



**Memorandum**

**To:** TPTG  
**Subject:** **FY2024-29 Transportation Improvement Program (TIP) Development and Review - ITS Subcommittee Review and Certification** of proposed projects for inclusion in the AMPA Regional ITS Architecture and standards in accordance with 23 CFR Part 940, ie, "Rule 940" (and corresponding FTA policy)  
**Date:** July 16, 2023

This memo outlines the ITS Subcommittee review and certification of the member agency project proposals submitted for inclusion in the 2024-29 TIP for inclusion in the AMPA Regional ITS Architecture. As noted in 23 CFR Part 940, Intelligent Transportation Systems Architecture and Standards, Rule 940 state that for projects seeking highway trust funding:

*ITS Projects shall conform to the National ITS Architecture and standards in accordance with the requirements contained in this part. Conformance with the National ITS Architecture is interpreted to mean the use of the National ITS Architecture to develop a regional ITS architecture, and the subsequent adherence of all ITS projects to that regional ITS architecture. Development of the regional ITS architecture should be consistent with the transportation planning process for Statewide and Metropolitan Transportation Planning.*

Further noted in 23 cfr 940.11 (a), *All ITS projects funded with highway trust funds shall be based on a Systems Engineering analysis.*

The purpose of this review is not only to comply with the planning rules, but to provide the ITS Subcommittee the opportunity to consider all submitted project proposals on the following criteria:

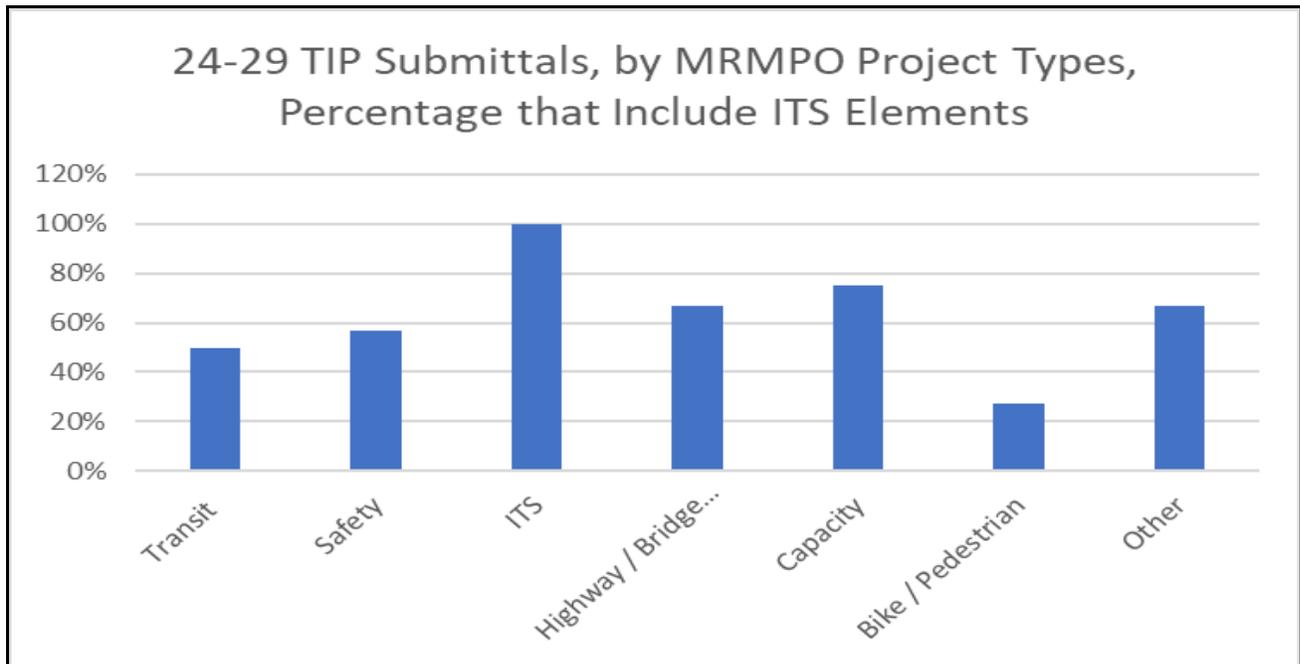
- Corridor planning and coordination purposes to ensure consistency in its Service deployment,
- Identification and association of applicable **project level** ITS Service Packages associated with the AMPA Regional ITS Architecture
- Pursuit of maintenance actions identified by agencies in pursuit of Systems Engineering certification, consistent with the AMPA's ITS Regional Architecture Maintenance Plan.
- Support MRMPO stakeholder agencies with project-level Systems Engineering certifications.

