

Lancaster County Transportation Strategy

Jeff McKerrow, PE, PTOE

Nick Weander, PTP, MPA

May 3, 2018



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



Agenda

- Team Introductions
- Study Goals
- Budget Analysis
- Proposed Projects
- Funding Options
- Peer County Review
- Next Steps



Study Goals

- Develop Goals –
 - Realistic
 - Measurable
 - Consistent with LRTP Regional Goals
 - Support overall vision for County and Region



Study Goals

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

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

Goal 2. Mobility and System Reliability – An efficient, reliable, and well-connected transportation system to move people and freight.

Objective - Optimize the reliability of the transportation network

Objective - Provide a reliable network of farm-to-market and home-to-work roadways

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

Objective - Consider paved shoulders on paved county roadways

Goal 4. Safety and Resiliency – Provide a safe and resilient transportation network.

Objective - Institute a Roadway Safety Audit Report (RASR) program

Objective - Evaluate the resiliency of the system to natural and human-events



Study Goals

Goal 5. Economic Vitality – A transportation system that supports economic vitality for residents and businesses.

Objective - Improve farm-to-market and home-to-work networks to support county commerce

Objective - Improve county economic competitiveness by enhancing the transportation system to promote business growth

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

Objective - Maintain compliance with air quality standards

Objective - Reduce fossil fuel consumption

Objective - Avoid, minimize and mitigate environmental impacts of transportation projects

Goal 7. Funding and Cost Effectiveness – Collaboration in funding transportation projects to maximize resources

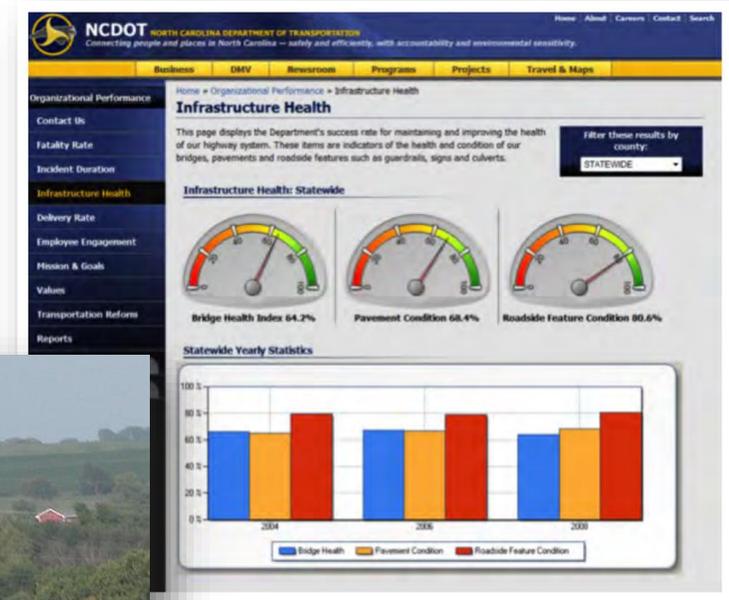
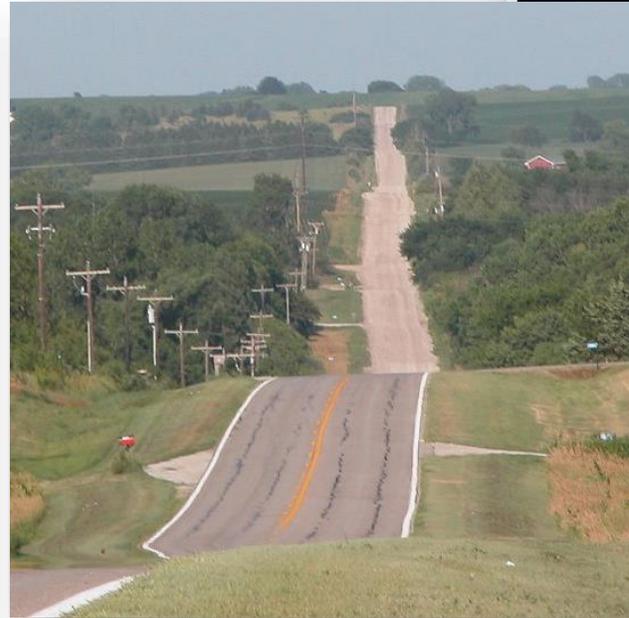
Objective - Make the best use of public resources

Objective - Decrease the gap between available resources and needed improvements



Study Goals

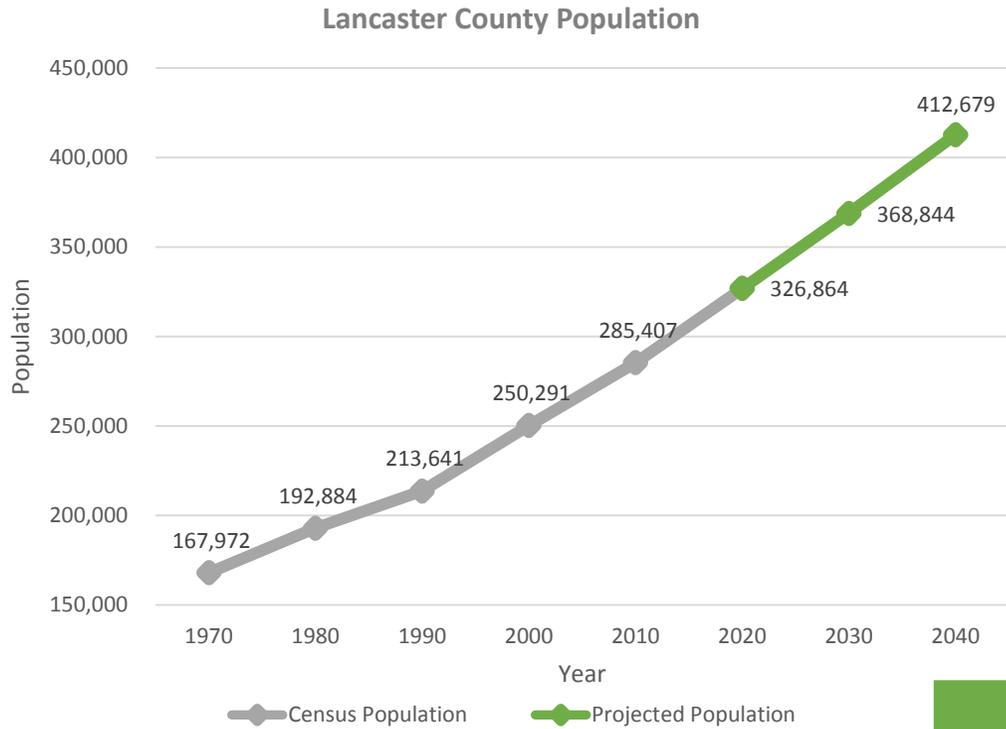
- Next steps
 - Develop Performance Measures
 - Identify Targets for each Goal



