





Regional Transportation Safety Action Plan Roadway safety plan for all modes in the Region

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groundworkstudío

Pedestrian Fatality National Rankings

WHY DOWE NEED A PLAN?

#1 Most Dangerous State

Albuquerque

New Mexico



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FATAL CRASH TRENDS (2017 – 2021)

Year	Fatal Crashes	AMPA VMT Annual (billions)	Fatality Rate per 100 Mil VMT
2015	72	7.49	0.96
2016	114	7.74	1.47
2017	110	7.83	1.41
2018	118	8.30	1.42
2019	127	8.62	1.47
2020	129	6.67	1.93
2021	171	7.86	2.18

PEDESTRIAN FATAL CRASH TRENDS (2017 – 2021)

Year	Total MRCOG Fatalities	Pedestrian Fatalities
2015	83	20
2016	137	37
2017	125	36
2018	142	44
2019	141	46
2020	144	35
2021	184	56
% Change '20 to '21	28%	60%

GOAL: ACHIEVE ZERO TRAFFIC DEATHS BY 2040



THE SAFE SYSTEMS APPROACH



A new approach is need that is proactive and systemic! The Safe Systems Approach

- Integrates best practices in design
- Recognizes the need to immediately take action to prevent more fatalities and serious injuries
- Human-centric identifies and addresses risks
- Shared responsibility rather than victim blaming

Funding Eligibility

- This plan meets the eligibility criteria for local agencies to apply for federal safety funds.
- A variety of non-traditional projects and plans are eligible,

LOOKING AT OUR ROADWAYS



ADDRESSING SPEEDING

- High number of single vehicle crashes along rural roads
- Reevaluate process of setting speed limits
- Default speed limits in city and town centers
- Designate slow/speed zones
- Evaluate conflict density and land use context
- Use automated enforcement
- Intelligent Transportation Systems

FHWA PSC - Appropriate Speed Limits for All Road Users

"Speed control is one of the most important methods for reducing fatalities and serious injuries." – FHWA

According to NHTSA in 2022, speeding killed 12,151 people — accounting for 29% of total traffic fatalities.

COMPARING CONGESTED CORRIDORS: ROADWAY CHARACTER

- East Central, between Louisiana and Tramway is 6 lanes, and has 24 percent less VMT than Alameda.
- East Central contains 80% more fatalities and 86% more Class A injuries (seriously incapacitating injuries).
- East Central is home to the highest concentration of pedestrian crashes in our region.

 Alameda Boulevard (region's most congested corridor) has more trips despite being 4 lanes for most of the corridor.





Road	Miles	Location	Killed	Class A Injury	Injured	Pedestrian Killed	Pedestrian Injured	VMT 17-21 (millions)
Alameda Blvd.	4.1	Coors to I-25	7	10	355	0	5	204.3
Central Ave.	4.05	Louisiana to Tramway	36	73	965	17	110	164.5







STREET OR ROAD?

WHEN YOU DON'T HAVE A CLEAR PURPOSE, SAFETY IS COMPRISED.

Alameda is a road.

Its function is to move large volumes across the region quickly and efficiently without local access.

Downtown Albuquerque provides us with examples of streets.

 Low speed and prioritize connecting people with jobs, goods, and services.

Central east of Louisiana is an example of a 'Stroad' in our region.

- A 6-lane road + 35 mph speed limit
- Tries to move vehicles fast and grant them access to adjoining land uses via driveways.

