ADAMS COUNTY OFFICE OF PLANNING AND DEVELOPMENT

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Sherri Clayton-Williams, AICP, Director

Date: April 21, 2023

To: Adams County Transportation Planning Organization (ACTPO) Committee Members

From: Andrew D. Merkel, AICP
Assistant Director/Comprehensive Planning Manager

Subject: ACTPO Meeting: April 26, 2023

The next meeting of the ACTPO Board is **Wednesday, April 26, 2023** from **1:00-3:00 p.m.** This meeting will be conducted using as a hybrid format, with options for in-person attendance or virtual attendance.

The in-person component of the meeting will be held at Adams County Agricultural and Natural Resources Center, Meeting Rooms A1-A3, 670 Old Harrisburg Rd, Gettysburg, PA 17325. The virtual component will be held using Microsoft Teams. Instructions to access the meeting are included in the meeting notice email. Attached, please find the following documents:

1) Draft agenda for the April 26, 2023 ACTPO meeting,
2) Draft minutes from the February 1, 2023 ACTPO meeting,
3) 2023 Adams County Active Construction Projects Map
4) Adams County Performance Measures (PM-2 & PM-3) Target Setting Letter,
5) District 8-0 Bridge Program Update,
6) Administrative Actions for the 2023-2026 TIP,

Anyone needing special meeting accommodations should contact Andrew Merkel at 717-337-9824 or amerkel@adamscounty.us at least 24 hours in advance of the meeting.

Adams County Transportation Planning Organization
April 26, 2023
1:00 – 3:00 P.M.

1. Introductory Comments – Bob Gordon, ACTPO Chairman
2. Approval of Minutes: February 1, 2023
3. Staff Updates – ACOPD
    a. Developments of Significance
    b. HOP / Traffic Study / Project Meetings
    c. Local Bridge Update – Adams County Bridge Engineer
    d. 2023 Adams County Active Construction Projects
    e. ONWARD2050 – Long Range Transportation Plan Implementation Update
    f. Urban Area Boundary / Update of ACTPO By-Laws
4. Transit Update
    a. Commuter Services of Pennsylvania Update
    b. Susquehanna Regional Transportation Authority Update
5. ***Presentation***: District 8-0 Bridge Program Updates – Derek Mitch, District Bridge Engineer
6. Performance Measures for Adams County – Adams County (***Action Needed***)
    a. Pavement/Bridge Performance Measures (PM-2)
    b. System Performance Measures (PM-3)
7. 2025 – 2028 TIP Development Process (***Informational***)
8. 2023 – 2026 TIP Update – PennDOT, Adams County (***Informational***)
    a. Administrative Actions
9. Penn DOT Comments
10. FHWA Comments
11. Public Comments
    a. Open Public Comment Period
12. Member Comments
13. Next Meeting, Time and Place
    a. 2023 ACTPO Meetings
        - July 26, 2023
        - October 25, 2023 (tentative until the dates of the 2023 Fall Statewide Planning Partners Meeting are confirmed)

Adams County Transportation Planning Organization (ACTPO)
Minutes for the Committee Meeting on February 1, 2023

Attendance:

Voting Members

Bob Gordon	Hamiltonban Township (Chair)
David Laughman	Arendtsville Borough (Vice-Chair)
Ray Green	PennDOT Central Office
Charles "Skip" Strayer	Adams County Planning Commission
Beth Nidam	SRTA – rabbittransit
Scott Small	Conewago Township
Robin Fitzpatrick	Adams Economic Alliance
Jim Martin	Adams County Commissioner
David Hazlett	Carroll Valley Borough
Nina Tipler	York Springs Borough

Legislative Representatives

Misty Wagner-Grillo	Congressman Joyce's Office
Catherine Wallen	Representative Ecker's Office
Chris Kimple	Representative Moul's Office

Adams County Office of Planning and Development

Andrew Merkel
Harlan Lawson

Others

Judie Butterfield	Gettysburg Borough
Laura Heilman	Commuter Services
David Juba	SRTA - rabbittransit
Kenana Zejcirovic	PennDOT District 8-0
Carey Mullins	PennDOT District 8-0
Jeff Puher	PennDOT District 8-0
Matthew Crea	PennDOT Central Office
Edward Sheehe	PennDOT Central Office
Michelle Tarquino	PennDOT Central Office
Ronnique Bishop	FHWA PA Division
Will Cameron	County Bridge Engineer
Stacey Rice	@Home in Adams County
Jack Ketterman	Germany Township
Kevin Holtzinger	Reading Township
Thomas Jolin	HABPI
Dennis Hickethier	HABPI
Darrin Catts	Oxford Township
Christine Demas	Mt. Joy Township
Chris Caba	YAMPO
Mike Pritchard	YAMPO
Jennifer Heller	Bermudian Springs School District
Bonnie Little	Conewago Valley School District

Media

None

1. Introductory Comments

Mr. Gordon called the meeting to order at 1:00pm. It was established that a quorum was present. No items were added to the agenda.

2. ACTPO Re-organization / Selection of Officers

Mr. Gordon announced that his term as Supervisor of Hamiltonban Township will be expiring at the end of 2023, and so a replacement will have to be named at the end of his term. Mr. Mullins made a motion to retain the existing officer in their positions. Ms. Tipler seconded the motion, and the motion carried unanimously. Mr. Gordon will remain as Chair and Mr. Laughman as Vice-Chair of ACTPO for 2023.

3. Approval of Minutes – October 26, 2022

Mr. Strayer made a motion to approve the October 26, 2022 ACTPO meeting minutes. Mr. Martin Seconded the motion and the motion passed unanimously.

4. Staff Updates – ACOPD

a. Mr. Merkel reported on Developments of Significance being proposed in the county. Significant Developments include plan submissions proposing 25 or more total new residential lots or units, or 30,000 square feet or more of industrial, commercial, or mixed use development. There were three resubmissions and two new submissions in the 4th quarter of 2022, including:
   - Green Pallet, Inc (Mt. Joy Township)
   - Thunderbolt Self Storage LLC (resubmission; Union Township)
   - Wade Run Community (resubmission; Mt. Joy Township)
   - Mayberry at Mason Dixon (resubmission; Littlestown Borough)
   - Cedarfield (Bonneauville Borough)

b. Mr. Merkel reported that staff attended the following HOP, traffic study, and project meetings. Some discussion ensued on the various meetings.
   - SRTP/PA Commuter Services Board meetings in November 2022 and January 2023
   - PennDOT Meetings
     - Bi-Monthly Planning Partners Call (November 2022 and January 2023)
     - District 8-0 Planning Partners Call (November 2022)
     - Historic Metal Truss Bridge Management Plan
     - District 8-0 Highway Safety Plan
   - Royal Farms HOP / Traffic Study meeting (Hamilton Township)

   Mr. Merkel also reported that staff is preparing a letter of support for designating PA Bicycle Route S as part of the US Bicycle Route system. Bicycle Route S follows PA-234 and connects to US-30 to continue westward. He noted that staff will be recommending that the routes designated as PA Bicycle Routes be re-evaluated as part of the effort.

c. Mr. Cameron presented on local metal truss bridges within Adams County. He noted that there are two historic metal truss bridges within the county: Adams County Bridge No. 5 (Rhodes Mill Bridge in Freedom Township) and Adams County Bridge No. 118 (Zeigler Mill Bridge in Butler Township). Rhodes Mill Bridge rehabilitation was completed in 2022 and the Zeigler Mill Bridge is a potential future project for a specific funding opportunity focused on rehabilitating metal truss bridges. A

program committee is currently evaluating a list of potential candidates for the funding and Bridge No. 118 is included in the evaluation as “high preservation priority”.

d. Mr. Merkel discussed FFY 2022 Adams County Obligation Report. The MPO is required to post the report by the end of the calendar year following the close of the fiscal year. Traditionally the report has been posted in spreadsheet form, however, staff has reformatted the report in an attempt to make it more reader-friendly. The report is posted on ACTPO’s webpage.

e. Mr. Merkel discussed the 2020 Census Urbanized Area maps that have been released. He explained that the definition of “urbanized area” has been revised, but staff has not yet been informed of the final implications of the change. When the Urbanized Area maps and figures have been finalized, ACTPO will likely evaluate the current by-laws and make updates as the board sees necessary.

5. Transit Update

a. Ms. Heilman reported on 2022 year-end statistics for the Commuter Services program and employer relation efforts that have been underway.
b. Ms. Nidam reported on the success of the new Same Day Shared Ride pilot program, which allows same day paratransit reservations. She also announced Transit Equity Day on Saturday, February 4, 2023.

6. Performance Measures for Adams County – Adams County

Mr. Merkel covered the annual adoption of the Safety Performance Measure (PM-1). He presented historic trends related to the safety measures included in PM-1. Traditionally, ACTPO has adopted the targets established by PennDOT, however, ACTPO does have the option to establish different targets. Ms. Nidam made a motion to adopt the 2023 PM-1 targets established by PennDOT and Mr. Green seconded. The motion was carried by unanimous vote. Some additional discussion regarding the topic continued after the vote, namely regarding the performance measure process.

7. MOU between York MPO (YAMPO) and ACTPO - Staff

Mr. Merkel discussed a funding pot, the Carbon Reduction Program, established by IIJA/BIL legislation that is allocated based on urbanized area population. Because the Hanover Urbanized Area encompasses parts of both Adams County and York County, an MOU has been developed to outline how the funds will be handled between the two MPOs. The MOU is a formal agreement that the funds will be split based on the respective populations of the Hanover UA in each MPO. He explained that funding could potentially go to a regional project that benefits both MPOs, but the MOU is the first step in establishing the funding allocation. Mr. Strayer made a motion to approve the MOU between YAMPO and ACTPO and Mr. Laughman seconded. The motion was approved by unanimous vote.

8. 2022-2024 UPWP Addition – Adams County

Mr. Merkel explained that the Increasing Safe and Accessible Transportation Options (ISATO) program established with the passing of IIJA/BIL legislation resulted in a small pot of funds becoming available to ACTPO through the Unified Planning Work Program for specific uses. Staff coordinated with PennDOT and FHWA to brainstorm potential allowable uses and settled on directing the funds toward the Active Transportation Tool that was identified as an implementation item in the most recent LRTP. Mr. Merkel

relayed The UPWP was amended in January 2023 to add this task with cooperation from the County Commissioners.

9. 2023-2026 TIP Update – PennDOT, Adams County

a. Mr. Puher noted that there were 18 administrative modifications involving 14 projects made to the 2023-2026 TIP. There is no vote required for administrative modifications.

