Transportation Performance Management in Pennsylvania

A Perspective from PennDOT

James D. Ritzman, P.E. Deputy Secretary for Planning



Legacy of Commitment to Measures

When Change Itself is Changing

"In today's fast-paced world with ever-rising customer expectations ...we have no choice but to manage with measures

> Secretary Mallory January 2001





Palm Desert - 2009



Dallas - 2010

Plenary Session 4: Resource Allocation and Accountability

Barry Barker, Transit Authority of River City (Moderator)

Panel 1—Resource Allocation

Performance-Based Planning: A State-of-the-Practice Summary

National Forum on Performance-Based Planning and Programming September 13-15, 2010



prepared for National Cooperative Highway Research Program

prepared by Cambridge Systematics, Inc. with High Street Consulting Group Paul N. Bay, P.E., Transportation Consultant Jim Ritzman, Pennsylvania Department of Transportation (*combined with Kessler*) Amy Kessler, North Central Pennsylvania Regional Planning Commission (*combined with Ritzman*) Alan Clark, Houston Galveston Area Council Trish Hendren, Washington Metropolitan Area Transportation Authority

Panel 2—Accountability

Susan Mortel, Michigan Department of Transportation (*no presentation*) Ron Kirby, National Capital Region Transportation Planning Board (*no presentation*) Mark Aesch, Rochester Genesee Regional Transportation Authority



Denver - 2012

Making Progress: Transportation Planning and Programmers Turn Ideas into Reality.





Denver, Colorado May 24, 2012

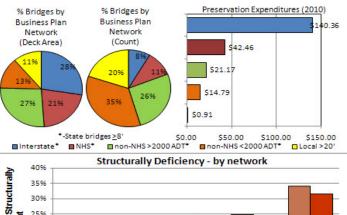


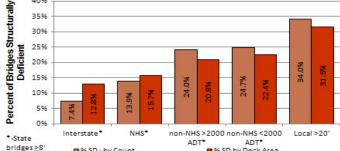


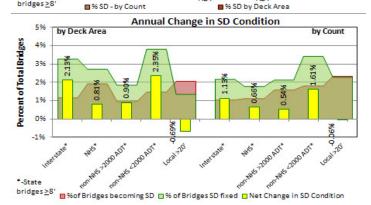


Asset Management for Bridges

Annual Bridge Performance Measure - Statewide







Statewide

Annual Performance Metric

Metuurk	Tutal Bridge Count	Tutal Deck Area	Avor. Bridgo DA (rf)	Clurod Bridger	Partod Bridger	Struct. Deficient Count	z SD by Caust	SD-Døck Arøs (Hurf)	Z SD by Døck Arøs
State ≥8'; Interstate/Ramps	2,659	34.6632	13,036	0	0	197	7.41%	4.4497	12.84%
State ≥8'; NHS (non Interstate)	3,353	27.0766	8,075	0	3	465	13.87%	4.2407	15.66%
State ≥8'; non-NHS ≥2000 ADT	8,328	33.5499	4,029	\$	171	1,998	23.99%	6.9808	20.81%
State ≥8'; non-NHS <2000 ADT	10,979	16.8175	1,532	36	543	2,712	24.70%	3.7680	22.41%
Total - State Bridges (≥8')	25,319	112.1072	4,42\$	44	717	5,372	21.22%	19.4392	17.34z
Local≥20'	6,301	14.1565	2,247	78	899	2,142	33.99%	4.4534	31.46%

