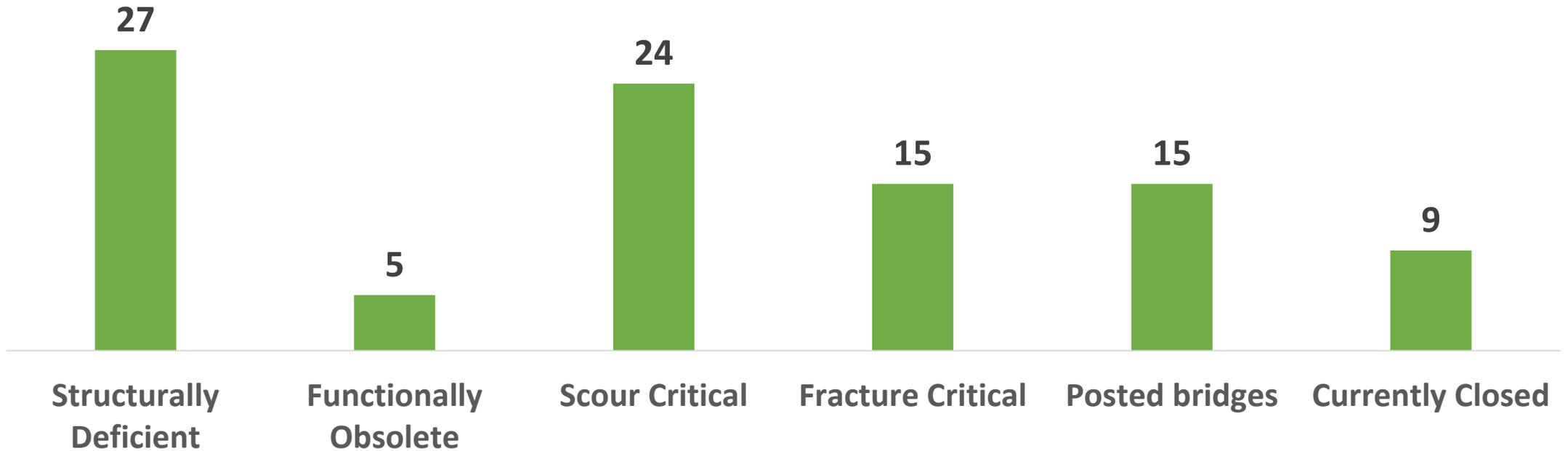
- County maintains 184 bridges
- Bi-annual inspections
 - Or if rehab or replacement
- Sufficiency Rating (0-100)
 - Between 50-80 = eligible for rehab
 - < 50 = eligible for replacement
- Avg Rating = 75.2



Bridge Sufficiency Rating	City Maintained Bridges	County Maintained Bridges
> 80	104	77
50 - 80	25	84
< 50	6	23
Total	135	184