DESIGNING ROADWAYS

NAME	DESCRIPTION	LINK
Desiging for All Ages and Abilities	This document considers how to best apply different types of bicycle facilities by looking at contextual factors like vehicular speeds and volumes and observed sources of bicycling stress. The document helps determine when, where, and how to best combine traffic calming tools, like speed reduction and volume management, with roadway design changes.	https://nacto.org/wp-content/ uploads/2017/12/NACTO_ Designing-for-All-Ages- Abilities.pdf
Don't Give Up at the Intersection	Focuses on improving comfort and safety by reducing vehicle conflict with bicyclists and pedestrians at intersections. Strategies to improve signalization are also included.	https://nacto.org/publication/ dont-give-up-at-the- intersection/
Rural Roadway Departure	Contains countermeasures related to minimizing severity and keeping vehicles on the roadway. This quick reference document is meant to be distributed to workers managing roadway safety. Costs are also provided.	https://safety.fhwa.dot.gov/ FoRRRwD/RwDPocketGuide. pdf
Small Town and Rural Design Guide	Addresses unique issues in small towns and rural areas using existing national design guidance but also encourages innovation. Two emphasized treatments are Yield Roadways and Advisory Shoulders. An additional purpose is to advance more experimentation and research for multimodal design and flexibility in small towns and rural areas.	https://ruraldesignguide.com/
Speed Management Practices	Because of the lack of resources to address speeding and pushback with changing speed limits, this document was developed to provide practitioners with some noteworthy practices from case studies that addressed speed management at local agencies. Includes automated enforcement, setting new speed limits, self-enforcing roadways, and more.	https://safety.fhwa.dot. gov/speedmgt/ref_mats/ fhwasa20047/index.cfm
Transit Street Design Guide (NACTO)	On all types of streets design can directly improve transit travel time, reliability, and capacity. Large projects like dedicated transitways and smaller improvements like bus bulbs and signal timing can increase frequency and safety.	https://nacto.org/publication/ transit-street-design-guide/ transit-streets/

There were ~140 comments related to issues of road design and engineering, particularly that roads are designed for speed and efficiency rather than safety and that there is missing or insufficient infrastructure for vulnerable road users on roadways throughout the region.

- RTSAP Engagement Process

- Broad designs principles
- Context sensitive design
- Innovative intersection design
- Designing for all modes
 - Safe crossings for bikes and pedestrians
 - Alternate routes
 - Bike boulevards and safe mobility
 - Separation of modes

SAFETY PLANNING TOOLS



EQUITY AND MRMPO VULNERABILITY INDEX

Enforcement	Ensure traffic enforcement programs are implemented with extensive engagement with local underserved communities or develop a program where police are not involved with traffic enforcement.
Investment	Prioritize planning and investment in underserved communities when creating and implementing transportation plans, programs, and projects.
Representation	Ensure diverse representation during the decision-making process on advisory committees and in leadership positions.
Engagement	Tailor the design of traffic education and campaigns with extensive input from underserved communities.
Public Health	Support public health approaches that would improve traffic crash prevention.

As a part of this plan:

- I. An equity / crash assessment was conducted for the region.
- 2. Public outreach was prioritized to engage historically disinvested communities.
- 3. Projects and programs were selected that integrate equity.



CORRELATION BETWEEN MVI AND CRASHES

Fatalities and injuries rise as the MVI tract score (1-10) increases.

MVI developed using Socioeconomic characteristics including Income and Race





High Fatality Injury Network All Modes Metropolitan Planning Organization

RTSAP

HIGH FATAL AND INJURY NETWORK

HFIN helps target locations to improve roadway safety

• Further study needed before developing a project

HFIN links above the mean

 8% of major roadways contain 47% of the fatal crashes + 64% of injury crashes.

HFIN links 2x the mean or higher

 2.5% of major roadways = 26% of fatalities + 40% of injury crashes.

Pedestrian HFIN and Bicyclist HFIN

Intersections are purely totals



POTENTIAL ROAD DIET CANDIDATES

4-to-3 lane road diet =
29% crash reduction (usually under 20,000 ADT)

Opportunity for Parking,
Bicycle Facilities, Lane
Narrowing and BAT Lanes

Follows FHWA and NMDOT guidelines





ROAD DIET – BEFORE AND AFTER

SAFETY STRATEGIES TOOLBOX

- Easy-to-use comprehensive list
- Searchable stand alone excel spreadsheet
- Investigate prior to implementation

Broad Categories:

- 1. Data Collection and Analysis
- 2. Policies and Programs
- 3. Design and Engineering
- 4. Education and Campaigns
- 5. Traffic Technologies

Secondary Categories:

- a. Education
- b. Enforcement
- c. Intersections

ple	ementation
d. e. f. g. i. j. k. I. m.	Pedestrians Bicyclists Active Transportation Planning / Engineering Railroad Roadways Roadways / Lane Departures Schools Speed Legislation
11.	- Tanon

		Secondary	Guidance Notes	Online Resources
Strategy 🚽	Description 🗾	Category 🔽	(countermeasure 🔽	/ PSC Information
	Continue to		The TraCS project	
	enhance crash		provides law	
	data acquisition		enforcement	
Crash Data	timeliness and	Planning /	statewide with	https://nmtrafficreco
Acquisition	geographic	Engineering	access to an	rds.com/
Enforcement	Build non-police		Equity Concern.	https://visionzeronet
Staff (Non-	first responder		Remove the authority	work.org/re-thinking-
Police)	teams that focus	Enforcement	of police to stop cars	the-role-of-
Mini	Raised circular			https://nacto.org/pub
Roundabouts /	islands		Typically used for	lication/urban-street-
Neighborhood	constructed in the	Speed	lower volume	<u>design-</u>
Traffic Circles	center of streets to	Management	residential streets.	guide/intersections/
	Improve driver		Recent updates from	
	education to		NMDOT Traffic Safety	
	include		Division who manages	https://rosap.ntl.bts.g
Driver Education	information on	Education	this curriculum. The	ov/view/dot/34736
	Uses technology		In the Albuquerque	
Advanced	to acquire vehicle		metropolitan area	https://www.standar
Vehicle	counts, speed of		consider the Intelligent	ds.its.dot.gov/Applic
Detection	each individual	Intersections	Transportation	ationArea/10

PROVEN SAFETY COUNTERMEASURES (PSC)

- Well-vetted Federal Highway Administration (FHWA) Proven Safety Countermeasures
- % probability of a countermeasure to reduce crashes
- Types of countermeasures:
 - Primarily roadway infrastructure
 - Signal operation
 - Road Safety Audits and Local Safety Plans

RTSAP STRATEGIES	FHWA ICON	DESCRIPTION	CMF INFORMATION	GUIDANCE
Appropriate Speed Limits for all Roadway Users	SPEED LIMIT	Review current speed limits by looking at a range of factors such as pedestrian and bicyclist activity, land use context, and intersection and driveway density and establish non- statuatory speed limits and designate reduced speed zones.	Traffic fatalities in Seattle decreased 26% after the city implemented city-wide speed management strategies and countermeasures, including setting speed limits on all non-arterial streets at 20 mph and 200 miles of arterial streets at 25 mph.	Systemwide process for reevaluating how speed limits are being set.
Backplates with Retroreflective Borders		Use backplates for Signal Heads that have retroflective borders making them more visible and conspicuous. Also supports better orientation for older and color vision deficient drivers.	15% reduction in total crashes.	Low cost application.
Bicycle Lanes / Buffered Bicycle Lanes		Provide dedicated on-road space for bicycling. Buffered lanes provide dedicated on-road space for bicycling with additional marked space between vehicles and bicyclists.	Bicycle lane additions can reduce crashes up to 49% for total crashes on urben 4-lane undivided collectors and local roads and 30% for total crashes on urban 2-lane undivided collectors and local roads.	See MRMPO Long Range Bicycle System recommendations.

PROVEN SAFETY COUNTERMEASURES IN EFFECT

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HAWK Signal and Pedestrian Refuge

Bulbouts



Backplates with Reflective Borders



Raised Crosswalks



AREA SAFETY PROFILE STATISTICS

Village of Corrales Area Safety Profile Fatal by Mode and Class (2017 to 2021)

Corrales, with its modest population of 8,493 as per the 2020 Census, experienced three fatal crashes over a span of five years, each involving drugs and/or alcohol. All three were collisions with fixed objects. The first two involved vehicles and the third a motorcycle. All three fatalities occurred on Corrales Road.

Corrales has fewer severe crashes involving vehicle overturns or rollovers compared to the region. However, it has more collisions with fixed objects. The difference may be because of the road characteristics. Corrales has narrow roads lined with trees, walls, and other barriers. So, vehicles that veer off the road, for example, because of speeding or substance involvement are more likely to hit these objects instead of resulting in a rollover.



