



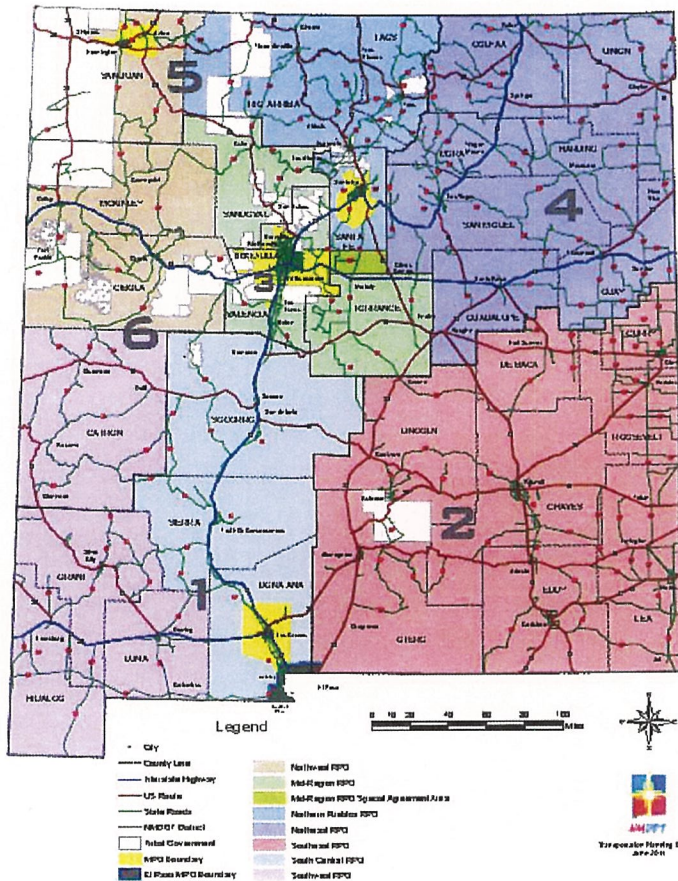
## **Design and Construction**

Presented to the  
Transportation Infrastructure Revenue Subcommittee  
July 15, 2016

# Design / Construction

- The Design / Construction Division
  - Engineering and design services for NMDOT
  - Advancing any project from concept to final design
    - NMDOT Mission: on-time, on-budget multimodal project delivery
  - Construction oversight for NMDOT
  - Providing technical expertise for oversight ensuring federal funding participation
    - NMDOT Mission: on-time, on-budget multimodal project delivery
- The primary responsibility of Design is to develop projects
  - Statewide Transportation Improvement Plan (STIP). The projects included in the construction program are funded through Federal-aid and the State Road Fund and total approximately  $\pm$ \$400M / annually ( $\pm$ \$1.5B 2016-2019)
  - NMDOT's overall annual budget of  $\pm$ \$800M
  - [http://dot.state.nm.us/content/dam/nmdot/STIP/Official\\_STIP.pdf](http://dot.state.nm.us/content/dam/nmdot/STIP/Official_STIP.pdf)
- Design / Construction staffing  $\pm$ 300 FTE's who provide project development project development support or construction oversight
  - professional or consulting services \$20M - \$30M annually