	Annual Performance Measures - by SD Bridge Count								
Goals:	% SD be		reasones - by			Deterior	Annual B	let SD Re	dustia
Hetuurk	Lung Renge Guel 2 SD by Cuunt (mex.)	Tarqat 22010 SD Caunt (max.)	Actual 25D Caust	Hex. Annuel Heu SD Count ("SD on"- 0.75%")	Hez. Annuel Heu SD Caunt ("SD an" - 1.0%")	Actual Annual Hau SD	His. Hot Annual SD Caust Roduction s (10 yr**	Hin. Het Annual SD Caunt Reduction n (20 yr** to qual	Hət Actua SD Cuu Rəduct
State ≥8'; Interstate/Ramps	5.0%	8.5×	7.40%	20	27	28	9	5	30
State ≥8'; NHS (non Interstate)	5.0%	14.5%	13.9%	25	34	38	32	16	22
State ≥8'; non-NHS ≥2000 ADT	10.0%	24.5%	24.0%	62	83	133	102	51	45
State ≥8'; non-NHS <2000 ADT	10.0%	26.3%	24.7%	82	110	200	144	72	177
Total - State Bridges (≥8')	\$.0Z	22.32	21.23	194	253	399	2\$7	144	274
Local≥20'	12.0%	33.9%	84.0%	95	126	148	53	36	-4
Goals:		Deck Are	a	Mex.	Hez.	Deterior	Rin. Rot		
	Lung Range Gual Z	Tarqat 22010 SD		Annual Heu SD	Annual Neu SD	Actual Annual	Annual SD DA	Annual SD DA	Hat Actua
Network	SD by DA (max.)	DA (mez.)	Actual 25D DA	DA ("SD "- 	DA ("SD 1.0%")	Heu SD DA (SD "ms")	Roductin n (10 yr** tu qual	Røductin n (20 yr** tu qual	
	SD by DA	DA				DA (SD	. (10 yr**	. (20 yr**	Raduct
Netuerk State <u>2</u> 8'; Interstate/Ramps State <u>2</u> 8'; NHS (non Interstate)	SD by DA (mex.)	DA (mez.)	DA	•.75z)	1.0z)	DA (SD "==")	n (10 yr"" tu qual	n (20 yr"" tu qual	SD Care Reduct 0.7375 0.220
State ∠8'; Interstate/Ramps State ∠8'; NHS (non Interstate)	SD by DA (mex.) 5.0%	DA (mex.) 15.0%	DA 12.8%	•.75×*) 0.2600	1.0×**) 0.3466	DA (SD "==") 0.4020	• (10 yr"" to qual 0.3454	• (20 yr** ta qual 0.1727	Reduct 0.737
State ∠8'; Interstate/Ramps State ∠8'; NHS (non Interstate) State ∠8'; non-NHS ∠2000 ADT	SD by DA (mex.) 5.0% 5.0%	DA (m+z.) 15.0% 16.5%	DA 12.8% 15.7%	0.2600 0.2031	0.3466 0.2708	DA (SD "==") 0.4020 0.5190	• (10 yr*** ts qual 0.3454 0.2974	• (20 yr** ta qaal 0.1727 0.1487	Reduct 0.737 0.220
State ∠8'; Interstate/Ramps State ∠8'; NHS (non Interstate) State ∠8'; non-NHS ∠2000 ADT State ∠8'; non-NHS <2000 ADT	SD by DA (m=z.) 5.0% 5.0% 10.0%	DA (mex.) 15.0% 16.5% 21.7%	DA 12.8% 15.7% 20.8%	•.75×*) 0.2600 0.2031 0.2516	1.0×**) 0.3466 0.2708 0.3355	DA (SD "=="") 0.4020 0.5190 0.3209	• (10 yr** t= q=el 0.3454 0.2974 0.3641	• (20 yr** ta qual 0.1727 0.1487 0.1820	Reduct 0.737: 0.220 0.301
State ≥8'; Interstate/Ramps	SD by DA (mex.) 5.0% 5.0% 10.0% 10.0%	DA (m-ex.) 15.0% 16.5% 21.7% 24.8%	DA 12.8% 15.7% 20.8% 22.4%	•.75×*) 0.2600 0.2031 0.2516 0.1261	1.0×**) 0.3466 0.2708 0.3355 0.1682	DA (SD "m") 0,4020 0,5190 0,3209 0,2475	• (10 yr*** t= q=al 0.3454 0.2974 0.3641 0.2082	• (20 yr** ta qaal 0.1727 0.1487 0.1820 0.1041	Reduct 0.737 0.220 0.301 0.335
State <u>2</u> 8'; Interstate/Ramps State <u>2</u> 8'; NHS (non Interstate) State <u>2</u> 8'; non-NHS <u>2</u> 2000 ADT State <u>2</u> 8'; non-NHS <2000 ADT Total - State Bridges (>8')	SD by DA (m=z.) 5.0% 5.0% 10.0% 10.0% 5.0% 12.0%	DA (mex.) 15.0% 16.5% 21.7% 24.8% 18.4%	DA 12.8% 15.7% 20.8% 22.4% 17.3% 31.5%	•.75×*) 0.2600 0.2031 0.2516 0.1261 •.8408	1.0×**) 0.3466 0.2708 0.3355 0.1682 1.1211	DA (SD "==") 0.4020 0.5190 0.3209 0.2475 1.4894	• (10 yr*** t= q==1 0.3454 0.2974 0.3641 0.2082 1.2151	• (20 yr*** ta qaal 0.1727 0.1487 0.1820 0.1041 •.6075	Reduct 0.737 0.220 0.301 0.395 1.654
State <u>2</u> 8'; Interstate/Ramps State <u>2</u> 8'; NHS (non Interstate) State <u>2</u> 8'; non-NHS <u>2</u> 2000 ADT State <u>2</u> 8'; non-NHS <2000 ADT Total - State Bridges (>8')	SD by DA (m=z.) 5.0% 5.0% 10.0% 10.0% 10.0% 10.0% 12.0% " - Thresho	DA (m=z.) 15.0% 16.5% 21.7% 24.8% 18.8% 30.8%	DA 12.8% 15.7% 20.8% 22.4% 17.3% 31.5% letwork:	•*- •75×*) 0.2600 0.2031 0.2516 0.1261 •	1.02") 0.3466 0.2708 0.3355 0.1682 1.1211 0.1416	DA (SD "==") 0.4020 0.5190 0.3209 0.2475 1.4894	• (10 yr" t= q=el 0.3454 0.2974 0.3641 0.2082 1.2151 0.1089	• (20 yr" te quel 0.1727 0.1487 0.1820 0.1041 •.6075 0.0726	Reduct 0.737 0.220 0.301 0.395 1.654

Goals:	Annual F	reservati	on
Matuurk	Hin. Preserv. (million\$	Hin. Prozorv. (million\$	Actual Preserv. (million\$)
State ≥8'; Interstate/Ramps	\$52.87	\$37.77	\$140.36
State ≥8'; NHS (non Interstate)	\$39.96	\$28.54	\$42.46
State ≥8'; non-NHS ≥2000 ADT	\$46.50	\$33.21	\$21.17
State ≥8'; non-NHS <2000 ADT	\$22.84	\$16.31	\$14.79
Total - State Bridges (>8')	\$162.17	\$115.#4	\$218.78
Local≥20'	\$16.98	\$12.13	\$0.91