10. PennDOT Comments

- Mr. Mullins provided updates on three projects in Adams County:
  - The bridge replacement on Oxford Rd in Straban Township is expected to be completed July 2023. There is currently a detour in place.
  - PennDOT is hoping to have a consultant on board in mid-March for the PA-234 / Stoney Point Rd project and PA-234 / Peepytown Rd project. These projects are expected to be on one agreement.
  - The Finding of No Significant Impact was approved for the Eisenhower Extension Project and the consultant is working to update the project estimate.
- Mr. Crea announced that Conewago Township received $55,094 in funding from the 2022 ARLE grant round for guiderail improvements.

11. FHWA Comments

- Ms. Bishop provided the following updates:
  - Additional resources related to IIJA/BIL discretionary grants.
  - RAISE grant NOFO is open until February 28, 2023.
  - FHWA and FTA are reviewing the recently released Urbanized Area information and will release a federal register notice designating new TMAs and other information related to Census information.

12. Public Comments

- Mr. Hickethier provided the following updates on behalf of HABPI:
  - 9/11 National Memorial Trail: Letters were sent by the 9/11 Trail Coordinator to municipalities regarding the trail signage, but Gettysburg Borough is the only municipality to respond to date.
  - A feasibility study is underway to locate the best option for a trail route from the Gettysburg Borough to the new Adams County Historical Society Building. He explained next steps in the effort for this project.
- Ms. Butterfield provided the following updates:
  - There have been very few traffic complaints related to the filming of a movie in Gettysburg Borough.
  - A planning committee has been established for the 160th Anniversary of the Battle of Gettysburg.

13. Member Comments

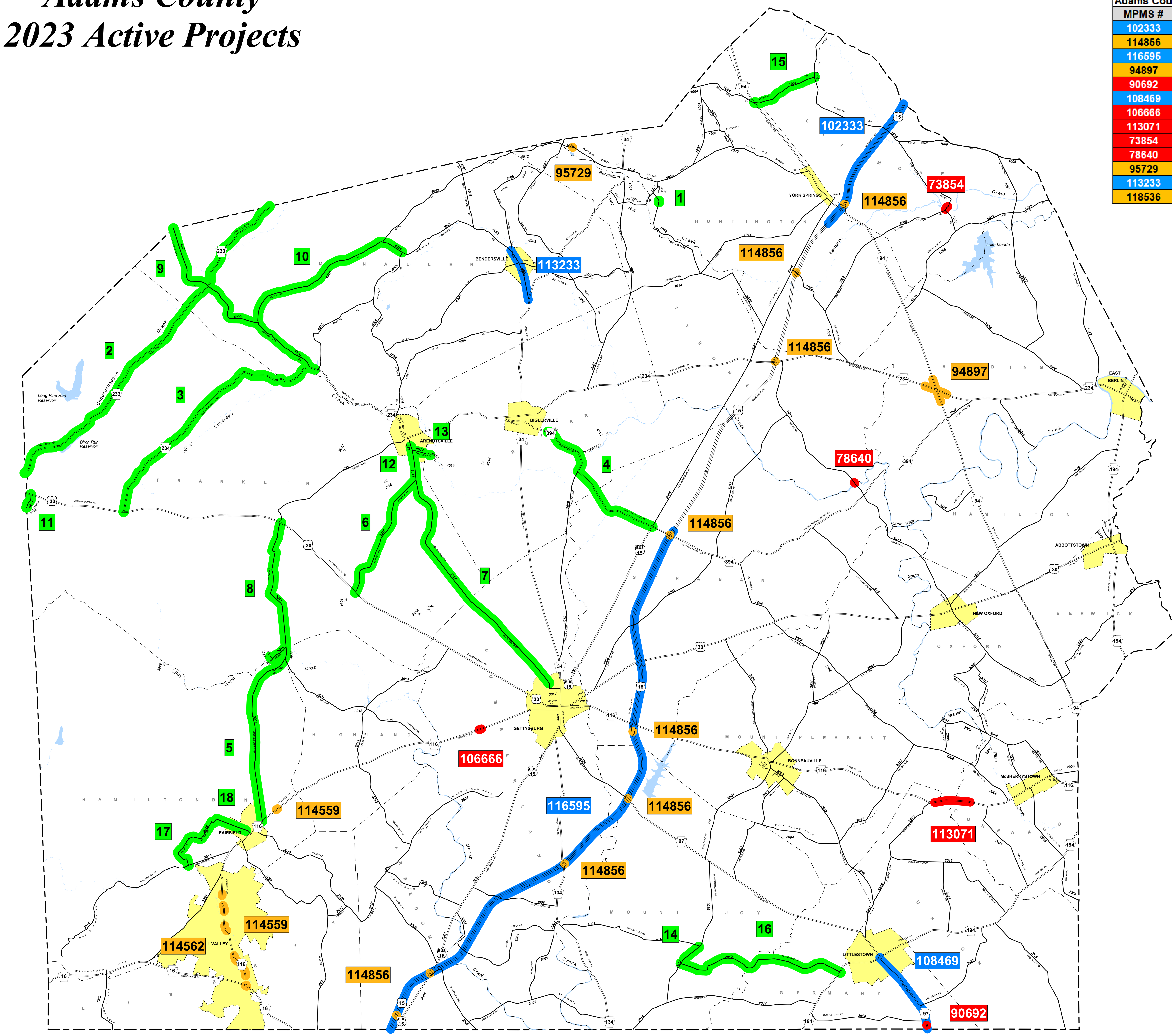
- Mr. Gordon announced the board received a letter of resignation from Mayor Rita Frealing. Mr. Laughman announced the Borough's Association is actively looking for a replacement for the alternate position in light of Ms. Frealing's resignation.

- Mr. Martin announced that the traffic plan from the 150th Anniversary of the Battle of Gettysburg may be a good resource for planning the 160th Anniversary.

14. Next Meeting, Time and Place

a. The next meeting is scheduled for Wednesday April 26th, 2023.

Adams County
2023 Active Projects



Adams County Construction Contracts			
MPMS #	SR-Sec	Title	Type
102333	0015-038	US 15 Improvements - Adams	Safety Improvement
114856	0015-057	TSMO Adams County Devices	Intelligent Transportation System
116595	0015-059	US 15 Preservation NorthBound	Highway Restoration
94897	0094-026	94 & 234 Intersection Imp	Safety Improvement
90692	0097-010	Piney Creek Bridge 2	Bridge Replacement
108469	0097-013	Littlestown Resurfacing	409 Expanded Maintenance
106666	0116-044	PA 116/Trib Willoughby Run	Bridge Replacement
113071	0116-051	SR 116 Bridge over Conewago Creek	Bridge Replacement
73854	1005-009	Latimore Valley Road Brg-C	Bridge Restoration
78640	1015-016	Conewago Creek Bridge	Bridge Replacement
95729	1020-000	Peach Glen RR Crossing	Rail Highway Grade Crossing
113233	4008-030	SR 4008 Main Street Resurface	409 Expanded Maintenance
118536	0000-000	Dist AWPM 2023	General Maintenance

Adams County CY 2023 M213 Department Force Surface Improvement Work						
Map#	SR	Bseg	Boff	Eseg	Eoff	Type
1	1016	110	1560	110	1670	Patch
2	233	10	0	190	1793	Seal
3	234	10	0	120	2280	Seal
4	394	40	0	110	2968	Seal
5	3011	10	0	144	2034	Seal
6	3015	10	0	70	2654	Seal
7	3017	20	68	150	1576	Seal
8	3018	30	0	30	2666	Seal
9	4009	10	0	70	2146	Seal
10	4010	10	0	130	2134	Seal
11	4011	10	0	10	1665	Seal
12	4014	10	0	10	1539	Seal
13	4014	22	0	22	6	Seal
14	2029	30	800	30	3100	Level
15	1004	50	0	80	1697	Level
16	2012	10	0	80	2368	Level
17	3016	10	0	40	2046	Level
18	3016	40	2046	70	760	Paving

Legend

Color	Description
Red	Contracted Bridge Project
Blue	Contracted Highway/Resurfacing Project
Green	Department Force Highway Project
Orange	Traffic/Safety Related

PRODUCED BY: GEOGRAPHIC INFORMATION DIVISION

Disclaimer
District 8-0 provides the data within these pages for your personal use. The maps shown here are for illustration purposes only and are not suitable for site-specific decision making. Information is provided with the understanding that it is not guaranteed to be accurate, correct or complete and conclusions drawn from such information are the responsibility of the user.

BRIDGE PLANNING

- Derek Mitch, P.E., District Bridge Engineer – Background
- Emphasis has switched from lowering number of “poor” bridge to a Lowest Life Cycle Cost.
- Taking a deeper look at our bridge program

BRIDGE PLANNING

- **Condition Rating (CR) 9 → Brand new**
- **Condition Rating (CR) 4 → Poor**
- **Condition Rating (CR) 0 → Collapsed in river**
- **A quick look at CR tells the story - a "wave" coming**

Treat Network by CR – Examine Next 30 Years

- CR = 0-2, Deck Area = 16,192 → Needs Replacement (5 years)
- CR = 3, Deck Area = 434,201 → Needs Replacement (10 years)
- CR = 4, Deck Area = 522,953 → Needs Replacement (15 years)
- CR = 5, Deck Area = 6,834,689 → Needs Rehab (15 years)
- CR = 6, Deck Area = 3,010,595 → Needs Rehab (25 years)
- CR = 7, Deck Area = 2,405,674 → Needs Preservation (15 years)
- CR = 8, Deck Area = 518,795 → Needs Preservation (25 years)
- CR = 9, Deck Area = 62,563 → Needs Preservation (40 years)

BRIDGE PLANNING

- Bridge design life ~75 years
- Eisenhower Interstate System – started 1956, ended 1972
- 1956 + 75 = 2031, 1972 + 75 = 2047
- 61% of our network in 1950-1979

Deck area by Year built

	Adams	Cumberland	Dauphin	Franklin	Lancaster	Lebanon	Perry	York	Total
Before 1929	39,799.60	38,866.90	310,331.10	34,323.90	370,681.30	10,585.00	37,127.70	38,931.70	880,647.21
1930-39	39,470.40	29,984.70	141,061.31	59,610.30	98,780.70	40,290.50	78,018.30	119,943.40	607,159.62
1940-49	45,020.90	10,788.80	82,812.90	44,378.90	163,229.70	78,598.30	19,726.10	77,995.90	522,551.51
1950-59	53,002.00	66,973.00	510,886.40	41,055.30	203,651.51	14,597.90	132,319.90	646,443.52	1,668,929.52
1960-69	188,054.80	670,364.31	1,221,608.81	259,340.11	553,047.41	330,182.21	182,685.60	196,419.50	3,601,702.77
1970-79	8,619.90	306,924.21	1,768,922.20	39,376.80	1,213,390.27	31,411.00	0.00	221,574.00	3,590,218.38
1980-89	39,369.10	50,909.60	383,495.51	45,252.40	134,534.50	25,648.40	9,732.50	97,815.50	786,757.52
1990-99	59,398.20	202,012.20	150,322.80	18,469.10	136,783.91	8,675.20	11,632.20	32,825.30	620,118.91
2000-09	50,049.40	74,398.20	30,321.70	55,438.10	487,132.62	138,792.21	45,588.40	157,955.41	1,039,676.04
2010+	120,145.40	220,978.51	141,533.80	136,124.80	240,241.11	74,223.50	40,084.80	321,177.61	1,294,509.54
Total	**642,929.71**	**1,672,200.43**	**4,741,296.54**	**733,369.72**	**3,601,473.03**	**753,004.23**	**556,915.51**	**1,911,081.85**	**14,612,271.02**