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%

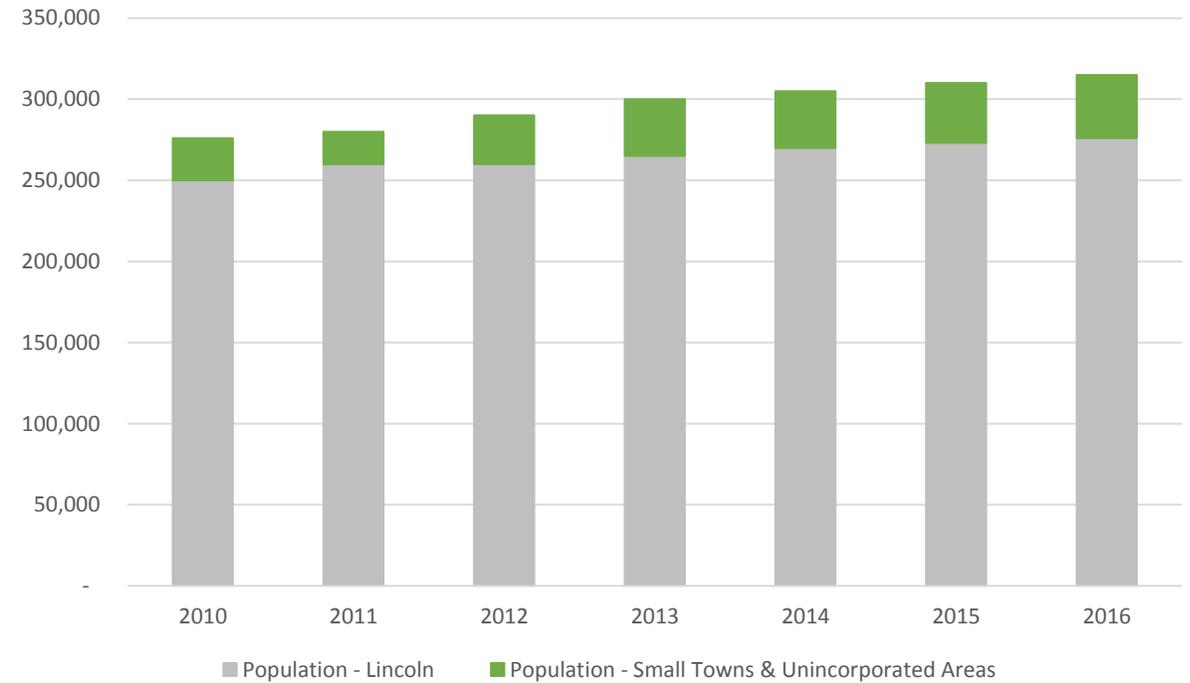
Source: <https://lincoln.ne.gov/city/plan/reports/cpanrev/benchrpt/bench17.pdf>

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



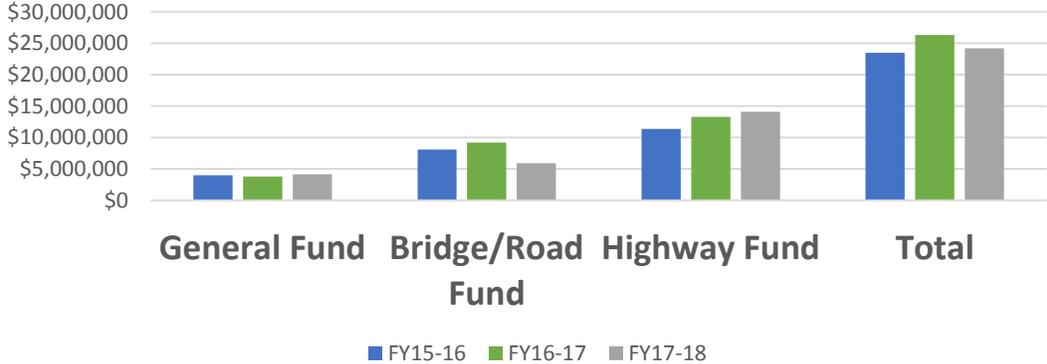
Source: <https://lincoln.ne.gov/city/plan/reports/cpanrev/benchrpt/bench17.pdf>