Fatalities + Class A Injuries by Mode and Year



Pedestrian Bicyclist Motorcyclist Auto



Top Intersections and Corridors

Corrales Road and Loma Larga Road are the primary locations for the most dangerous intersections. These intersections, particularly where they cross Meadowlark Lane, have more severe crashes. A total of 36 crashes occurred at these intersections, resulting in 8 severe injuries. These figures underscore the need for increased safety measures at these specific locations.

Certain corridors also stand out for their high number of severe crashes. Don Julio Road, for instance, has seen 40 injuries from crashes within a five-year period. Additionally, multiple segments along Corrales Road and Loma Larga Road have also reported a high number of injuries, with 51 and 9 injuries respectively.

High Priority Maps

The map shows the High Fatal and Injury Network (HFIN) corridors and intersections that are above mean for the Village of Corrales. An analysis of crash distribution reveals that all fatal incidents, along with numerous severe (Class A) injuries, took place on Corrales Road. Loma Larga Road also accounted for a significant proportion of severe injuries. This pattern aligns with the fact that these two corridors contain most of the Village's traffic. A couple of segments along Corrales Road stand out with a higher number of severe crashes. These corridors house numerous key destinations, including schools, museums, and cultural centers. Ensuring the safety of these bustling areas for pedestrians, cyclists, and drivers alike is of utmost importance for safety.

INTERSECTIONS

Street A	Street B	Killed + Injury Crashes	Approach Volume	Severe Rate
LOMA LARGA	SAGEBRUSH			
RD	DR	3	1,898	0.86
	MEADOWLARK			
CORRALES RD	LN	4	12,158.5	0.18
CORRALES RD	ELLA DR	3	5,601	0.16
LOMA LARGA				
RD	WINDOVER RD	2	7,160	0.15
MEADOWLARK	LOMA LARGA			
LN.	RD.	2	9,172.5	0.12

CORRIDORS

Corridor	Location	Killed	Class A	Injured	Speed	Lanes
	NORTH OF TODOS					
DON	JUNTOS RD SE OF					
JULIO RD.	N.M. 528	0	0	40	25	2
	NORTHEAST OF					
	MEADOW LARK -					
CORRALES	SOUTH OF WEST					
ROAD	ELLA DR.	1	1	21	35	2
	NORTH OF CALLE					
CORRALES	CUERVO - SOUTH OF					
ROAD	MEADOW LARK	0	0	16	35	2
	NORTH OF SAN					
CORRALES	YSIDRO - SOUTH OF					
ROAD	CAMINO DE LUCA	1	0	14	30	2
	N. OF OLD					
	BERN/SAND C.L					
LOMA	SOUTH OF MEADOW					
LARGA	LARK	0	0	9	30	2

AREA SAFETY PROFILE PRIORITY MAPS AND SITE VISITS



Local Concerns

The Pueblo of Jemez has identified traffic and pedestrian safety as top priorities in their Long-Range Transportation Plan, Transportation Safety Plan, and Pedestrian Trails and Bikeways Master Plan. The Pueblo is working on several transportation projects and initiatives to increase safety for drivers, pedestrians, and bicyclists and promote active transportation. The Pueblo recently completed the construction of the Hemish Path to Wellness, a 1.7mile multi-use pedestrian path along the NM-4 highway. The Pueblo has implemented a safety campaign to promote safe driving practices, pedestrian safety, and use of bicycle helmets. The Pueblo is also conducting a road safety audit (RSA) for the N.M. 4 mileposts 6 through 8. The Pueblo hopes the RSA will result in recommendations to implement a Safe System Approach including the 1) installation of guardrail where there are steep slopes and no shoulders, 2) installation of pedestrian facilities and lighting at the Red Rocks area where there are substantial pedestrian crossings, and 3) reduction of the current speed limit from 50 MPH to 30 MPH in the commercial zone. The Pueblo of Jemez would also like to streamline the process of acquiring data from the New Mexico Department of Transportation (NMDOT) and the Bureau of Indian Affairs (BIA) to run better crash analyses. reduce work, and save time for their small staff.