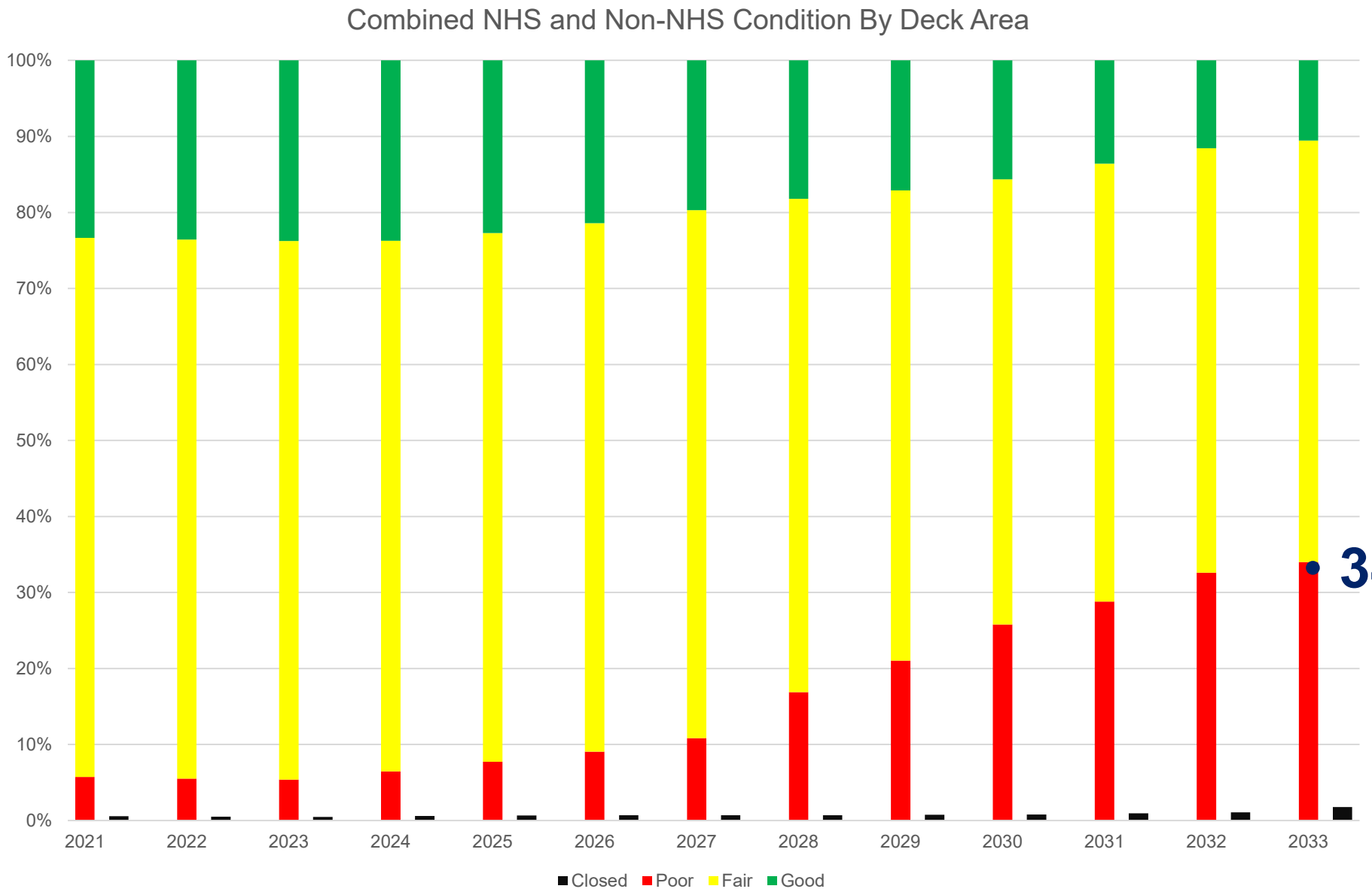
BRIDGE PLANNING

- Bridge design life ~75 years
- Eisenhower Interstate System – started 1956, ended 1972
- 1956 + 75 = 2031, 1972 + 75 = 2047
- 61% of our network in 1950-1979

Poor Deck Area by Year Built

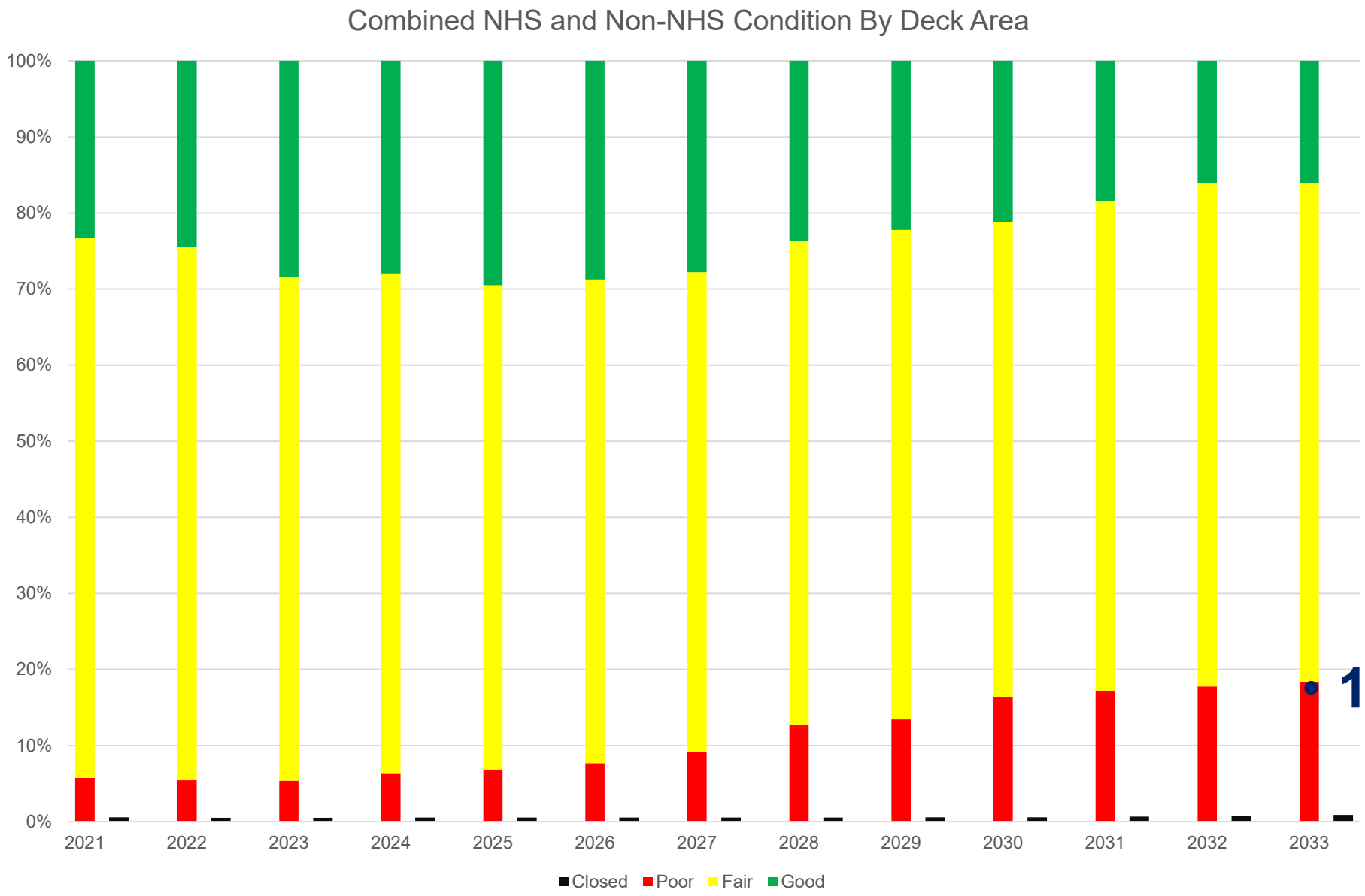
	Adams	Cumberland	Dauphin	Franklin	Lancaster	Lebanon	Perry	York	Total
Before 1929	8,474.80	6,928.50	97,970.20	5,381.90	19,381.00	2,749.80	9,673.90	6,128.30	156,688.40
1930-39	5,241.70	1,719.60	3,385.70	7,243.80	16,551.10	1,017.50	10,032.80	18,424.80	63,617.00
1940-49	7,237.30	2,652.00	31,474.30	5,037.40	24,691.50	1,085.60	4,969.70	10,943.60	88,091.40
1950-59	1,896.00	1,868.10	3,232.10	3,101.90	22,262.00	1,254.30	3,985.20	82,118.20	119,717.81
1960-69	14,147.00	17,492.00	7,227.00	9,017.10	29,684.40	1,948.00	7,000.50	8,405.00	94,921.00
1970-79	0.00	352.00	19,900.40	1,452.00	3,776.00	11,237.60	0.00	3,812.80	40,530.80
1980-89	0.00	676.00	3,834.00	0.00	5,475.00	0.00	0.00	782.00	10,767.00
1990-99	0.00	0.00	1,206.00	0.00	0.00	0.00	0.00	0.00	1,206.00
2000-09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2010+	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	**36,996.80**	**31,688.20**	**168,229.70**	**31,234.10**	**121,821.00**	**19,292.80**	**35,662.10**	**130,614.70**	**575,539.42**

WORST 1ST



34% Poor

LOWEST LIFE CYCLE COST



18% Poor

BRIDGE PLANNING

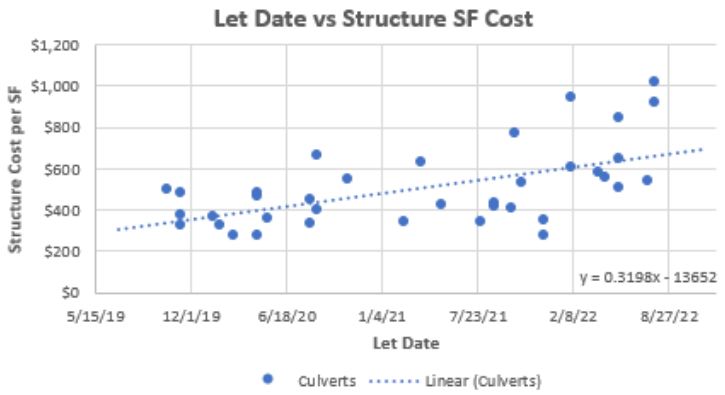
Unit Cost Data: Replacement - Culvert
ECMS Data Range: 08/02/2019 to 08/02/2022

Last Updated: 09/13/22
Updated By: KJS

Data Set Count: 37 Culvert Projects

Instructions:
(1) Cells shaded green are input.
(2) To add a new project, copy a row from the middle of the table and insert the row in the middle of the table. This will retain the drop downs, eliminate the need to reapply the filters to the column headings, and automatically add the new data point to the graph. After insertion, edit all shaded data fields
(3) After all new projects are added, re-sort data using by newest first.
(4) After new cost data is entered, adjust trendline formula input based off of chart.