Budget Analysis Discussion



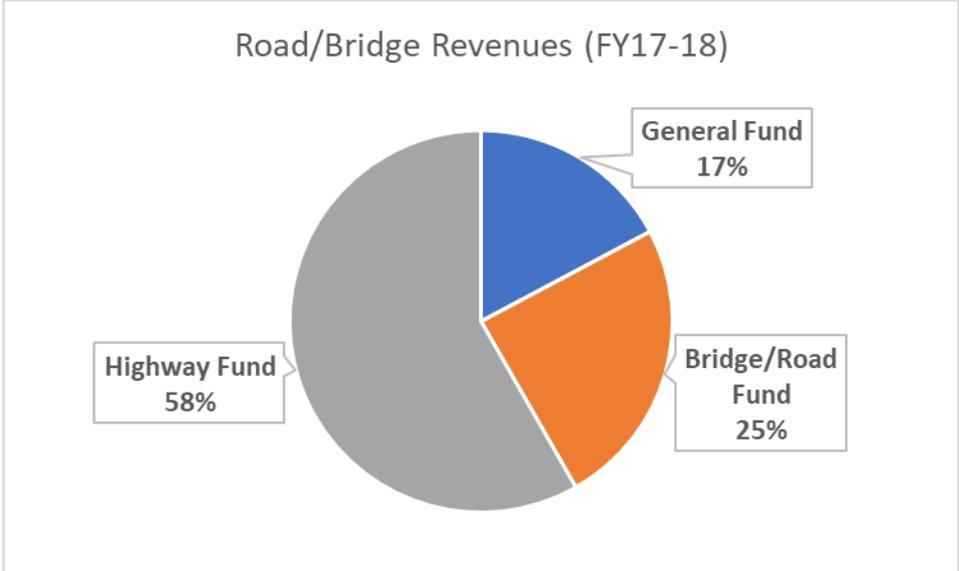
Budget/Revenue Structure

Lancaster County Budget

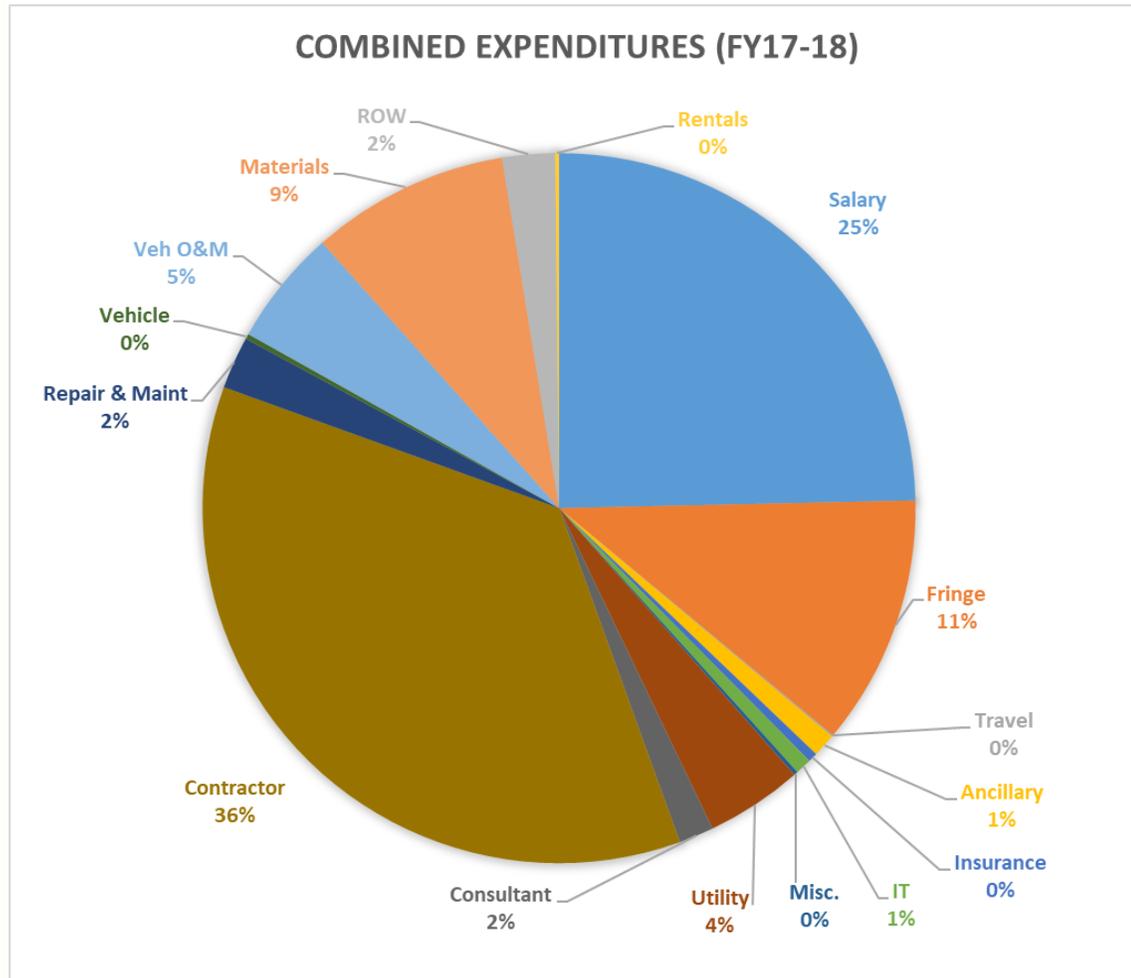


	Expenditures FY15-16	Expenditures FY16-17	Budget FY17-18
General Fund	\$ 4,023,757	\$ 3,795,626	\$ 4,166,669
Bridge/Road Fund	\$ 8,107,359	\$ 9,224,301	\$ 5,936,983
Highway Fund	\$ 11,368,159	\$ 13,302,754	\$ 14,093,804
Total	\$ 23,499,275	\$ 26,322,681	\$ 24,197,456

- \$4M Reserve (County General Fund)
 - \$1.5M set aside – Bridge projects
- \$300k-\$400k reserved annually
 - Federal-Aid Buy-back funding
- Keno funding reserve funds for East Beltway ROW
- FY16-17 - FEMA provided \$4M for reimbursement due to floods



