### Santa Fe Metropolitan Planning Organization











### Santa Fe MPO Transportation Policy Board Thursday, August 25, 2022 5:00 P.M.

### **IN PERSON LOCATION:**

500 Market Street, Suite 200 Roundhouse Room (Above REI at the Railyard)

Map: http://tinyurl.com/l6kejeq

Directions & Parking: <a href="http://www.railyardsantafe.com/north-railyard/">http://www.railyardsantafe.com/north-railyard/</a>

### **AGENDA**

- ♦ Call to Order
- ♦ Approval of Agenda
- ♦ Approval of Meeting Minutes from June 23, 2022
- 1. Communications from the Public
- 2. Items for Discussion and Possible Action:
  - a. Approval of Memorandum of Agreement between the SFMPO and NMDOT Awarding Funding for FFY2023 through FFY2026 via FTA Planning Funds to Manage and Operate the SFMPO in accordance to the SFMPO UPWP. (Erick Aune)
  - b. Approval of Santa Fe Local Road Safety Plan via Self Certificate (Erick Aune)
  - c. Approval of FFY 2022-2027 TIP Amendment 4 via Self Certificate (Leah Yngve)
  - d. Project Update: Cerrillos Road Redesign (Erick Aune)
  - e. Agency Project Updates (Leah Yngve)
- 3. Matters from MPO Staff
- 4. Matters from TPB Members
- 5. Adjourn Next TPB Meeting: September 22, 2022

Persons with disabilities in need of accommodations, contact the City Clerk's office at 955-6520, five (5) working days prior to the meeting date. The Santa Fe MPO is committed to compliance with Title VI of the Civil Rights Act of 1964, 49 CFR, part 2, and all related regulations and directives. The Santa Fe MPO assures that no person shall on the grounds of race, color, national origin, gender, age, or disability be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity under any Santa Fe MPO program, activity or service.

### SUMMARY OF ACTION SANTA FE MPO TRANSPORTATION POLICY BOARD THURSDAY, JUNE 23, 2022, 5:00 PM 500 MARKET STREET, SUITE 200 ROUNDHOUSE CONFERENCE ROOM SANTA FE, NEW MEXICO

<u>ITEM</u>	ACTION	<u>PAGE</u>
CALL TO ORDER		1
ROLL CALL	QUORUM	1
APPROVAL OF AGENDA	APPROVED	1
APPROVAL OF MEETING MINUTES	APPROVED	1-2
COMMUNICATIONS FROM THE PUBLIC	NONE	2
ITEMS FOR DISCUSSION AND POSSIBLE ACTION		
APPROVAL OF REVISED DRAFT SFMPO FFY2023 AND 2024 UNIFIED PLANNING WORK PROGRAM (UPWP) VIA SELF CERTIFICATION	APPROVED	2
APPROVAL OF COOPERATIVE AGREEMENT BETWEEN THE SFMPO AND NMDOT AWARDING FUNDING FOR FFY2023 THROUGH FFY2026 VIA FHWA PLANNING FUNDS TO MANAGE AND OPERATE THE SFMPO IN ACCORDANCE TO THE SFMPO UPWP.	APPROVED	2-3
MATTERS FROM STAFF	INFORMATION/DISCUSSION	3-4
MATTERS FROM TPB MEMBERS	NONE	4
NEXT MEETING	MONDAY, AUGUST 25, 2022	4
ADJOURN	ADJOURNED	4

### SANTA FE MPO TRANSPORTATION POLICY BOARD THURSDAY, JUNE 23, 2022, 5:00 PM 500 MARKET STREET, SUITE 200 ROUNDHOUSE CONFERENCE ROOM SANTA FE, NEW MEXICO

### A. CALL TO ORDER

The meeting of the Santa Fe MPO Transportation Policy Board was called to order by Commissioner Hughes, Chair, at 6:02 pm, at 500 Market Street, Suite 200, Roundhouse Conference Room, Santa Fe, New Mexico.

### **MEMBERS PRESENT**

Paul Brasher, NMDOT, Telephonically Councilor Jamie Cassutt, Vice Chair Councilor Amanda Chavez Commissioner Anna Hansen, Telephonically Commissioner Hank Hughes, Chair

### **MEMBERS ABSENT**

Pueblo of Tesuque (Vacancy) Commissioner Rudy Garcia, Excused Councilor Renee Villarreal, Excused

### **OTHERS PRESENT**

Erick Aune, MPO Officer
Hannah Burnham, MPO Planner
Leah Yngve, MPO Planner
Heather Lamboy, Assistant Director, Land Use Department
Justin Green
Elizabeth Martin, Stenographer

### B. APPROVAL OF AGENDA

MOTION A motion was made by Councilor Cassutt, seconded by Councilor

Chavez, to approve the agenda as presented.

**VOTE** The motion passed on a voice vote.

### C. APPROVAL OF MEETING MINUTES FROM MAY 26, 2022

**MOTION** A motion was made by Councilor Cassutt, seconded by Councilor Chavez, to approve the minutes as presented.

**VOTE** The motion passed on a voice vote.

### 1. COMMUNICATIONS FROM THE PUBLIC

None.