Bridges - Today

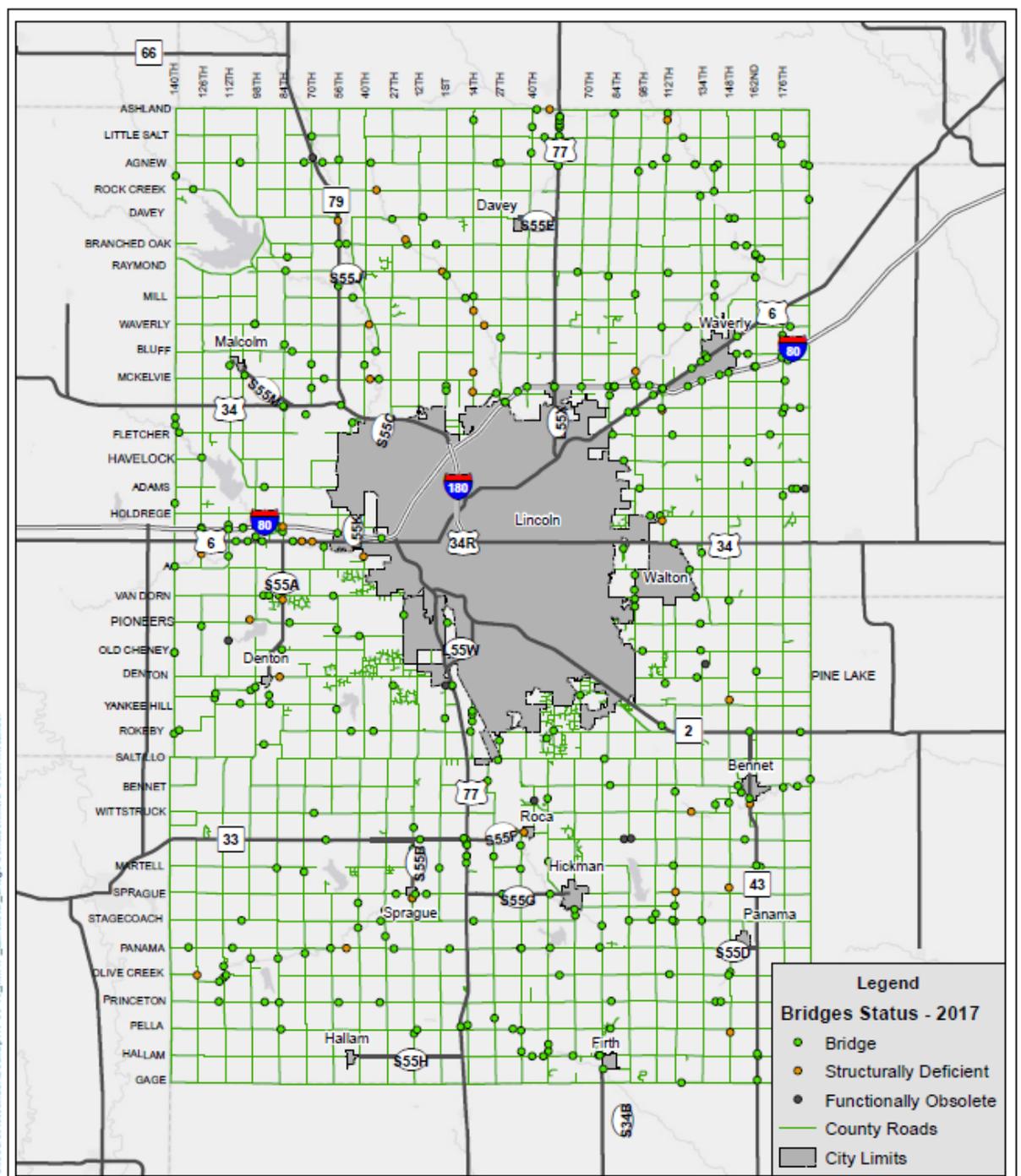
Lancaster County Maintains 184 Bridges



Bridges - Today

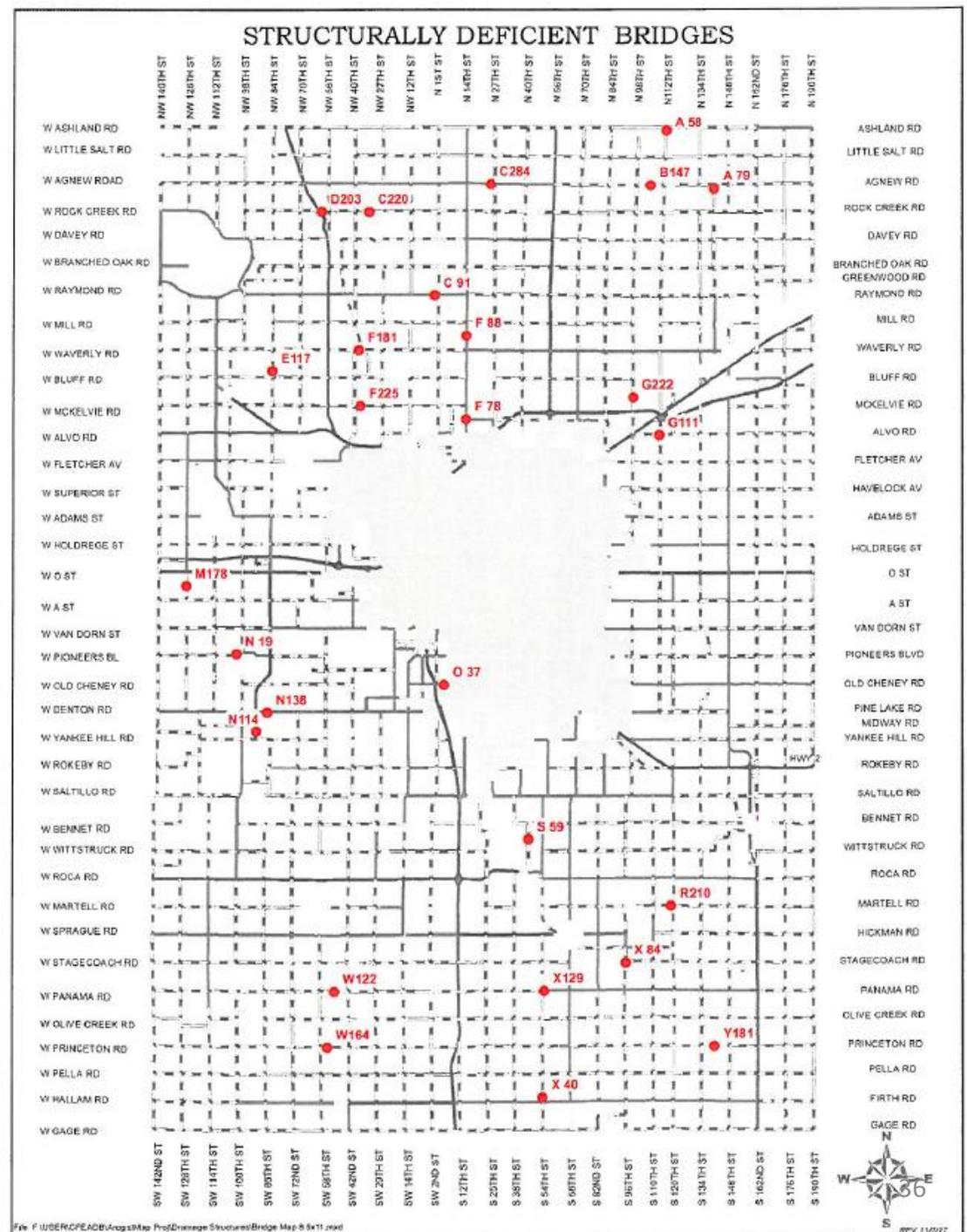
- Structurally Deficient – 27
- Scour Critical – 24
- Currently Closed - 9

C:\Users\Nwainder\Desktop\17-06-15_MMTP_Lancaster_Bridge Condition.mxd User: nwainder



27 Structurally Deficient Bridges

Structurally deficient : If deck, superstructure, substructure or culvert is rated in “poor” condition. Or if load carrying capacity is significantly below current design standards; or if a waterway frequently overtops the bridge during floods.

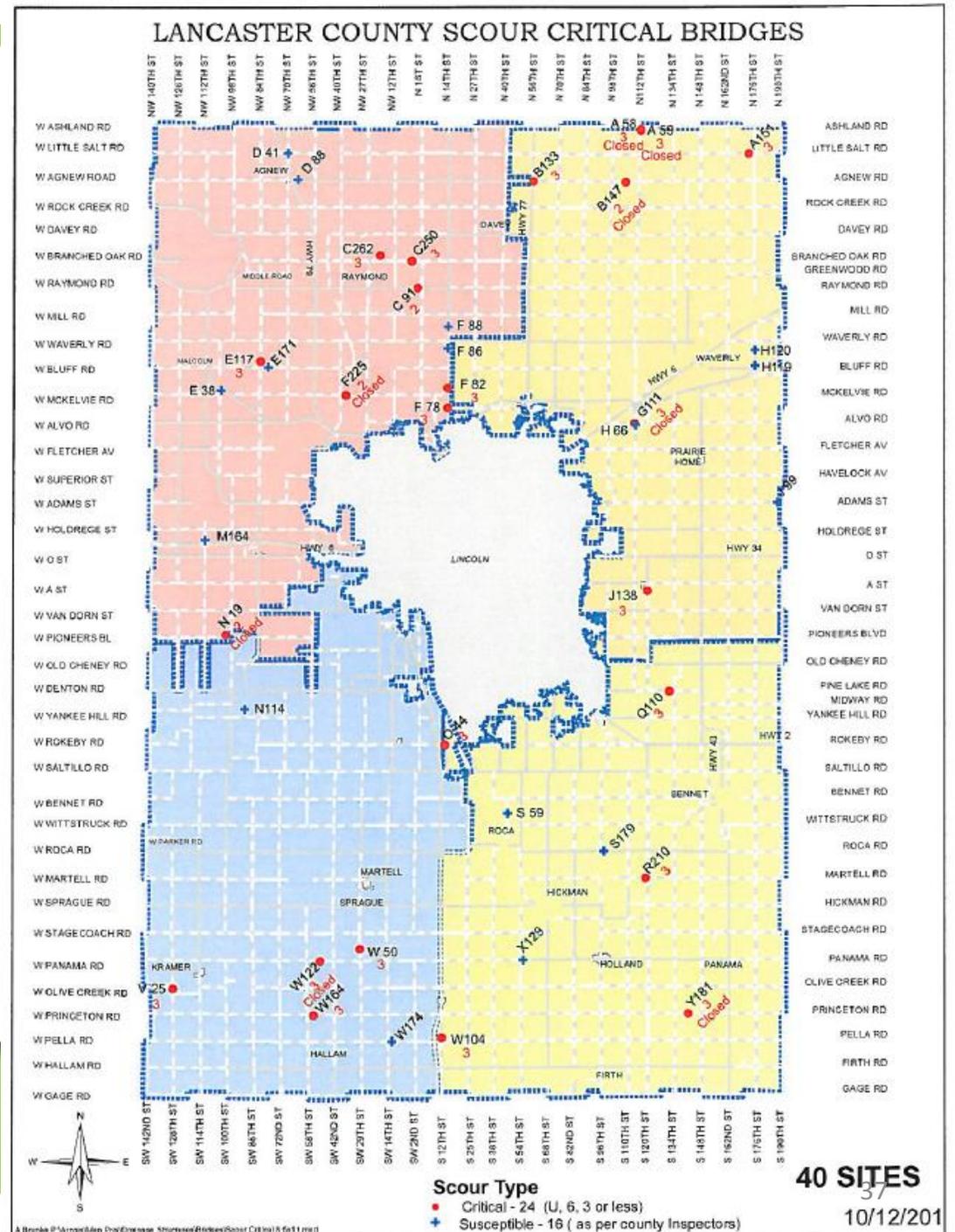


24 Scour Critical Bridges

Scour: Erosion of soil surrounding a bridge foundation, caused by fast moving water.