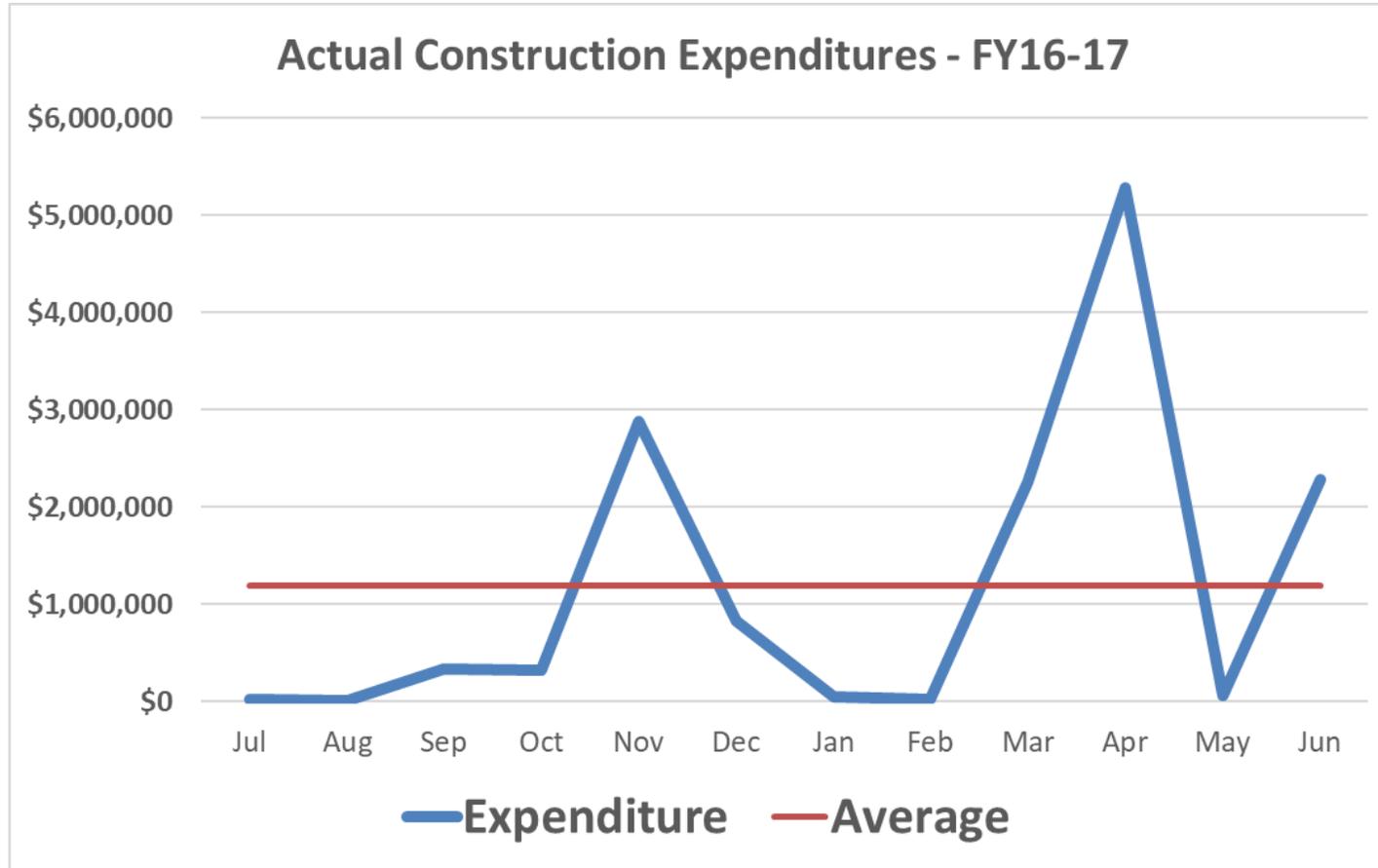
Combined Expenditures (FY17-18)



	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

- Largest expenditure items –
 - Contractors (36%)
 - Salaries (25%)
 - Fringe Benefits (11%)
 - Materials (9%)

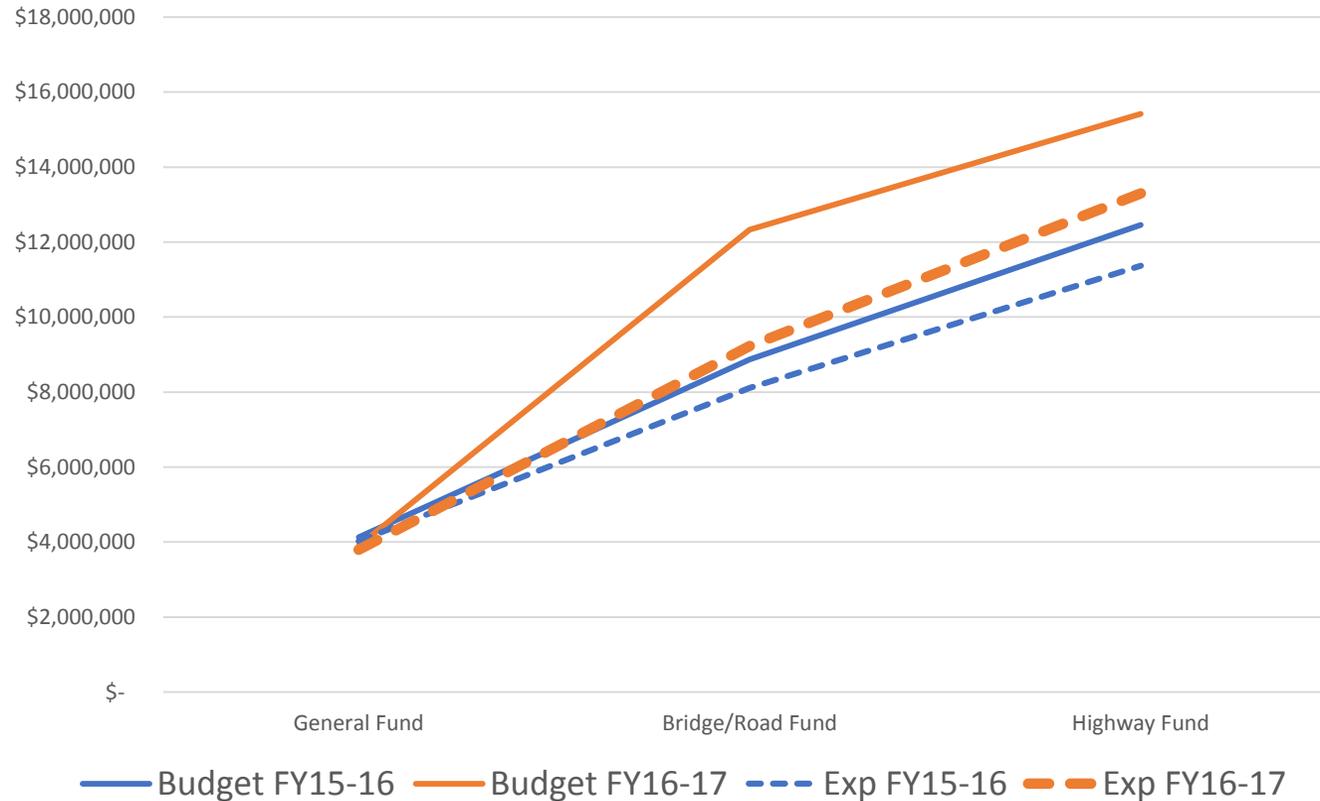
Expenditure Trends by Month (FY17-18)



- Huge Fluctuation Annually
 - Peaks - Nov/April
 - Valleys – Jan, May, July-Oct
- Projects are encumbered upon contract execution with contractors
- Project encumbrances
 - Generally for 1 year or less
 - Can be extended, but should they be?
 - Budgeting large projects over several years
 - Cash Flow

Spending Trends (FY15-17)