Asset Management for Pavements

2010 Performance Measures Annual Report -- Pavements

District 11-0

2011 2010

96 IRI % IRI

Seg-Mi Seg-Mi

2011

% OPI % OPI

Seg-M Seg-Mi

2011

% OPI % OPI

Seg-M Seg-Mi

2011 2010

95 %

18.7% 18.7%

2010

3.2%

2010

3.4%

Seg-M

0.0%

3.1%

Range

% IRI

Sam. Mi

18.7%

52.6% 52.6% 52.6%

Range

% OPI

Seg-Mi

56.15

Range

% OPI

Seg-Mi

Range

Current Pavement Smoothness Summary by Business Plan Network

			IRI						
	Total	Tested							
Business Plan	Segment	Segment	Excellent	Good	Fair	Poor	Median		
Network	Miles	Miles	Seg-Mi	Seg-Mi	Seg-Mi	Seg-Mi	IRI		
Interstate	223.3	221.2	119.2	36.0	47.8	18.1	67		
NHS, Non-Interstate	397.4	368.5	62.4	135.2	113.6	57.3	120		
Non-NHS, 2000 ADT	1,288.6	1,271.8	265.5	469.2	299.5	237.6	142		
Non-NHS, < 2000 ADT	659.7	648.5	25.4	99.7	182.4	341.0	225		
Total - Roadway	2,568,9	2.510.0	472.5	740.1	643.3	654.0			

Current Overall Pavement Index Summary

				0	PI				Pavement Age >
	Total	Tested						Surface	40 years
Business Plan	Segment	Segment	Excellent	Good	Fair	Poor	Median	Out-of-Cycle	Out-of-Cycle
Network	Miles	Miles	Seg-Mi	Seg-Mi	Seg-Mi	Seg-Mi	OPI	Seg-Mi	Seg-Mi
Interstate	223.3	185.0	56.3	122.0	6.7	0.0	93	21.5	1.3
NHS, Non-Interstate	397.4	349.5	22.7	241.7	63.2	21.9	86	92.4	57.7
Non-NHS, ≥2000 ADT	1,288.6	1,253.0	162.1	504.0	526.2	60.8	81	526.1	
Non-NHS, < 2000 ADT	659.7	643.3	53.9	306.9	214.9	67.7	72	208.3	
Total - Roadway	2,568.9	2,430.8	295.0	1,174.5	811.1	150.3		848.2	59.0

Non-NHS Goals

Goal: Maintain Poor IRI

n-NHS, ≥ 2000 ADT

Non-NHS < 2000 ADT

Ion-NHS, < 2000 ADT

Non-NHS, ≥ 2000 ADT

Non-NHS, < 2000 ADT

Non-NHS, ≥ 2000 ADT

Leg

Non-NHS, < 2000 ADT

Business Plan

Network

Goal: Maintain % Good and Excellent OP

Business Plan

Network

Business Plan

Goal: Maintain Surface Out-of-Cycle (Poor OP

Goal: Reduce Seal Coat Network Out-of-Cycl

Business Plan

Network

Interstate and NHS,	Non-Interstate Goals
C	

NHS, Non-Interstate

	Long	Target	Actual
	Range	2011	2010
Business Plan	96 IRI	96 IRI	% IRI
Network	Seg-Mi	Seg-Mi	Seg-Mi
Interstate	1.5%	6.9%	8.2%
NHS, Non-Interstate	5.0%	13.4%	15.5%

Goal: Maintain % Good and Ex	cellent OPI		
	Long	Target	Actual
	Range	2011	2010
Business Plan	% OPI	% OPI	% OPI
Network	Seg-Mi	Seg-Mi	Seg-Mi
	0.5 414	0.0 441	0.0 414

	Long	Target	Actual
	Range	2011	2010
Business Plan	% OPI	% OPI	% OPI
Network	Seg-Mi	Seg-Mi	Seg-Mi
Interstate	0.0%	0.0%	0.0%
NHS, Non-Interstate	9.5%	9.5%	9.5%

79.0% 76.3% 75.6%

Goal: Maintain Pavement Potentially Past Design Service Life, Out-of-

	Long	Target	Actual
	Range	2011	2010
Business Plan	% OPI	% OPI	% OPI
Network	Seg-Mi	Seg-Mi	Seg-M
Interstate	0.0%	0.0%	0.0%
NH5, Non-Interstate	0.8%	0.9%	1.0%

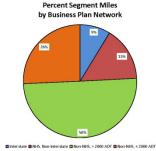
Note: for the Interstate and NHS, Non-Interstate Business Plan Networks, the IRI and OPI data is for 2010. For the Non-NHS Business Plan Networks, the IRI and OPI data for most recent year captured, either 2009 or 2010.