Notes:
(1) Items/cost associated with natural streambed material placement/storage
(2) Items/cost associated with unique issues (e.g. sinkhole stabilization) that appear on structures tab block were excluded.
(3) Over-excavation and backfilling of unsuitable material included under other
(4) SF Costs include temporary excavation support and removal of existing structures.



	Structure	Total
2020 Average SF Cost =	$414	$826
2021 Average SF Cost =	$449	$877
2022 Average SF Cost =	$719	$1,301
Overall Average SF Cost =	$507	$974
Trendline Slope =	0.3198	
Trendline Y-intercept =	-13652	

Structure Trendline		
Date	SF Cost	
#########	$696	Today
6/30/2023	$773	
6/30/2024	$890	
6/30/2025	$1,007	
6/30/2026	$1,124	

Project Data						Structure Data										Construction Cost Data							
																Low Bidder - Structure Cost							
ECMS Project	Let Date	Dist.	County	Route & Section	Structure Plan Number	No. of Spans	Structure Type	Wing Type	Barrier Type	Span (FT)	Wall Width (FT)	Rise (FT)	Culv. Length (FT)	Staged Constr. ?	Dist. Slab ?	Str. Area (SF)	Lump Sum	Rebar	Rock	TES&PS	Other Str. Item	Existing Removal	Total Structure	Structure SF Cost	Total Constr. SF Cost
87538	7/28/22	8	Lancaster	0772 - 048	S-40076	1	Box - Precast	Combo	Combo G/R	6.00	0.67	3.00	42.13	No	Yes	309	$284,000	$4,800	in LS	$0	$300	$25,000	$314,100	$1,017	$2,198
100292	7/28/22	8	Lebanon	0419 - 009	S-40249	1	Box - Precast	Combo	Combo G/R	7.50	0.67	6.00	57.23	No	Yes	506	$406,976	$26,495	$3,612	$0	$13,179	$17,495	$467,757	$924	$1,606
90846	7/14/22	8	Dauphin	4006 - 006	S-40454	1	Box - Precast	End Section	10M	26.00	1.08	7.50	29.25	No	No	824	$400,000	$4,096	$21,350	$0	$2,070	$20,000	$447,516	$543	$872
89288	5/12/22	8	Lancaster	7101 - BRG	L-65	1	Box - Precast	End Section	10M	16.00	1.08	4.00	31.50	Yes	Yes	573	$391,900	Alt. Bid	$9,800	$37,500	$4,565	$40,000	$483,765	$844	$1,715
89288	5/12/22	8	Lancaster	7101 - BRG	L-64	2	Box - Precast	End Section	10M	12.00	1.00	5.00	43.50	Yes	Yes	1,218	$655,735	Alt. Bid	$9,800	$37,500	$7,500	$80,000	$790,535	$649	$1,318
92562	5/12/22	8	York	2079 - 005	S-40014	1	Box - Precast	End Section	SM G/R	27.00	1.08	6.00	33.75	No	Yes	985	$460,000	$11,820	in LS	$0	$2,240	$30,000	$504,060	$512	$796
100211	4/14/22	8	York	3035 - 001	S-39942	1	Box - Precast	End Section	SM G/R	25.00	1.08	6.00	32.33	No	No	879	$408,719	$3,135	$21,871	$12,276	$3,467	$40,761	$490,228	$558	$922
78655	3/31/22	8	Cumberland	0997 - 039	S-39668	1	Box - Precast	End Section	PA Bridge	18.00	1.08	7.00	35.83	No	Yes	723	$389,900	$8,525	$5,040	$0	$520	$20,000	$423,985	$586	$877
91359	2/3/22	8	York	2002 - 019	S-39830	1	Box - Precast	End Section	SM G/R	7.50	0.67	5.00	29.38	No	Yes	260	$229,000	$850	in LS	$10,000	$2,250	$4,000	$246,100	$947	$1,803

BRIDGE PLANNING

Cost Analysis:

			Total Replacement			Partial Replacement		Rehabilitation		
			Culvert [2]	Bridge [3]	Com-bined	Super-structure	Deck	Stone Arch	Conc. Arch	Preser-vation
Design Cost (Total Cost)		Preliminary Engineering	$296,242	$319,848	$310,518	$215,915	$138,765	$196,528	$220,848	$107,492
		Final Design	$175,172	$229,551	$198,113	$202,539	$257,226	$112,583	$139,289	$163,241
		Preliminary + Final	$471,414	$549,398	$508,631	$418,454	$395,991	$309,111	$360,136	$270,733
		Right-of-Way	$17,438	$19,732	$18,385	$4,271	$7,098	$18,365	$26,709	$238
Design Cost (Cost per SF)		No. of Projects with Design Costs	37	27	64	10	3	3	5	10
		Total Associated SF Area	30,912	100,284	131,196	25,303	20,722	4,222	11,883	143,199
		Average SF Area	835	3,714	2,050	2,530	6,907	1,407	2,377	14,320
		Total Design Cost (PE + FD + R/W)	$18,383,784	$15,346,797	$33,710,629	$4,227,253	$1,209,270	$982,427	$1,934,228	$2,709,704
		Average Cost per SF	$595	$153	$257	$167	$58	$233	$163	$19
Construction Cost (Cost per SF)	Structure Only	2020 Average	$414	$342	$378	(1)	(1)	(1)	(1)	$73
		2021 Average	$449	$406	$426	(1)	(1)	(1)	(1)	$64
		2022 Average	$719	$353	$634	(1)	(1)	(1)	(1)	$97
		Overall Average	$507	$365	$446	$236	$143	$372	$157	$72
	Low Bid (w/o CENG)	2020 Average	$826	$567	$697	(1)	(1)	(1)	(1)	$103
		2021 Average	$877	$752	$812	(1)	(1)	(1)	(1)	$125
		2022 Average	$1,301	$494	$1,115	(1)	(1)	(1)	(1)	$184
		Overall Average	$974	$627	$825	$402	$233	$596	$356	$133
		Constr. Engineering (CENG)	$122	$78	$103	$50	$29	$75	$44	$17
		Low Bid Average + CENG	$1,096	$706	$928	$452	$262	$671	$400	$149
Total (Cost per SF)			$1,690	$859	$1,185	$619	$320	$904	$563	$168

BRIDGE PLANNING

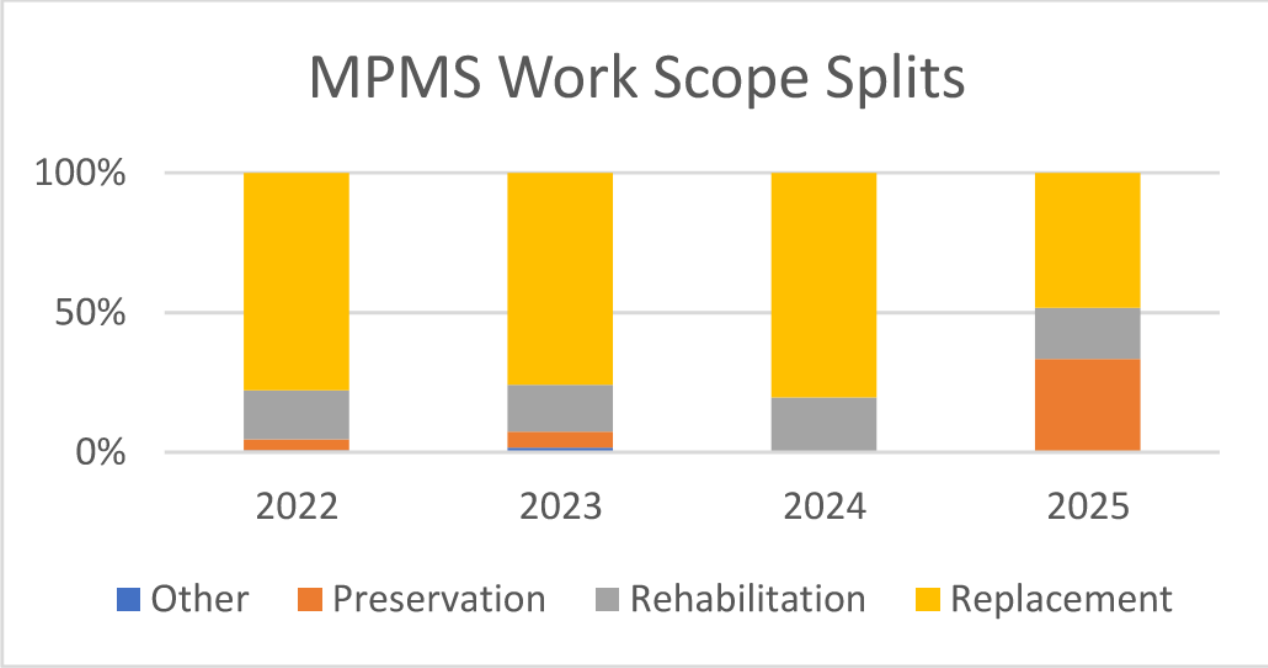
- CR = 4, Deck Area = 522,953 → Needs Replacement (15 years)
- CR = 5, Deck Area = 6,834,689 → Needs Rehab (15 years)