Budget vs. Expenditures Trends



- Total annual expenses consistently under budget
- Project bid times
- Project schedules

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



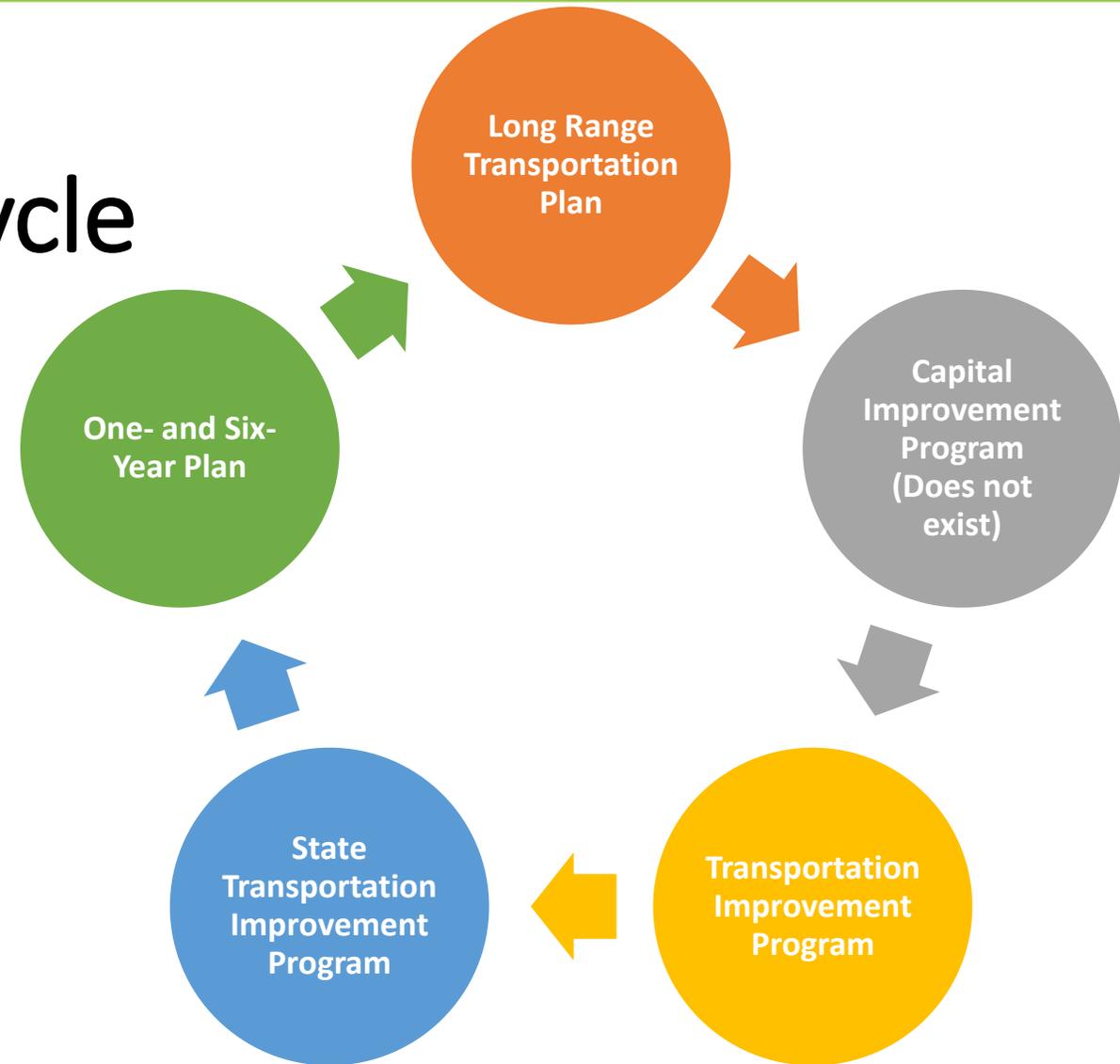
Budget Observations

- State dictates:
 - County Fiscal Year begins July 1
 - Budget must be on file by September 20
- Budget approval process:
 - May impact Roadway/Bridge projects
 - Larger projects – flexible spending amounts
 - History of Capital Improvement Program (CIP) in Lancaster County



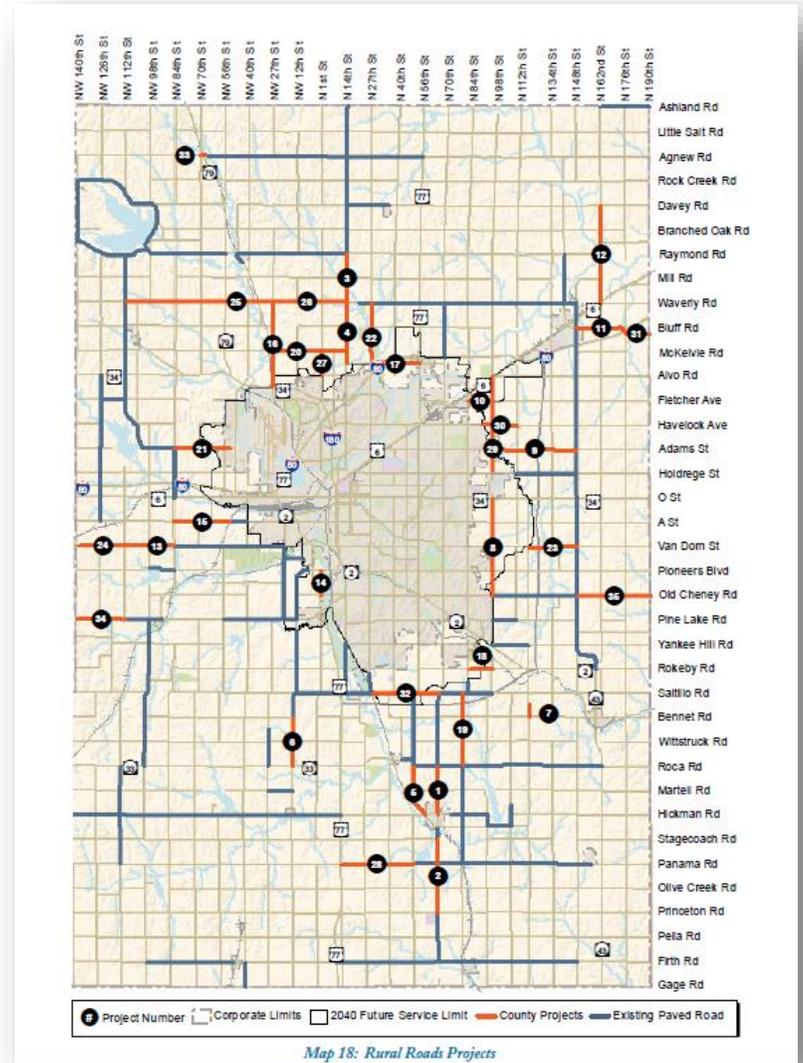
Inclusive Planning/Reporting Cycle

- Maximize grant opportunities
- Meet prioritized needs
- Community support
- Project selection transparency