The summary of action included in this memo will serve as the ITS SC's certification that the projects submitted for the FY24-29 TIP are consistent with and have been mapped to the corresponding Service Packages included in the AMPA Regional ITS Architecture.

**Summary of Review Findings and Certification:**

**Total Projects Submitted**

<b>MRMPO TIP Project Type:</b>	<b>Total:</b>	<b>W/ITS</b>	<b>% w/ITS</b>	<b>Service Package Maint. Needed</b>
Bike / Pedestrian	11	3	27%	
Capacity	4	3	75%	
Highway / Bridge Preservation	12	8	67%	
Intelligent Transportation Systems	6	6	100%	
Safety	7	4	57%	1
Transit	10	5	50%	
Other	6	4	67%	
<b>TOTALS</b>	<b>56</b>	<b>33</b>	<b>67%</b>	<b>1</b>



### **MPO Projects and AMPA Regional ITS Architecture Services and Service Packages**

The AMPA Regional ITS Architecture includes a hierarchy of primary **Service areas** that represent broader defined areas of functionality designed to integrate advanced technologies, communication, and data flows to improve the operations and safety of the transportation system. Numerous **Service Packages** are included within each Area that detail the specific data collection and information flows included to meet the intended function. Both components of the architecture are close to the MRMPO Project Types identified above but with slight variation, and therefore must be aligned to provide a correspondence between the TIP and the AMPA Regional ITS Architecture. The architecture **Service Areas** include:

- Commercial Vehicle Operations
- **Data Management \***
- Maintenance and Construction
- Parking Management
- **Public Safety \***
- **Public Transportation \***
- Sustainable Travel
- **Traveler Information \***
- **Traffic Management \***
- **Vehicle Safety \***
- Weather

\*denotes Services that are included among the proposed projects

The following table and chart provide a breakdown of the nested ITS Service Areas with detailed Service Packages that are included in the proposed projects. Totals are shown for the **Service Areas** and the **Service Packages** the each of the projects submitted:

**TIP Project Submittals by Service Area and Service Packages Included:**

**SP Total**

**Traffic Management**

TM01	<a href="#">Infrastructure-Based Traffic Surveillance</a>	17
TM03	<a href="#">Traffic Signal Control</a>	17
TM06	<a href="#">Traffic Information Dissemination</a>	3
TM19	<a href="#">Roadway Closure Management</a>	1
	<b>Subtotal</b>	<b>38</b>

**Public Safety**

PS08	<a href="#">Roadway Service Patrols</a>	2
PS10	<a href="#">Wide-Area Alert</a>	1
	<b>Subtotal</b>	<b>3</b>

**Public Transportation**

PT01	<a href="#">Transit Vehicle Tracking</a>	2
PT02	<a href="#">Transit Fixed-Route Operations</a>	1
PT05	<a href="#">Transit Security</a>	2
PT06	<a href="#">Transit Fleet Management</a>	1
PT07	<a href="#">Transit Passenger Counting</a>	1
PT08	<a href="#">Transit Traveler Information</a>	1
PT09	<a href="#">Transit Signal Priority</a>	1
PT10	<a href="#">Intermittent Bus Lanes</a>	1
	<b>Subtotal</b>	<b>10</b>

**Data Management**

DM01	<a href="#">ITS Data Warehouse</a>	1
DM02	<a href="#">Performance Monitoring</a>	1
	<b>Subtotal</b>	<b>2</b>