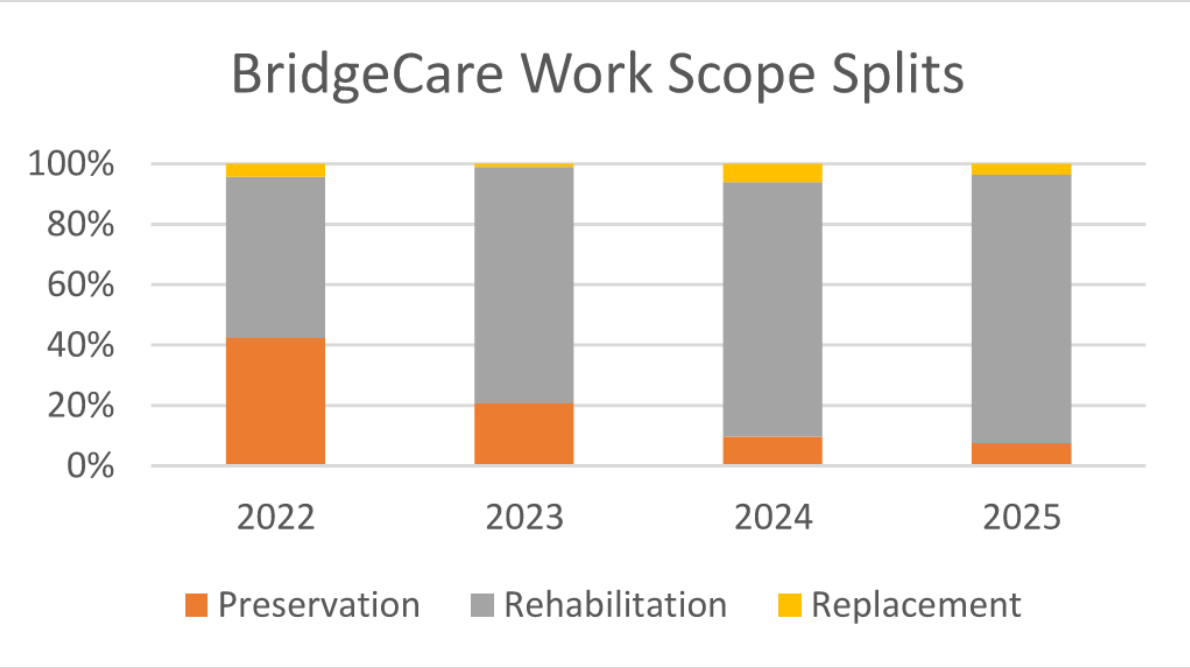
- **Bridge (Light) Preservation → $ 25 / SF**
- **Bridge (Medium) Preservation → $ 75 / SF**
- **Bridge (Heavy) Preservation → $ 150 / SF**
- **Bridge Deck Replacement → $ 250 / SF**
- **Bridge Beam & Deck Replace → $ 450 / SF**
- **Bridge Total Replacement → $ 750 / SF**
- **Culvert Replacement → $1000 / SF**

Avg = $350/sf
vs. $750/sf

BRIDGE PLANNING

- Another angle - BAMS
- Bridge Asset Management → BridgeCares Software
- Can compare our planned project (MPMS) to our theoretical "perfect" LLC scopes.
- Reality is in between, because it will always be a mix.





BRIDGE PLANNING

- Current 12 year plan (by count)
  - 272 (34%) are preservation → ??
  - 60 (7%) are rehabilitation → ??
  - 475 (59%) are replacement → ??

2024+ Projects	Programmed by $
Preservation	3%
Rehabilitation	13%
Replacement	84%

- We are rethinking preservation work to get closer to LLC
  - Re-scope projects (future, 2024+ projects)
  - Emphasize rehab & (heavy) preservation (future)
  - **Light & Medium Preservations do not warrant individual TIP projects.**
    - **Expand use of task-specific contracts (next slides)**

BRIDGE PLANNING

- Task Specific Contract – Example is our current Bridge Maintenance Contract
  - 409 Funded – BMC - $1.5M/yr (50% on-call)
- Future Bridge (Medium) Preservation Contract
  - TIP Funded - $2.0M/yr (focus on “surgical” major structure work)
  - Prevent full TIP projects
- Future Bridge (Light) Preservation Contract
  - TIP Funded - $2.0M/yr (focus on joints & scour)
  - Reduce long term degradation of bridges

- These Task-Specific Contracts will need funded, but are more efficient than traditional TIP projects.

BRIDGE PLANNING

- Task Specific Contract – Example is our current Bridge Maintenance Contract
  - 409 Funded – BMC - $1.5M/yr (50% on-call)
- **Future Bridge (Medium) Preservation Contract**
  - **TIP Funded - $2.0M/yr (focus on “surgical” major structure work)**
  - **Prevent full TIP projects**
- Future Bridge (Light) Preservation Contract
  - TIP Funded – $2.0M/yr (focus on joints & scour)
  - Reduce long term degradation of bridges

- These Task-Specific Contracts will need funded, but are more efficient than traditional TIP projects.

BRIDGE (MEDIUM) PRESERVATION

BRIDGE (MEDIUM) PRESERVATION

- Example Medium Preservation
- Scope ~$75/SF

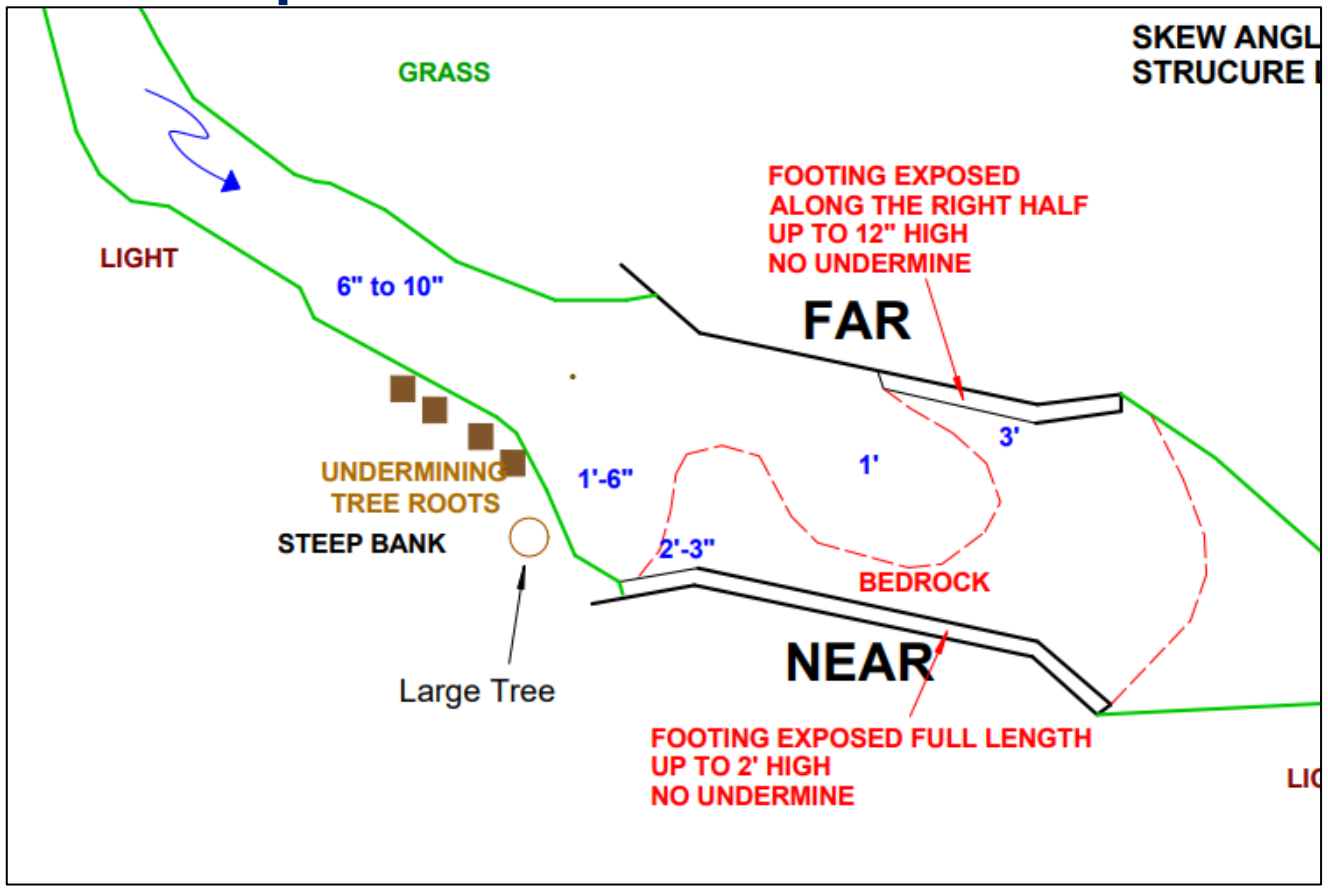
BRIDGE PLANNING

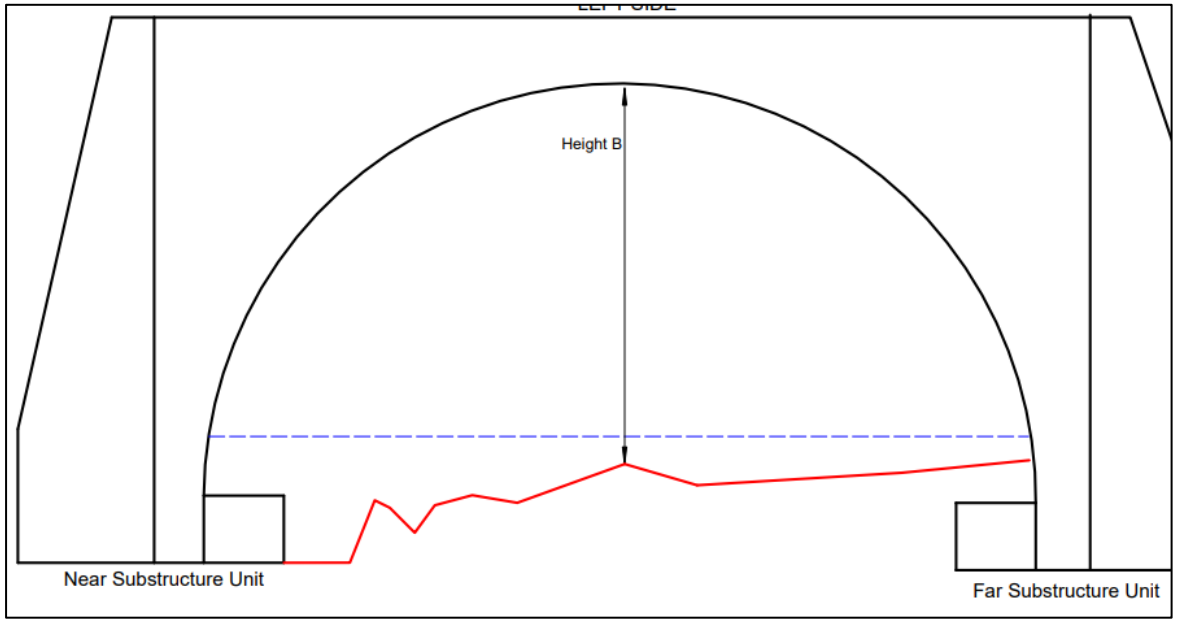
- Task Specific Contract – Example is our current Bridge Maintenance Contract
  - 409 Funded – BMC - $1.5M/yr (50% on-call)
- Future Bridge (Medium) Preservation Contract
  - TIP Funded - $2.0M/yr (focus on “surgical” major structure work)
  - Prevent full TIP projects
- **Future Bridge (Light) Preservation Contract**
  - **TIP Funded – $2.0M/yr (focus on joints & scour)**
  - **Reduce long term degradation of bridges**

- These Task-Specific Contracts will need funded, but are more efficient than traditional TIP projects.