### 2. ITEMS FOR DISCUSSION AND POSSIBLE ACTION:

A. APPROVAL OF REVISED DRAFT SFMPO FFY2023 AND 2024 UNIFIED PLANNING WORK PROGRAM (UPWP) VIA SELF CERTIFICATION

Mr. Aune stated that this is a repeat of what you adopted in April. The Plan was reviewed by DOT and it came back to us with minor revisions. The first one was some required language he left out from the Infrastructure Bill. Secondly, the Rail and Trail Bureau of the DOT added in a schedule that included them which was not there before. None of the numbers or activities were changed. We are honoring the request of NMDOT to bring this back to you for approval.

Councilor Cassutt said Councilor Chavez's name is spelled incorrectly.

Mr. Aune will take care of that.

**MOTION** A motion was made by Commissioner Hansen, seconded by Councilor Cassutt, to approve the revised draft Unified Planning Work Program via self certification.

**VOTE** The motion passed on a voice vote.

B. APPROVAL OF COOPERATIVE AGREEMENT BETWEEN THE SFMPO AND NMDOT AWARDING FUNDING FOR FFY2023 THROUGH FFY2026 VIA FHWA PLANNING FUNDS TO MANAGE AND OPERATE THE SFMPO IN ACCORDANCE TO THE SFMPO UPWP.

Mr. Aune stated that this item is for your approval of the planning funds contract to manage and operate the Santa Fe MPO. MPO's are required to enter into a contract with DOT in order to receive these funds.

**MOTION** A motion was made by Councilor Cassutt, seconded by Councilor Chavez, to approve the agreement between the SFMPO and NMDOT for planning funds to manage and operate the SFMPO.

**VOTE** The motion passed on a voice vote.

### 3. MATTERS FROM STAFF

Mr. Aune said he will be working closely with Ms. Lamboy since she has joined Land Use. We met this week and are off and running.

Mr. Aune said right after this meeting he is going to City Hall for the Bicycle and Trails Advisory Committee meeting. There is going to be a review from the consultants regarding the Richards Avenue extension. That is a very important project. For those of you with the City, we have wrapped up presentations regarding the Multimodel Transportation Plan. We will be bringing it to this Board and other committees and then to Governing Body. A Resolution sponsored by Councilor Cassutt is going to be reviewed by Legal. It is the Complete Streets Resolution. The County, at end of May, adopted a version of the Resolution. He wants to reference the importance of that Resolution. It will effect a lot of what we do. Thank you for your support on that.

Mr. Aune thanked the Board members for attending the meeting and making a quorum.

Councilor Cassutt said she thinks it would be worthwhile to have the Richards conversation at MPO as well.

Mr. Aune said yes, for the Policy Board. He had a respectful conversation with Regina Wheeler as to the differences of opinion in that design.

Councilor Cassutt said she might have some difference of opinion on what is being proposed as the design as well. She may call it up to Quality of Life as well.

Councilor Cassutt said with complete streets, she is interested in how it informs updates to Chapter 14. She would love to speak with you, Ms. Lamboy, more on that subject.

Ms. Lamboy said we will be involving several groups in that update. There is a lot to be changed in zoning codes. We will bring that to this Board.

Commissioner Hansen said she is also interested in the design for Richards Avenue. She supports it going through from Cerrillos to Rodeo. She is interested in seeing that design.

Chair Hughes asked are we talking about building a road as well as a bike path.

Mr. Aune said his understanding of the design at this time is that it has the trail going over the road and bridge. It is our request that the designer consider an

Mr. Aune said his understanding of the design at this time is that it has the trail going over the road and bridge. It is our request that the designer consider an alternative design. We can help find the funding for that.

Chair Hughes said he is interested in us talking about it here as well. His constituents in Rancho Viejo ask him about it.

Mr. Aune said it is a hugely impactful project.

Ms. Burnham said the design also proposes bike lanes along that road.

### 4. MATTERS FROM TPB MEMBERS

None.

5. NEXT MEETING MONDAY, AUGUST 25, 2022

### 6. ADJOURN

MOTION

A motion was made by Councilor Cassutt, seconded by Councilor Chavez, to adjourn the meeting.

VOTE

The motion passed on a voice vote.

There being no further business before the Board, the meeting adjourned at 5:25 pm.

Commissioner Hank Hughes, Chair

Elizabeth Martin, Stenographer



### Santa Fe Metropolitan Planning Organization









### Santa Fe MPO Staff Report

Technical Coordinating Committee: August 22, 2022 Transportation Policy Board: August 25, 2022

**Matter of Approval**: Recommendation to the MPO TPB Approval of Memorandum of Agreement between the SFMPO and NMDOT Awarding Funding for FFY2023 through FFY2026 via FTA Planning Funds to Manage and Operate the SFMPO in accordance to the SFMPO UPWP.

**RECOMMENDED ACTION:** Approval of the FFY 2023-2027 FTA Federal Grant Funding Memorandum of Agreement between the Santa Fe MPO and the NMDOT.

