

Reading Area Transportation Study

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c/o Berks County Planning Commission
Berks County Services Center
633 Court Street, 14th Floor
Reading, PA 19601-4309

To: Reading Area Transportation Study Technical Committee
From: Devon Hain, Transportation Planner II
Re: Annual Pavement and Bridge Condition Report 2018-2022
Date: January 4, 2024

The Moving Ahead for Progress in the 21st Century Act (MAP-21) and Fixing America's Surface Transportation (FAST) Act established a series of performance measures to ensure effective use of Federal transportation funds. Title 23 Part 490 of the Code of Federal Regulations (23 CFR 490) establishes measures to assess the conditions of pavement and bridges on the National Highway System (NHS), which are collectively referred to as the PM-2 measures. By evaluating these performance measures, the targets established are based on data driven trend analysis.

PennDOT has established performance measures for pavements and bridges to help drive investment decisions to meet PennDOT's overall asset management strategy. Performance measures, along with long-term and short-term targets are set for various road and bridge groups, and the actual data for Berks County for the reporting year are evaluated in PennDOT's annual report. The current reports, showing the data for the prior calendar year are included in the appendices of the Annual Pavement and Bridge Condition Report 2018-2022, which explores data over a 5-year period to help determine condition trends.

Berks County Scorecards Based on Map-21 Performance Measures have been created for both pavement and bridge conditions to be included in the Annual Pavement and Bridge Condition Report. These scorecards can be viewed at the end of this memo.

As Reading MPO's interests extend beyond those included in PennDOT's Performance Measure Annual Reports, the data will be analyzed not only for road and bridge groups for PennDOT-owned assets but Local Federal Aid (LFA) roads and locally owned bridges. At the beginning of Section 2 and Section 3 of the Annual Pavement and Bridge Condition Report 2018-2022, the differences between the PennDOT annual report and the Reading MPO report are displayed.

New to the Annual Pavement and Bridge Condition Report this year is the addition of the Reading MPO 2022 Poor Condition Pavement Spreadsheet with TIP Projects Identified and the Reading MPO 2022 Poor Condition Bridge Spreadsheet with TIP Projects Identified, which can be found in the Appendices. The addition of these spreadsheets to this report will provide Reading MPO Planners with the full list of all Poor Condition Bridges and Pavements within Berks County along with associated projects, or the lack thereof, which aids in determining which poor condition infrastructure should be improved.

The Goal of this report is as follows: "Our experience and perception of the transportation system is largely based on the condition of the roads and bridges we drive on every day. This report is prepared for the Reading Metropolitan Planning Organization (Reading MPO) detailing the conditions of the roads and bridges throughout Berks County. This report will help guide investment decisions to keep Berks County's roads and bridges in good order by determining potential projects for inclusion in the Reading Area Transportation Study Transportation Improvement Program and Long Range Transportation Plan."

Berks County Pavement Condition Scorecard Based on Map-21 Pavement Performance Measures (Based on Total PA Lane Miles)