BRIDGE (LIGHT) PRESERVATION

- Example Light Preservation Contract
- Scope ~$25/SF





BRIDGE (LIGHT) PRESERVATION

- Example Light Preservation Contract
- Scope ~$25/SF

BRIDGE (LIGHT) PRESERVATION

2020		2022
	→	
	→	

BRIDGE PLANNING

Example Deck Area =	1800	SF
Medium Preservation Cost =	$75	SF
Light Preservation Cost =	$25	SF
Cycle Length =	4	Yrs

County		Allocated %	Medium Preservation		Light Preservation	
#	Name		$/Yr	Total #	$/Yr	Total #
01	Adams	*12%*	*$240,000*	*7*	*$240,000*	*44*
21	Cumberland	*8%*	*$160,000*	*5*	*$160,000*	*30*
22	Dauphin	*18%*	*$360,000*	*11*	*$360,000*	*67*
28	Franklin	*10%*	*$200,000*	*6*	*$200,000*	*37*
36	Lancaster	*20%*	*$400,000*	*12*	*$400,000*	*74*
38	Lebanon	*8%*	*$160,000*	*5*	*$160,000*	*30*
50	Perry	*4%*	*$80,000*	*2*	*$80,000*	*15*
66	York	*20%*	*$400,000*	*12*	*$400,000*	*74*
Total		100%	$2,000,000	60	$2,000,000	371

BRIDGE PLANNING

- Next Steps:
  - Re-scope projects
  - Emphasize rehab & preservation
  - BAMS / Bridge Cares to be incorporated
  - **How to fund task-specific contracts**
    - **Nothing today**
    - **Will come back with future changes to fund this**

  - Thank you!

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

February 15, 2023

Dear Planning Partners:

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. 23 CFR 490.105 establishes measures to assess NHS travel reliability and the effectiveness of the Congestion Mitigation and Air Quality Improvement (CMAQ) Program. These measures are collectively referred to as the **PM-3** measures. More information on Transportation Performance Management (TPM) is available at *https://www.fhwa.dot.gov/tpm/*.

PM-2 Performance Measures include:

- Percentage of pavements on the Interstate System in Good condition
- Percentage of pavements on the Interstate System in Poor condition
- Percentage of pavements on the NHS (excluding the Interstate System) in good condition
- Percentage of pavements on the NHS (excluding the Interstate System) in Poor condition
- Percentage of NHS bridge deck area classified as in good condition
- Percentage of NHS bridge deck area classified as in poor condition

PM-3 Performance Measures include:

- Percent of Person-miles Traveled on the Interstate System that are Reliable
- Percent of Person-miles Traveled on the Non-Interstate NHS that are Reliable
- Interstate System Truck Travel Time Reliability Index
- Annual Hours of Peak-Hour Excessive Delay (PHED) per Capita
- Percent Non-Single Occupant Vehicle (SOV) Travel
- On-Road Mobile Source Emissions Reduction for CMAQ-funded Projects

On December 16th, the Pennsylvania Department of Transportation (PennDOT) submitted to the Federal Highway Administration (FHWA) two sets of electronic Performance Management Forms (PMFs) that summarize the targets and associated progress related to the PM-2 and PM-3 measures for the following performance periods:

Performance Period	Submittal Name	Purpose of Submittal
2018-2021 (4-year)	Full Period Performance Report	▪ Assess performance against the 4-year targets ▪ Address freight reliability requirements including inclusion of bottleneck report and strategies
2022-2025 (4-year)	Baseline Performance Report	▪ Provide baseline performance metrics ▪ Provide 2-year and 4-year performance measure targets for applicable regions

Attachment 1 (includes two tables: A&B) **-** provides a summary of the 2018-2021 full performance period performance and targets for the PM-2 and PM-3 measures. This information is being provided to the MPOs/RPOs for inclusion in future Transportation Improvement Program (TIP) and Long-Range Transportation Plan (LRTP) documentation. No additional actions are required by the MPOs/RPOs for items related to the 2018-2021 performance period.

Attachment 2 (includes two tables: A&B) - provides a summary of the 2022-2025 baseline period baseline values and targets for the PM-2 and PM-3 measures as established by PennDOT. Note that targets for the PM-3 PHED and Non-SOV congestion measures were established through a coordinated effort between PennDOT and the applicable MPOs in each urbanized area. Federal regulations require that MPOs establish targets for the remaining PM-2 and PM-3 measures within 180 days of the PennDOT established targets (by June 14, 2023), either by agreeing to plan and program projects in support of PennDOT targets, or by committing to their own quantifiable targets. PennDOT is requesting that Rural Planning Organizations (RPOs) also establish targets by June 14, 2023, by agreeing to support the PennDOT targets or setting their own.

To ensure compliance with 23 U.S.C. §134, please respond to this letter by selecting an option for PM-2 and PM-3 measures and clicking the “SUBMIT” button below before June 14, 2023.

Please select one of the following options for PM-2 measures:

☐ The MPO/RPO decision-making body agrees to support the state PM-2 targets by planning and programming projects that contribute to meeting or making significant progress toward the established PennDOT performance targets. See **Attachment 2 (A&B)** enclosures for statewide baseline and target values for the 2022-2025 performance period.

☐ The MPO/RPO decision-making body commits to establishing their own quantifiable targets for the 2022-2025 performance period and has attached their methodology. MPOs/RPOs that establish their own targets will report the

methodology used to develop them.

Please select one of the following options for PM-3 measures:

☐ The MPO/RPO decision-making body agrees to support the state PM-3 targets by planning and programming projects that contribute to meeting or making significant progress toward the established PennDOT performance targets. See **Attachment 2 (A&B)** enclosures for statewide baseline and target values for the 2022-2025 performance period.

☐ The MPO/RPO decision-making body commits to establishing their own quantifiable targets and has attached their methodology. MPOs/RPOs that establish their own targets will report the methodology used to develop them.

Concurrence: _____ Date: _____
Authorized MPO/RPO Representative

SUBMIT

Should you have any questions, please contact Casey Markey, Transportation Planning Manager, at 717.787.1251 or via email at cmarkey@pa.gov.

Sincerely,

Larry S. Shifflet
Deputy Secretary for Planning

Sincerely,

Melissa J. Batula, P.E.
Deputy Secretary for Highway Administration

ATTACHMENT 1:

2018-2021 Full Performance Period Performance Summary

Attachment 1A: PM-2 and PM-3 4-Year Performance Assessment for 2018-2021 Performance Period

Measure Category	Performance Measure	Urbanized Area*	2021 4-Year Performance	2021 4-Year Target	Target Met
PM-2	Percentage of Pavements of the Interstate System in Good Condition	Statewide	68.8%	60.0%	Yes
	Percentage of Pavements of the Interstate System in Poor Condition	Statewide	0.4%	2.0%	Yes
	Percentage of Pavements of the Non- Interstate NHS in Good Condition	Statewide	49.0%	33.0%	Yes
	Percentage of Pavements of the Non- Interstate NHS in Poor Condition	Statewide	15.2%	5.0%	Yes
	Percentage of NHS Bridges Classified as in Good Condition	Statewide	27.5%	26.0%	Yes
	Percentage of NHS Bridges Classified as in Poor Condition	Statewide	4.4%	6.0%	Yes
PM-3	Percent of the Person-Miles Traveled on the Interstate That Are Reliable	Statewide	92.8%	89.5%	Yes
	Percent of the Person-Miles Traveled on the Non-Interstate NHS That Are Reliable	Statewide	92.6%	87.4%	Yes
	Truck Travel Time Reliability (TTTR) Index	Statewide	1.30	1.40	Yes
	Annual Hours of Peak Hour Excessive Delay Per Capita:	Philadelphia	13.1	17.2	Yes
		Pittsburgh	9.3	11.8	Yes
	Percent of Non-Single Occupancy Vehicle (Non-SOV) Travel:	Philadelphia	30.6%	28.1%	Yes
		Pittsburgh	27.6%	24.4%	Yes
	Total Emission Reductions (kg/day): PM2.5	Statewide	269.080	20.490	Yes
	Total Emission Reductions (kg/day): NOx	Statewide	1644.620	612.820	Yes
	Total Emission Reductions (kg/day): VOC	Statewide	360.220	201.730	Yes
	Total Emission Reductions (kg/day): PM10	Statewide	0.000	0.000	Yes
	Total Emission Reductions (kg/day): CO	Statewide	3791.360	250.000	Yes

** Urbanized areas are based on 2010 CENSUS urbanized area boundaries (2010 Census Urban Area Reference Maps)*

Attachment 1B: Reliability Performance by MPO/RPO 2018-2021

(Green Highlighted Cells = Better than Target; Red Highlighted Cells = Worse than Target)

