

PAVEMENT & BRIDGE CONDITION PERFORMANCE MEASURES:

2018



FHWA'S 8 PAVEMENT & BRIDGE CONDITION PERFORMANCE MEASURES



Data Source:
KDOT

- 1 % of Interstate pavements in GOOD condition
- 2 % of Interstate pavements in POOR condition
- 3 % of Non-Interstate NHS pavements in GOOD condition
- 4 % of Non-Interstate NHS pavements in POOR condition




Data Source:
KDOT

- 1 % of NHS bridges by deck area classified as in GOOD condition
- 2 % of NHS bridges by deck area classified as in POOR condition
- 3 % of Non-NHS bridges by deck area classified as in GOOD condition
- 4 % of Non-NHS bridges by deck area classified as in POOR condition



BACKGROUND ON PAVEMENT CONDITIONS

- Pavement condition is evaluated by measuring International Roughness Index (IRI), Present Serviceability Index (PSR), Cracking Percent, Rutting, and Faulting (uneven slabs of concrete). See the figure to view the pavement thresholds for good, fair, and poor.
- *2016 was the first year of reported data to comply with federal requirements – Data provided by the Kansas Department of Transportation (KDOT).



§ 490.311 Metric Thresholds in Final Rule

Rating	Good	Fair	Poor
IRI <i>(inches/mile)</i>	<95	95-170	>170
PSR* <i>(0.0-5.0 value)</i>	≥4.0	2.0-4.0	≤2.0
Cracking Percent <i>(%)</i>	<5	CRCP: 5-10 Jointed: 5-15 Asphalt: 5-20	>10 >15 >20
Rutting <i>(inches)</i>	<0.20	0.20-0.40	>0.40
Faulting <i>(inches)</i>	<0.10	0.10-0.15	>0.15

*PSR may be used only on routes with posted speed limit < 40mph.

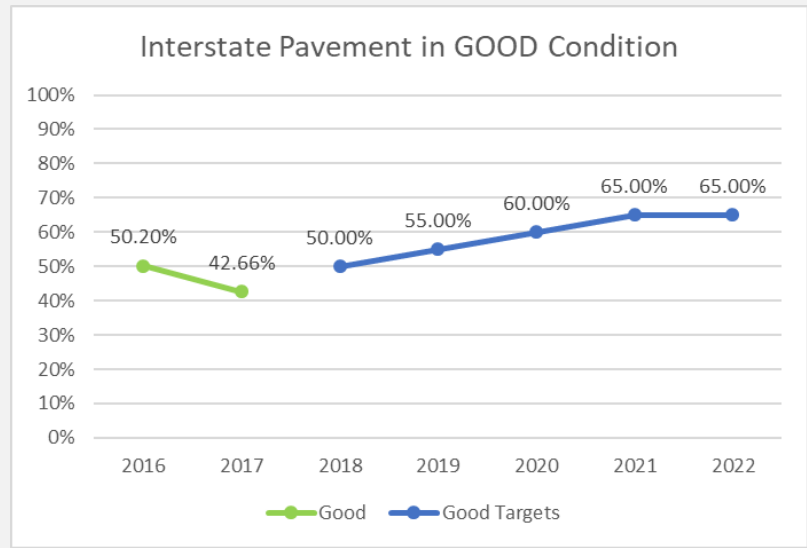
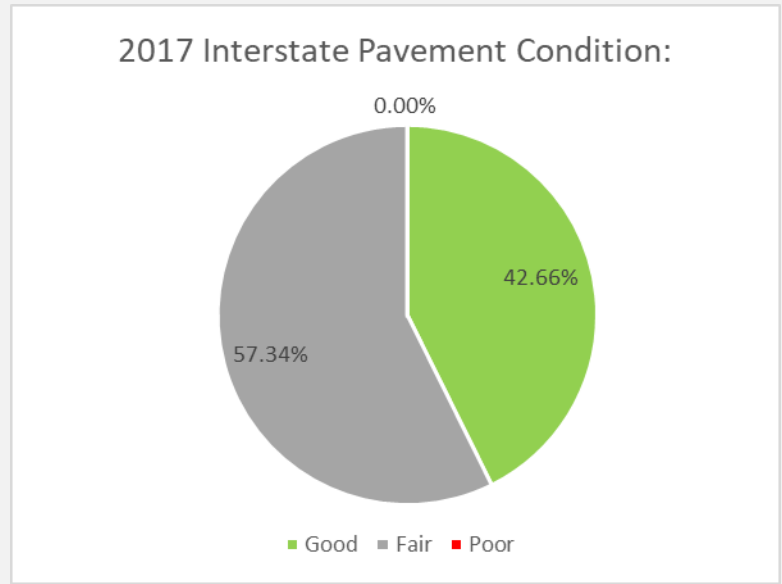
U.S. Department of Transportation
Federal Highway Administration

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% OF INTERSTATE PAVEMENTS IN GOOD CONDITION

Year	Good Condition	Target
2016	50.20%	
2017	42.66%	
2018		50%
2019		55%
2020		60%
2021		65%
2022		65%