# Design and Construction Division



## Infrastructure

- North, Central, South Regions
- Programs
  - Bridge, Traffic, Drainage

## Plans Specifications Estimate

## Environmental

## Environmental Geology Survey

## Right of Way / Utilities

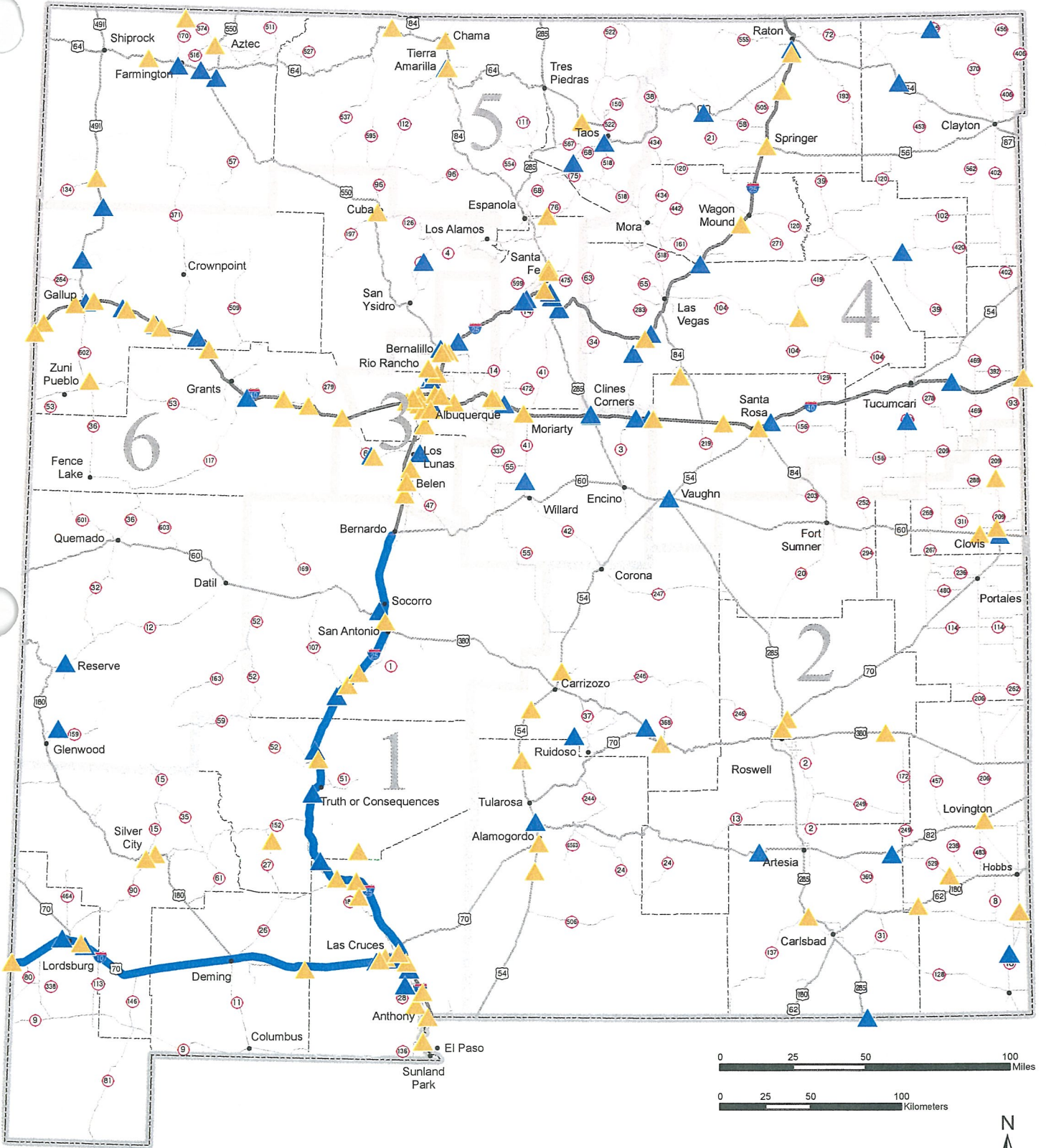
## Construction Civil Rights

## Types of Projects:

- New Construction
- Roadway/Bridge Reconstruction
- Roadway/Bridge Rehabilitation
- Drainage Improvements
- Intersection Signalization & Lighting



# NMDOT ACTIVE AND COMPLETED PROJECTS JULY 2016



## LEGEND

- ▲ Completed Projects (Less than 25 Miles Long)
- ▲ Active Projects (Less than 25 Miles Long)
- Active Projects (Greater than 25 Miles Long)

This map shows projects active and completed projects as of July 2016 for the New Mexico Department of Transportation (NMDOT).

Prepared for: NMDOT Secretary Tom Church  
Prepared by the NMDOT GIS Section on July 13, 2016



# Statewide Transportation Improvement Program (STIP)

- Statewide Transportation Improvement Program (STIP) is a 4-Year Fiscally Constrained Plan based on available Federal Funds
- [http://dot.state.nm.us/content/dam/nmdot/STIP/Official\\_STIP.pdf](http://dot.state.nm.us/content/dam/nmdot/STIP/Official_STIP.pdf)
  - Federal funding is eligible for use on
    - Interstates (I-10, I-25 & I-40)
    - National Highway System (US designated Routes)
    - Major State, County or Local roads designated as major collector or arterial routes
  - Core Funding Programs
    - National Highway Preservation Program (NHPP)
    - Surface Transportation Program (STP)
    - Highway Safety Improvement Program (HSIP)
    - Rail-Highway Grade Crossings Program
    - Congestion, Mitigation and Air Quality (CMAQ)
    - Metropolitan Planning

# Project Prioritization

- NMDOT manages the programming, design, and development of projects which makes up the STIP
- The STIP includes any project that utilizes any amount of federal-aid funding and projects that are regionally significant to either the State or the local Metropolitan Planning Organization (MPO).
- Prioritization of projects (in the STIP or not) based on the following criteria:
  - safety/fatalities
  - roadway condition
  - economic development
  - congestion mitigation
- NMDOT staff prioritize projects by balancing the available funding between statewide needs and local priorities.