Area (MPO/RPO)	Interstate Reliability					Non-Interstate Reliability					Truck Travel Time Reliability Index				
	2017 Baseline	2018	2019	2020	2021	*2017 Baseline*	2018	2019	2020	2021	*2017 Baseline*	2018	2019	2020	2021
Statewide Total	**89.8%**	**89.6%**	**89.9%**	**96.2%**	**92.8%**	**87.4%**	**88.2%**	**88.4%**	**92.6%**	**92.6%**	**1.34**	**1.39**	**1.36**	**1.23**	**1.30**
Statewide Target	**89.5%** *2 & 4-Year Target*					**87.4%** *4-Year Target*					**1.40** *2 & 4-Year Target*				
Targets only Apply to Statewide Total - MPO Numbers Provided for Information Purposes Only															
Adams	*Not Applicable*					86.2%	89.8%	93.4%	95.8%	91.4%	*Not Applicable*				
Altoona	100.0%	100.0%	100.0%	100.0%	100.0%	82.7%	83.9%	84.4%	87.9%	90.0%	1.21	1.25	1.18	1.12	1.15
Centre	100.0%	100.0%	100.0%	100.0%	100.0%	91.3%	93.2%	94.9%	97.2%	96.3%	1.13	1.33	1.15	1.17	1.22
DVRPC	65.5%	66.0%	66.6%	90.6%	83.5%	81.2%	82.6%	83.2%	94.2%	93.1%	2.01	2.04	1.99	1.54	1.62
Erie	100.0%	100.0%	100.0%	100.0%	100.0%	83.8%	86.7%	88.2%	91.1%	84.5%	1.25	1.23	1.29	1.16	1.15
Franklin	100.0%	100.0%	100.0%	100.0%	100.0%	93.8%	96.5%	94.6%	95.6%	92.7%	1.08	1.11	1.09	1.09	1.11
Harrisburg	91.3%	92.7%	92.4%	99.7%	96.0%	91.0%	92.4%	90.3%	95.7%	94.9%	1.32	1.33	1.31	1.18	1.29
Johnstown	*Not Applicable*					93.0%	94.5%	95.6%	96.3%	96.6%	*Not Applicable*				
Lancaster	100.0%	100.0%	100.0%	100.0%	100.0%	95.2%	95.3%	92.1%	97.0%	95.2%	1.09	1.12	1.17	1.11	1.14
Lebanon	100.0%	100.0%	100.0%	100.0%	100.0%	97.5%	97.7%	95.4%	98.3%	93.8%	1.12	1.14	1.15	1.07	1.13
Lehigh Valley	100.0%	100.0%	99.5%	100.0%	100.0%	86.4%	84.6%	85.4%	95.7%	88.7%	1.32	1.34	1.35	1.14	1.30
NEPA	100.0%	100.0%	99.9%	100.0%	100.0%	91.9%	90.9%	93.1%	93.1%	93.2%	1.26	1.25	1.28	1.17	1.23
North Central	100.0%	100.0%	100.0%	100.0%	100.0%	93.0%	95.7%	95.6%	94.4%	93.9%	1.10	1.11	1.50	1.17	1.17
Northern Tier	100.0%	100.0%	100.0%	100.0%	100.0%	98.8%	99.1%	94.7%	97.6%	95.2%	1.24	1.17	1.18	1.13	1.16
Northwest	100.0%	100.0%	100.0%	100.0%	93.3%	87.5%	91.5%	91.8%	85.3%	82.0%	1.18	1.32	1.17	1.13	1.46
Reading	100.0%	100.0%	100.0%	100.0%	100.0%	93.2%	94.2%	95.0%	95.4%	94.3%	1.12	1.38	1.19	1.12	1.19
S. Alleghenies	100.0%	100.0%	100.0%	100.0%	100.0%	95.9%	96.7%	94.2%	96.8%	93.1%	1.11	1.13	1.16	1.12	1.15
Scranton	98.3%	98.3%	98.2%	100.0%	100.0%	87.4%	90.3%	90.1%	93.5%	92.1%	1.39	1.28	1.35	1.24	1.24
SEDA-COG	100.0%	100.0%	100.0%	100.0%	96.0%	95.7%	96.4%	96.2%	97.5%	94.3%	1.11	1.11	1.12	1.11	1.24
SPC	92.9%	91.6%	92.1%	98.0%	95.9%	87.0%	87.7%	88.9%	93.8%	93.8%	1.42	1.49	1.46	1.29	1.32
SVTS	99.3%	99.2%	100.0%	100.0%	100.0%	95.1%	96.7%	95.9%	95.3%	95.8%	1.18	1.59	1.14	1.13	1.23
Wayne	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	1.11	1.12	1.17	1.15	1.16
Williamsport	100.0%	100.0%	100.0%	100.0%	100.0%	98.4%	98.3%	97.4%	98.7%	97.5%	1.16	1.18	1.19	1.14	1.16
York	100.0%	97.5%	94.9%	100.0%	100.0%	90.0%	89.6%	90.7%	93.8%	93.4%	1.22	1.32	1.28	1.15	1.17

ATTACHMENT 2:

2022-2025 Baseline Period Targets Established by PennDOT

Attachment 2A: PM-2 and PM-3 Baseline and Target Values for 2022-2025 Performance Period

Measure Category	Performance Measure	Urbanized Area*	2021 Baseline	2023 2-Year Target	2025 4-Year Target
PM-2	Percentage of Pavements of the Interstate System in Good Condition	Statewide	68.8%	69.0%	65.0%
	Percentage of Pavements of the Interstate System in Poor Condition	Statewide	0.4%	2.0%	2.0%
	Percentage of Pavements of the Non- Interstate NHS in Good Condition	Statewide	37.2%	31.0%	29.0%
	Percentage of Pavements of the Non- Interstate NHS in Poor Condition	Statewide	1.5%	6.0%	6.5%
	Percentage of NHS Bridges Classified as in Good Condition	Statewide	27.5%	28.0%	28.0%
	Percentage of NHS Bridges Classified as in Poor Condition	Statewide	4.4%	7.5%	7.5%
PM-3	Percent of the Person-Miles Traveled on the Interstate That Are Reliable	Statewide	92.8%	89.5%	89.5%
	Percent of the Person-Miles Traveled on the Non-Interstate NHS That Are Reliable	Statewide	92.6%	88.0%	88.0%
	Truck Travel Time Reliability (TTTR) Index	Statewide	1.30	1.40	1.40
	Annual Hours of Peak Hour Excessive Delay Per Capita:	Allentown--	7.1%	8.4%	8.4%
		Harrisburg	7.2%	9.1%	9.1%
		Lancaster,	3.3%	3.7%	3.7%
		Philadelphia	13.1%	15.2%	15.1%
		Pittsburgh, PA	9.3%	10.5%	10.5%
		Reading, PA	6.3%	6.5%	6.5%
		York, PA	5.0%	6.4%	6.4%

Measure Category	Performance Measure	Urbanized Area*	2021 Baseline	2023 2-Year Target	2025 4-Year Target
	Percent of Non-Single Occupancy Vehicle (Non-SOV) Travel:	Allentown	20.4%	18.6%	18.6%
		Harrisburg	21.3%	20.2%	20.2%
		Lancaster	20.5%	21.9%	21.9%
		Philadelphia	30.6%	30.0%	30.0%
		Pittsburgh	27.6%	27.0%	27.0%
		Reading	22.8%	20.2%	20.2%
		York	18.4%	15.8%	15.8%
PM-3	Total Emission Reductions (kg/day): PM2.5	Statewide	269.080	18.000	36.000
	Total Emission Reductions (kg/day): NOx	Statewide	1644.620	392.000	785.000
	Total Emission Reductions (kg/day): VOC	Statewide	360.220	46.000	93.000
	Total Emission Reductions (kg/day): PM10	Statewide	0.000	0.000	0.000
	Total Emission Reductions (kg/day): CO	Statewide	3791.360	0.000	0.000

** Urbanized areas are based on 2010 CENSUS urbanized area boundaries (2010 Census Urban Area Reference Maps)*

Attachment 2B: PM-2 and PM-3 Target Setting Notes

Measure Category	Performance Measure	Target Setting Notes
PM-2	Percentage of Pavements of the Interstate System in Good Condition	Planned and programmed projects were considered while establishing targets. Expected improvement from these projects is projected, as is anticipated deterioration on "untouched" pavements. Adequate funding is available and appropriate projects are programmed in the short term in order to result in investment that maintains a state of good repair.
	Percentage of Pavements of the Interstate System in Poor Condition	Planned and programmed projects were considered while establishing targets. Expected improvement from these projects is projected, as is anticipated deterioration on "untouched" pavements. Adequate funding is available and appropriate projects are programmed in the short term in order to result in investment that maintains a state of good repair.
	Percentage of Pavements of the Non- Interstate NHS in Good Condition	Planned and programmed projects were considered while establishing targets. Expected improvement from these projects is projected, as is anticipated deterioration on "untouched" pavements. Adequate funding is available and appropriate projects are programmed in the short term in order to result in investment that maintains a state of good repair. However, we forecast a decrease in the percentage in good condition which will continue in the future if our funding levels remain constant.
	Percentage of Pavements of the Non- Interstate NHS in Poor Condition	Planned and programmed projects were considered while establishing targets. Expected improvement from these projects is projected, as is anticipated deterioration on "untouched" pavements. Adequate funding is not available to result in investment that maintains what we previously defined as a state of good repair, which is no more than 5% in poor condition. This increase in the percentage in poor condition will continue in the future if our funding levels remain constant.
	Percentage of NHS Bridges Classified as in Good Condition	Planned and programmed projects were considered while establishing these targets. Expected improvement from these projects is projected, as well as anticipated deterioration. Short term flat forecasts are largely the resultant of the BIL/IIJA funding.
	Percentage of NHS Bridges Classified as in Poor Condition	Our internal data notes an actual of 4.5 vs the 4.4 value shown. Projected poor targets are based off of IIJA/BIL investment dollars applied to LLCC based investment decisions that

Measure Category	Performance Measure	Target Setting Notes
		are forecasted to largely be spent on preservation and not on reduction of poor deck area, as was previously custom. Forecasts show a higher, flat target due to a combination of factors, including IIJA/BIL money, adoption of LLCC investment logic and software model maturity level.
PM-3	Percent of the Person-Miles Traveled on the Interstate That Are Reliable	The target as adjusted during the 2020 mid-period report is maintained for this performance period. With no major changes to PennDOT's project selection and implementation strategy in the near-term, it is anticipated that the measure will remain relatively consistent from year-to-year. The target was set using the trends from 2017 to 2021, with a cushion to accommodate yearly fluctuations. The target also considers increased freight and more road construction impacting performance. PennDOT anticipates performance will move closer to the levels seen prior to the COVID-19 pandemic.
	Percent of the Person-Miles Traveled on the Non-Interstate NHS That Are Reliable	With no major changes to PennDOT's project selection and implementation strategy in the near-term, it is anticipated that the measure will remain relatively consistent from year-to-year. The target was set using the trends from 2017 to 2021, with a cushion to accommodate yearly fluctuations. The target also considers increased freight and more road construction impacting performance. PennDOT anticipates performance will move closer to the levels seen prior to the COVID-19 pandemic.
	Truck Travel Time Reliability (TTTR) Index	The target as adjusted during the 2020 mid-period report is maintained for this performance period. With no major changes to PennDOT's project selection and implementation strategy in the near-term, it is anticipated that the measure will remain relatively consistent from year-to-year. The target was set using the trends from 2017 to 2021, with a cushion to accommodate yearly fluctuations. The target also considers increased freight and more road construction impacting performance. PennDOT anticipates performance will move closer to the levels seen prior to the COVID-19 pandemic.
	Annual Hours of Peak Hour Excessive Delay Per Capita:	The approach for developing targets for the CMAQ PHED measures included the following •Develop conservative targets reflecting that recent trends may not be representative of future conditions. •Uncertainties with COVID-19, inflation, long-term trends for working at home and energy and supply chain disruptions.