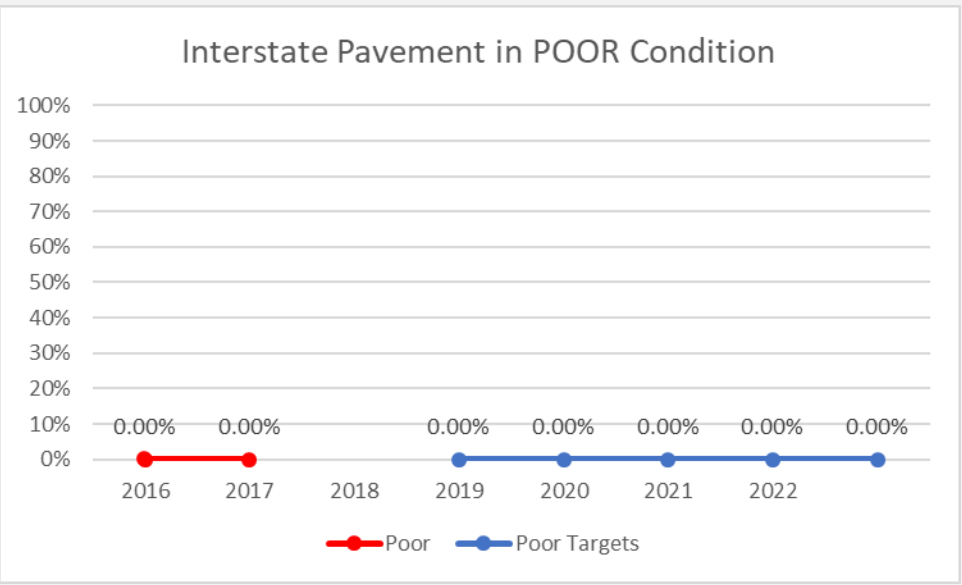
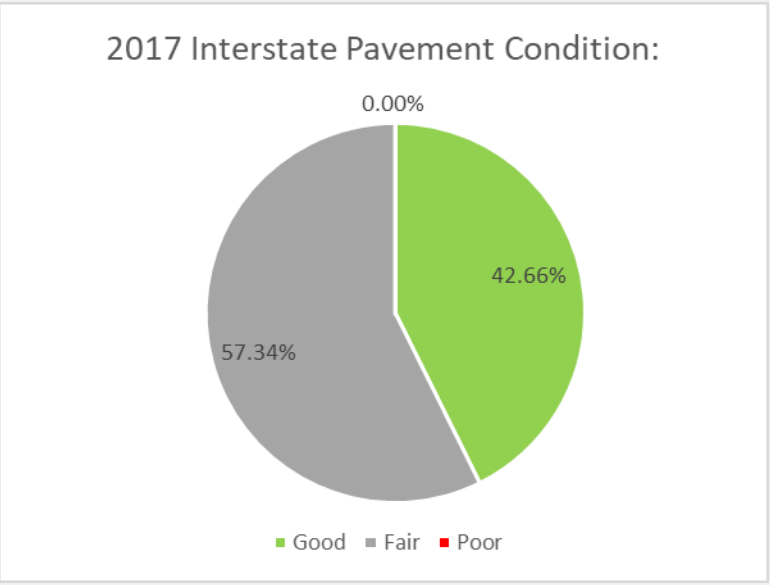
Only 2 years of data provided by KDOT



% OF INTERSTATE PAVEMENTS IN POOR CONDITION

Year	Poor Condition	Target
2016	0%	
2017	0%	
2018		0%
2019		0%
2020		0%
2021		0%
2022		0%

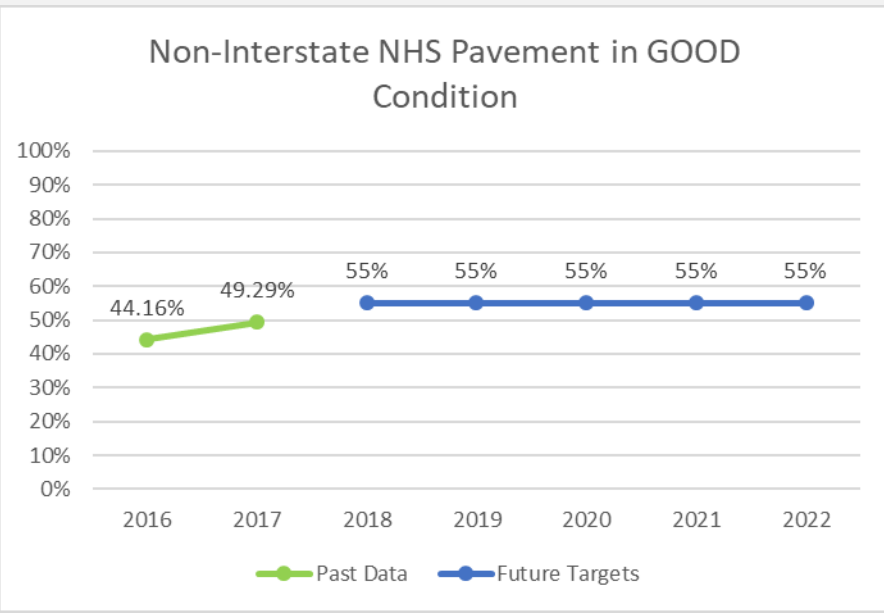
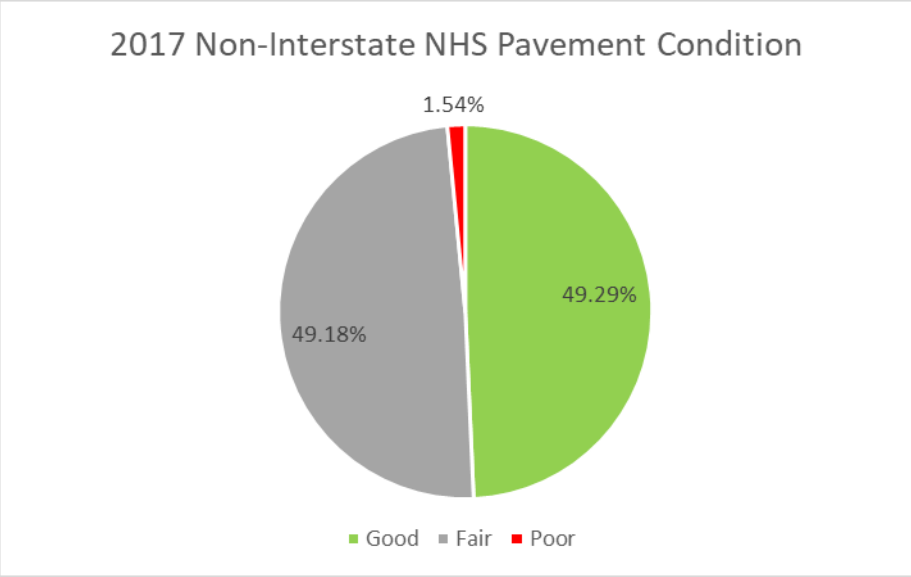
Only 2 years of data provided by KDOT





