TAM and Investment Decision-Making

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NMDOT TAM and Investment Decision-Making

TAM Mission

NMDOT uses data-driven asset management to maximize use of limited public resources and maintain the state's transportation infrastructure in the best possible condition.

> Do what you can, with what you have, where you are. **Theodore Roosevelt** 26th president of US (1858 - 1919)

Financial Plans in TAM

Integrated TAM Program

PLANNING ACTIVITIES Project Prioritization, Long Range Plan, STIP, other plans TAMP

Pavement & Bridge Assets Asset Management Objectives, Measures Performance Gap Identification Lifecycle Cost, Risk Management Analysis

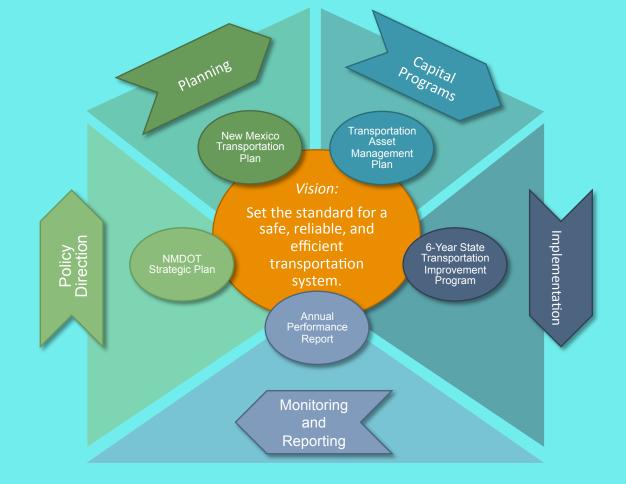
ENGINEERING ACTIVITIES

Project Design, Asset Deterioration Modeling, other activities

Financial Plan & Investment Strategies

TAMP Integration in NM

Planning and Programming is Key



TAMP Guiding Principles

Condition and Performance

- » Maintain current condition (5% Structurally Deficient) or show slight improvement for the NHS
- » Maintain no poorer than 10% Structurally Deficient for the non-NHS
- Investment» When offered an alternative, maintain what we have before adding capacity
 - » Determine thresholds for Good, Fair, and Poor using Pavement Condition Rating (PCR), with recognition to MAP-21 requirements (pavement)

TAMP Guiding Principles

Funding and Resource Allocation

Investment » Reserve a % of budget for statewide prioritization

» A % of the model recommendation can be overridden by engineering judgment

Investment » Delineate funding decisions between Interstate, non-Strategy Interstate NHS, non-NHS, and Off System

Management Systems

- » Bridge
- » Pavement
- » Other Assets (Future TBD)

Sustainability Index in NM

To Sustain Current Condition of NMDOT Bridges and Highways (\$ millions)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Bridge need	65	66	68	69	70	72	73	75	76	78
Bridge \$	94	96	99	103	106	108	109	106	122	124
Pavement need	250	255	260	265	271	276	282	287	293	299
Pavement \$	119	122	126	130	134	137	138	136	139	141
Total need	315	321	328	334	341	348	355	362	369	377
Total \$	213	218	225	232	239	245	247	242	261	265
S.I.	0.68	0.68	0.69	0.69	0.70	0.70	0.70	0.67	0.71	0.70

Assumptions: Combine Maintenance, Preservation, Replacement/Reconstruct

- Roughly use SPP models developed in March; assume Reconstruction favored.
- Inflation = Revenue Growth (2%). BIG assumption.

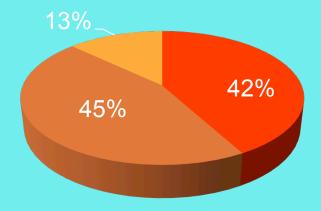


Historic NMDOT Allocations

- Averaged FY13 and FY14 STIP
- Divided Recon.
 & New Con.
 equally among
 Bridge,
 Pavement, and
 Other

STIP %

- Bridge
- Pavement Preservation
- Reconstruction & New Construction





Asset Condition

at various 10-Year annual funding levels

Bridge % Poor

	Current	\$0	\$25	\$50	\$75	\$100	\$125
NHS	3.4%	26.5%	17.5%	8.4%	3.1%	.7%	.4%
Non-NHS	6.5%	34.2%	28.7%	15.1%	4.7%	.9%	.3%
All	5.1%	30.6%	23.5%	12.0%	3.9%	.8%	.4%

Pavement Condition

	Current	\$110	\$165	\$220	\$275	\$330	\$385
Interstate	58.6	43.3	50.0	51.5	59.3	63.6	66.3
Non-I NHS	56.7	42.4	47.5	49.7	59.5	64.6	65.3
Non-NHS	51.1	37.6	44.2	49.8	54.3	57.8	60.9
All	53.3	39.4	45.6	51.4	56.1	60.1	63.4

Delphi Exercise



spy pond partners, IIc

- \$241 million annual baseline scenario
- Participants

 allocate funding
 among Bridge,
 Pavement, Other
 Construction
- Highs and Lows
 must defend their ¹¹

Delphi - \$241 Million

Round 2 \$241M Scenario

	Bridge	Pavement	Other
Average	\$71	\$151	\$19
Мах	\$100	\$190	\$40
Min	\$51	\$101	\$0
Standard Deviation	11.0	15.6	8.1



Delphi - \$<u>390</u> Million



News Bulletin: Oil tycoon pays off NMDOT debt in • *exchange for right-of-way royalties.*

- Everyone now has
 \$390 million in FY17
- Review performance against investments
- Allocate between Bridge, Pavement, Other Construction
- Prepare to defend your allocation!