### **Background:**

Every four years per the Federal Transit Authority's (FTA) code of federal regulations each MPO is to enter into updated federal funding grant agreements. In this case the Memorandum of Agreement details the requirements of the MPO needed to fulfill the allocation of federal 5303 FTA grant funds.

Once approved by the Santa Fe MPO Policy Board and recommended by the MPO Technical Coordinating Committee the NMDOT will provide MPO staff with the signed agreement including a control number used for each of the reimbursement request sent by the City of Santa Fe, the MPO's fiscal agent.

### Santa Fe MPO

### Santa Fe Metropolitan Planning Organization









### Santa Fe MPO Staff Report

Technical Coordinating Committee: August 22, 2022 Transportation Policy Board: August 25, 2022

Matter of Approval: Approval of Santa Fe Local Road Safety Plan via Self Certificate

**RECOMMENDED ACTION:** Approval of the Santa Fe MPO's Santa Fe Local Road Safety Plan via Self Certificate

### **Background:**

The Federal Highway Administration (FHWA) approached the NMDOT in early 2021 with funds available to develop these plans for MPO's in New Mexico. Santa Fe responded favorably to the invitation and the FHWA's contracted consultants began the process of developing the draft Local Road Safety Plan (LRSP).

The attached ppt presentation provides highlights of the plan.

A LRSP is a Federal Highway Administration (FHWA) Proven Safety countermeasure. 1 This Santa Fe Metropolitan LRSP provides a framework for identifying, analyzing, and prioritizing street and road safety improvements on local streets and roads within the region. The LRSP development process and content are tailored to local issues and needs. The process results in a prioritized list of issues, risks, actions, and improvements that can be used to reduce fatalities and serious injuries on local roads.

The Santa Fe Metropolitan Region LRSP vision, mission, and goal are:

Vision: Create a transportation system that is safe for all users.

Mission: Prioritize safety through a data-driven, collaborative, multi-disciplinary effort which identifies and implements safety strategies equitably to reduce traffic related fatalities and serious injuries.

Goal: Reduce fatalities and serious injuries by 50 percent by 2027.

The LRSP aligns with the New Mexico 2021 Strategic Highway Safety Plan (SHSP) *Safe Mobility for Everyone* 2 and supports the New Mexico Department of Transportation's (DOT) implementation of the national Toward Zero Deaths.



### Santa Fe Metropolitan Planning Organization









### MPO SELF-CERTIFICATION

### Santa Fe Local Road Safety Plan Adopted on August 25th, 2022 by the Santa Fe MPO Transportation Policy Board

The Santa Fe MPO Transportation Policy Board has reviewed and supports the adoption of the Santa Fe Local Road Safety Plan via this Self-Certificate.

It is the intent of the MPO to provide systemic support and guidance to member agencies so they may take advantage of the recommendations with highly accurate and objective data detailed in the plan.

The MPO will incorporate updates to the data and implementation progress during each 5 year mandatory update to the Metropolitan Transportation Plan. The MPO extends our thanks to the U.S. DOT, FHWA and NMDOT Leadership who supported, funded and developed this plan together with many local stakeholders providing input during workshops and the day long field tour/audit of the High Injury Network.

Hank Hughes, Chair- Santa Fe MPO TPB	Date

# Local Road Safety Plan

Santa Fe Metropolitan Planning Organization

A LRSP is a Federal Highway Administration (FHWA) Regional Local Road Safety Plan (LRSP). Proven Safety Countermeasure. Santa Fe Metropolitan LRSP provides a framework for identifying, analyzing, and prioritizing street and road safety improvements



Goal: Reduce

fatalities &

serious injuries by

50 % by 2027

Analysis: 5 years (2015 -2019) crash data for <mark>1,664</mark> miles of local streets/roads identified:

Total 2,852 Injury Crashes

Total 109 crashes resulted in 118 traffic-related fatalities and serious injuries

85 % occurred on only 7 % of the local street/road system

## SFMPO stakeholders identified strategies and action items Examples include:

- Establish a Santa Fe Safety Committee
- Improve data collection
- Conduct road safety audits (RSAs) and implement RSA recommendations
- Provide enhanced crosswalk and intersection visibility
- Install six-inch pavement markings
- Implementing leading pedestrian intervals (LPI)

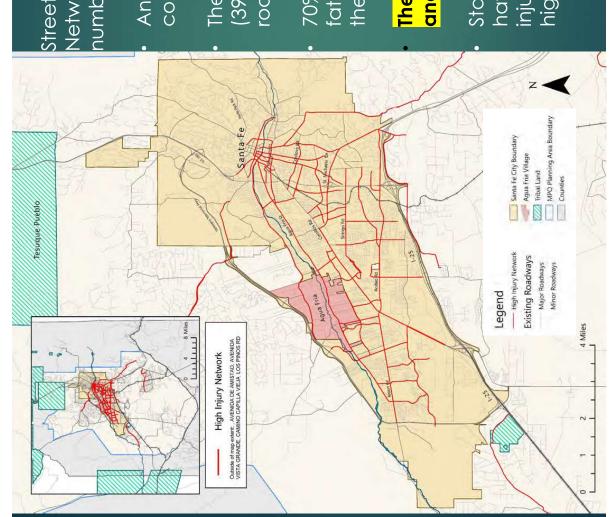
## LRSP's intent is to:

- Achieve a significant reduction of traffic fatalities/serious injuries
- Leverage partnerships and resources to <mark>maximize implementation</mark>
- Complement efforts to develop and implement master transportation plans and other plans and studies
- Identify strategies based on data analysis and crash trends
- Prioritize needed street and road safety improvements
- Increase awareness of road safety and risks through education and enforcement
- Develop support for funding applications
- Support implementation of 2021 New Mexico State Highway Safety Plan

## SFMPO and stakeholders considered transportation equity during the LRSP development process.

income areas, and households with zero-vehicles with those streets Evaluating and comparing locations of minority populations, lowand roads with higher concentration of fatal and serious injury crashes.

The LRSP identifies strategies and projects that address the safety needs of all road users.



Streets and roads identified as High Injury Network, the segment lengths, and the number of crashes by severity

- An evaluation of the 114 miles of HIN a subset of 16 corridors
- These priority corridors consist of approximately 44 miles (39%) of the HIN, or nearly 3 % of the 1,664 miles of local roads in the region.
- 70% of fatal and serious injury crashes and 60% of the fatal, serious and minor injury crashes occurred on these priority HIN corridors.
- The priority HIN corridors are primarily Urban Principal and Minor Arterials.
- Statewide, for New Mexico, urban principal arterials have the highest number of fatalities and serious injuries, with urban minor arterials having the second highest number of serious injuries.

The intersection of Saint Michaels and South Pacheco Street is like many along the principal arterials in the region.

The intersection is very wide with multiple lanes, requiring pedestrians

to walk a longer distance to cross.

High visibility crosswalks and stop bars are not present and reflective backplates on not on the signal heads. This was similar to other locations along the priority HIN corridors.

of the intersection as well as the driver expectation for pedestrians and are These low-cost safety countermeasures increase the visibility effective at reducing fatalities and serious injuries.

Side Note on how local efforts can compliment data analysis and plan Implementation -

132 Pedestrians who used this on Friday, 7/23/21 during the 24 hour count, 12 counted as many as 19 bikes on the road here though during a 14 hour count, bicyclists on the sidewalks and 6 more using the road on that same day. We and as many as 17 on the crosswalks. A rough estimate suggests that it is a minimum of 7 pedestrians that cross here every hour during the day-time hours (7 am to 9 pm), but as many as 23. At St. Mike's and Pacheco MPO counted

vehicles and demand attention as all of these users are extremely vulnerable In short, cross-walks like this one are constantly used by non-motorized where speeds are high.

Crashes are random in nature. Systemic Safety Analysis

beyond crashes at a specific location, where crashes have not yet occurred. evaluates risk across an entire streets and roads system, and proactively treats locations with **identified risk** A system-based approach looks

serious injury crashes and meet the safety goal of significant reductions in traffic-related fatal and The LRSP contains nine **emphasis areas** which offer the greatest opportunity to achieve



( Roadway Departure



( Distracted Driving ( Impaired Driving



Speeding



(中) Intersections



Older Drivers



Younger Drivers



(A) Pedestrians



(%) Bicyclists

## Proven Safety Countermeasures

### SPEED MANAGEMENT



Speed Safety Cameras

ROADWAY DEPARTURE

Wider Edge Lines



Variable Speed Limits



















Enhanced Delineation for Horizontal Curves







B

SafetyEdge

NTERSECTIONS















Corridor Access Management

9

Backplates with Retroreflective Borders

•••







Roundabouts

Reduced Left-Turn Conflict Intersections

### PEDESTRIANS/BICYCLES

Yellow Change Intervals











Leading Pedestrian Interval









Walkways

Road Diets (Roadway Reconfiguration)



Lighting

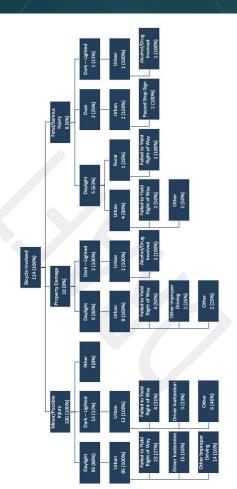
Pavement Friction Management

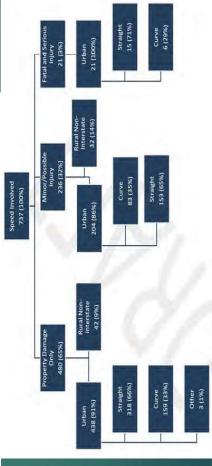
CROSSCUTTING

Road Salety Audit

HWA-5A-21-082

elements of crash data creating multiple "crash trees" agencies to focus improvement where they may shown below that allow the MPO and member The data analysis for the LRSP digs deep into all make the biggest impact!