Note: Pavement Potentially Past Design Serivce Life, Out-of-Cycle is defined as old pavements (pre-2009 pavement age) greater than 40 years

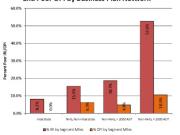
Note: Long-Range Goals are for 5-years (2015).

end		
	Target - Opimum Threshold	
	Target - Cautionary Threshold	
	Actual - At Optimum Threshold	
	Actual - At Cautionary Threshold	
	Actual - Not Meeting Cautionary Threshold	

Version	6-Districts, 4	1/11	/201

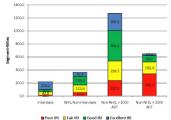


Percent of Segment Miles with a Poor IRI and Poor OPI by Business Plan Network

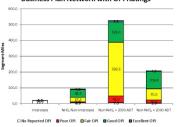




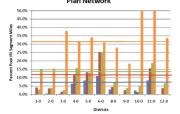
Segment Miles by Business Plan Network with IRI Ratings



Surface Out-of-Cycle Segment Miles by **Business Plan Network with OPI Ratings**

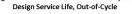


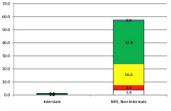
Percent Poor IRI by District, by Business Plan Network



■ Interstate ■ NHS, Non-Interstate ■ Non-NHS, > 2000 ADT ■ Non-NHS, < 2000 ADT

Segment Miles of Pavement Potentially Past



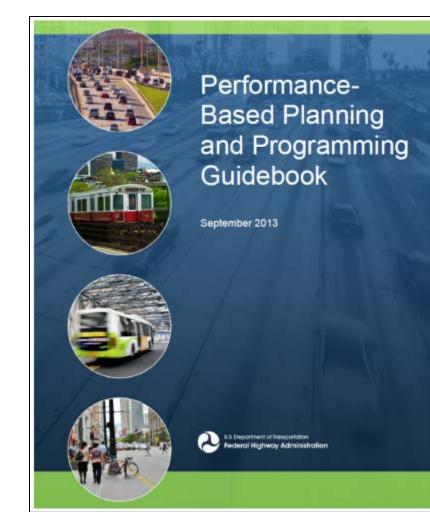


□ No Reported OPI ■ Poor OPI ■ Fair OPI ■ Good OPI ■ Excellent OPI

NCHRP 08-36 Task 104

NCHRP 08-36, Task 104 Performance-Based Planning and Programming Pilots			
 Requested by: American Association of State Highway and Transportation Officials (AASHTO) Standing Committee on Planning			
	4.0	Per	nnsylvania Pilot
		4.1	Background/Existing Conditions
		4.2	Pilot Implementation Activities
Prepared by: Joe Guerre and Kelsey Ahern Cambridge Systematics 115 South LaSalle Street, Suite 2200 Chicago, IL 60603		4.3	1
Julie Lorenz Burns & McDonnell 9400 Ward Parkway Kansas City, MO 64114			
August, 2012			
 The information contained in this report was prepared as part of NCHRP Project 08 Task 104 National Cooperative Highway Research Program (NCHRP). Special N This report <u>IS NOT</u> an official publication of the NCHRP, the Transportation Rese Board or the National Academies.	Note:		pennsylvania
			DEPARTMENT OF TRANSPORTATIO

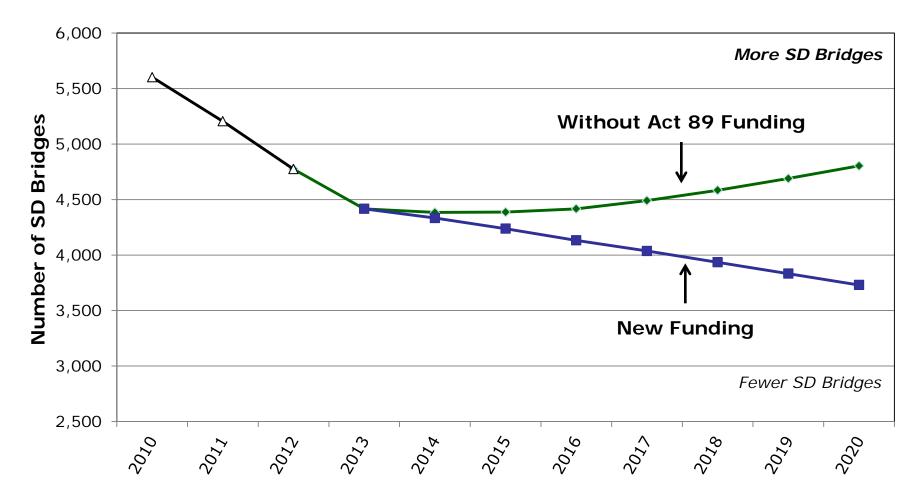
Stakeholder Committee Involvement





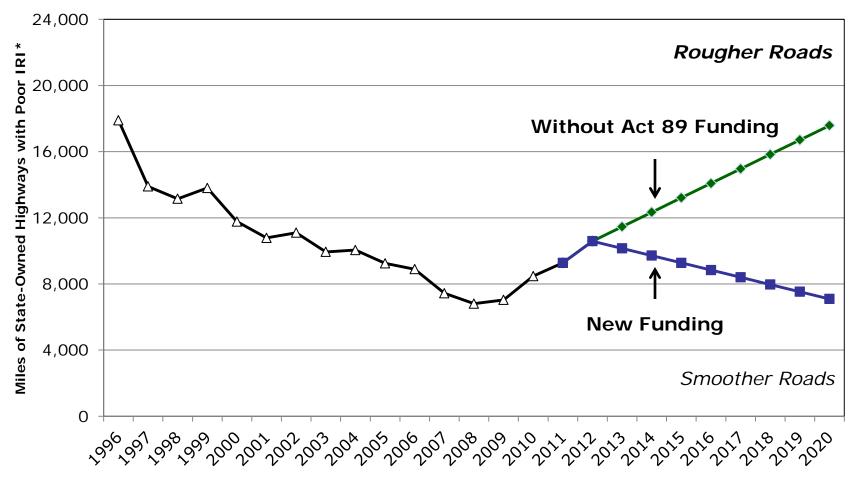
Comparison

Impact on State-Owned Structurally Deficient (SD) Bridges



[•] Comparison

Impact on Roughness of State-Owned Highways



AASHTO - SCOPM

Best Practices and Research

Save the Date

For the AASHTO Standing Committees on Planning and Performance Management Joint Technical Meeting