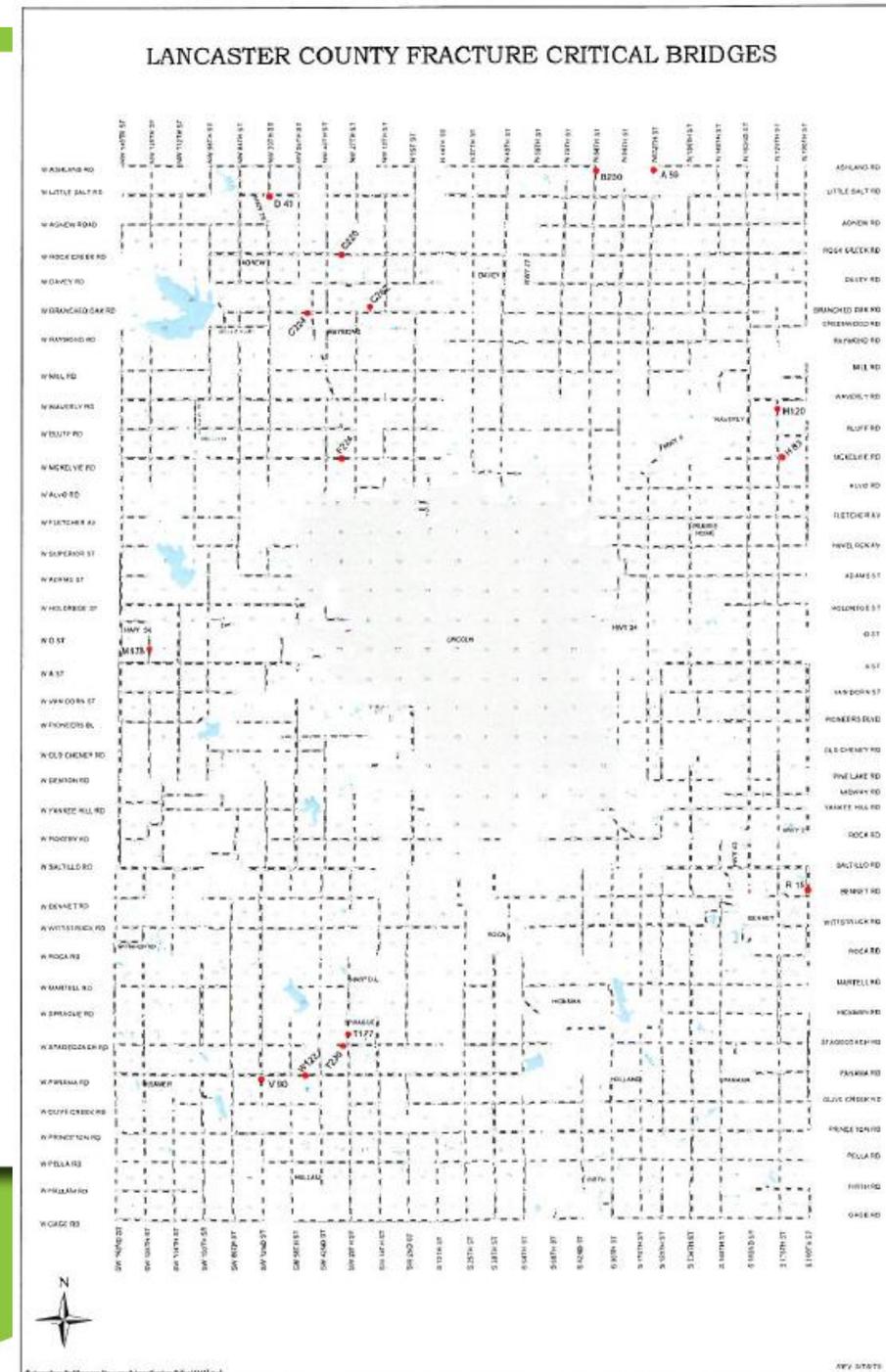
Scour Critical: When scour causes bridge foundations to become unstable

Susceptible: Bridge is of type that historically causes problems and leads to scour