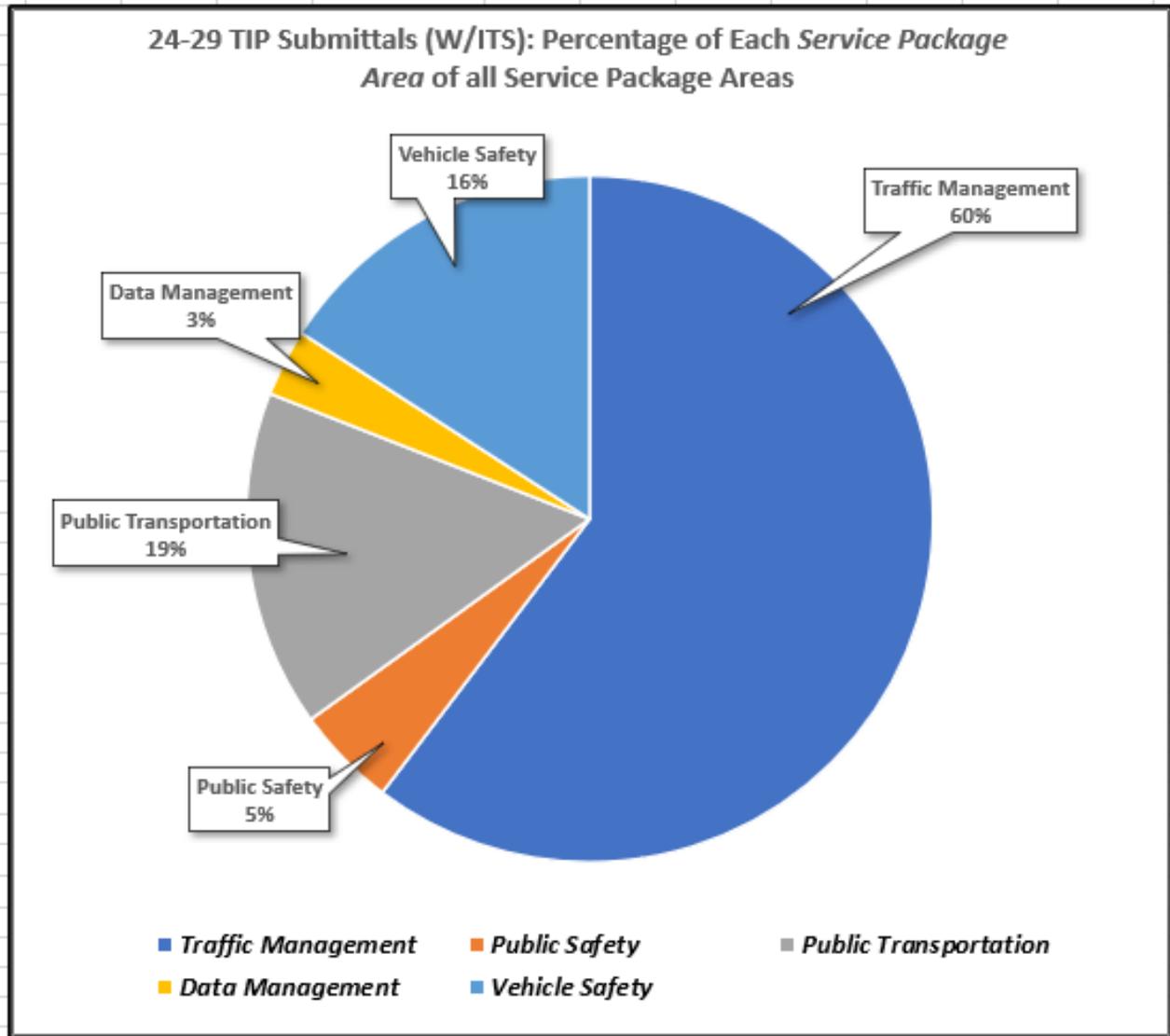
**New Service Packages Introduced for Maintenance:**