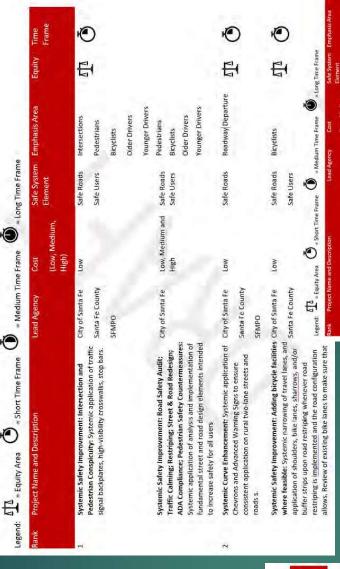


## Reginal Safety Priorities Includes:

Recommended Systemic Improvements that improve safety to the existing network Existing and Planned Infrastructure Projects intended to increase safety in the network



### Regional Safety Priorities



Including
planned projects
checks the box
for some federal
funding eligibility

					200
				Safe Users	Bicyclists
27	Cerrillos - Sandoval Intersection Improvements	City of Santa Fe	High (\$1.7 M)	Safe Roads	Intersections
				Safe Users	Pedestrians
					Bicyclists
88	Calle Po Ae Pl Extension	City of Santa Fe	High (\$1.5 M)	Safe Roads	
53	Delgado St - SF River Bridge Replacement	City of Santa Fe	High (\$2.0 M)	Safe Roads	
30	South Capital Area Road Reconstruction	City of Santa Fe	High (\$1.5 M)	Safe Roads	
				Safe Users	
31	Paseo de Peralta - SF River Bridge Rehab	City of Santa Fe	High (\$2.5 M)	Safe Roads	
32	Bicycle & Pedestrian Wayfinding System	City of Santa Fe	Med (\$0.4 M)	Safe Users	Pedestrians
					Bicyclists
33	Cerro Gordo Reconstruction	City of Santa Fe	High (\$6.0 M)	Safe Roads	Pedestrians
				Safe Users	Bicyclists
34	West Alameda St. Drainage/bike lanes	City of Santa Fe	High (\$9.4 M)	Safe Roads	Bicyclists
35	Transit Fixed Route Vehicle Replacement	City of Santa Fe	High (\$5,3 M)	Safe Vehicles	

systemic support and guidance to member agencies so they may take advantage of the recommendations with highly accurate and objective data detailed in the plan. It is the intent of the MPO to adopt the Plan via the MPO Policy Board and provide

The MPO will incorporate updates to the data and implementation progress during each 5 year mandatory update to the Metropolitan Transportation Plan.

providing input during workshops and the day long field tour/audit of the High Injury supported, funded and developed this plan together with many local stakeholders The MPO extends our thanks to the U.S. DOT, FHWA and NMDOT Leadership who

Priscilla Tobias, P.E.,   ARORA and ASSOCIATES, P.C.	Luis (FHWA) Leah Yngve, MPO Lois (FHWA)	(Consultant Engineer) Scurx, Karen FHWA Rosemarie Anderson U.S. DOT
	Aelgoza, Luis (FHW,	iric Tana (Consulta

РО

Brett Clavio County Transportation Planner Shannon Glendenning, NMDO1 Coffey, Jason, NMDOT Cpl. Jared Mosher County Sheriff Robert Griego County Planner Jacolyn Beam County Sustainability Patricia Boies County Community Services Muhammad M. Javed (Consultant) Ivan Trujillo County Engineer

Neal Denton, City Sustainability Mark Brooks, City Streets Romella Glorioso-Moss City Project Manager Deputy Chief Matt Champlin, City Police Paul Kavanau County Public Works

Lisa Randall SFPS

William Henry Mee – Agua Fria Village Steven Martinez, DOH Charleen Quintana Puebleo of Tesuque Roza Kozub NMDOT Charlie Dorme Pueblo of Tesuque JoAnn Garcia NMDOT

Patrick Henry, SFPS

Sten Johnson, City Fire

Chara Abram Christus Health **Eugene Bostwick SFPS** Ignacio Dominguez, County Emergency Managment Cali French, UNM Wendy Johnson La Familia Medical Center Amy Sandoval NMDoHs

Kathleen Tunney, STVIN

Matthew Heneghan, Consultant Support Anthony Tapia, City Streets Ltn. Thomas Grundle, City Police Mahesh Sita, American Heart Association



### Santa Fe Metropolitan Planning Organization









### **MPO SELF-CERTIFICATION**

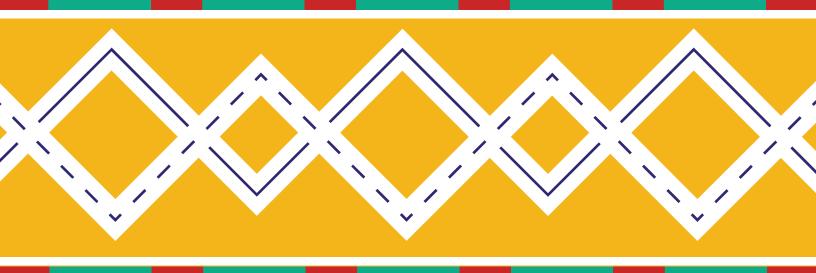
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Hank Hughes, Chair- Santa Fe MPO TPB	Date