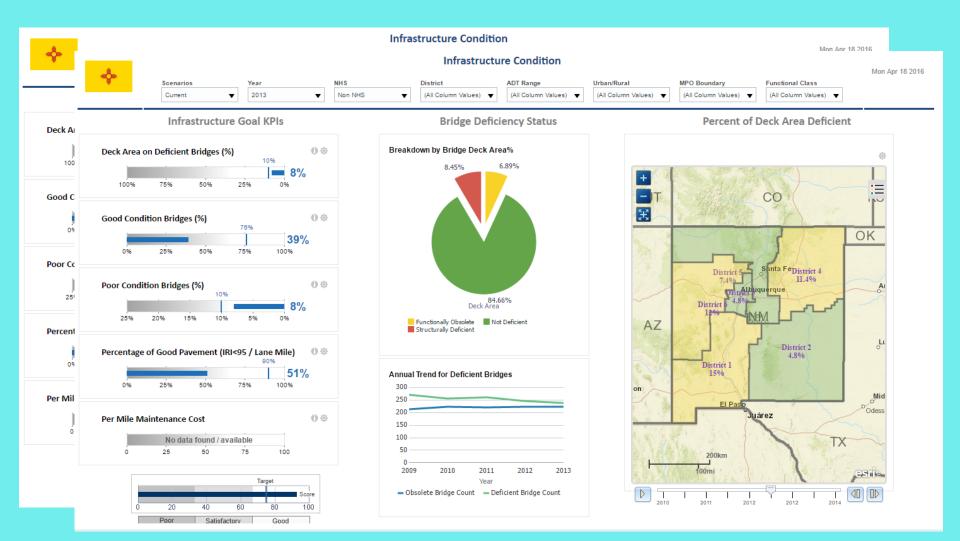
Delphi - \$390 Million

Round 2 \$390M Scenario

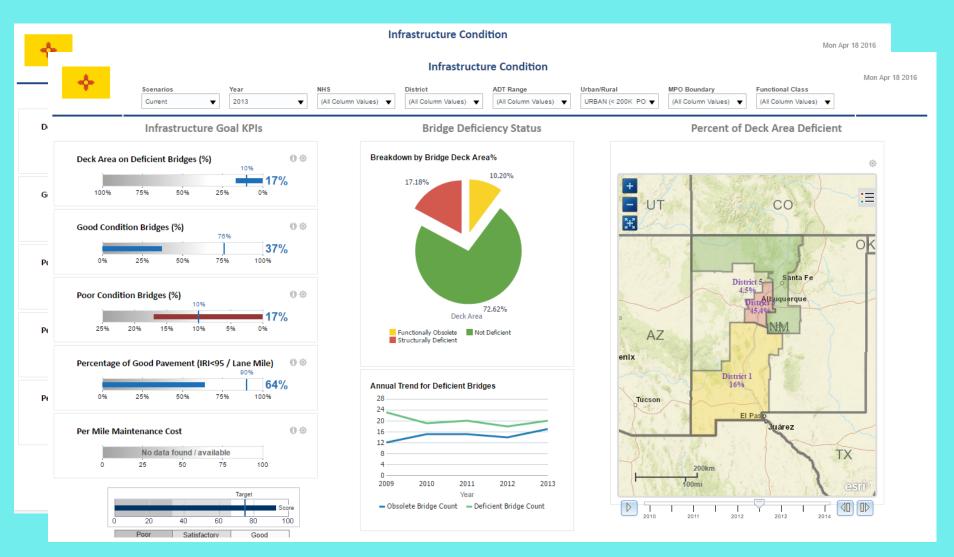
	Bridge	Pavement	Other	
Average	\$87	\$268	\$35	
Max	\$156	\$300	\$50	
Min	\$65	\$204	\$20	
Standard Deviation	20.9	21.6	8.9	



Investment Strategies: NHS vs Non-NHS



Balancing Urban and Rural Investments



Placeholder

- Timeline of LRTP to 10-Year Capital Program to 8-Year Design STIP to 4-Year Construction STIP to 1-2 Year Budget
- Asset Valuation graphic from the TAMP Valuation narrative (draft complete)
- Summary of objectives from Task C amended scope Literature/ Applied Practice Review

Questions?

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