**Vehicle Safety**

VS12	<a href="#">Pedestrian and Cyclist Safety</a>	<b>Subtotal</b>	<b>1</b>
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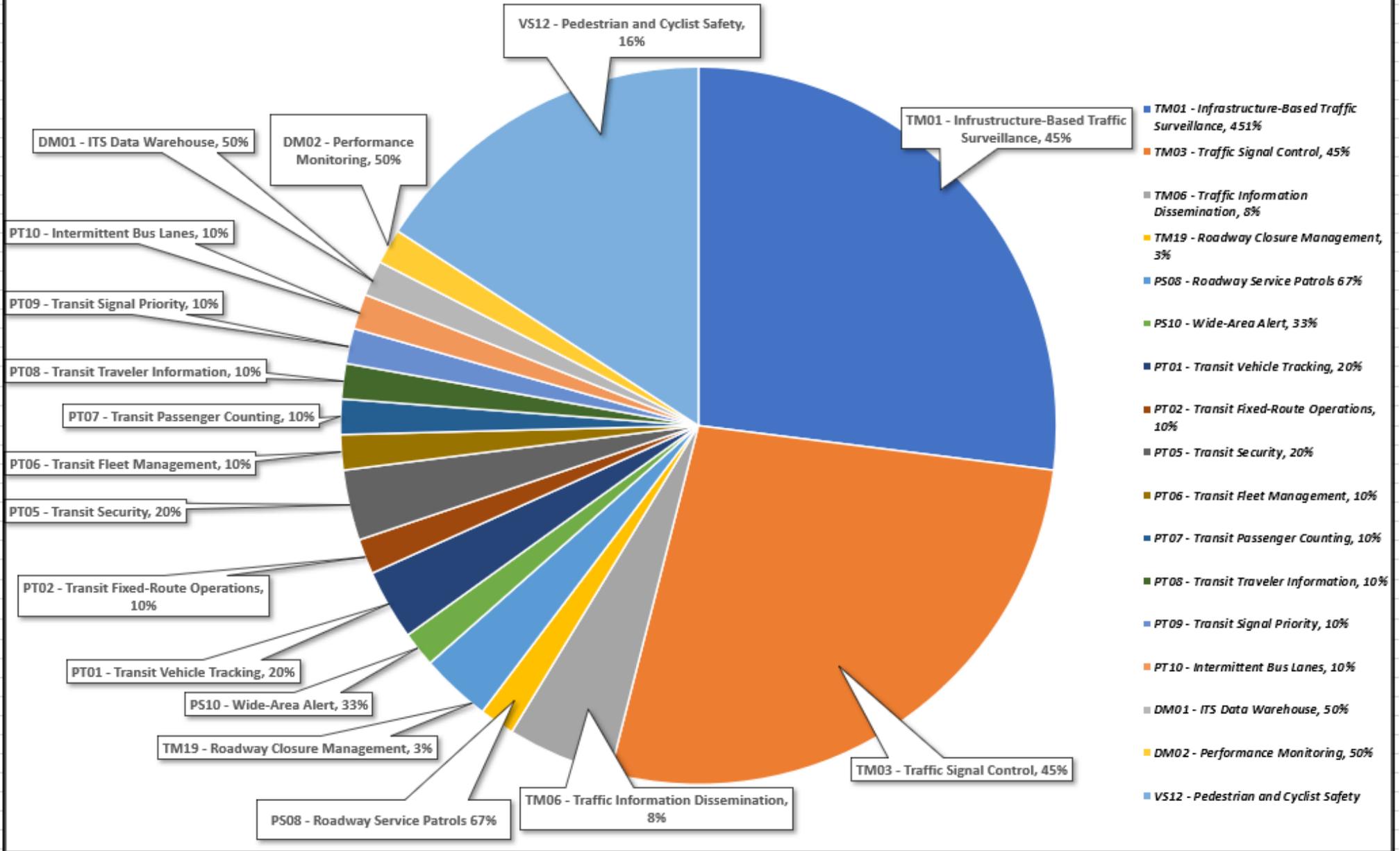
Note that five of the eleven **Service Areas** included in the current architecture (v3.0) are represented, and all the project-level ITS Service Packages mapped for the proposed projects are included in the architecture except for one, **VS12 Pedestrian and Cyclist Safety**. This Service Package was added to the architecture and a new diagram was developed in accordance with the AMPA's maintenance plan. The New Mexico Department of Transportation (NMDOT), Intelligent Transportation Systems division of the Highway Operations Program will perform the edits to add the new service package in the ARC-IT software package at the forthcoming maintenance cycle later this year. The new Service Package is included in the Maintenance section at the end of this memo.

The following charts summarize the info in the table above with the distribution of **Service Area** categories and customized **Service Packages** associated with the set of proposed projects. The first chart shows the breakdown of each of the Service Package Area from the total of Service Package Areas.



The next chart goes into further detail to show the specific Service Packages relative to their parent Service Area.