> When: June 17–20, 2014 Where: The Saguaro Phoenix, Arizona

For more information, please e-mail Matt Hardy at mhardy @aashto.org



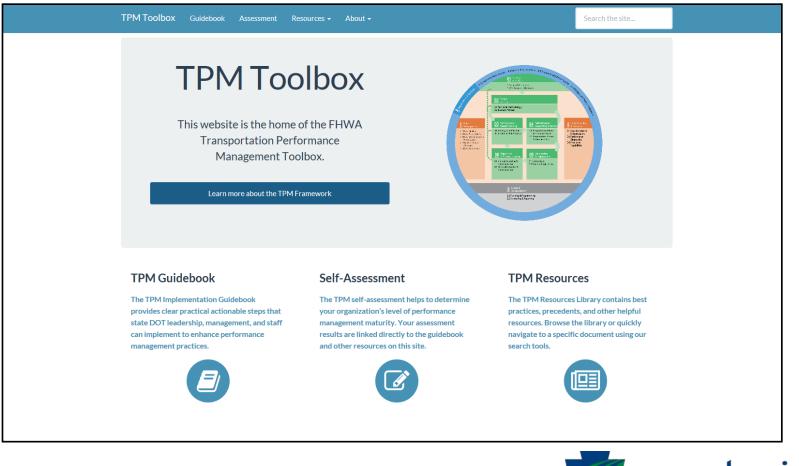
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ASHC

Transportation Performance Management

Performance	NPRM	Comments	Anticipated					
Areas		Due	Final Rule					
Safety Performance	March 11, 2014	<u>Closed</u> June 30,	Published					
Measures		2014	March 15 2016					
Highway Safety	March 28, 2014	<u>Closed</u> June 30,	Published					
Improvement Program		2014	March 15 2016					
Statewide and Metro Planning; Non-Metro Planning	June 2, 2014	<u>Closed</u> October 2, 2014	Published May 27 2016					
Pavement and Bridge Performance Measures	January 5, 2015	<u>Closed</u> May 8, 2015	Anticipated November 2016					
Highway Asset	February 20,	<u>Closed</u>	Anticipated					
Management Plan	2015	May 29 2015	November 2016					
System Performance Measures	April 22, 2016	<u>Open</u> until August 20 2016 (120 days)	TBD					