Preliminary Recommendations

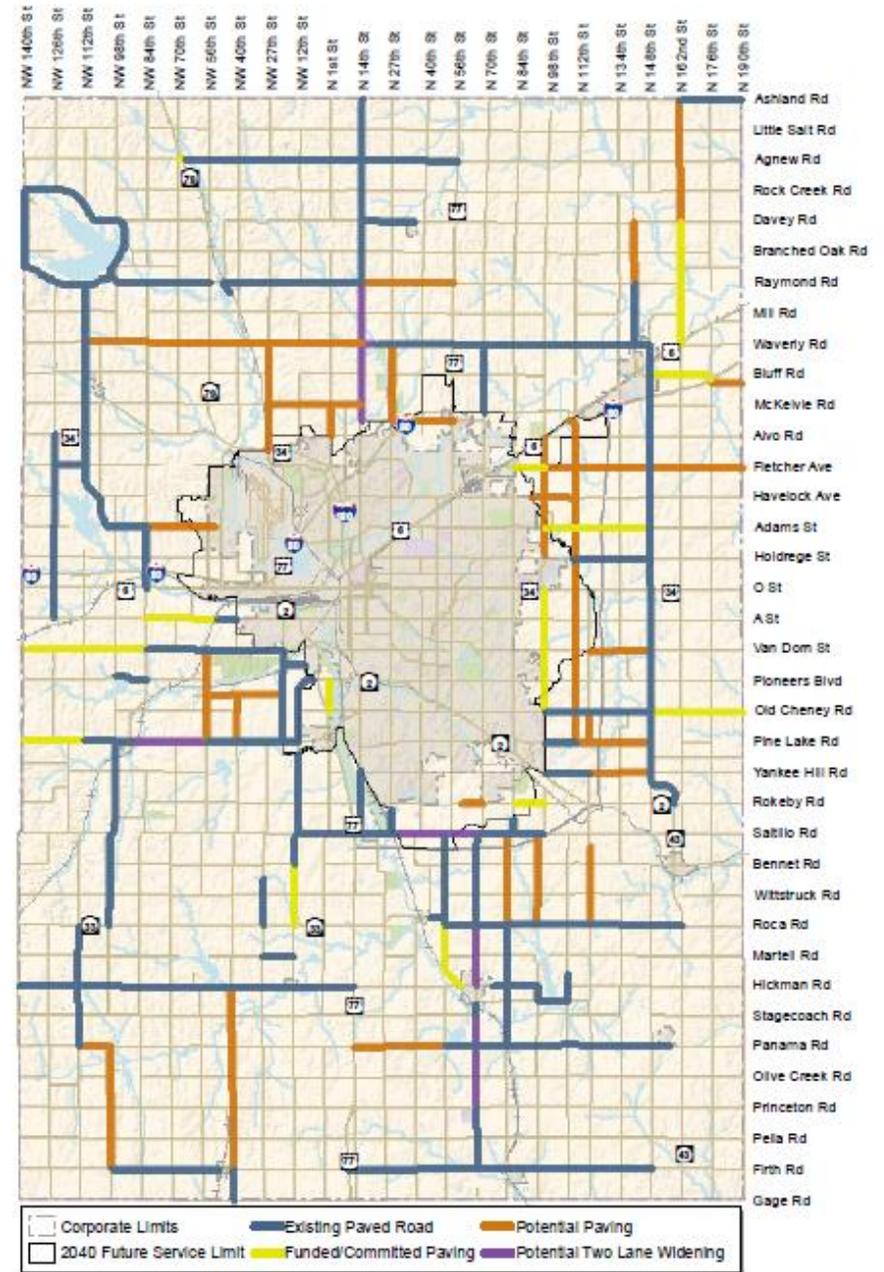
- Develop a Capital Improvement Program (CIP) for the County
 - Plan for long-term projects
 - Prioritize non-urgent repairs
 - Maximize grant funding opportunities
- Develop an emergency / rainy-day fund
 - Cover your known unknown costs