Measure Category	Performance Measure	Target Setting Notes
		•Future funding (e.g. IIJA) may initiate more project construction activities impacting congestion. •Generalized approach for target determination Average 2018 and 2019 PHED values. •Assume same values for 2-year and 4-year targets. 4-year targets can be updated at the midterm report
	Percent of Non-Single Occupancy Vehicle (Non-SOV) Travel:	The approach for developing targets for the CMAQ Non-SOV measure included the following • Develop conservative targets reflecting that recent trends may not be representative of future conditions. • Uncertainties with COVID-19, inflation, long-term trends for working at home and energy and supply chain disruptions. Expectations of future higher work-at-home percentages than pre-pandemic conditions. •Note that COVID impacts on work-at-home and transit commuting in 2020-2021 will be included in future ACS 5-year estimates throughout performance period. •Generalized approach for target determination Average non-SOV 5-year ACS values for end year periods 2016-2020. •Assume same values for 2-year and 4-year targets. 4-year targets can be updated at the midterm report
	Total Emission Reductions (kg/day)	Targets were developed by evaluating historic emission benefits accrued during the 2018-2021 performance period and evaluating CMAQ project emission benefits currently programmed in the FY2023 TIP for "new" CMAQ funded projects. The emission estimates for these two approaches were compared and assessed. The lower of these two values was considering as the more conservative estimate and used for the 4-year target value. The 2-year target was established as 1/2 of the 4-year target.

FFY 2023-2026 TIP MODIFICATIONS FORM

ADAMS MPO

Informed Coordinating Committee: 4/26/2023

Informed Technical Committee: N/A

Adminstrative Modification - Highway					Funds		FFY 2023			FFY 2024			FFY 2025			FFY 2026			Remarks
Item	Project Title	MPMS	Ph	Prog	Fed	Sta.	Fed.	Sta.	Loc.	Fed.	Sta.	Loc.	Fed.	Sta.	Loc.	Fed.	Sta.	Loc.	
1	Piney Creek Bridge 2 97/010 Adams	90692	FD	Before															Adding the FD phase of Piney Creek Bridge 2 in FFY 2023 for $10,453 to add additional environmental activities. This project consists of a bridge replacement on PA 97 over Tributary to Piney Creek in Germany Township, Adams County. This project has a current estimated let date of May 25, 2023.
				Adjust		185		10,453											
				After		185		10,453											
2	Bridge Reserve Adams	87792	CON	Before	BRIP	185		141,000		70,000	213,124		696,000	235,011					This is a reserve line item.
				Before	BOF								52,000						
				Adjust	BRIP	185		-10,453											
				Adjust	BOF														
				After	BRIP	185		130,547		70,000	213,124		696,000	235,011					
				After	BOF								52,000						
3	PA 116/Trib Willoughby Run 116/044 Adams	106666	UTL	Before															Adding the UTL phase of PA 116/Trib Willoughby Run in FFY 2023 for $223,000 to the current estimate. This project consists of bridge improvements on PA 116 (Fairfield Road) over Tributary to Willoughby Run in Cumberland Township, Adams County. This project has a current estimated let date of April 27, 2023.
				Adjust		185		223,000											
				After		185		223,000											
4	PA 116/Trib Willoughby Run 116/044 Adams	106666	CON	Before		185		635,500			204,000								Cashflowing the CON phase of PA 116/Trib Willoughby Run from FFY 2023 to FFY 2024 for $92,453 to better utilize current available funding. This project consists of bridge improvements on PA 116 (Fairfield Road) over Tributary to Willoughby Run in Cumberland Township, Adams County. This project has a current estimated let date of April 27, 2023.
				Adjust		185		-92,453			92,453								
				After		185		543,047			296,453								
5	Bridge Reserve Adams	87792	CON	Before	BOF	185		130,547			213,124		52,000	235,011					This is a reserve line item.
				Before	BRIP					70,000			696,000						
				Adjust	BOF	185		-130,547			-92,453								
				Adjust	BRIP														
				After	BOF	185					120,671		52,000	235,011					
				After	BRIP					70,000			696,000						

FFY 2023-2026 TIP MODIFICATIONS FORM

Adminstrative Modification - Highway					Funds		FFY 2023			FFY 2024			FFY 2025			FFY 2026			Remarks
Item	Project Title	MPMS	Ph	Prog	Fed	Sta.	Fed.	Sta.	Loc.	Fed.	Sta.	Loc.	Fed.	Sta.	Loc.	Fed.	Sta.	Loc.	
6	Eisenhower Drive Extension 0/RWY Adams	58137	FD	Before		581		1,961,000			629,250			1,000,000					Changing the funding flavor and Cashflowing the FD phase of Eisenhower Drive Extension from FFY 2023 to FFY 2024 for $90,565 to better utilize current available funding. This project consists of extending the Eisenhower Drive through Conewago Township, Adams County, from where it currently ends at High Street to Hanover Road (SR 0116) west of McSherrystown. Potential improvements include new alignment alternatives, partial new alignment alternatives, as well as options to improve the existing roadway network. This project has a current estimated let date of Jan. 2, 2025.
				Before		185					534,109			50,984					
				Adjust		581		-90,565											
				Adjust		185					90,565								
				After		581		1,870,435			629,250			1,000,000					
				After		185					624,674			50,984					
7	Wierman Mill Bridge 1009/012 Adams	87431	ROW	Before															Adding the ROW phase of Wierman Mill Bridge in FFY 2023 for $13,100 to the current estimate. This project consists of a bridge replacement on SR 1009 (Weirmans Mill Road) over Tributary to Bermudian Creek in Huntington Township, Adams County. This project has a current estimated let date of Jan. 11, 2024.
				Adjust		581		13,100											
				After		581		13,100											
8	US 15 Preservation NorthBound 15/059 Adams	116595	PE	Before															Adding the PE phase of US 15 Preservation NorthBound in FFY 2023 for $77,465. This is for survey, plan prep and permit submission for US 15 pipe replacement. This project consists of a pavement preservation on US 15 (Blue-Gray Highway) from the Maryland line to PA 394 (Shrivers Corner Road) in Freedom, Cumberland, Mount Joy and Straban Townships. This project has a current estimated let date of Dec. 14, 2023.
				Adjust		581		77,465											
				After		581		77,465											
9	Bridge Reserve Adams	87792	CON	Before	BOF	185					120,671		52,000	235,011					This is a reserve line item.
				Before	BRIP					70,000			696,000						
				Adjust	BOF	185					-90,565								
				Adjust	BRIP														
				After	BOF	185					30,106		52,000	235,011					
				After	BRIP					70,000			696,000						

FFY 2023-2026 TIP MODIFICATIONS FORM

Adminstrative Modification - Highway					Funds		FFY 2023			FFY 2024			FFY 2025			FFY 2026			Remarks
Item	Project Title	MPMS	Ph	Prog	Fed	Sta.	Fed.	Sta.	Loc.	Fed.	Sta.	Loc.	Fed.	Sta.	Loc.	Fed.	Sta.	Loc.	
10	Latimore Valley Road Brg-C 1005/009 Adams	73854	CON	Before															Adding the CON phase of Latimore Valley Road Brg-C in FFY 2023 for $186,320 for additional construction inspection costs and Class A Concrete Fill Material. This project consists of a bridge rehabilitation on SR 1005 (Latimore Valley Road) over Bermudian Creek in Latimore Township, Adams County. This project was let on June 24, 2021.
				Adjust	BOF		186,320												
				After	BOF		186,320												
11	Mengus Mill Rd Bridge 7207/BRG Adams	18049	PE	Before															This item is a deob.
				Adjust	BOF		-186,320												
				After															
12	94 & 234 Intersection Imp 94/026 Adams	94897	CON	Before	NHPP		545,069												Increasing the CON phase of 94 & 234 Intersection Imp in FFY 2023 for $162,533 for additional iron stone rock blasting. This project consists of an intersection improvement, adding left turn lanes and protected phasing to the intersection of PA 94 (Carlisle Pike) and PA 234 (East Berlin Road) in Reading Township, Adams County. This project was let on March 18, 2021.
				Adjust	NHPP		162,533												
				After	NHPP		707,602												
13	US 15 Preservation Northbound 15/059 Adams	116595	CON	Before	NHPP		2,737,931			3,416,299			2,770,000						Decreasing the CON phase of US 15 Preservation Northbound in FFY 2023 for $162,533 to the current estimate. This project consists of a pavement preservation on US 15 (Blue-Gray Highway) from the Maryland line to PA 394 (Shrivers Corner Road) in Freedom, Cumberland, Mount Joy and Straban Townships. This project has a current estimated let date of Dec. 14, 2023.
				Before	STP		113,585			1,302,140									
				Adjust	NHPP		-162,533												
				Adjust	STP														
				After	NHPP		2,575,398			3,416,299			2,770,000						
				After	STP		113,585			1,302,140									

FFY 2023-2026 TIP MODIFICATIONS FORM

Adminstrative Modification - Highway					Funds		FFY 2023			FFY 2024			FFY 2025			FFY 2026			Remarks
Item	Project Title	MPMS	Ph	Prog	Fed	Sta.	Fed.	Sta.	Loc.	Fed.	Sta.	Loc.	Fed.	Sta.	Loc.	Fed.	Sta.	Loc.	
14	Piney Creek Bridge 2 97/010 Adams	90692	UTL	Before		185		46,000											Increasing the UTL phase of Piney Creek Bridge 2 in FFY 2023 for $29,000. This is for additional pole relocation. This project consists of a bridge replacement on PA 97 over Tributary to Piney Creek in Germany Township, Adams County. This project has a current estimated let date of July 13, 2023.
				Adjust		185													
				Adjust		581		29,000											
				After		185		46,000											
				After		185		29,000											
15	Eisenhower Drive Extension 0/RWY Adams	58137	FD	Before		581		1,870,435			629,250			1,000,000					Changing the funding flavor and Cashflowing the FD phase of Eisenhower Drive Extension from FFY 2023 to FFY 2024 for $29,000 to better utilize current available funding. This project consists of extending the Eisenhower Drive through Conewago Township, Adams County, from where it currently ends at High Street to Hanover Road (SR 0116) west of McSherrystown. Potential improvements include new alignment alternatives, partial new alignment alternatives, as well as options to improve the existing roadway network. This project has a current estimated let date of Jan. 2, 2025.
				Before		185					624,674			50,984					
				Adjust		581		-29,000											
				After		581		1,841,435			629,250			1,000,000					
				After		185					653,674			50,984					
16	Bridge Reserve Adams	87792	CON	Before	BRIP	185				70,000	30,106		696,000	235,011					This is a reserve line item.
				Before	BOF								52,000						
				Adjust	BRIP	185					-29,000								
				Adjust	BOF														
				After	BRIP	185				70,000	1,106		696,000	235,011					
				After	BOF								52,000						
Program Summary - Net Changes				Before FFY Totals			3,396,585	4,784,482	0	4,998,439	3,198,308	0	5,762,000	3,042,012	0	0	0	0	0
				Adjustments			0	0	0	0	0	0	0	0	0	0	0	0	
				After FFY Totals			3,582,905	4,784,482	0	4,998,439	3,198,308	0	5,762,000	3,042,012	0	0	0	0	