Transportation Performance Management





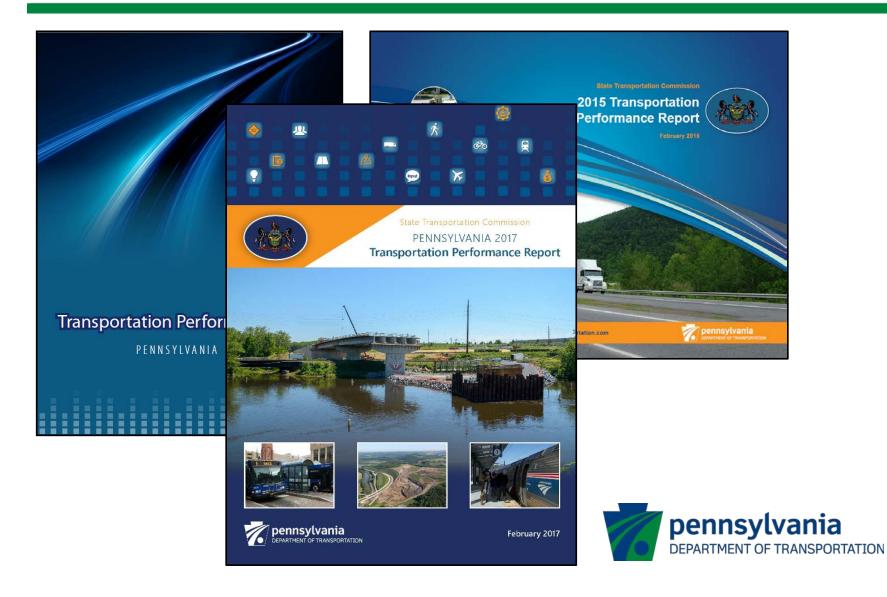
TPM Toolbox - Examples

STEP 2.1.6 Document technical methodology Identify influencing factors and assess risk (internal and external) Define influencing factors and assess risk (internal and external) Define influencing factors categorize agency influence Define target parameters Target format, geography/scope, and time horizon Forecast future performance Tools and methods used Documentation of Technical Methodology: PennDOT Assumptions Examples Documentation of Technical Methodology: PennDOT As part of the Pennsylvania Department of Transportation's (PennDOT's) transportation performance measure (see Figure 2-12 and Figure 2-13, below). These documents also describe how staff can use the Highway Administration Performance Desbhoard (HAPD) to access raw otata, view results, genral staff and eternal stakeholders responded positively to this transparent documentation of the data and eternal atakeholders responded positively to this transparent documentation of the data and on the HAPD scorecard. "Im Ritman, PennDOT	TPM Guidebook			
In derivery influence Categorize agency influence Identify factors to include in next cycle and why Define target parameters Target format, geography/scope, and time horizon Assumptions Define target parameters Tools and methods used Define target parameters and conclusions obtained Examples Documentation of Technical Methodology: PenDOT As part of the Pennsylvania Department of Transportation's (PennDOT's) transportation performance management approach, the agency developed a set of "Production User Manuals" to document the definition, data source, calculations, reporting cycle, and purpose for each key performance measure (see Figure 2-12 and Figure 2-13, below). These documents also describe how staff can use the Highway Administration Performance Desbhoard (HAPD) to access raw dax, view reeuts, generate reports, and enter comments. Internal staff and technical methodology behind the targets posted on the HAPD scorecard. The application of the data and technical methodology behind our results improved because everyone results improved because everyone results improved because everyone frequency manderstood processes. As a result, people's trust in the data and published results improved because everyone from and how they were calculated."	STEP 2.1.6	Document technical methodology	,	
Forecast future performance Assumptions Tools and methods used Define scenario parameters and conclusions obtained Decumentation of Technical Methodology: PennDOT As part of the Pennsylvania Department of Transportation's (PennDOT's) transportation performance management approach, the agency developed a set of "Production User Manuals" to document the definition, data source, calculations, reporting cycle, and pupose for each key performance measure (see Figure 2-12 and Figure 2-13, below). These documents also describe how staff can use the Highway Administration Performance Dashboard (HAPD) to access raw data, view results, generate reports, and enter comments. Internal staff and eternal statehololers responded positively to this transparent documentation of the data and to previously often assumed from and how they were calculated."		and assess risk (internal and	Categorize	agency influence
Forecast future performance Tools and methods used Define scenario parameters and conclusions obtained Tools and methods used Define scenario parameters and conclusions obtained The Production User Manuals performance measure (see Figure 2-12 and Figure 2-13, below). These documents also describe how staff can use the Highway Administration Performance Dashboard (HAPD) to access raw dax, view results, generate reports, and enter comments, Internal staff and external stateholders responded positively to this transparent documentation of the data and technical methodology behind the targets posted on the HAPD scorecard. Tools and methods used The Production User Manuals pulled back the curtain to the technical methodology to any transparency to previously often assumed and transparent documents internal staff and external stakeholders responded positively to this transparent documentation of the data and technical methodology behind the targets posted on the HAPD scorecard. Tools and methods used Tools and methods and published Tools and methods and published Tools and methods and published Tools and they were calculated,"		Define target parameters	Target form	at, geography/scope, and time horizon
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		document the definition, data source, reporting cycle, and purpose for each performance measure (see Figure 2-12 and Figure 2-13, below). 1 documents also describe how staff ca Highway Administration Performance (HAPD) to access raw data, view resul reports, and enter comments. Interna external stakeholders responded posi transparent documentation of the dat technical methodology behind the tar	calculations, key 'hese n use the Dashboard ts, generate I staff and tively to this ta and	pulled back the curtain to the technical methodology behind our performance scorecard providing improved clarity and transparency to previously often assumed and frequently misunderstood processes. As a result, people's trust in the data and published results improved because everyone knew where the numbers came from and how they were calculated."

TEP 2.1.6	Document technical methodology
	Figure 2-12: Highway Administration Performance Dashboard
	Source: Adapted from Highway Occupancy Permit (HOP) Application Review ²⁷ Highway Administration Performance Dashboard
	righway Administration Performance Dashboard
	Clicking the Info link opens a table listing the metric
	HAPD014 background information. This is the same information as the "Details" section in the
	Performance Measures Dashboard (PMD).
	Permitting – Goal #1 Quality of Service
	Metric Description This metric monitors the amount of time it takes to review a Highway Occupancy Permit (HOP) application.
	Business Owner Glenn Rowe
	Source Systems E-Permitting System
	Reporting Cycle MONTHLY: 02/01/2015 to 02/28/2015
	Suggested Thresholds Red: <95%, Yellow: 95% to <98%, Green ≥98% Selection Criteria All HOP applications where a review was completed in EPS in a
	given month.
	Formula Applications reviewed in less than or equal to 30 days / total applications reviewed
	Purpose To provide an efficient, predictable, consistent review of all HOP applications.
	Goal ALL HOP applications reviewed in less than 30 days
	Sunset Review Date Evaluate after each fiscal year
	Documents Metric Meta Data.doc
	Figure 2-13: Expanded View for Specific Metric
	Source: Highway Occupancy Permit (HOP) Application Review ¹⁸
	Info Tab Expanded View
	(Program Area) Permitting (Strategic Focus Area) Goal #1 Quality Service
	Metric Description: This metric monitors the amount of time it takes to review a Highway Occupancy Permit application.
	Business Owner: Glenn Rowe
	Source Systems: E-Permitting System Reporting Cycle: MONTHLY: 02/01/2015 To 02/28/2015
	Rad: < 95% Suggested Thresholds: Yellow: 95% to < 98%
	Group: 2.83% Selection Criteria: All HOP applications where a review was completed in EPS in a given
	Formula: Applications reviewed in less than or equal to 30 days / total applications reviewed.
	Purpose: To provide an efficient, predictable, consistent review of all Highway Occupancy Permit (HOP) applications.
	Goal: All HOP Applications reviewed in less than 30 days.
annohania Com	stment of Transportation. (2015). Highway Occupancy Permit (HOP) Application Review Time-M. Harrisburg, PA.
Pennsylvania Depa	erment of Transportation. (2015). Highway Occupancy Permit (HOP) Application neview Time-M. Harrisburg, PA. erment of Transportation. (2015). Highway Occupancy Permit (HOP) Application Review Time-M. Harrisburg, PA.