### Local Road Safety Plan

Santa Fe Metropolitan Planning Organization



### Acknowledgements

Santa Fe Metropolitan Planning Organization

City of Santa Fe Public Works

Santa Fe Public Schools

City of Santa Fe Police Department

City of Santa Fe Fire Department

City of Santa Fe Land Use Department

Pueblo of Tesuque

Traditional Village of Aqua Fria

Santa Fe County Public Works Department

Santa Fe County Growth and Management Department

New Mexico Department of Transportation

New Mexico Department of Health

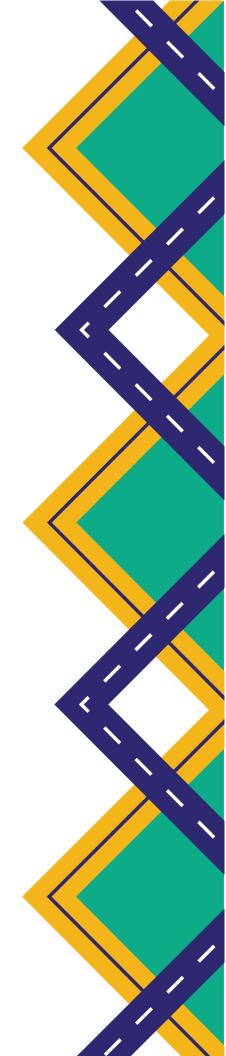
American Heart Association in New Mexico

**Compass Community Planning Association** 

CHRISTUS St. Vincent Regional Medical Center

Federal Highways Administration (FHWA) New Mexico Division

Federal Highway Administration Office of Safety



### **Executive Summary**

The Santa Fe Metropolitan Planning Organization (SFMPO) promotes a safe, efficient, and reliable multi-modal transportation system that serves the needs of the citizens and those that travel the Santa Fe metropolitan region. The Santa Fe 2020-2045 Metropolitan Transportation Plan (MTP)1 documents the SFMPO's goal to have a safe and secure transportation system for all transportation users. The SFMPO engaged a multi-disciplinary stakeholder group comprised of federal, state, and local representatives from the 4E's (engineering, enforcement, education, and emergency response) to develop the Santa Fe Metropolitan Region Local Road Safety Plan (LRSP).

A LRSP is a Federal Highway Administration (FHWA) Proven Safety

Countermeasure. 2 This Santa Fe Metropolitan LRSP provides a framework for identifying, analyzing, and prioritizing street and road safety improvements on local streets and roads within the region. The LRSP development process and content are tailored to local issues and needs. The process results in a prioritized list of issues, risks, actions, and improvements that can be used to reduce fatalities and serious injuries on local roads.

The Santa Fe Metropolitan Region LRSP vision, mission, and goal are:

Vision: Create a transportation system that is safe for all users.

**Mission:** Prioritize safety through a data-driven, collaborative, multi-disciplinary effort which identifies and implements safety strategies equitably to reduce traffic related fatalities and serious injuries.

Goal: Reduce fatalities and serious injuries by 50 percent by 2027.

The LRSP aligns with the New Mexico 2021 Strategic Highway Safety Plan (SHSP) Safe Mobility for Everyone 3 and supports the New Mexico Department of Transportation's (DOT) implementation of the national Toward Zero Deaths

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<sup>1</sup> Santa Fe MPO, 2020 – 2045 Metropolitan Transportation Plan, https://santafempo.org/wpcontent/uploads/2021/11/Santa-Fe-MTP\_FINAL\_111621-low-res.pdf

<sup>2</sup> FHWA, Office of Safety, Proven Safety Countermeasures, https://safety.fhwa.dot.gov/provencountermeasures/local\_roads.cfm

<sup>3</sup> New Mexico Department of Transportation, New Mexico 2021 Strategic Highway Safety Plan Safe Mobility for Everyone, bc275f2c-9ec3-406a-94fa-6be73e85187f

concept. It adopts the <u>Safe System approach</u>4 which is based on the principles that the human body is vulnerable, humans make mistakes, and it is unacceptable that these mistakes result in death and serious injury.

Developed using the collaborative six-step process documented by FHWA, the Santa Fe Metropolitan Region LRSP's intent is to:

- 1. Achieve a significant reduction of traffic fatalities and serious injuries on the local streets and roads in the SFMPO planning area limits.
- 2. Leverage partnerships and resources to maximize implementation of this plan.
- 3. Complement efforts to develop and implement master transportation plans and other plans and studies.
- 4. Identify safety strategies based on data analysis and crash trends.
- 5. Prioritize needed street and road safety improvements.
- 6. Increase awareness of road safety and risks through education and enforcement.
- 7. Develop support for funding applications.
- 8. Support implementation of the 2021 New Mexico SHSP and its safety performance targets.

An analysis of 5 years (2015 -2019) of crash data for the 1,664 miles of local roads within the metropolitan planning area limits identified a total of 2,852 injury crashes occurred. A total of 109 crashes resulted in 118 traffic-related fatalities and serious injuries, of which nearly 85 percent occurred on 7 percent of the local road system in the region. Based on the data analysis and discussions, the SFMPO stakeholders identified the following nine emphasis:

- 1. Roadway Departure.
- 2. Distracted Driving.
- 3. Impaired Driving.
- 4. Speeding.
- 5. Intersections.
- 6. Older Drivers.
- 7. Younger Drivers.
- 8. Pedestrians.
- 9. Bicyclists.