Site Visit

MRMPO staff visited the Pueblo of Jemez to conduct a site visit on Mission Road. Mission Road is a constrained roadway that leads to the San Diego Riverside Charter School. The route walk was initiated at Mission Road's intersection with Eagle Wings. Many students use the road to walk between the charter school and the village, but because there is no sidewalk, pedestrians must walk in the roadway.

Sidewalks

The Pueblo would like to install sidewalks, or a sidewalk on one side of the road depending on the constraints that exist. The roadway passes above a culverted ditch that could make constructing a sidewalk above it more costly. A house on the north side of the road may restrict sidewalks to the south side only. However, Right-of-Way would likely need to be purchased from residents on the south side of the road to make building a sidewalk possible. The project may be complicated, but in no means impossible, and should be researched further. If sidewalks prove to be impossible, more traffic calming elements could be added to this stretch of roadway to ensure that cars and pedestrians can share it safely.



AREA SAFETY PROFILE TOP CONTRIBUTING FACTORS

Top Contributing Factor (TCF)

Between 2017 and 2019, 3 fatalities and 10 injuries were linked to drugs and/or alcohol, and 10 injuries were related to speeding, emphasizing the importance of comprehensive crash analysis and prevention strategies. The TCF (Top Contributing Factor) for fatal crashes is Alcohol / Drug Involved at 75%, with the remaining 25% identified as Following too Closely. Driver Inattention is identified as the Top Contributing Factor of crash related injuries, resulting in 17 injuries. Excessive Speeding is second, contributing to 10 injuries, while Following Too Closely is a close third with 9 injuries.

	Corrales				Sandoval				Region			
Top Contributing Factor	Fatal + Class A	% of total	Injured	% of total	Fatal + Class A	% of total	Injured	% of total	Fatal + Class A	% of total	Injured	% of total
Alcohol Drug Involved	3	75.0%	10	11.5%	25	34.7%	56	13.5%	441	23.3%	1954	6.5%
Following Too Closely	1	25.0%	9	10.3%	2	2.8%	31	7.5%	92	4.9%	3251	10.9%
Driver Inattention	0	0.0%	17	19.5%	4	5.6%	62	14.9%	208	11.0%	6927	23.1%
Excessive Speed	0	0.0%	10	11.5%	17	23.6%	90	21.6%	215	11.4%	2626	8.8%
Improper Driving	0	0.0%	3	3.4%	4	5.6%	29	7.0%	110	5.8%	1980	6.6%
Other	0	0.0%	3	3.4%	7	9.7%	51	12.3%	54	2.9%	594	2.0%
Failed to Yield Right of Way	0	0.0%	2	2.3%	0	0.0%	21	5.0%	271	14.3%	5828	19.5%
None Identified	0	0.0%	2	2.3%	2	2.8%	35	8.4%	85	4.5%	1190	4.0%
Avoid Contact	0	0.0%	1	1.1%	2	2.8%	18	4.3%	45	2.4%	807	2.7%
Disregard Traffic Signal	0	0.0%	0	0.0%	0	0.0%	0	0.0%	165	8.7%	3034	10.1%
Pedestrian Error	0	0.0%	0	0.0%	0	0.0%	0	0.0%	95	5.0%	304	1.0%
Drove Left Of Center	0	0.0%	0	0.0%	8	11.1%	9	2.2%	45	2.4%	253	0.8%
Mechanical or Road Defect	0	0.0%	0	0.0%	1	1.4%	13	3.1%	30	1.6%	569	1.9%
Passed Stop Sign	0	0.0%	0	0.0%	0	0.0%	1	0.2%	29	1.5%	553	1.8%
Bicyclist Error	0	0.0%	0	0.0%	0	0.0%	0	0.0%	5	0.3%	59	0.2%
Traffic Control Not Functioning	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	16	0.1%
Total	4	100.0%	87	100.0%	72	100.0%	416	100.0%	1890	100.0%	29945	100.0%