Future Projects Discussion



Rural Road Project Identified Needs



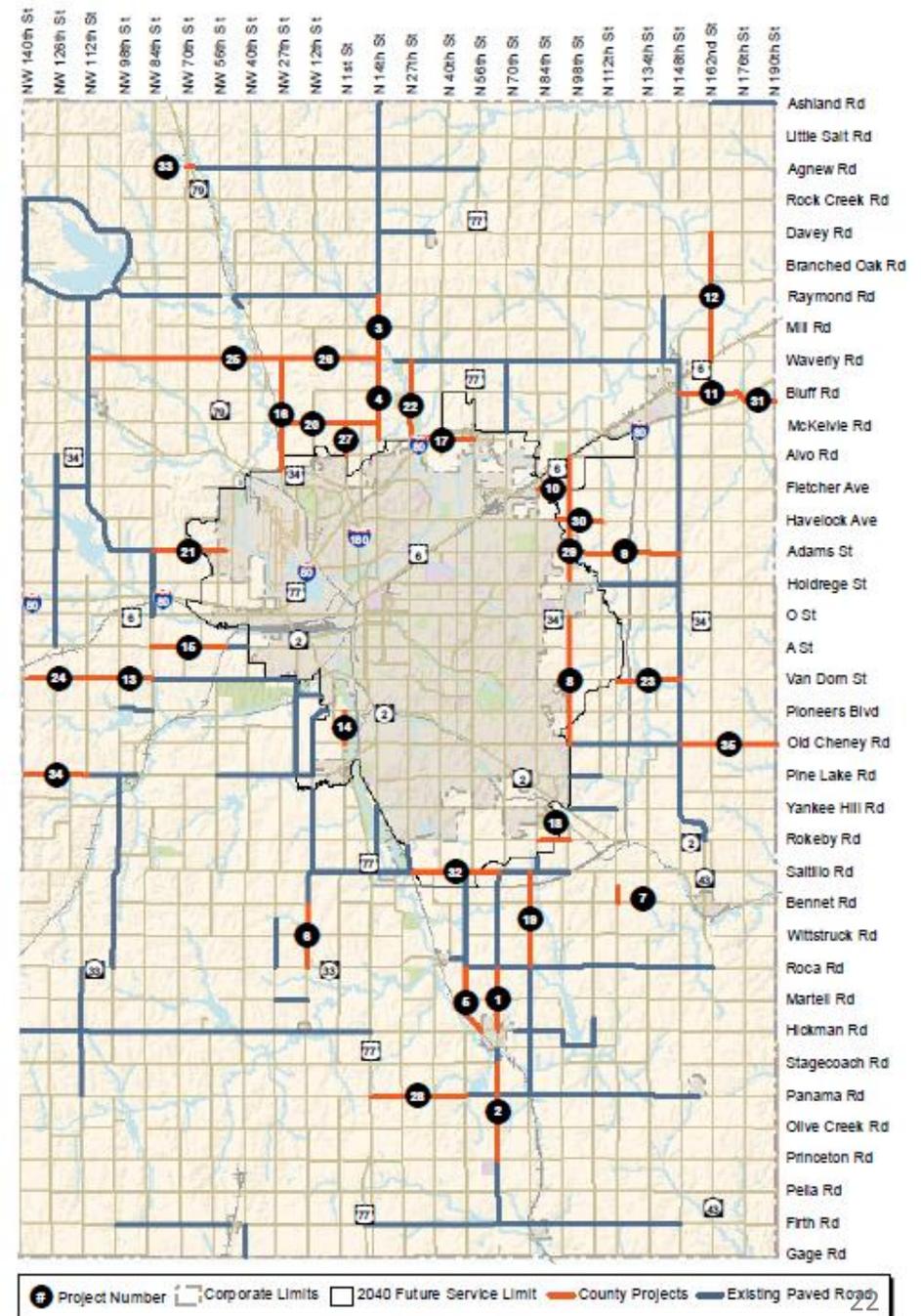
Source: LPLAN 2040, 2016 *Map 11: Rural Road Project Needs*

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

Rural Road Identified Projects

Table 10: Rural Roads Projects

Priority	Proj ID				
2016	11				
2016	18				
2016	33				
2016	34				
2016	35				
1	9				
2	5				
3	1				
4	32				
5	15				
6	30				
7	16				
8	2				
9	3				
10	8				
11	4				
12	6				
13	10				
14	29				
15	13				
16	7				
17	17				
18	12				
19	24				
20	14				
21	25				
22	26				
23	27				
24	22				
25	19				
26	21				
27	23				
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

Identify Total
Short/Long Range Project Costs

-

Funding Availability

=

Funding Gap Analysis



Project Number Corporate Limits 2040 Future Service Limit County Projects Existing Paved Road

Source: LPLAN 2040, 2016

Map 18: Rural Roads Projects

Future Funding Options



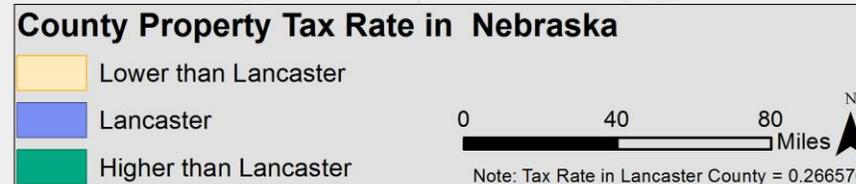
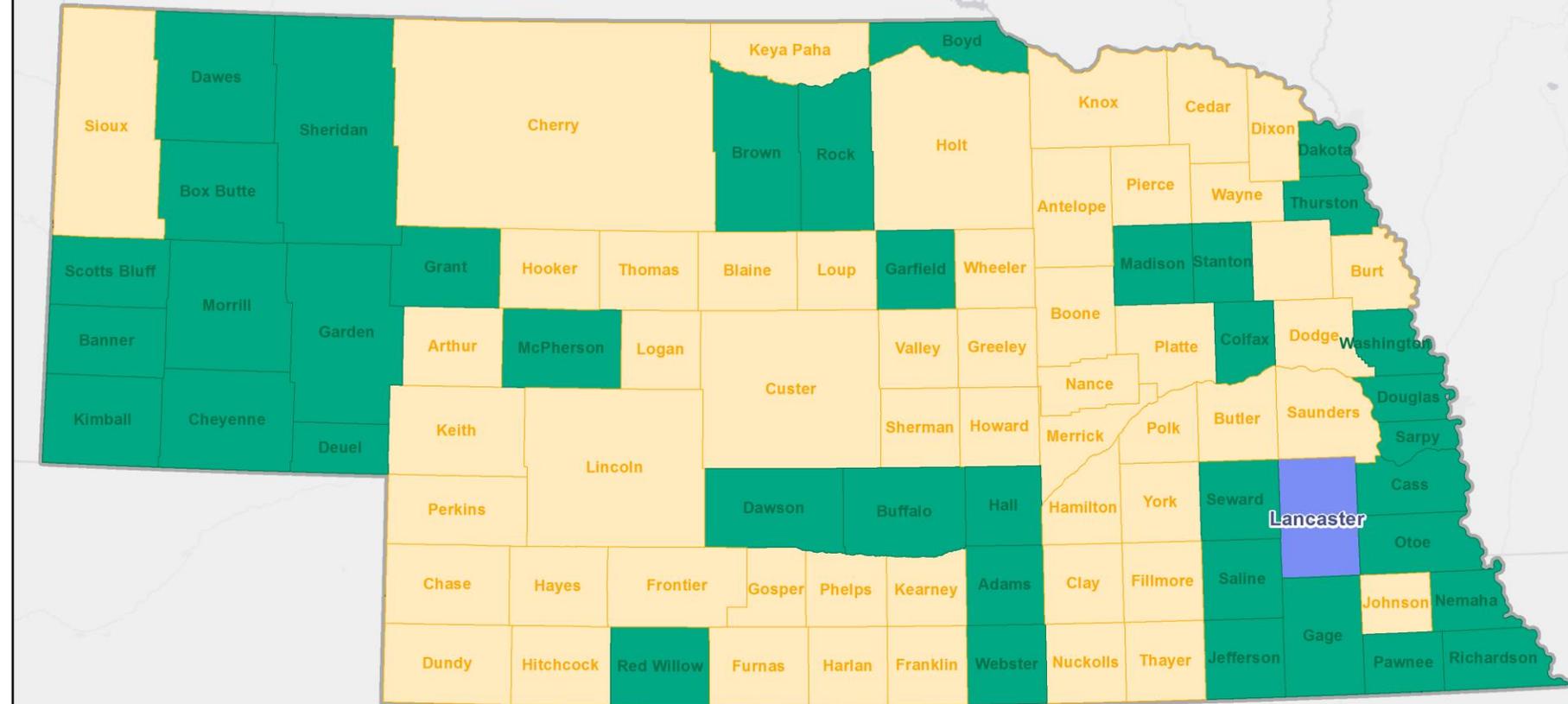
Revenue Sources