% OF NON-INTERSTATE NHS PAVEMENTS IN GOOD CONDITION

Year	Good Condition	Target
2016	44.16%	
2017	49.29%	
2018		55%
2019		55%
2020		55%
2021		55%
2022		55%



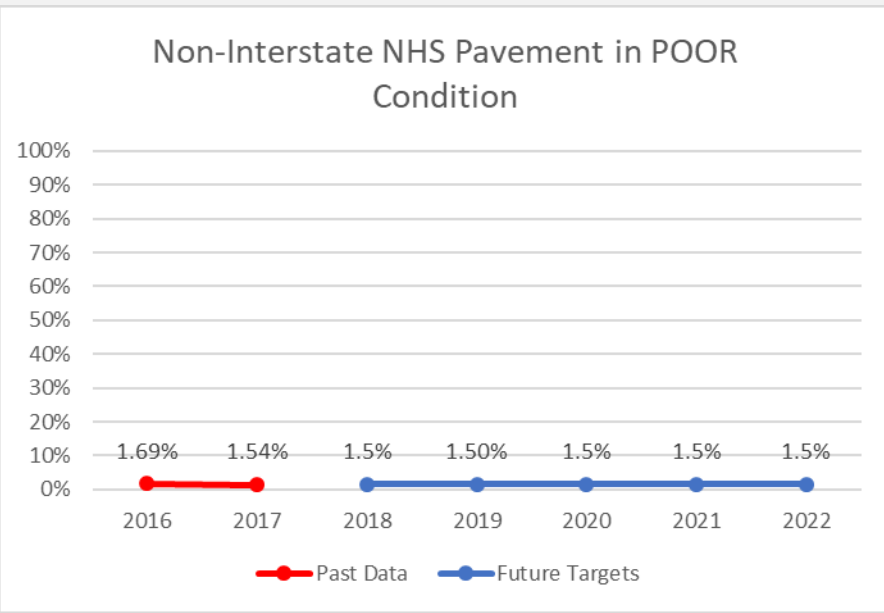
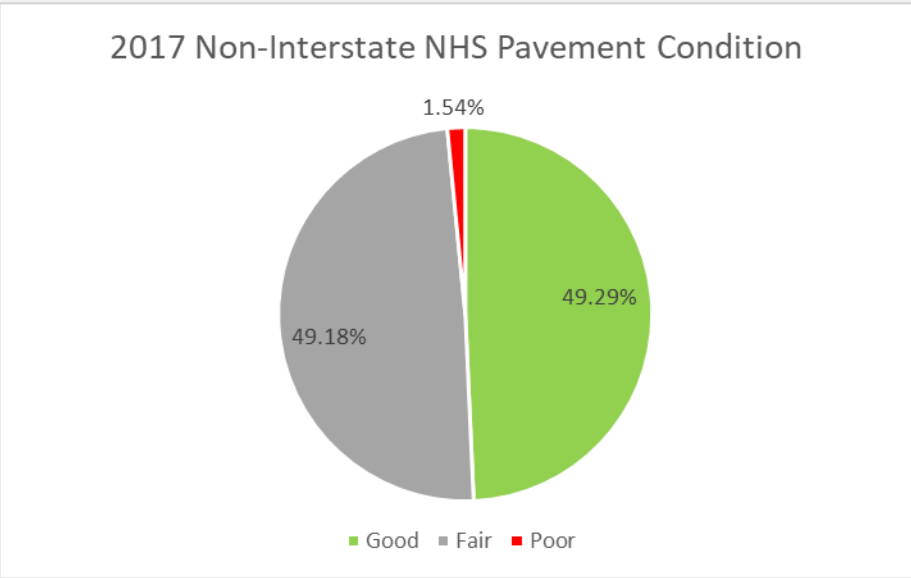
Only 2 years of data provided by KDOT



% OF NON-INTERSTATE NHS PAVEMENTS IN POOR CONDITION

Year	Poor Condition	Target
2016	1.69%	
2017	1.54%	
2018		1.5%
2019		1.5%
2020		1.5%
2021		1.5%
2022		1.5%