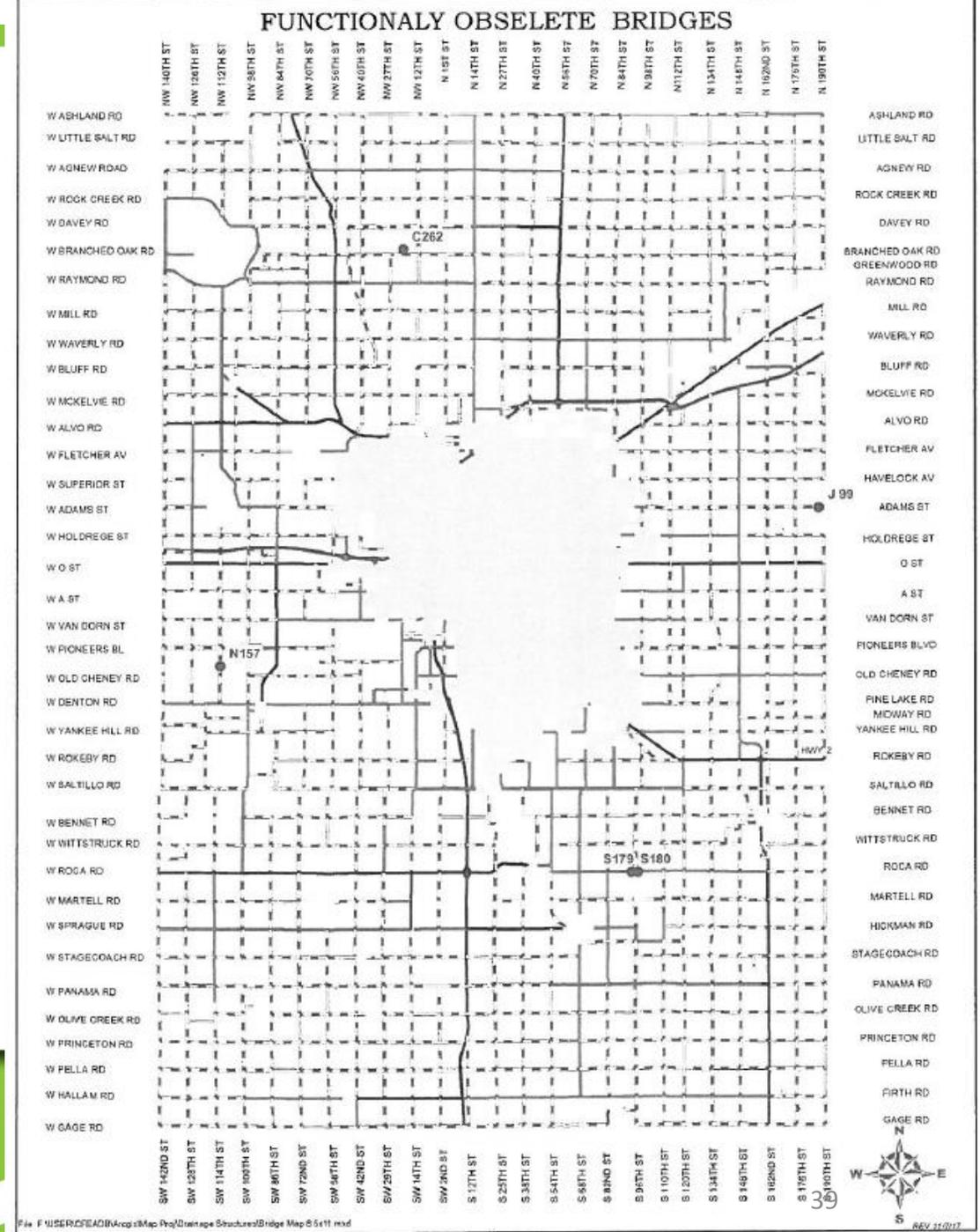
15 Fracture Critical Bridges

Fracture Critical Bridges: Lacking structural capacity or redundancy to prevent failure in event one structural element fails.



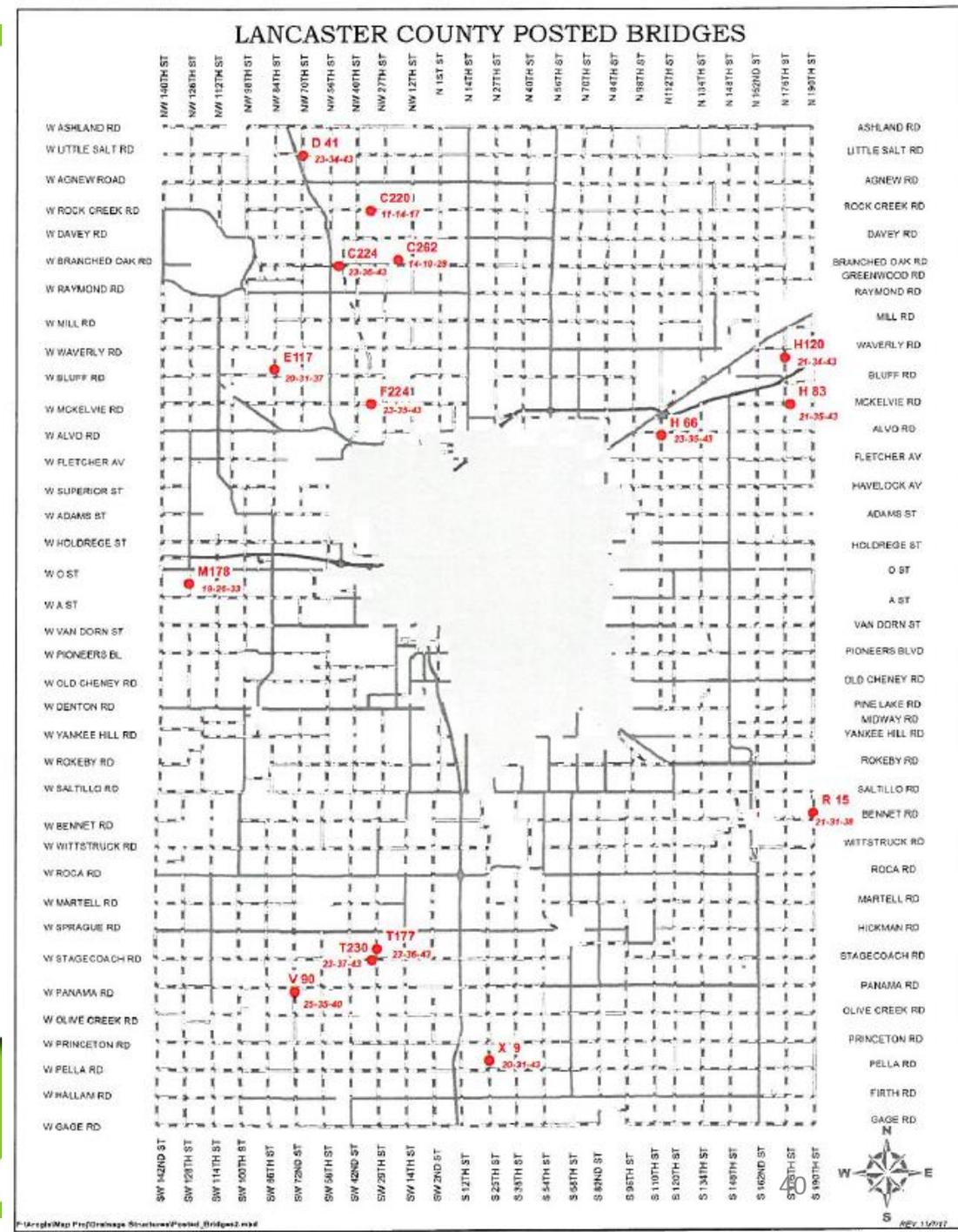
5 Functionally Obsolete Bridges

Functionally Obsolete : Bridge that is no longer by design functionally adequate for its task. I.e., not enough traffic lanes or not enough clearance for oversized vehicles. Not related to its structural nature.



15 Posted Bridges

Posted Bridges: Bridges that, due to their condition or design, do not have the structural capacity to safely carry the state legal loads.