Transportation Performance Report



Transportation Investment Plan



ting concrete i-beams on the interstate 84 eastbound bridge over Houte 6, photo by John Pupaliti

STATEWIDE TRANSPORTATION IMPROVEMENT PROGRAM

FFY 2017-2020

EXECUTIVE SUMMARY AUGUST 11, 2016

Investment Priorities

- Bridges on the NHS
- Roadway conditions on the NHS
- Bridges on the balance of the system
- Roadway conditions on the balance of the system

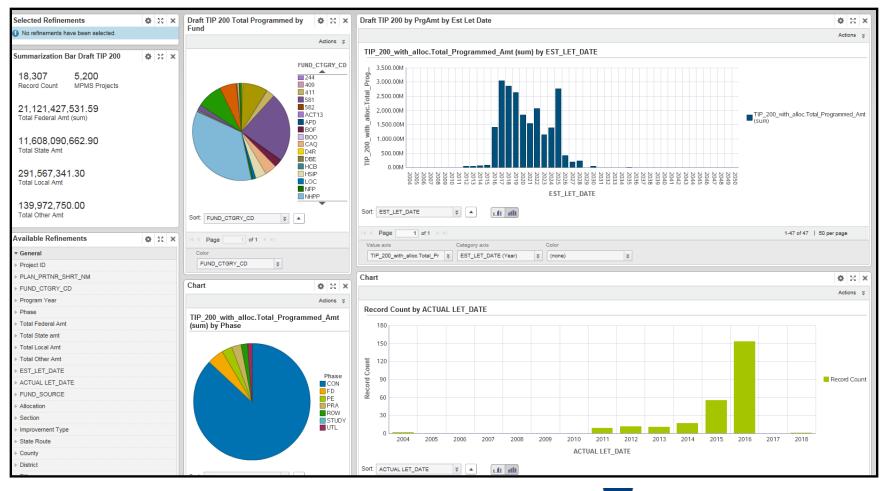


Scorecard of Influence

	Investm NHS(Non-Ii <5.5 5.5%-11%-	nmended/Requireco ent Level based on Iterstate) SD% (by (\$000) %-consider at leas at least calculated 40-60% >11%-at least 609	Region's y Deck Area) t 40% % between	Guideline Range for Bridge Investment If the Region's Current SD% (by Deck Area) Non-NHS exceeds Targets, Utilize the following guideline range: Priority Network (2) NHS, start @ 55% (Range from 35% to 65%) Priority Network (2) NHS, start @ 13% (Range from 55% to 30%) Priority Network (4) <2000, start @ 13% (Range from 55% to 30%) Priority Network (5) Local > 20', start @ 13% (Range from 15% to 5%) If the Region's Current SD% (by Deck Area) Non-NHS is not meeting the Network Target, utilize the "Starting Investment Level" for that Network. If the Region is meeting the Network Target, the Investment Level maybe reduced within the designated range, and others increased.																		
Ţ	\$ Amount	Percent of Flexible Funding	Draft 2017 Program Bridge Investment Amount	NHS (Non- Interstate) Priority Network (2) SD% (by Deck NHS (Non-Interstate) Area) SD% (by Deck Area)		Draft 2017 Program Bridge Investment Amount for Priority Network (👻	Non-NHS ≥ 2,000 ADT SD% (by Deck Area) Target-10.~~	Non-	Priority Network (3) Non-NHS ≥ 2,000 ADT SD% (by Deck Area)		Draft 2017 Program Bridge Investment Amount for Priority Network (🗸	Non-NHS < 2,000 ADT SD% (by Deck Area) Target-12.	Priority Network (4) Non-NHS < 2,000 ADT SD% (by Deck Area)		DO ADT	Draft 2017 Program Local ≥ 20' Bridge SD% (by) Investment Deck Area) Amount for Target-15.43 Priority Target-15.43		(5)) Local ≥ 20' SD% (by Deck		Draft 2017 Program Bridge Investment Amount for Priority Network		
MPO/RPO					35%		65%			15%	33%	50%			5%	11%	30%			1%	5%	
Adams	\$15,295	40%	\$15,656	4.2%	\$5 <mark>,35</mark> 3	\$8,412	\$9,942	\$1,770	9.9%	\$2,294		\$7,648	\$4,884	19.7%	\$765			\$7,838	25.9%	\$153		
Altoona	\$12,411	40%	\$9,923	3.3%	\$4,344	\$6,826	\$8,067	\$3,200	3.1%	\$1,862	\$4,096		\$4,350	4.9%	\$621	\$1,365		\$1,962	24.7%	\$124		
Centre	\$18,581	43%	\$20,056	6.3%	\$6,503	\$10,220		\$1,465	18.1%	\$2,787				13.0%	\$929			+	18.2%			
DVRPC	\$647,949	60%	\$401,821	15.2%		\$356,372	\$421,167	\$159,432	13.3%		\$213,823			10.1%	\$32,397		\$194,385	\$12,431	33.1%			Page 2
Erie	\$27,595	40%	\$14,915	1.0%	\$9 <mark>,65</mark> 8	\$15,177	\$17,937	\$1,000	8.6%	\$4,139	\$9,106			10.2%	\$1,380	\$3,035		\$3,915	36.9%	\$276		