Only 2 years of data provided by KDOT



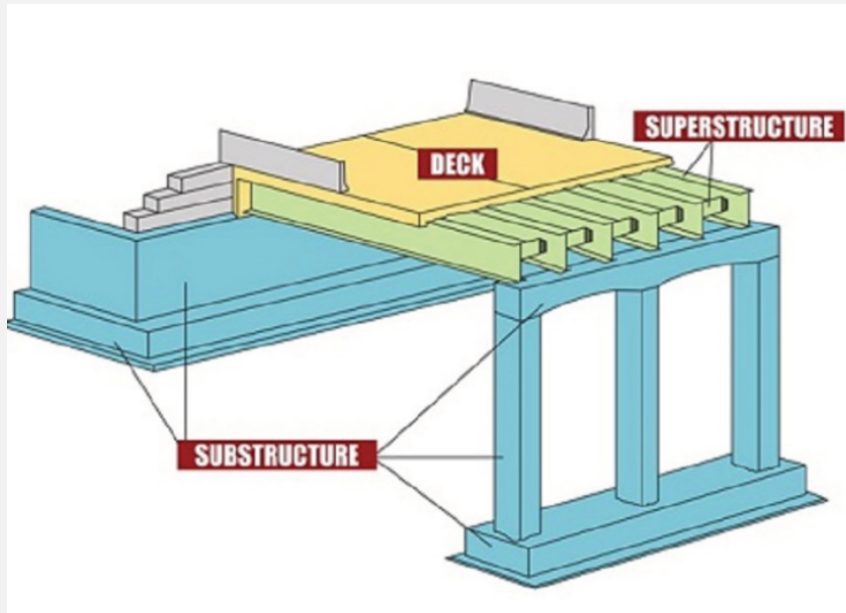


BACKGROUND ON BRIDGE CONDITIONS

- The Federal government (FHWA) is moving towards utilizing a new metric to evaluate bridges. This metric includes the deck, superstructure, and substructure. The rating is then weighted based on the deck area.



Bridge deck area is the percent of deck area classified as good and poor, using National Bridge Inventory (NBI) condition ratings for Deck, Superstructure, Substructure, and Culvert. Condition is determined by the lowest rating of these items. If the lowest rating is greater than or equal to 7, the bridge is classified as good; if it is less than or equal to 4, the bridge is classified as poor. Deck area is computed using NBI Structure Length and Deck Width or Approach Roadway Width (for some culverts). (Bridges rated below 7 but above 4 will be classified as fair.) See the figures below to view bridge components and the bridge condition thresholds for good, fair, and poor. Data provided by the Kansas Department of Transportation (KDOT).



§ 490.409 Metric Thresholds



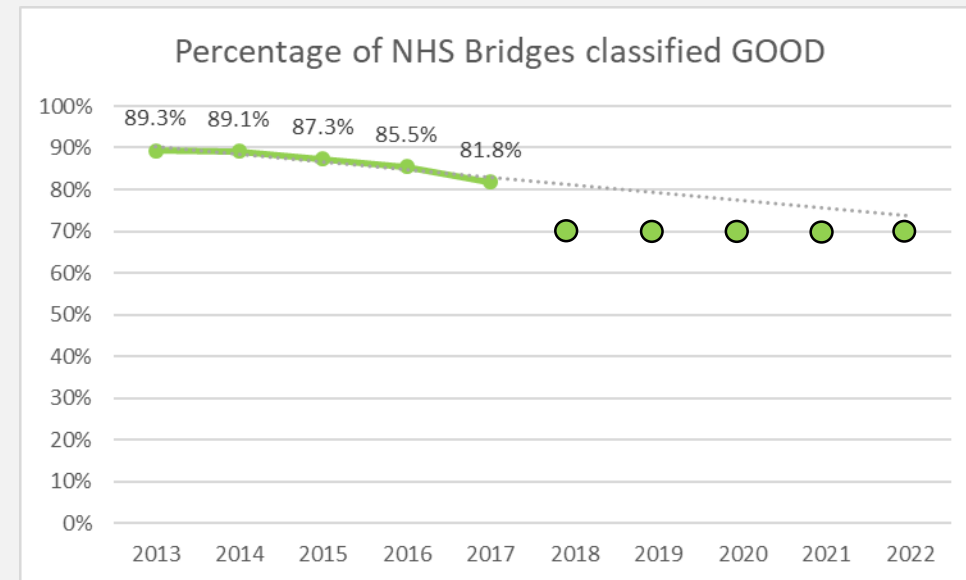
NBI Rating Scale <i>(from 0 – 9)</i>	9	8	7	6	5	4	3	2	1	0
	Good			Fair		Poor				
Deck <i>(Item 58)</i>	≥ 7			5 or 6		≤ 4				
Superstructure <i>(Item 59)</i>	≥ 7			5 or 6		≤ 4				
Substructure <i>(Item 60)</i>	≥ 7			5 or 6		≤ 4				
Culvert <i>(Item 62)</i>	≥ 7			5 or 6		≤ 4				



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% OF NHS BRIDGES BY DECK AREA CLASSIFIED AS IN **GOOD** CONDITION


Year	Good Condition	Target
2013	89.3%	
2014	89.1%	
2015	87.3%	
2016	85.5%	
2017	81.8%	
2018		70%
2019		70%
2020		70%
2021		70%
2022		70%