<sup>4</sup> FHWA, Office of Safety, Safe System Approach flyer, SA-20-015, https://safety.fhwa.dot.gov/zerodeaths/docs/FHWA\_SafeSystem\_Brochure\_V9 508 200717.pdf



### SANTA FE METROPOLITAN REGION LOCAL ROAD SAFETY PLAN

The Safe System approach elements serve as the framework for integrating the LRSP emphasis areas, strategies, and action items. The SFMPO stakeholders identified strategies and action items. Examples include:

- 1. Establish a Santa Fe Safety Committee
- 2. Improve data collection.
- 3. Conduct road safety audits (RSAs) and implement RSA recommendations.
- 4. Provide enhanced crosswalk and intersection visibility,
- 5. Install six-inch pavement markings
- 6. Implementing leading pedestrian intervals (LPI).

The stakeholders identified prioritized projects to implement these strategies and action items. It is the combined, collaborative efforts of the stakeholders that will advance the implementation of the LRSP and achieve the vision of creating a transportation system that is safe for all users.

### Acronym List

4Es Engineering, Education, Enforcement, and Emergency Medical Services

A Suspected Serious Injury/A-Injury (From The KABCO Injury Scale)

B Non-Incapacitating Injury (From the KABCO Injury Scale)

C Possible Injury (From the KABCO Injury Scale)

DWI Driving While Intoxicated

FHWA Federal Highway Administration

HIN High Injury Network

HSP Highway Safety Plan

HSIP Highway Safety Improvement Program

K Fatality (from the KABCO injury scale)

KABCO KABCO Injury Scale

LPI Leading Pedestrian Interval

MTP Metropolitan Transportation Plan

NCRTD North Central Regional Transit District

NHTSA National Highway Traffic Safety Administration

NMDOTNew Mexico Department of Transportation

NMEMSTARS New Mexico Emergency Medical Services Tracking and Reporting System

### SANTA FE METROPOLITAN REGION LOCAL ROAD SAFETY PLAN

NMHP New Mexico Highway Patrol

O Property Damage Only (From the KABCO Injury Scale)

PHB Pedestrian Hybrid Beacon

PSC Proven Safety Countermeasure (As identified by FHWA)

RECC Regional Emergency Communications Center

RRFB Rectangular Rapid Flashing Beacon

SAMS Safety Analysis Management System

SFMPO Santa Fe Metropolitan Planning Organization

SHSP Strategic Highway Safety Plan

STEP Saturated Traffic Enforcement Program

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### Introduction

The Santa Fe Metropolitan Planning Organization (SFMPO) was established in 1982 and is one of five MPOs in New Mexico. The SFMPO includes the City of Santa Fe, parts of the Santa Fe County, and the Pueblo of Tesuque (see Figure 1). The SFMPO planning area represents 25 percent of the total land area for Santa Fe County, 80 percent of the population and 90 percent of its employment. The region reflects a combination of urbanized and rural characteristics. The total population for the SFMPO planning area is 123,189. The population growth of the region is anticipated to be 20 percent over the next 25 years. The region also receives over 1 million tourists annually.

The Santa Fe metropolitan region has a diverse population with distinct areas of minority populations, low-income and zero-vehicle households. The three predominant cultures in the region are Hispanic, Non-Hispanic

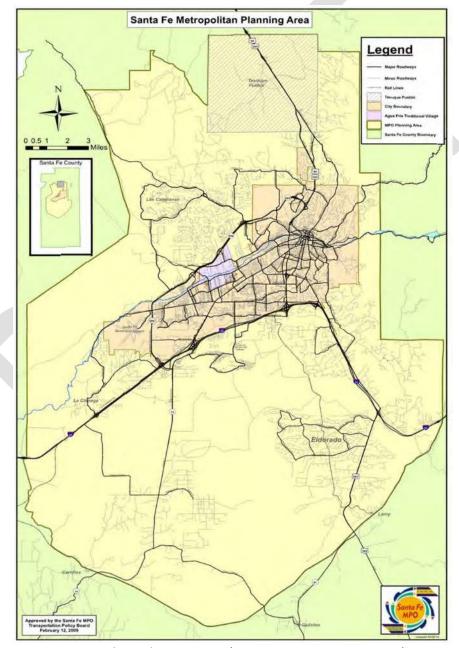


Figure 1. Santa Fe Metropolitan Planning Area (Source: Santa Fe MPO, 2022)

White, and Native Americans. Hispanic people represent the largest racial/ethnic demographic population in the region. Based on the most recent U.S. Census Bureau data, Hispanics represent over 50 percent of the population in the region. Native Americans represent 2.7 percent of the region's population. The Santa Fe region has over 50,000 households, of which approximately 6,000 are considered low-income and 2,000 have zero vehicles. The areas where minority population reside align closely with the low-income areas. The region also has a large aging population. The transportation planning decisions and investments have significant impact on the various populations and communities in the Santa Fe metropolitan region. Therefore, it is essential to consider these impacts and transportation equity5 early during the planning process.