Lancaster County Culverts

- 83 Combination Structures
 - Culvert / Pipe / Bridge combinations
 - Substandard Design
- Approx. 6,900 pipes
 - Includes driveways
- Approx. 1,000 box culverts



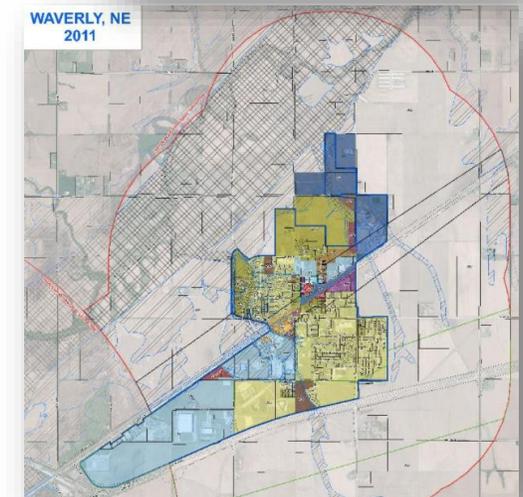
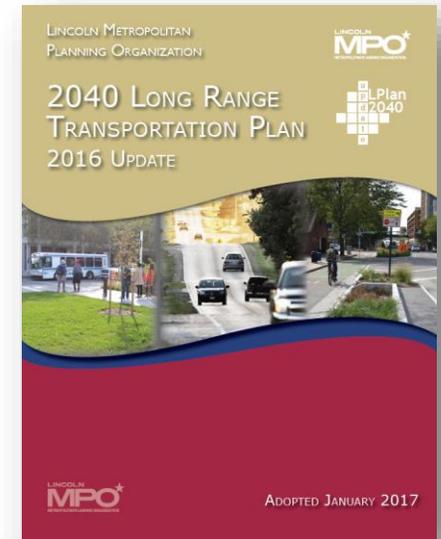
Existing Practices and Guidelines

- 300 trips per day = 100' ROW
 - 66' Historic Section-Line ROW
 - 50' from center on current platting
- 400 trips per day = pavement
 - Dependent on Funding
- Residential subdivisions:
 - With lot sizes of < 3 acres, must have community water/sewer
 - Lot sizes of 1 acre or less, roads must be paved



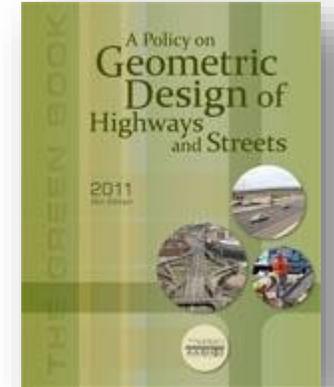
Adopted Design Standards/Guidelines

- 2040 Regional Transportation Plan
- Interlocal Agreement County/City – Rural to Urban Transition Street (RUTS)
 - ROW and construction standards within 3-mile zoning jurisdiction of the City
- County Zoning Regulations
 - <https://lincoln.ne.gov/city/plan/dev/zoning/stratreg/cozon.htm>
- Chapter 2.20 Rural Public and Intermediate BTA (Build Through Acreage) Public Street Design Standards - City of Lincoln Design Standards
 - <http://lincoln.ne.gov/city/attorn/designs/ds220.pdf>
 - <http://www.lincoln.ne.gov/city/plan/reports/acre/2627.pdf>
 - <http://www.lincoln.ne.gov/city/plan/reports/acre/build.pdf>



Adopted Design Standards/Guidelines

- Nebraska Board of Public Roads Classifications & Standards (NBCS)
 - Minimum Design Standards for Rural Roads
- American Association of State Highway and Transportation Officials (AASHTO)
 - *A Policy on Geometric Design of Highways and Streets*
- Access Management Policy, City of Lincoln, 2012
 - <http://lincoln.ne.gov/city/pworks/docs/pdf/access-mgmt.pdf>
 - Rural-type cross-sections and a parallel ditch, a drainage culvert shall be installed under the driveway approach.



Previous Reports

- 2017 Annexation Study
 - <https://lincoln.ne.gov/city/plan/long/AnnexStudy/Study.pdf>
- 2040 Long Range Transportation Plan, 2016 Update
- 2018 Lincoln Transportation Strategy Report
- County Construction Report, Monthly/Annual
- Traffic Model 2040 Data by TAZ
- Rural Cost of Services Study – Lincoln/Lancaster County, 2003
 - <http://www.lincoln.ne.gov/city/plan/reports/acre/cost.pdf>
- Complete Streets Gap Analysis and Prioritization Strategy, 2015
 - <http://lincoln.ne.gov/city/plan/reports/GapAnalysis.pdf>
- SE NE Regional ITS Architecture, 2005
 - <http://local.iteris.com/senearch/deliver/Executive%20Summary%203-17-05.pdf>



One- and Six-Year Plans

- Unique annual mandatory reporting to NDOT
- Promotes orderly development of an integrated system of public roads
- Electronic filing
- Separate Financial Sheet submitted. Must be fiscally constrained.
- The NE Board of Public Roads Classifications and Standards oversees annual construction and planning.
- Identifies projects to be accomplished over next one and six years.
- Includes maps of projects
- Public hearing must be held, prior to governing body adopting the plan.



Evolution of a typical road project

- Survey: 1 – 3 months
- Design: 2 – 12 months depending on complexity
- Permit: 6 – 12 months
- ROW Acquisition (if needed): 2 – 4 months
- Utility Relocation (if needed): 1 – 3 months
- Construction: 3 – 24 months