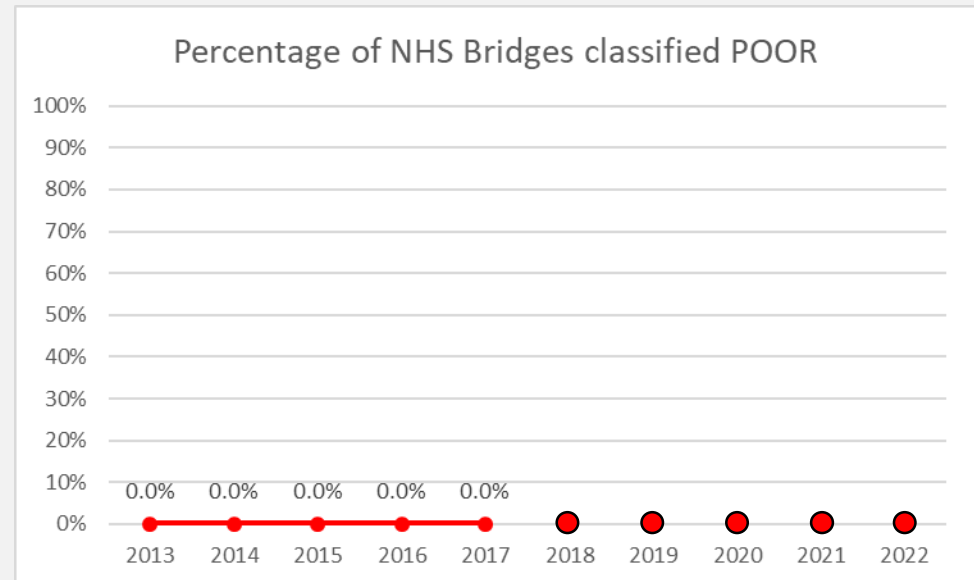




2

% OF NHS BRIDGES BY DECK AREA CLASSIFIED AS IN **POOR** CONDITION

Year	Poor Condition	 Target
2013	0%	
2014	0%	
2015	0%	
2016	0%	
2017	0%	
2018		0%
2019		0%
2020		0%
2021		0%
2022		0%

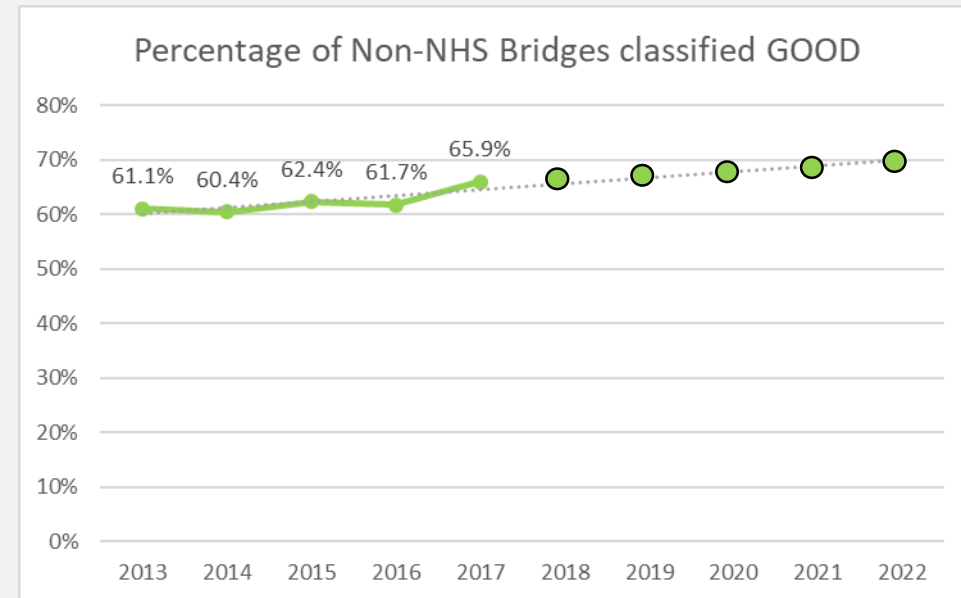




3


% OF NON-NHS BRIDGES BY DECK AREA CLASSIFIED AS IN **GOOD** CONDITION

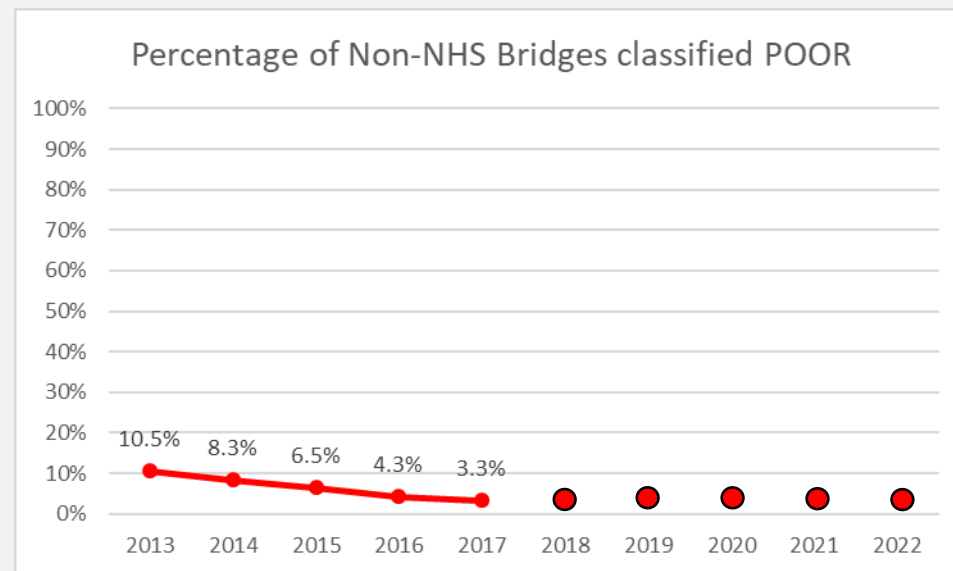
Year	Good Condition	Target
2013	61.1%	
2014	60.4%	
2015	62.4%	
2016	61.7%	
2017	65.9%	
2018		66%
2019		67%
2020		68%
2021		69%
2022		70%