- Federal funds
 - Grant Awards
- State funds
- Local funds
 - Property Tax
 - \$0.45 per \$100 of valuation – NE statute
 - Can go to \$0.50 with community partnership
 - Sales Tax (limited impact)
 - Wheel tax (requires partnership with community)
 - Railroad Transportation Safety District (RTSD)
- Bonding



County Property Tax Rates in Nebraska

- Lancaster County
 - Tax Rate = 0.266576
- 39 counties (42%) have higher mill levy
- Highest mill levy at 0.500000
- Median mill levy at 0.248536
- Only Douglas County has higher tax receipts than Lancaster
 - \$118M vs. \$68M

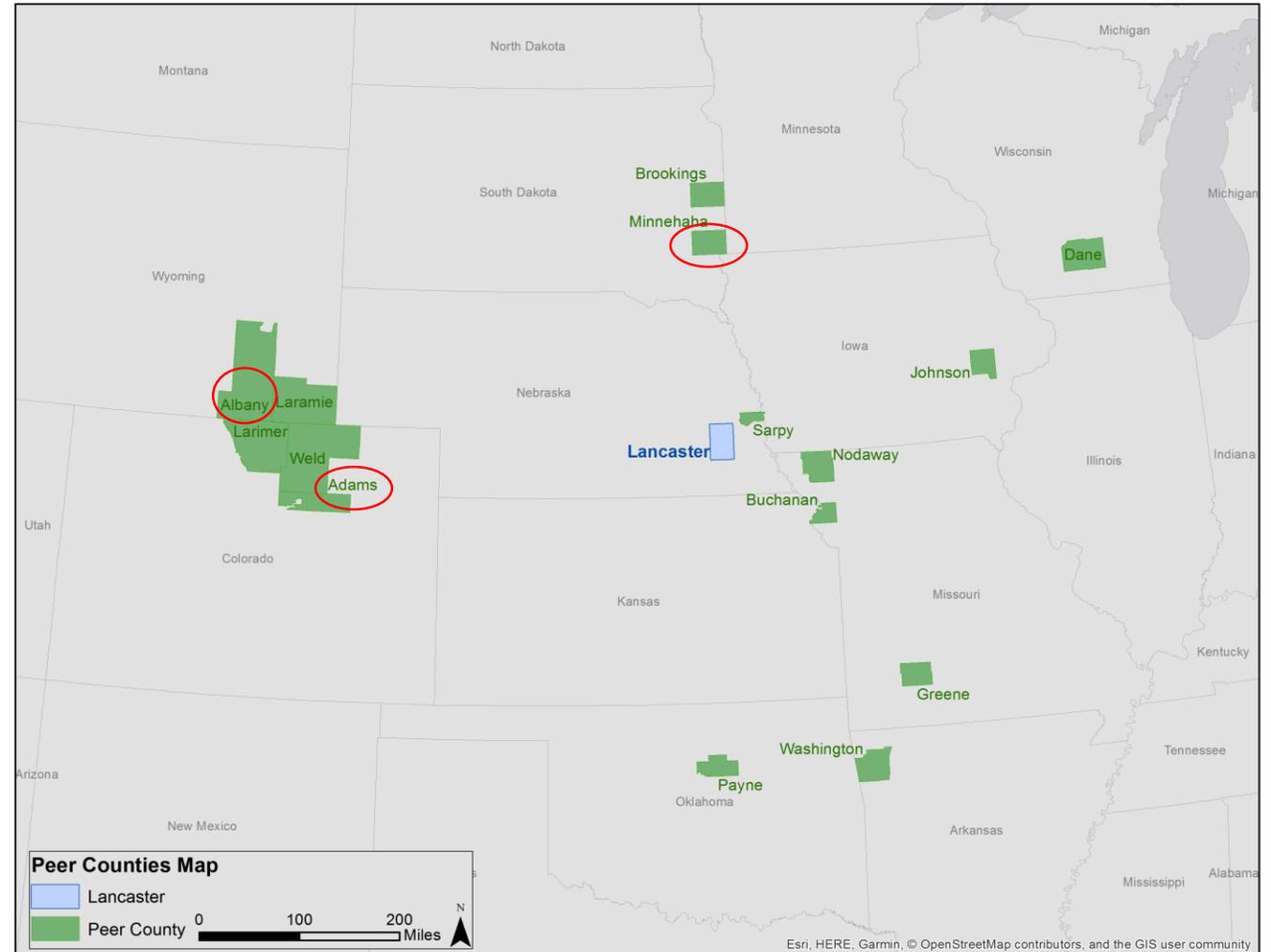


Revenue Sources

- Determine total needs
 - Preservation
 - Growth
- Explore all possible funding sources
 - Public
 - Private
- Project team discussion for funding strategies moving forward

Peer County Review

- Goal of Peer Review
 - Determine what other areas are using to
 - manage system preservation,
 - promote optimization, and
 - facilitate growth
 - Similar size counties w/ similar development & travel patterns



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

Next Steps

- Complete Peer Review
- Complete Budget Gap Analysis for Improvements
- Evaluate County policies for new and infill development regarding transportation infrastructure
- Develop growth strategy based upon best practices



Discussion/Questions

Thank you!!

Jeff McKerrow, PE, PTOE
jmckerrow@olssonassociates.com

Nick Weander, PTP, MPA
nweander@olssonassociates.com