Total 12 – 58 months

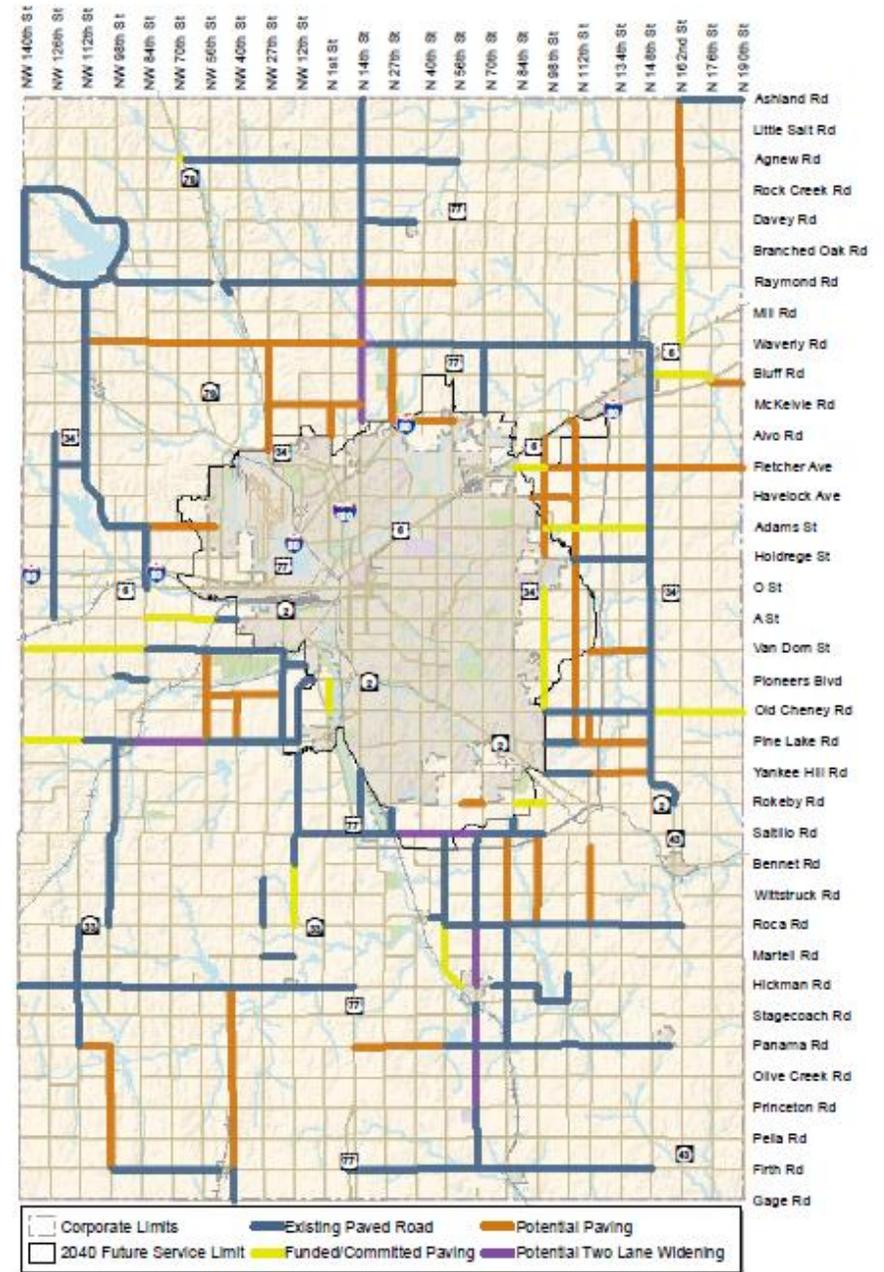


Existing Plans

- Bennet 2026 Comprehensive Plan, 2006-2026
- Denton Comprehensive Plan, 1977
- Firth Comprehensive Plan, 1969
- Hallam 2035 Comprehensive Plan
- Hickman Comprehensive Plan, 2007-2030
- Malcolm Comprehensive Plan, 2007
- Panama Comprehensive Plan, 2013
- Raymond Comprehensive Plan, 2000
- Roca Comprehensive Plan, 1976
- Sprague-Martell Comprehensive Plan, 1976
- Waverly Comprehensive Plan, 2013-2033