### 24-29 TIP Submittals: Service Package Percentages of Each Service Package Area

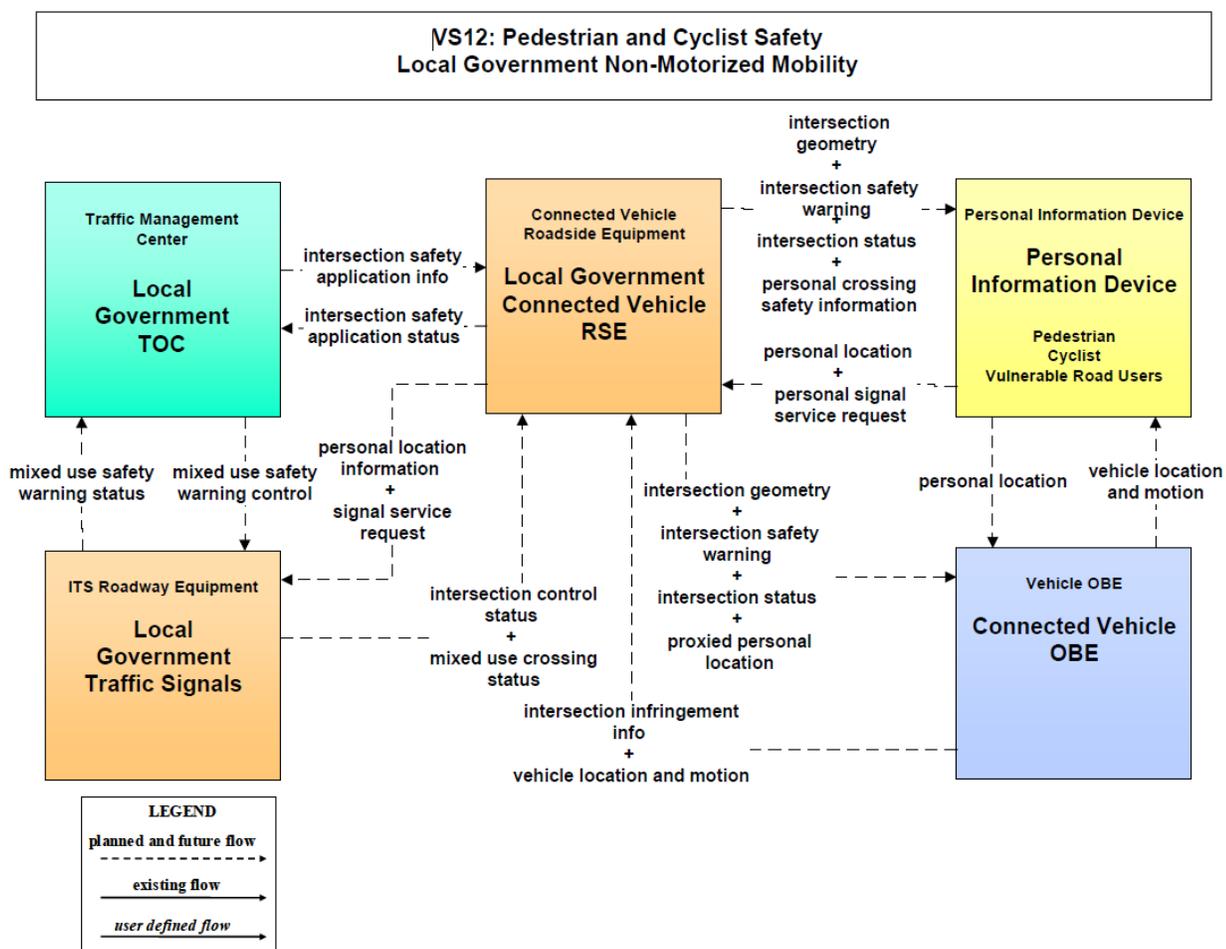


It should be noted that local stakeholders in law enforcement are in the process of pursuing automated enforcement for speed and red-light running cameras including detection. These systems involve advanced technologies and advanced communications similar to ITS, however, they are not a part of the Regional ITS System and therefore, and not part of the AMPA Regional ITS Architecture. Funding is non-highway trust fund monies and their use is primarily for law enforcement, the ITS SC believes that these projects are not subject to Rule 940 and NMDOT Systems Engineering Certification.

### **Maintenance – Version 3.1**

#### **Service Package added - “VS12 Pedestrian and Cyclist Safety – Local Governments”.**

Note – this new SP stakeholder is identified as “local governments” for use at this time based on project proposals which the ITS SC believes is a likely assurance that the region’s stakeholders will be including this service in their projects. Accordingly, and per the maintenance plan, this new service package has been added to the database by NMDOT ITS staff and will be incorporated in the NMDOT’s maintenance cycle later this year.



 VS12 Pedestrian and Cyclist Safety Lo

 All\_Projects\_byType \_ITSSCcomments-02.