# Fixing America's Surface Transportation Act (FAST ACT)

- **President Obama signed into FAST ACT into law which authorizes Federal highway, highway safety, transit, and rail programs for five years From Federal fiscal years (FY) 2016 through 2020.**
- The FAST Act authorizes \$305 billion from both the Highway Trust Fund and the General Fund (GF) of the United States Treasury. It provides \$225 billion in Highway Trust Fund (HTF) contract authority over five years for the Federal - aid Highway Program, increasing funding from \$41 billion in 2015 to \$47 billion in 2020.
- What this means for New Mexico— is an overall increase from \$354.4 million in FY2015 to \$372.4 million in FY2016 which represents a \$18 million or 5.1% increase. Year over year from FY2016 to FY2020 New Mexico will see a 2% to 2.4% increase.
- New Mexico's allocation of the freight formula funds represents approximately \$58.8 million from FY2016 to FY2020. New Mexico's Primary Highway Freight System (PHFS) miles are less than 2% of all PHFS miles, so NM can use the freight apportionment anywhere on the National Freight Network, which would include all Interstates in New Mexico + critical urban and rural corridors NM identifies.

# Construction Gaps

Fiscal Year 2017 Approved Operating Budget Compared to Estimated Need

(In Millions)

		Budget	Needs	Gap
<b>Roadway Reconstruction and Rehabilitation</b>	Estimated need of 11.9 billion over the next 20 years or an average of \$595 million per year. Performing 75 percent of the estimated requirement would address the most critical needs.	\$ 274.0	\$ 446.3	\$ 172.3
<b>Bridge Preventive Maintenance and Minor Rehabilitations</b>	Preventive maintenance and minor rehabilitation projects on existing inventory.	\$ 11.6	\$ 31.7	\$ 20.1
<b>Major Bridge Rehabilitations</b>	Major rehabilitation projects on bridges that require deck replacements and minor superstructure and substructure work.	\$ 4.4	\$ 11.5	\$ 7.1
<b>Bridge Replacements</b>	Structurally deficient bridges that have met their service life. Based on optimal spending with a goal of satisfying all needs in a 10 year period. Need to replace approximately 27 bridges per year based upon an average 50 year design life at an average cost of 3.1 million per bridge.	\$ 33.0	\$ 83.7	\$ 50.7
<b>Major Bridge Projects</b>	Functionally obsolete bridges and other capacity projects such as major intersections. No major bridge projects in FY 2016. Based on estimated cost of Rio Bravo. Currently a backlog of \$317 million in FO projects.	\$ -	\$ 317.0	
<b>Total</b>		<b>\$ 323.0</b>	<b>\$ 890.2</b>	<b>\$ 250.2</b>



## ESTIMATION of OBLIGATION LIMITATION for FFY2017

### AVAILABLE for PERCENTAGE DISTRIBUTION

NHPP	\$ 135,198,155
STPS	\$ 19,374,037
STPR	\$ 9,299,411
STPF	\$ 19,281,840
	\$ 183,153,443

	D1	EMPO	D2	D3	MRMPO	D4	D5	D6	Total
	\$ 31,081,139		\$ 35,696,606	\$ 38,608,746		\$ 25,037,076	\$ 32,180,060	\$ 20,549,816	\$ 183,153,443