Indicator	Description	Trend	Future Outlook												
Interstate Pavement in Good Condition	In 2022, 50.31% of Interstate Pavement was in Good Condition. This value has ranged from 45.24% to 62.39% over the last 5 years, however, needs to improve significantly to meet 2023-2025 Targets, which range from 65% to 69%.	<p style="text-align: center;">Declining</p> <table border="1"> <caption>Interstate Pavement in Good Condition - Trend Data</caption> <thead> <tr> <th>Year</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>2018</td> <td>45.24%</td> </tr> <tr> <td>2019</td> <td>58.00%</td> </tr> <tr> <td>2020</td> <td>62.39%</td> </tr> <tr> <td>2021</td> <td>60.00%</td> </tr> <tr> <td>2022</td> <td>50.31%</td> </tr> </tbody> </table>	Year	Percentage	2018	45.24%	2019	58.00%	2020	62.39%	2021	60.00%	2022	50.31%	
Year	Percentage														
2018	45.24%														
2019	58.00%														
2020	62.39%														
2021	60.00%														
2022	50.31%														
Interstate Pavement in Poor Condition	In 2022, 0.29% of Interstate Pavement was in Poor Condition. This value has ranged from 0.14% to 0.30% over the last 5 years and is on track to remain well below the upcoming 2% Targets.	<p style="text-align: center;">Steady</p> <table border="1"> <caption>Interstate Pavement in Poor Condition - Trend Data</caption> <thead> <tr> <th>Year</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>2018</td> <td>0.17%</td> </tr> <tr> <td>2019</td> <td>0.23%</td> </tr> <tr> <td>2020</td> <td>0.30%</td> </tr> <tr> <td>2021</td> <td>0.14%</td> </tr> <tr> <td>2022</td> <td>0.29%</td> </tr> </tbody> </table>	Year	Percentage	2018	0.17%	2019	0.23%	2020	0.30%	2021	0.14%	2022	0.29%	
Year	Percentage														
2018	0.17%														
2019	0.23%														
2020	0.30%														
2021	0.14%														
2022	0.29%														
Non-Interstate NHS Pavement in Good Condition	In 2022, 31.10% of Non-Interstate, NHS Pavement was in Good Condition. This value has improved from 25.54% in 2018, however, will need to remain at the current level to continue meeting the 2022-2025 Targets which range from 29%-31%.	<p style="text-align: center;">Improving</p> <table border="1"> <caption>Non-Interstate NHS Pavement in Good Condition - Trend Data</caption> <thead> <tr> <th>Year</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>2018</td> <td>25.54%</td> </tr> <tr> <td>2019</td> <td>30.00%</td> </tr> <tr> <td>2020</td> <td>35.00%</td> </tr> <tr> <td>2021</td> <td>30.00%</td> </tr> <tr> <td>2022</td> <td>31.10%</td> </tr> </tbody> </table>	Year	Percentage	2018	25.54%	2019	30.00%	2020	35.00%	2021	30.00%	2022	31.10%	
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Non-Interstate NHS Pavement in Poor Condition	In 2022, 5.38% of Non-Interstate, NHS Pavement was in Poor Condition. This value has ranged from 3.63% to 5.38% over the last 5 years, and meets the 2022-2025 Targets, which range from 6% to 6.5%. However, with this percentage creeping towards these Targets, consideration should be given to keep this figure below these Targets.	<p style="text-align: center;">Declining</p> <table border="1"> <caption>Non-Interstate NHS Pavement in Poor Condition - Trend Data</caption> <thead> <tr> <th>Year</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>2018</td> <td>3.63%</td> </tr> <tr> <td>2019</td> <td>4.00%</td> </tr> <tr> <td>2020</td> <td>4.00%</td> </tr> <tr> <td>2021</td> <td>3.80%</td> </tr> <tr> <td>2022</td> <td>5.38%</td> </tr> </tbody> </table>	Year	Percentage	2018	3.63%	2019	4.00%	2020	4.00%	2021	3.80%	2022	5.38%	
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Berks County Bridge Condition Scorecard Based on Map-21 Bridge Performance Measures (Based on Total PA Lane Miles)

Indicator	Description	Trend	Future Outlook												
<p>NHS Bridge Deck Area in Poor Condition</p>	<p>In 2022, 12.49% of the NHS Bridge Deck Area was in Poor Condition. This value has improved by 6.84% over the last 5 years, and is on track to meet the set Targets through 2025, however, just meets the 13.00% 2025 Target and therefore should continue improving to stay on track to meet this Target and to meet the overall statewide 10.00% Target set by FHWA.</p>	<p style="text-align: center;">Improving</p> <table border="1"> <caption>NHS Bridge Deck Area in Poor Condition Trend</caption> <thead> <tr> <th>Year</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>2018</td> <td>19.33%</td> </tr> <tr> <td>2019</td> <td>18.65%</td> </tr> <tr> <td>2022</td> <td>12.49%</td> </tr> <tr> <td>2023</td> <td>12.49%</td> </tr> <tr> <td>2024</td> <td>12.49%</td> </tr> </tbody> </table>	Year	Percentage	2018	19.33%	2019	18.65%	2022	12.49%	2023	12.49%	2024	12.49%	
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<p>NHS Bridges in Good Condition</p>	<p>In 2022, 15.19% of NHS Bridges were in Good Condition. This is a slight improvement of 2.23% since 2018, however, this number needs to greatly improve to meet the 2023 and 2025 Targets, which are set at 28%.</p>	<p style="text-align: center;">Steady</p> <table border="1"> <caption>NHS Bridges in Good Condition Trend</caption> <thead> <tr> <th>Year</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>2018</td> <td>12.96%</td> </tr> <tr> <td>2019</td> <td>13.01%</td> </tr> <tr> <td>2022</td> <td>12.23%</td> </tr> <tr> <td>2023</td> <td>12.23%</td> </tr> <tr> <td>2024</td> <td>15.19%</td> </tr> </tbody> </table>	Year	Percentage	2018	12.96%	2019	13.01%	2022	12.23%	2023	12.23%	2024	15.19%	
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2022	12.23%														
2023	12.23%														
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<p>NHS Bridges in Poor Condition</p>	<p>In 2022, 3.80% of NHS Bridges were in Poor Condition. This is an improvement from the 8.02% in 2018, and meets the 7.50% Targets set for 2023 and 2025.</p>	<p style="text-align: center;">Improving</p> <table border="1"> <caption>NHS Bridges in Poor Condition Trend</caption> <thead> <tr> <th>Year</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>2018</td> <td>8.02%</td> </tr> <tr> <td>2019</td> <td>6.78%</td> </tr> <tr> <td>2022</td> <td>5.54%</td> </tr> <tr> <td>2023</td> <td>5.54%</td> </tr> <tr> <td>2024</td> <td>3.80%</td> </tr> </tbody> </table>	Year	Percentage	2018	8.02%	2019	6.78%	2022	5.54%	2023	5.54%	2024	3.80%	
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