Rural Road Project Identified Needs

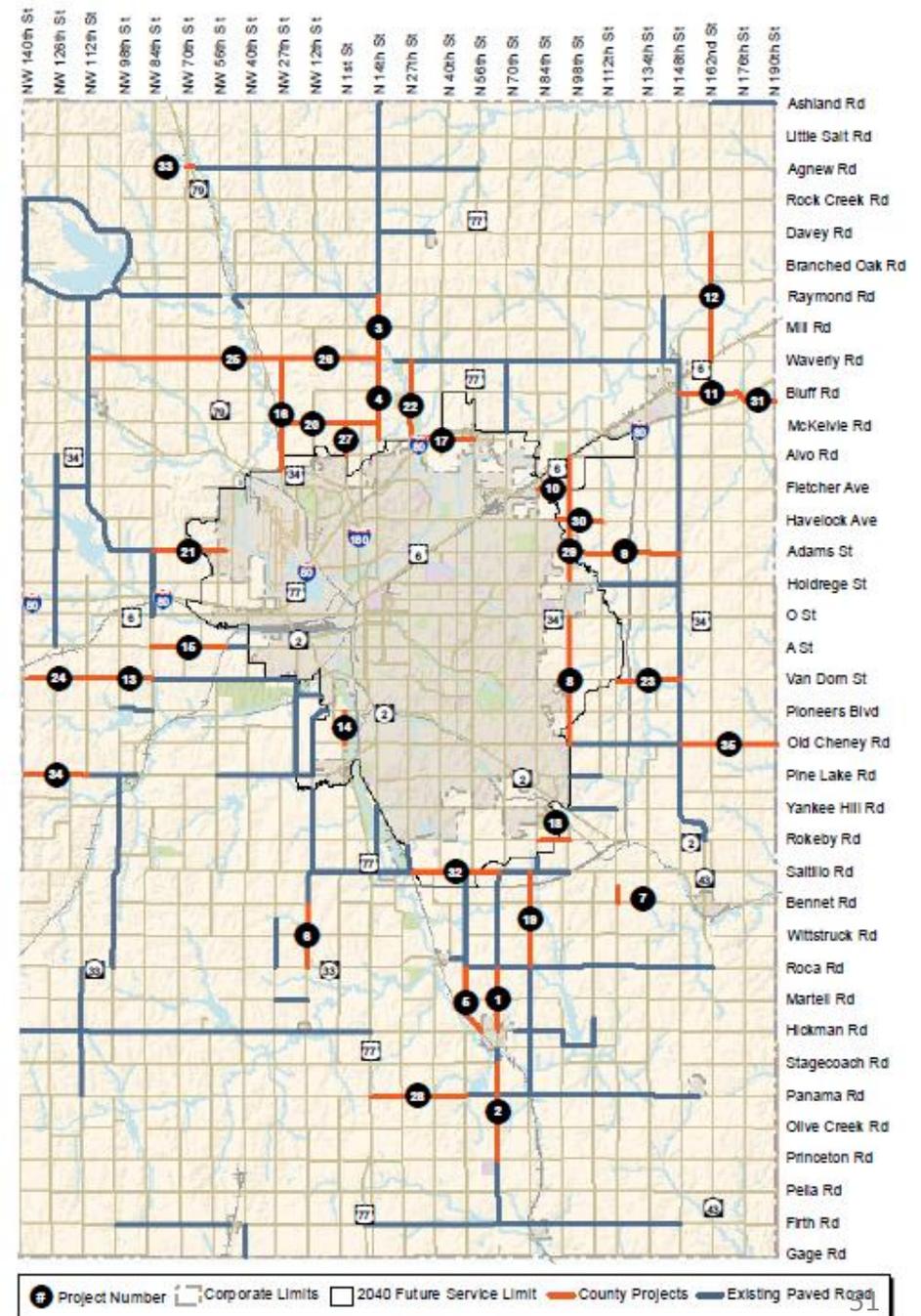


Rural Road Identified Projects

Table 10: Rural Roads Projects

Priority	Project ID	Street	Location	Length (Miles)	Project Type
2016	11	Bluff Road	Waverly City Limits to I-80	2.10	County Project
2016	18	Rokeby Road	S. 84th Street to 98th St	1.00	County Project
2016	33	W. Agnew Road	Hwy. 79 west 0.2 miles	0.20	County Project
2016	34	W. Denton Rd.	SW 112th St. to SW 140th St.	2.00	County Project
2016	35	Old Cheney Rd.	148th St. to 190th St.	3.00	County Project
1	9	Adams Street	Steven's Creek to N. 148th St	3.50	County Project
2	5	S. 54th Street	Hickman Rd to Roca Rd	2.00	County Project
3	1	S. 68th Street	Hickman to Roca Rd	1.30	Federal-Aid County Project
4	32	Saltillo Road	S. 27th St to S. 68th St	3.00	County Project
5	15	W. A Street	SW 84th St to SW 52nd St	2.20	County Project
6	30	Havelock Avenue	Stevens Creek to N. 112th St	1.40	County Project
7	16	NW 27th St	Hwy 34 to W. Waverly Rd	3.50	County Project
8	2	S. 68th Street	Princeton Rd to Stagecoach Rd	3.00	Federal-Aid County Project
9	3	N. 14th Street	Waverly Rd to Raymond Rd	2.00	Federal-Aid County Project
10	8	S. 98th Street	Old Cheney Rd to Hwy 34	4.00	County Project
11	4	N. 14th Street	Arbor Rd to Waverly Rd	2.50	Federal-Aid County Project
12	6	SW 14th Street	Highway N-33 to W. Bennet Rd	2.00	County Project
13	10	Fletcher Avenue	N. 84th St to N. 98th St	2.00	County Project
14	29	N. 98th Street	Holdrege St to Highway US-6	4.30	County Project
15	13	W. Van Dorn Street	SW 112th St to SW 84th St	2.00	County Project
16	7	S. 120th Street	Bennet Rd North 0.5 Miles	0.50	County Project
17	17	Arbor Road	N. 27th St to Highway US-77	2.00	County Project
18	12	N. 162nd Street	Highway US-6 to Davey Rd	3.80	County Project
19	24	W. Van Dorn Street	SW 140th St to SW 112th St	2.00	County Project
20	14	S. 1st Street	Old Cheney Rd to Pioneers Blvd	1.00	County Project
21	25	W. Waverly Road	NW 112th St to Highway N-79	4.00	County Project
22	26	W. Waverly Road	Highway N-79 to N. 14th St	5.00	County Project
23	27	N. 1st Street	Alvo Rd to McKelvie Rd	1.00	County Project
24	22	N. 27th Street	Arbor Rd to Waverly Rd	2.50	County Project
25	19	S. 82nd Street	Roca Rd to Saltillo Rd	3.00	County Project
26	21	W. Adams Street	NW 84th St to NW 56th St	2.00	County Project
27	23	Van Dorn Street	S. 120th St to S. 148th St	2.00	County Project
28	28	Panama Road	Highway US-77 to S. 54th St	3.00	County Project
29	20	McKelvie Road	NW 27th St to N. 14th St	3.00	County Project
30	31	Bluff Road	I-80 to N. 190th St	1.10	County Project