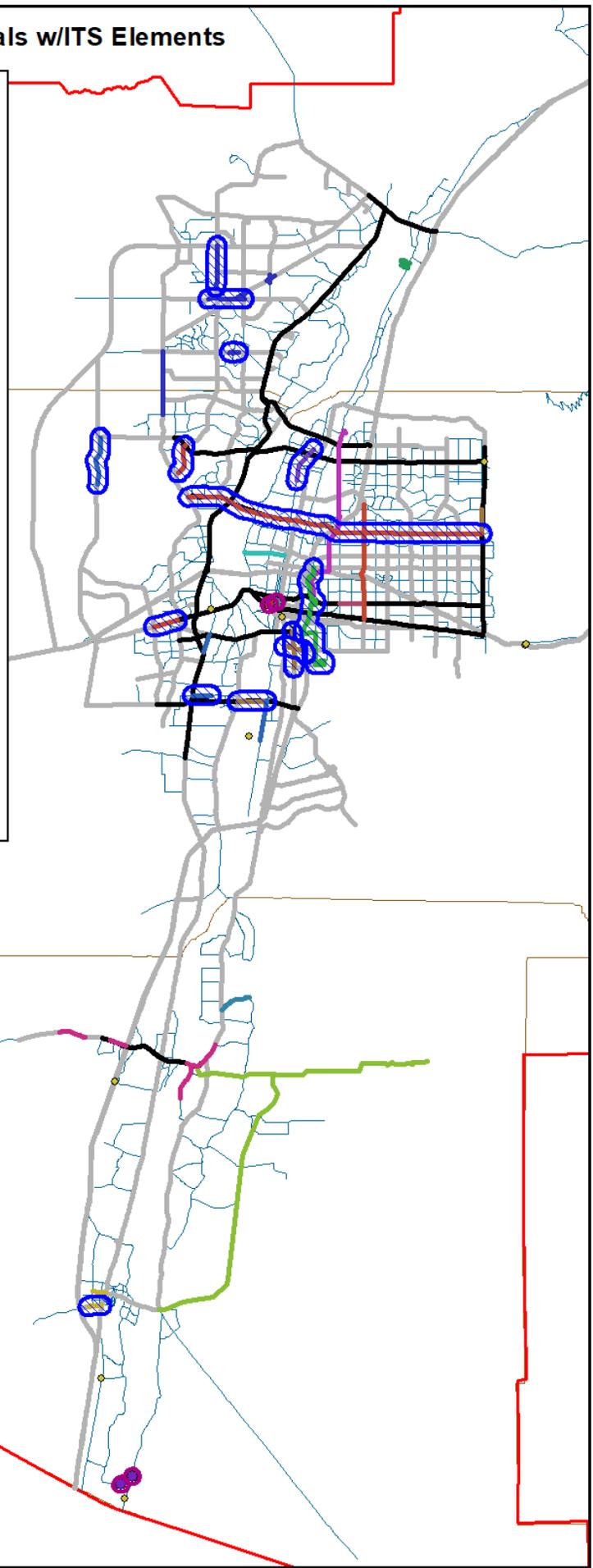
## Legend - FY24-29 Project Proposals w/ITS Elements

-  ITS Road Projects (buffered)
-  ITS Location Projects (buffered)

### PSP All Projects

#### LeadAgency

-  Bernalillo County
-  City of Albuquerque
-  City of Albuquerque DMD
-  City of Albuquerque Parks & Recreation
-  City of Albuquerque Parks and Recreation
-  City of Belen
-  City of Rio Rancho
-  MPO
-  NMDOT
-  Town of Bernalillo
-  Town of Peralta
-  Valencia County
-  Village of Los Lunas
-  Village of Los Ranchos de Albuquerque
-  Village of Tijeras
-  ITS Priority Corridors
-  ITS System Corridors
-  Roadways



The following projects were submitted for inclusion in the FY24-29 TIP, and those noted in **BOLD** were selected by TPTG for programming. The final TIP was approved by the MTB on 7/21/2023.