							Time
Agency 🚽	ID 💌	Name 💌	Description 🗾	Source 🔹	Type 1	Туре 2 🛛 💌	Frame 💌
Albuquerque							
City Council		Street Lighting Coors	Project to address growing pedestrian corridor in residential area (Bridge	Agency Survey		Corridor /	Medium
Office	PJ3	Blvd	Blvd to Old Coors).	2024	Project	Pedestrians	Term
			Complete a traffic study that complements the feasibility study on the				
			proposed construction of a gas station at the Y-intersection of NM22 and				
			Cochiti Highway. Since the intersection is narrow, has a poor sight line, and				
			lacks a turn lane, a traffic study can determine if the intersection will require	Pueblo de		Intersection /	
	PJ10		a complete redesign, and assess whether traffic circle installation might	Cochiti Tribal		Speed	
Pueblo de Cochiti	6	Y-Intersection of NM22	improve driving safety.	Safety Plan	Project	Management	Short Term
				Bernalillo County			
		Paradise Hills		Complete		Pedestrians /	Medium
Bernalillo County	PJ19	Neighborhood	ADA sidewalks on additional streets	Streets	Project	ADA	Term
Albuquerque		Albuquerque Public		APS Vision Zero			
Public Schools /		Schools Safety	Develop Awareness Campaign materials that consist of media messages	Action Plan		Campaign /	
Local Agencies	PG3	Campaigns	about traffic safety.	Youth Initiative	Program	Education	Short Term
		Emergency Medical	Current services are too far away to ensure quick response. Evaluate				
Torrance County		Response Services	current times and determine how to improve this service. In Torrance,	Agency Survey			Medium
/ All Agencies	PG60	(EMS)	coordination needs to happen with adjacent County.	2024	Program	Study / EMS	Term
Village of	PJ14	Corrales Rd Bike & Ped	Construct Bicycle & Pedestrian Pathway. Meadowlark Lane / Old Church			Pedestrians	
Corrales	9	Pathway	Rd.	MTP	Project	and Bicyclists	Long Term
		ITS Regional Operations					
		& Incident Management					
NMDOT / All		Enhancements (FY	Enhance operations and incident managment programs and facilities as			ITS / Incident	
Agencies	PG45	2026-2040)	needed. AMPA Wide. Focus on safety-related improvements and studies.	MTP	Program	Management	Long Term
				City of Rio			
				Rancho Bicycle			
		Sate Routes to School		and Pedestrian			
City of Rio		(SRTS) at Vista Grande		Transportation			
Rancho	PJ68	Elementary School	High visibility crossings.	Plan	Project	Crossing	Long Term
-				Town of			
I own of				Edgewood			
Edgewood / All		Edgewood Master Trail		Comprehensive			Medium
Agencies	PG64	Plan	Town will complete and adopt a Town of Edgewood Trails Plan.	Plan	Program	Study / Trails	Term

THE SAFETY PROJECT AND PROGRAM LIST

SAFE STREETS AND ROADS FOR ALL FUNDING

Bipartisan Infrastructure Law (BIL) established Safe Streets and Roads for All (SS4A)

- RTSAP 2024 = Eligible Action Plan for applying
- \$5 Billion available over 5 years (2022-2026)
 - Over 3 Billion is still available
- Types of Grants
- Project Readiness



- Implementation of Projects closed but Planning and Demonstration activities is still open and due August 29th.
- Upcoming funding notices in August and November of 2024.

HOW MRCOG CAN ASSIST

- Participate in discussions between local agencies and public schools.
- Support discussions between Tribal governments and small towns with the NMDOT.
- Aid in not just applying for grants but some of the crash analyses.
- Collaborate and use existing information from Road Safety Audits conducted by the Active Living Group when developing new projects or programs.
- Participate in consistent meetings with Tribal Governments. Consider quarterly site visits.
- Work with Tribal Governments to help them seek funding and oversee implementation grants.

- Participate in Road Safety Audits as requested.
- Create more online data resources for local communities
- Assist local government members in utilizing safety data in project development.
- Provide technical assistance to local communities working on local safety plans

THANK YOU!

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