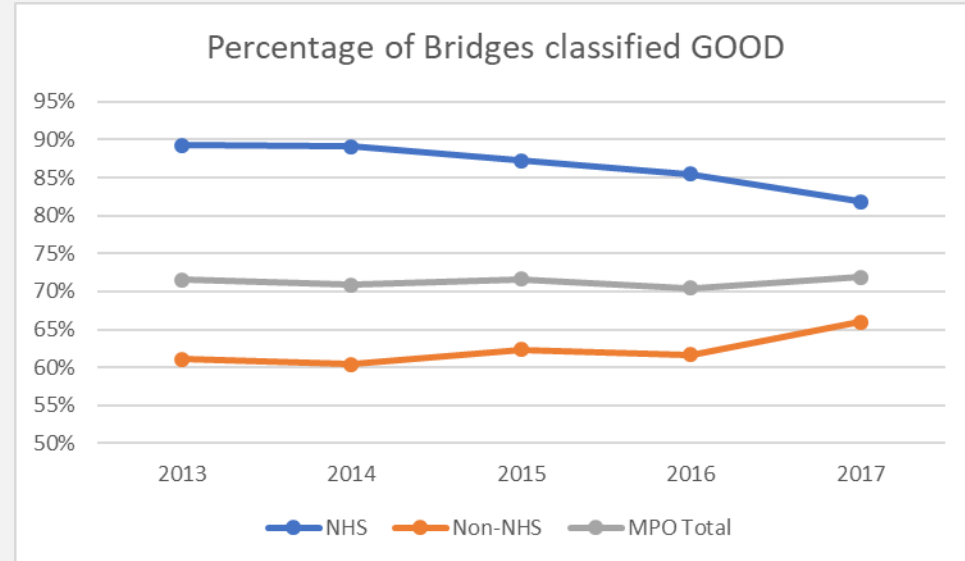
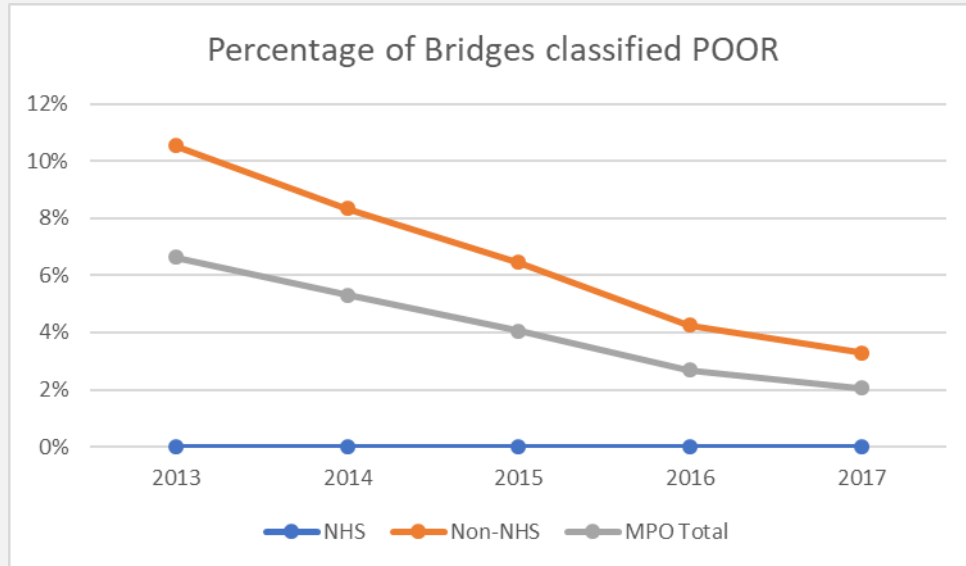
% OF NON-NHS BRIDGES BY DECK AREA CLASSIFIED AS IN **POOR** CONDITION

Year	Poor Condition	 Target
2013	10.5%	
2014	8.3%	
2015	6.5%	
2016	4.3%	
2017	3.3%	
2018		3%
2019		3%
2020		2%
2021		2%
2022		2%





BRIDGES CONDITION DETAILS



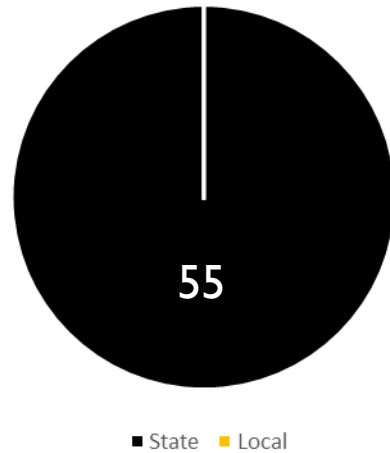
* All Bridges (NHS + Non-NHS)