Franklin	\$24,189	60%	\$27,247	20.4%	\$8 <mark>,46</mark> 6	\$13,304	\$15,723	\$6,217	12.6%	\$3,628				9.6%	\$1,209			\$5,917	10.1%	\$242		
Harrisburg	\$67,776	40%	\$35,866	3.1%	\$23,721	\$37,277	\$44,054	\$6,125	7.9%	\$10,166				11.6%	\$3,389			\$3,280	21.8%	\$678		
Johnstown	\$22,080	40%	\$21,654	0.2%	\$7,728	\$12,144	\$14,352	\$2,700	8.2%	\$3,312				4.2%	\$1,104			\$10,520	31.0%	\$221		
Lancaster	\$55,060	40%	\$73,062	2.2%	\$19,271	\$30,283	\$35,789	\$13,407	10.0%	\$8,259			\$27,420	14.9%	\$2,753			\$28,888	25.6%	\$551		
Lebanon	\$21,318	60%	\$19,801	18.8%	\$7,461	\$11,725	\$13,857	\$3,851	10.5%	\$3,198			\$11,341	5.3%	\$1,066			\$3,407	24.4%	\$213		
Lehigh Valley	\$108,545	55%	\$67,358	9.5%	\$37,991	\$59,700	\$70,554	\$18,014	14.8%	\$16,282		\$54,272	\$37,961	15.5%	\$5,427	\$11,940		\$6,947	29.9%	\$1,085		
NEPA	\$121,458	60%	\$93,754	21.5%	\$42,510	\$66,802	\$78,948	\$9,695	30.1%	\$18,219		\$60,729	\$51,175	29.6%	\$6,073	\$13,360	\$36,437	\$32,524	45.3%	\$1,215		
North Central	\$93,765	53%	\$119,882	9.0%	\$32,818	\$51,571	\$60,947	\$28,216	11.5%	\$14,065		\$46,882	\$29,228	17.9%	\$4,688	+		\$61,520	25.7%	\$938		
Northern Tier	\$70,433	40%	\$75,345	0.4%	\$24,652	\$38,738	\$45,782	\$16,226	4.7%	\$10,565		\$35,217	\$15,777	11.7%	\$3,522	\$7,748		\$42,355	26.8%	\$704		
Northwest	\$150,400	60%	\$78,185	29.0%	\$52,640	\$82,720	\$97,760	\$27,085	15.4%	\$22,560		\$75,200	\$18,748	12.9%	\$7,520			\$32,352	26.8%	\$1,504		
Reading	\$124,432	60%	\$87,001	17.2%	\$43,551	\$68,438	\$80,881	\$4,700	38.0%	\$18,665			\$65,557	20.9%	\$6,222			\$12,094	48.8%	\$1,244		
S. Alleghenies	\$56,080	40%	\$55,771	0.9%	\$19,628	\$30,844	\$36,452	\$1,600	5.9%	\$8,412			\$21,214	9.9%	\$2,804	+-,		\$31,810	41.6%	\$561		
Scranton/Wilkes-Barre	\$104,393	53%	\$97,488	9.2%	\$36,538	\$57,416	\$67,855	\$20,253	18.3%	\$15,659				8.5%	\$5,220	\$11,483		\$29,500	51.0%	\$1,044		
SEDA-COG	\$81,160	40%	\$94,184	5.3%	\$28,406	\$44,638	\$52,754	\$16,564	7.2%	\$12,174		\$40,580	\$45,731	6.7%	\$4,058	\$8,928		\$30,532	27.5%	\$812		
SPC	\$732,228	57%	\$526,128	10.1%	\$256,280	\$402,725	\$475,948	\$169,866	15.2%	\$109,834		\$366,114	\$195,474	26.3%	\$36,611	\$80,545		\$123,674	25.4%	\$7,322		1 \$37,114
SVTS	\$31,171	60%	\$18,371	13.1%	\$10,910	\$17,144	\$20,261	\$350	15.1%	\$4,676			\$12,775	12.9%	\$1,559	\$3,429		\$5,036	25.7%	\$312		
Wayne County	\$16,951	40%	\$32,434	0.0%	\$0	\$0	\$0	64 000	12.7%	\$2,543		\$8,476		27.6%	\$848	\$1,865		\$20,893	26.6%	\$170		
Williamsport	\$22,102	40% 40%	\$13,819	0.4%	\$7,736	\$12,156	\$14,366	\$1,800	1.3%	\$3,315		\$11,051	\$6,245	9.4%	\$1,105	\$2,431	\$6,631	\$5,313	19.6%	\$221		
York	\$37,252	40%	\$33,822	1.8%	\$13,038	\$20,489	\$24,214	\$3,575	9.5%	\$5,588	\$12,293	\$18,626	\$15,992	16.6%	\$1,863	\$4,098	\$11,176	\$11,793	16.3%	\$373	\$1,863	\$2,462
		× C C0/		× C C0/					< 10.0%					< 10.7%					× 15 A9/			



ENDECA (2017 TYP view)







Everything that can be counted does not necessarily count; everything that counts cannot necessarily be counted. - Albert Einstein