	D1	EMPO	D2	D3	MRMPO	D4	D5	D6	Total
NHPP	\$ 22,943,127		\$ 26,350,120	\$ 28,499,771		\$ 18,481,588	\$ 23,754,316	\$ 15,169,233	\$ 135,198,155
STPS	\$ 3,287,774		\$ 3,776,000	\$ 4,084,047		\$ 2,648,431	\$ 3,404,018	\$ 2,173,767	\$ 19,374,037
STPR	\$ 1,578,110		\$ 1,812,455	\$ 1,960,316		\$ 1,271,230	\$ 1,633,907	\$ 1,043,394	\$ 9,299,411
STPF	\$ 3,272,128		\$ 3,758,031	\$ 4,064,612		\$ 2,635,828	\$ 3,387,819	\$ 2,163,422	\$ 19,281,840
<b>Subtotal</b>	<b>\$ 31,081,139</b>	<b>\$ -</b>	<b>\$ 35,696,606</b>	<b>\$ 38,608,746</b>	<b>\$ -</b>	<b>\$ 25,037,076</b>	<b>\$ 32,180,060</b>	<b>\$ 20,549,816</b>	<b>\$ 183,153,443</b>
STPL		\$ 851,910			\$ 19,636,443				\$ 20,488,353
STBO	\$ -		\$ -	\$ -		\$ -	\$ -	\$ -	\$ -
CMAQ-Mand.	\$ -	\$ 1,512,321	\$ -		\$ 5,969,053	\$ -	\$ -	\$ -	\$ 7,481,373
<b>2017 Target</b>	<b>\$ 31,081,139</b>	<b>\$ 2,364,231</b>	<b>\$ 35,696,606</b>	<b>\$ 38,608,746</b>	<b>\$ 25,605,495</b>	<b>\$ 25,037,076</b>	<b>\$ 32,180,060</b>	<b>\$ 20,549,816</b>	<b>\$ 211,123,169</b>

## ESTIMATION of OBLIGATION LIMITATION for FFY2017

CORE PROGRAMS											
	National Highway Performance Program (NHPP)	Surface Transportation Program (STP)	Highway Safety Improvement Program (HSIP)	Rail-Highway Crossing Program	Congestion Mitigation & Air Quality (CMAQ)	Metropolitan Planning	Transportation Alternatives Program (TAP)	National Highway Freight Program (NHFP)	State Planning & Research	Section 154 & 164 Penalties	CORE PROGRAMS TOTAL
<b>2016 FHWA Revised APPORTIONMENT NOTICE</b> (dated January 8, 2016)	\$ 221,696,226	\$ 110,640,559	\$ 22,678,742	\$ 1,649,490	\$ 11,621,169	\$ 1,635,373	\$ -	\$ 10,269,525	\$ -	\$ -	\$ 380,191,084
*Section 164	\$ (5,679,579)	\$ (2,612,988)								\$ 8,292,567	
*Transportation Alternatives Program (TAP)	\$ (2,069,140)	\$ (5,539,172)					\$ 7,608,311				
*2% SPR	\$ (2,358,087)	\$ (4,275,967)	\$ (434,576)		\$ (232,072)			\$ (219,160)	\$ 7,519,862		
Border State Infra. Set Aside		\$ (2,469,571)									
Subtotal	\$ 211,589,420	\$ 95,742,862	\$ 22,244,167	\$ 1,649,490	\$ 11,389,097	\$ 1,635,373	\$ 7,608,311	\$ 10,050,365	\$ 7,519,862	\$ 8,292,567	\$ 377,721,513
NHPP Funds Exempt from Oblimit	\$ (6,343,464)										\$ (6,343,464)
Border State Infra. Set Aside		\$ 2,469,571									\$ 2,469,571
Rec Trails Set Aside							\$ (1,429,831)				\$ (1,429,831)
Subtotal	\$ 205,245,956	\$ 98,212,433	\$ 22,244,167	\$ 1,649,490	\$ 11,389,097	\$ 1,635,373	\$ 6,178,480	\$ 10,050,365	\$ 7,519,862	\$ 8,292,567	\$ 372,417,789
Assumed Obligation Authority	94.9%	94.9%	94.9%	94.9%	94.9%	94.9%	94.9%	94.9%	94.9%	94.9%	94.9%
Available Obligation Limitation	\$ 194,778,412	\$ 93,203,599	\$ 21,109,714	\$ 1,565,366	\$ 10,808,253	\$ 1,551,969	\$ 5,863,378	\$ 9,537,796	\$ 7,136,349	\$ 7,869,646	\$ 353,424,482

\* These set asides are increased by a formula and are subject to change as apportionment notices are released from FHWA.