MPOID	CN	Project Title	Lead Agency	Project Type	ITS SPs
1	248	<b>Albuquerque Public Schools (APS) Vision Zero for Youth Initiative</b>	<b>Albuquerque Public Schools</b>	<b>Safety</b>	
2	550.1	a302181 <b>2nd St SW Reconstruction Ph. 2</b>	<b>Bernalillo County</b>	<b>Highway / Bridge Preservation</b>	
3	64.1	a302181 <b>Atrisco Vista Blvd Reconstruction</b>	<b>Bernalillo County</b>	<b>Highway / Bridge Preservation</b>	
4	284	<b>Barcelona Rd SW Reconstruction</b>	<b>Bernalillo County</b>	<b>Highway / Bridge Preservation</b>	<b>TM03</b>
5		<b>Old Coors Dr SW Reconstruction</b>	<b>Bernalillo County</b>	<b>Highway / Bridge Preservation</b>	
6	431.8	ta00067 ABQ Ride - Bus Stop Facilities Improvements	City of Albuquerque - ABQ RIDE	Transit	
7	432.6	ta00145 ABQ Ride - Transit Facility Rehabilitation	City of Albuquerque - ABQ RIDE	Transit	
8	126.6	ta00116 ABQ RIDE - Transit Planning	City of Albuquerque - ABQ RIDE	Transit	
9	130.9	ta00139 ABQ Ride - Transit Technology Upgrade	City of Albuquerque - ABQ RIDE	Transit	PT01, PT09
10	345.4	ABQ RIDE - Uptown Transit Center Redevelopment	City of Albuquerque - ABQ RIDE	Transit	
11	154.x	ta0042x <b>ABQ RIDE - Vehicles &amp; Equip. Purchase</b>	<b>City of Albuquerque - ABQ RIDE</b>	<b>Transit</b>	<b>PT01</b>
12	200.5	ta00385 Transit Enhancements	City of Albuquerque - ABQ RIDE	Transit	
13	429.6	ta00126 Transit Security Equipment Upgrade	City of Albuquerque - ABQ RIDE	Transit	PT05
14	692.3	ta00342 <b>UNM/CNM/Sunport BRT Implementation Phase 2</b>	<b>City of Albuquerque - ABQ RIDE</b>	<b>Transit</b>	<b>PT02, PT05, PTO, PT07, PT08,</b>

						PT09, PT10
15	141.2/726.0		AMPA Wide Bicycle Facilities/Activities/Programs	City of Albuquerque DMD	Bike / Pedestrian	VS12
16	465		Unser Widening from PdN to Rainbow	City of Albuquerque DMD	Capacity Project	TM01, TM03
17	103.6	a300757	AMPA Wide ITS Equipment Upgrades and Design Program	City of Albuquerque DMD	Intelligent Transportation Systems	TM01, TM03, VS12
18	249	a300756	ITS-ABQ ASTPM Montgomery / Montano	City of Albuquerque DMD	Intelligent Transportation Systems	TM01, TM03, VS12
19			San Mateo Fiber & Traffic Safety Improvements	City of Albuquerque DMD	Intelligent Transportation Systems	TM01, TM03, VS12
20	892		West Central Complete Streets Saraccino to 98th Street	City of Albuquerque DMD	Other	TM01, TM03, VS12
21	248		Vision Zero Traffic Safety Program Initiatives	City of Albuquerque DMD	Safety	TM01, TM03, VS12
22	24.5	a301035	Alameda Drain Trail Phase 5 4th Street to Rio Grande	City of Albuquerque Parks and Recreation	Bike / Pedestrian	
23	101.5		AMPA Wide Bicycle/Pedestrian Safety Education Program	City of Albuquerque Parks and Recreation	Bike / Pedestrian	
24	870.2		North Diversion Channel Trail Rehabilitation from Tucker to Balloon Fiesta Parkway	City of Albuquerque Parks and Recreation	Bike / Pedestrian	
25	724.1		Camino Del Llano Roadway Improvements	City of Belen	Safety	TM01, TM03
26			West Reinken Road Improvements	City of Belen	Safety	TM01, TM03
27	347.1	a300431	Northern Blvd Phase B1 Reconstruction	City of Rio Rancho	Capacity Project	TM01, TM03, VS12
28	380.3	a301321	Unser Blvd Widening Phase IIB	City of Rio Rancho	Capacity Project	TM01, TM03, VS12
29	613.1	a300201	Idalia Rd and Broadmoor Blvd Roundabout Phase 1	City of Rio Rancho	Other	
30	613.1	a300201	Idalia Rd and Loma	City of Rio Rancho	Other	