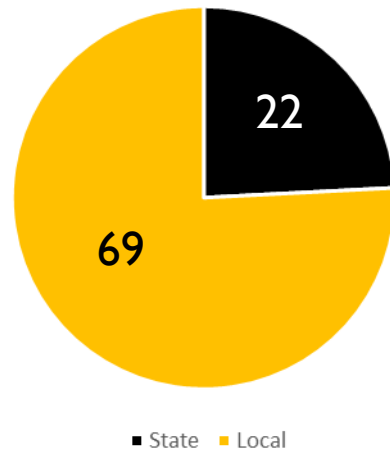
BRIDGES CONDITION DETAILS

MPO Region:
146
Bridges

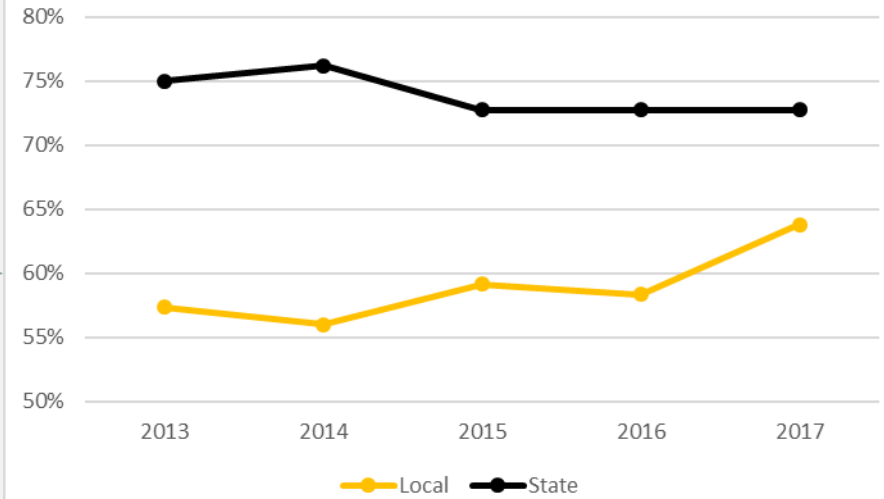
Bridge Ownership: NHS



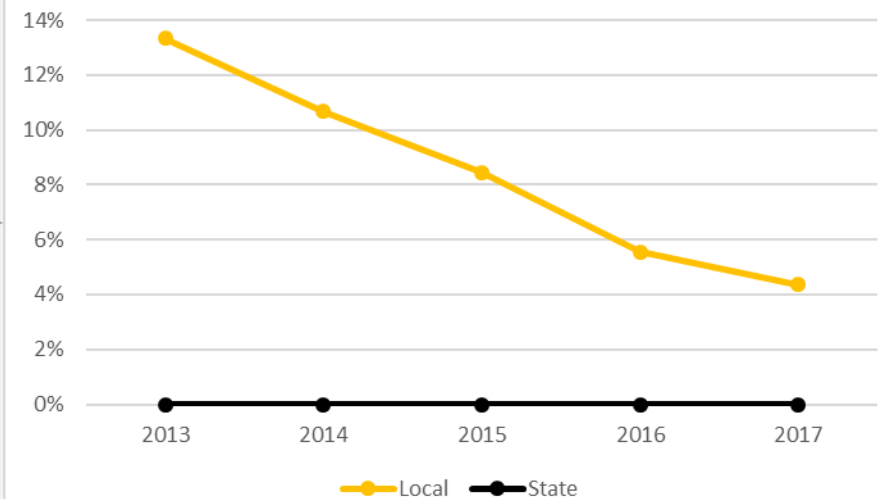
Bridge Ownership: non-NHS



Non-NHS Bridges classified GOOD by Owner



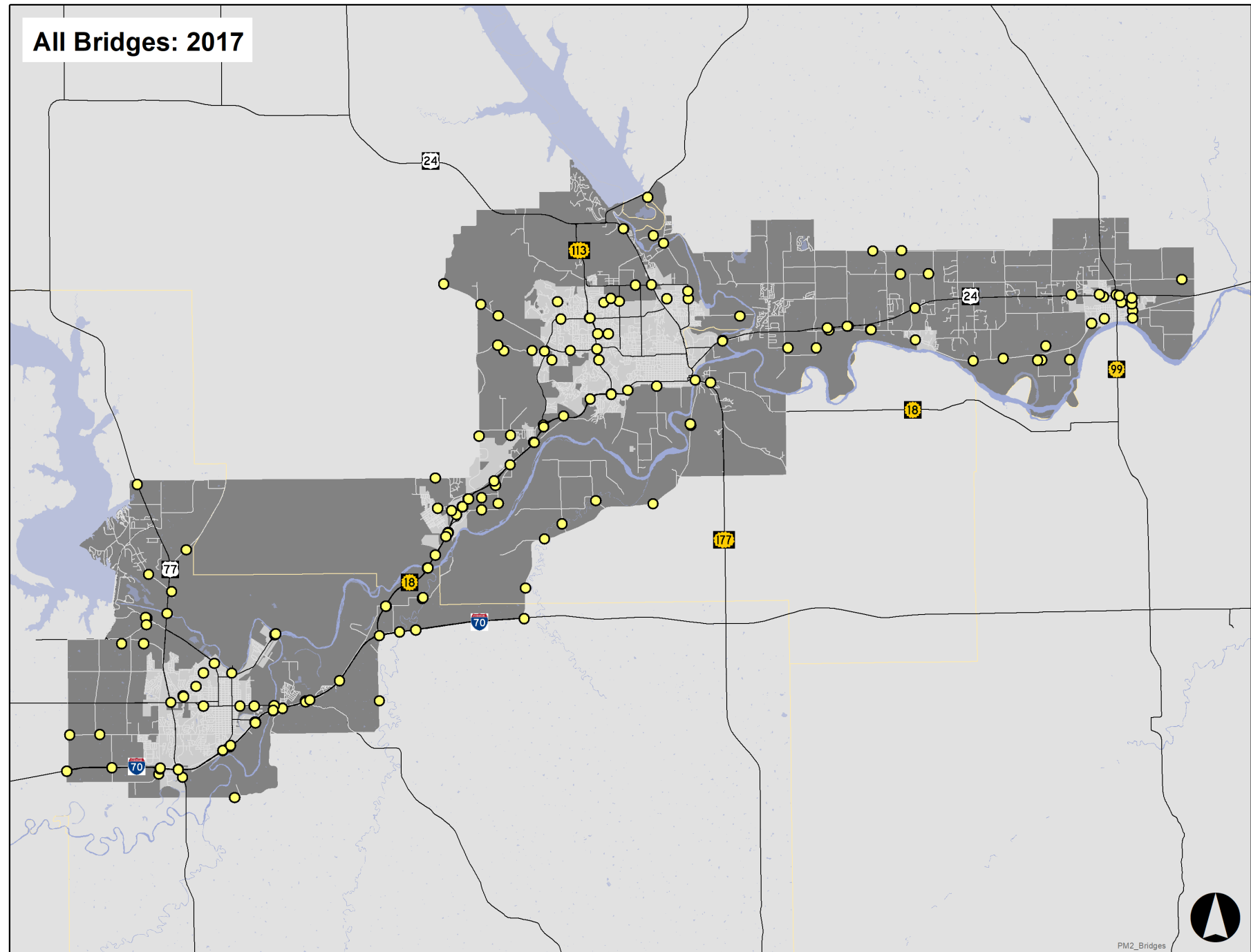
Non-NHS Bridges classified POOR by Owner