**ESTIMATION of OBLIGATION LIMITATION for FFY2017**

CORE Program	National Highway Performance Program (NHPP)	Surface Transportation Program (STP)						Highway Safety Improvement Program (HSIP)	Rail Highway Grade Crossing Program	Congestion Mitigation and Air Quality (CMAQ)		Metropolitan Planning	Transportation Alternatives Program (TAP)				Highway Freight Program (NHFP)	Section 164 Penalty Transfer (NHTSA)	TOTAL		
		STPL	STPS	STPR	STPF	STBO	SBSI		RRS	RRP	CMAQ - Flex	CMAQ - Mand.	PL	TAPL	TAPS	TAPR	TAPF	NHFP	H164		
Estimated Fed. Ob. Limit.	\$194,778,412	\$93,203,699						\$21,109,714	\$1,565,386	\$10,808,253		\$1,551,969	\$5,893,378				\$9,537,796	\$7,869,646	\$346,288,133		
Funding Category	NHPP	STPL	STPS	STPR	STPF	STBO	SBSI	HSIP	RRS	RRP	CMAQ - Flex	CMAQ - Mand.	PL	TAPL	TAPS	TAPR	TAPF	NHFP	H164		
Fed. Ob. Limit.	\$ 194,778,412	\$ 18,297,043	\$ 16,839,933	\$ 11,805,384	\$ 39,803,629	\$ 2,253,183	\$ 2,344,427	\$21,109,714	\$782,683	\$782,683	\$ 4,347,618	\$6,460,635	\$1,551,969	\$1,099,152	\$ 1,119,751	\$ 712,765	\$ 2,931,690	\$9,537,796	\$7,869,646	\$346,288,133	
Debt Service	\$ (62,872,509)	\$ (791,794)	\$ (377,556)	\$ (3,919,967)	\$ (1,969,226)							\$ (68,549)								\$ (70,000,000)	
STPL DS Taken directly from MRMPO on next page		\$ 791,794										\$ 68,549								\$ 660,344	
Penalty Transfer																				(\$7,869,646)	(\$7,869,646)
Adj. Fed. Ob. Limit	\$ 131,905,903	\$ 18,297,043	\$ 16,261,977	\$ 7,945,417	\$ 37,834,404	\$ 2,253,183	\$ 2,344,427	\$ 21,109,714	\$ 782,683	\$ 782,683	\$ 4,347,618	\$ 6,460,635	\$ 1,551,969	\$ 1,099,152	\$ 1,119,751	\$ 712,765	\$ 2,931,690	\$ 9,537,796		\$269,278,830	
Federal Share	85.44%	85.44%	85.44%	85.44%	85.44%	80.00%	85.44%	90.00%	80.00%	80.00%	85.44%	85.44%	85.44%	85.44%	85.44%	85.44%	85.44%	85.44%	100.00%		
State / Local Ob. Limit. w/ Match	\$ 154,364,250	\$ 21,415,078	\$ 21,374,037	\$ 9,299,411	\$ 44,281,840	\$ 2,816,479	\$ 2,743,946	\$ 23,455,236	\$ 699,848	\$ 699,648	\$ 5,088,504	\$ 7,661,604	\$ 1,816,443	\$ 1,288,461	\$ 1,310,570	\$ 834,253	\$ 3,431,285	\$ 11,163,151	\$ -	\$314,001,844	
Consultant Program					\$ (2,000,000)			\$ -			\$ -	\$ -	\$ -							(\$20,000,000)	
Suspense Bridge Maint Program	\$ (8,000,000)		\$ (2,000,000)		\$ (5,000,000)															(\$15,000,000)	
Border State Infra. Set Aside	\$ (11,188,095)				\$ -	\$ (2,813,905)		\$ (2,743,946)												(\$14,000,000)	
HSIP Safety Projects								\$ (12,955,238)												\$ (12,955,238)	
HSIP SW Price Agreement Program								\$ (10,500,000)												\$ (10,500,000)	
Rail Safety Projects								\$ (869,648)	\$ (869,648)											\$ (1,739,296)	
Planning TAP Selection														\$ (1,288,461)	\$ (1,310,570)	\$ (834,253)	\$ (3,431,285)			\$ (6,862,569)	
Sub-Allocated Programs					\$ -	\$ -		\$ -	\$ -	\$ -	\$ (5,088,504)	\$ -	\$ (1,816,443)							\$ (18,068,098)	
Program	\$ 135,198,155	\$ 21,415,078	\$ 19,374,037	\$ 9,299,411	\$ 19,281,840	\$ 2,574	\$ -	\$ (0)	\$ -	\$ -	\$ -	\$ 7,991,604	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$212,132,699	

These estimates are based on the most current information available on the date this document was prepared. Amounts shown are susceptible to change based on project cost overruns, project close-out information, program audit information, revised federal spending estimates, federal rescissions and redistributions. Changes in one federal funding category, or in one NMDOT District, are likely to have subsequent effects to other program categories and to other districts.

# FAST ACT Obligation Authority

■ 2016 ■ 2017 ■ 2018 ■ 2019 ■ 2020