Source: LPLAN 2040, 2016

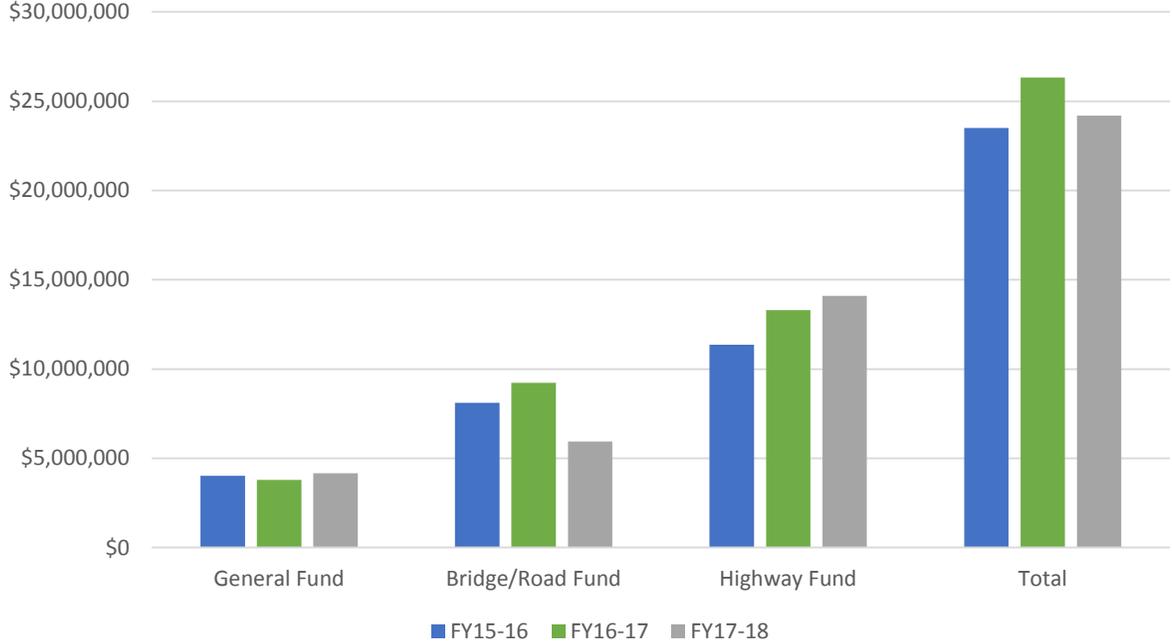


Source: LPLAN 2040, 2016

Map 18: Rural Roads Projects

Budget/Revenue Structure

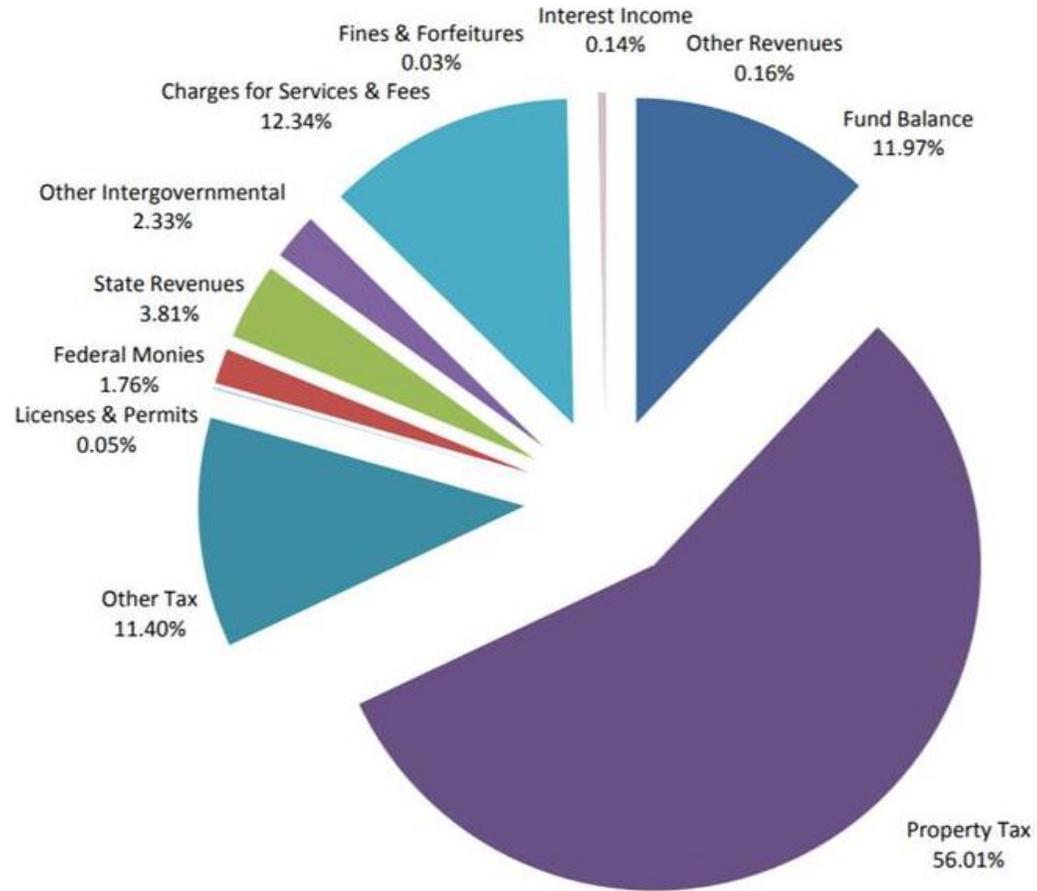
Lancaster County Budget



	Expenditures FY15-16	Expenditures FY16-17	Budget FY17-18
General Fund	\$ 4,023,757	\$ 3,795,626	\$ 4,166,669
Bridge/Road Fund	\$ 8,107,359	\$ 9,224,301	\$ 5,936,983
Highway Fund	\$ 11,368,159	\$ 13,302,754	\$ 14,093,804
Total	\$ 23,499,275	\$ 26,322,681	\$ 24,197,456

FEMA provided \$4M for reimbursement due to floods

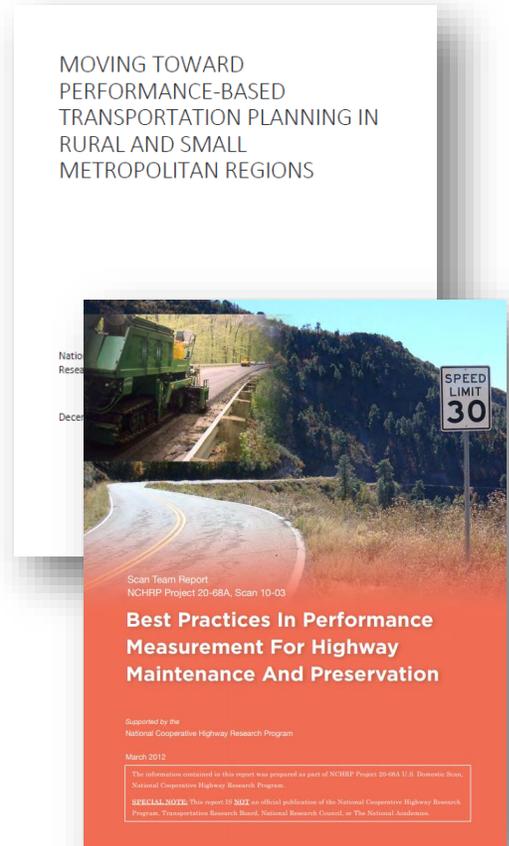
Budget/Expenditure



	Expenditures FY15-16	Expenditures FY16-17	Budget FY17-18
General Fund	\$ 4,023,757	\$ 3,795,626	\$ 4,166,669
Bridge/Road Fund	\$ 8,107,359	\$ 9,224,301	\$ 5,936,983
Highway Fund	\$ 11,368,159	\$ 13,302,754	\$ 14,093,804
Total	\$ 23,499,275	\$ 26,322,681	\$ 24,197,456

Research of Best Practices

- Best Practices to Enhance the Transportation-Land Use Connection in the Rural United States, NCHRP Report 582.
 - http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_582.pdf
- Moving Toward Performance-Based Transportation Planning in Rural and Small Metropolitan Regions, NADO Research Foundation.
 - http://ruraltransportation.org/wp-content/uploads/2015/02/MovingTowardPerformance_NADORF.pdf
- Domestic Scan Pilot Program Best Practices in Transportation Asset Management, NCHRP 20-68
 - http://onlinepubs.trb.org/onlinepubs/trbnet/acl/nchrp2068_domestic_scan_tam_final_report.pdf
- Best Practice in Performance Measurement for Highway Maintenance and Preservation, NCHRP Project 20-68A, Scan 10-03
 - http://onlinepubs.trb.org/onlinepubs/nchrp/docs/nchrp20-68a_10-03.pdf



Discussion of Peer Counties

- Goal of Peer Review
 - Determine what other areas are using to manage system preservation, optimization, and growth
 - Similar size communities w/ similar development & travel patterns
- Up to 12 Counties
 - Local Preferences

	Nearby Municipality	Population	Median HH Income	Poverty Rate	Employment Rate	Bachelors Degree or Higher
Sarpy County, NE	Omaha, NE	172,460	\$72,269	6.20%	70.10%	38.40%
Douglas County, KS	Lawrence, KS	116,352	\$52,698	19.20%	65.40%	49.70%
Story County, IA	Ames, IA	94,834	\$51,201	22.30%	63.90%	50.30%
Riley County, KS	Manhattan, KS	75,026	\$46,609	21.70%	55.80%	46.00%
Boone County, MO	Columbia, MO	172,773	\$50,813	19.30%	64.90%	46.80%
Hamilton County, IN	Carmel, IN	303,042	\$87,782	5.10%	70.10%	56.30%
Winnebago County, IL	Rockford, IL	288,896	\$49,468	15.50%	58.00%	22.40%
	<i>Average</i>	174,769	58,691	15.61%	64.03%	44.27%
Lancaster County, NE	Lincoln, NE	301,707	\$53,730	14.30%	68.60%	37.30%

Schedule - Lancaster County Infrastructure Task Force Executive Committee

- April 5, 2018: 2-3:30 pm - Kick-Off Meeting
- May 3, 2018: 2-3:30 pm - Meeting 2 - Waverly Engineering Shop, tour to follow.
 - Best Management Practice Recommendation
- June 12, 2018: 2-3:30 pm - Meeting 3 – Norris Public Schools, tour to follow.
 - Budget Analysis
 - Intro to Funding Options
- July 12, 2018: 2-3:30 pm - Wrap-Up Meeting – Denton Community Center, tour to follow.
 - Wrap-up

Next Steps

- Consensus on Goals
- Existing Infrastructure Assessment Report
 - Roadway and Bridge Conditions
 - Maintenance Needs
- Peer County Review



Discussion/Questions

Thank you!!

Jeff McKerrow, PE, PTOE
Nick Weander, PTP, MPA



Parking Lot

Pavement – Lancaster County

Future needs

- Assumptions - 20 yr life cycle of overlay pavement and growth of 300 ADT to 400 ADT in 5 years.
- Overlay 12.5 miles/year Mainline
- Overlay 2 miles/year in subdivisions
- New Paving
 - 26 miles with ADT of 300 or greater
 - Use 5 miles/year new paving



Pavement – Lancaster County

Cost Estimates - Summary



	Current Miles	Cost/Mile	Current \$ need	20 Year life cycle	Cost	20 yr cycle \$ annual need
Overlay	79	\$360,000	\$28,440,000	12.5	\$360,000	\$4,500,000
New Paving	6	\$530,000	\$3,180,000	5	\$750,000	\$3,750,000
Subdivisions	3	\$530,000	\$1,590,000	2	\$530,000	\$1,060,000
	88		\$33,210,000	19.5		\$9,310,000