			<b>Colorado Blvd Roundabout Phase 2</b>	<b>Rancho</b>		
<b>3 1</b>	<b>12.3 12.4</b>		<b>Rainbow Blvd Preliminary Engineering</b>	<b>City of Rio Rancho</b>	<b>Other</b>	<b>TM01, TM03, VS12</b>
<b>3 2</b>	<b>9.2</b>	<b>a30104 2</b>	<b>Southern Blvd Reconstruction Phase IIA - Nicklaus Channel</b>	<b>City of Rio Rancho</b>	<b>Other</b>	<b>TM01, TM03, VS12</b>
<b>3 3</b>	<b>201.5</b>	<b>a30184 5</b>	<b>Congestion Management Process: Travel Time Assessment Program</b>	<b>MRMPO</b>	<b>Intelligent Transportation Systems</b>	<b>DM01-04, DM01-09ab, DM01-10, DM02-05</b>
<b>3 4</b>	<b>91.1</b>	<b>301891</b>	<b>I25/Gibson I/C</b>	<b>NMDOT</b>	<b>Highway / Bridge Preservation</b>	<b>TM01, TM03, TM06</b>
<b>3 5</b>		<b>a30238 0</b>	<b>I-40 Bridges over Tijeras Arroyo</b>	<b>NMDOT</b>	<b>Highway / Bridge Preservation</b>	<b>TM06, MC05, MC06, MC07, PS10, TM19, others</b>
<b>3 6</b>	<b>138.3</b>		<b>NM 304 Bridge Projects</b>	<b>NMDOT</b>	<b>Highway / Bridge Preservation</b>	
<b>3 7</b>	<b>1009.2</b>		<b>NM 346 River Bridge</b>	<b>NMDOT</b>	<b>Highway / Bridge Preservation</b>	
<b>3 8</b>	<b>8.1</b>	<b>a30100 1</b>	<b>NM 500 Rio Bravo Bridge Replacement</b>	<b>NMDOT</b>	<b>Highway / Bridge Preservation</b>	<b>TM01, TM03, TM06</b>
<b>3 9</b>	<b>568.X</b>	<b>a30220 1</b>	<b>Courtesy Patrol</b>	<b>NMDOT</b>	<b>Intelligent Transportation Systems</b>	<b>TM01, PS08</b>
<b>4 0</b>			<b>District Three Area ITS</b>	<b>NMDOT</b>	<b>Intelligent Transportation Systems</b>	<b>All</b>
<b>4 1</b>	<b>568.X</b>	<b>a30220 X</b>	<b>AMPA Wide Motorist Assistance</b>	<b>NMDOT</b>	<b>Other</b>	<b>PS08</b>
<b>4 2</b>	<b>943</b>		<b>NM 116/Mill Road Intersection Improvements</b>	<b>NMDOT</b>	<b>Safety</b>	
<b>4 3</b>	<b>737</b>	<b>ta00490</b>	<b>NMRX Operations and Maintenance Facility, Phase 1</b>	<b>Rio Metro Regional Transit District</b>	<b>Transit</b>	

4 4			Bernalillo Industrial Park Road Improvements	Town of Bernalillo	Capacity Project	
4 5			Peralta Boulevard Improvements	Town of Peralta	Highway / Bridge Preservation	
4 6	940.2		Manzano Expressway Rehabilitation	Valencia County	Safety	
4 7	941		Meadowlake Road Safety Improvements	Valencia County	Safety	
4 8	537.3		NM 6 and Edeal Rd. to E-W Corridor Phase 1 Bike and Pedestrian Trail Improvements	Village of Los Lunas	Bike / Pedestrian	
4 9	109		NM 6 from Jubilee Blvd. to EL Cerro de Los Lunas Trailhead Bike and Pedestrian Trail Improvements	Village of Los Lunas	Bike / Pedestrian	
5 0	6.8		NM 6 from Lujan Rd. to Rio Grande Bridge Roadway and ADA Sidewalk Improvement	Village of Los Lunas	Bike / Pedestrian	
5 1	260.1-2, 627.0		NM 6 from Sand Sage Rd. to I-25 Roadway and ADA Sidewalk Improvement and Soil Mitigation	Village of Los Lunas	Bike / Pedestrian	TM03
5 2	169		NM 6/NM 47 ADA Sidewalk Improvement Project (Lujan Road to Valencia Road)	Village of Los Lunas	Bike / Pedestrian	
5 3	537.3		East West Corridor Soil Mitigation Improvement Phase I	Village of Los Lunas	Highway / Bridge Preservation	
5 4	537.3		East West Corridor Soil Mitigation Improvement Phase II	Village of Los Lunas	Highway / Bridge Preservation	
5 5	4.3	a30215 1	<b>4th Street Revitalization Phase 2A-2C</b>	<b>Village of Los Ranchos de Albuquerque</b>	<b>Bike / Pedestrian</b>	<b>TM01, TM03</b>
5 6	7		<b>Tijeras NM 14 Pedestrian Improvements</b>	<b>Village of Tijeras</b>	<b>Bike / Pedestrian</b>	