BRIDGES CONDITION MAPS

All Bridges: 2017

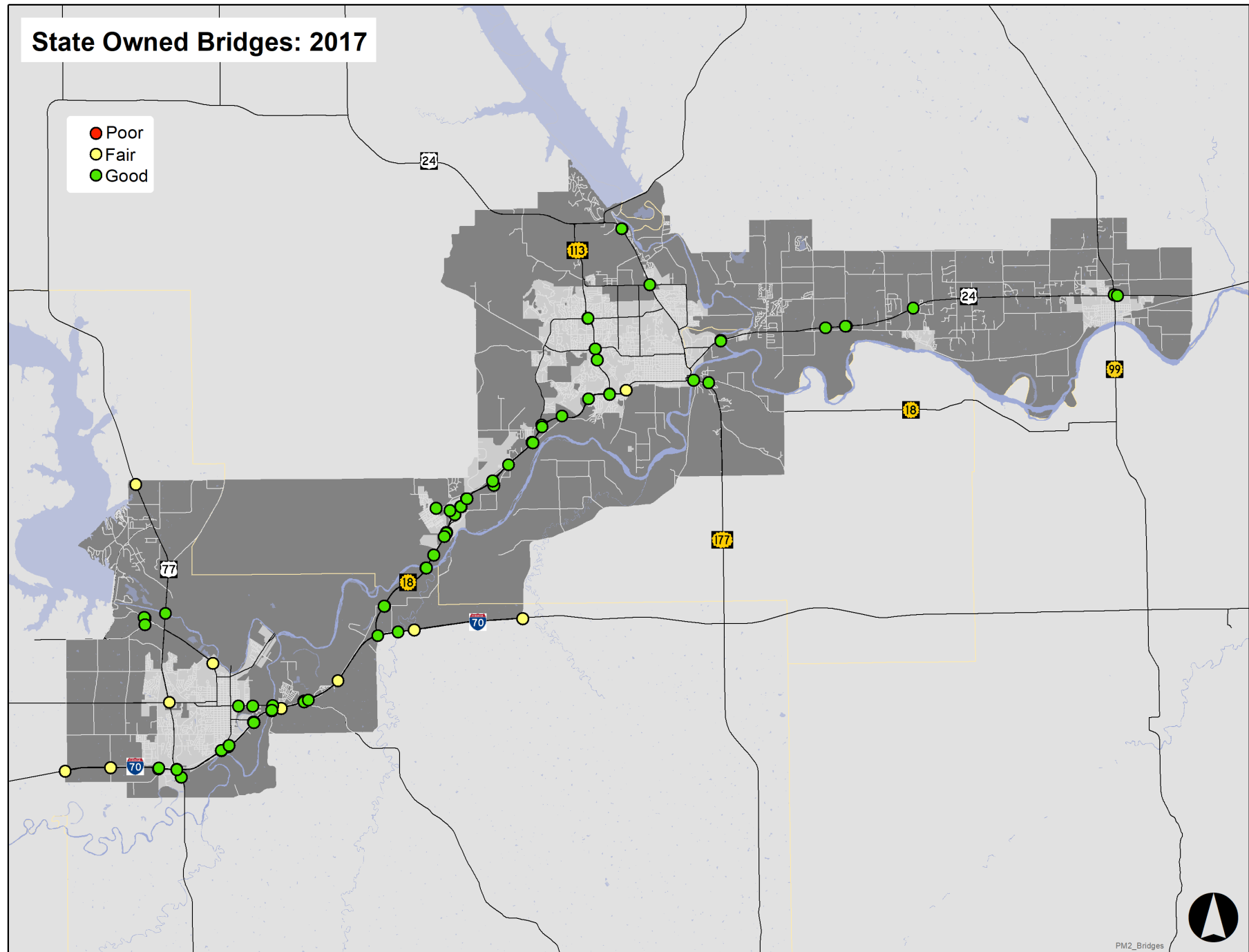




BRIDGES CONDITION MAPS

State Owned Bridges: 2017

- Poor
- Fair
- Good





BRIDGES CONDITION MAPS

Local Owned Bridges: 2017

- Poor
- Fair
- Good