The SFMPO provides a forum for decision-making in the metropolitan planning area to create a multi-modal transportation system that is safe and addresses the needs of the various system users. The region has a robust multi-modal transportation system that includes state and locally-owned streets and roads, sidewalks, bicycle lanes, multi-use paths, and transit facilities. There are 1,664 miles of locally owned streets and roads within the metropolitan planning area. These streets and roads are a combination of historic and modern and range from multi-lane highways to single lane cart paths that have been paved, to dirt roads. Although the historic nature of the roads sometimes makes upgrading streets to accommodate pedestrian facilities challenging, there are over 450 miles of sidewalks and urban trails within the region. The pedestrian facilities include a mix of sidewalks, crosswalks, and formal and informal pathways. On-street bicycle facilities include 190 miles of shared lanes and 108 miles of bicycle lanes on streets with speed limits from 25 mph to greater than 40 mph. Five public agencies offer public transit service in the Santa Fe area. Consideration of the various users of the system and the local road transportation system within the Santa Fe region creates unique safety challenges. This is particularly notable on the higher speed facilities where vulnerable road users are at greater risk of injury or death should a crash occur.

The SFMPO is committed to improving transportation safety for all users and eliminating traffic fatalities and serious injuries. The established safety goal from the <u>Santa Fe 2020-2045 Metropolitan Transportation Plan (MTP)</u>6 is "a safe and secure transportation system for motorized and non-motorized users". To achieve this, the SFMPO initiated and engaged a multi-disciplinary stakeholder group comprised of federal, state, and local representatives from the 4E's (engineering, enforcement, education, and emergency response) to develop a Local Road Safety Plan (LRSP).

A LRSP is a Federal Highway Administration (FHWA) Proven Safety Countermeasure. 7 The Santa Fe Metropolitan LRSP provides a framework for identifying, analyzing, and prioritizing streets and roads safety improvements on local roads within the region. The LRSP development process and content are tailored to local issues and needs. The process results in a prioritized list of issues, risks, actions, and improvements that can be used to reduce fatalities and serious injuries on local roads.

<sup>5</sup> FHWA/Federal Transit Administration, Transportation Capacity Building, Transportation Equity

<sup>6</sup> SFMPO, Santa Fe 2020 – 2045 Metropolitan Transportation Plan (MTP), https://santafempo.org/wp-content/uploads/2021/11/Santa-Fe-MTP\_FINAL\_111621-low-res.pdf

<sup>7</sup> FHWA, Office of Safety, Proven Safety Countermeasures, https://safety.fhwa.dot.gov/provencountermeasures/local\_roads.cfm

Developed using the collaborative six-step LRSP process documented by FHWA, the Santa Fe Metropolitan Region LRSP's intent is to:

- 7. Achieve a significant reduction of traffic fatalities and serious injuries on the locally owned or maintained streets and roads in the SFMPO planning area limits.
- 8. Leverage partnerships and resources to maximize implementation of this plan.
- 9. Complement efforts to develop and implement master transportation plans and other plans and studies.
- 10. Identify strategies based on data analysis and crash trends.
- 11. Prioritize needed street and road safety improvements.
- 12. Increase awareness of road safety and risks through education and enforcement.
- 13. Develop support for funding applications.
- 14. Support implementation of the 2021 New Mexico SHSP and its safety performance targets.

The data-driven Santa Fe Metropolitan Region LRSP aligns with the recently updated New Mexico 2021 Strategic Highway Safety Plan (SHSP) Safe Mobility for Everyone 8 and supports the New Mexico Department of Transportation's (DOT) implementation of the national Toward Zero Deaths concept as well as the 2021 NMDOT Pedestrian Safety Action Plan (PSAP). 9 The LRSP complements other SFMPO plans such as the Santa Fe Metropolitan Bicycle Master Plan 2019 10 and the Santa Fe Metropolitan Pedestrian Master Plan 2015-2040. 11 With the focus on improving safety for all users on the local road system in the region, the LRSP adopts and uses the Safe System approach as the framework for integrating the emphasis areas, strategies, and action items.

<sup>8</sup> New Mexico Department of Transportation, New Mexico 2021 Strategic Highway Safety Plan Safe Mobility for Everyone, bc275f2c-9ec3-406a-94fa-6be73e85187f (realfilef260a66b364d453e91ff9b3fedd494dc.s3.amazonaws.com)

<sup>9</sup> New Mexico Department of Transportation, 2021 NMDOT Pedestrian Safety Action Plan (PSAP), https://nmpedplan.altaplanning.cloud/storage/app/media/Final%20Plan\_August\_2021.pdf

<sup>10</sup> SFMPO, Santa Fe Metropolitan Bicycle Master Plan 2019, https://santafempo.org/plans/bicycle-master-plan/

<sup>11</sup> SFMPO, Santa Fe Metropolitan Pedestrian Master Plan 2015-2040, https://santafempo.org/plans/pedestrian-master-plan/

### Safe System Approach

The Santa Fe Metropolitan Region LRSP adopts the <u>Safe System approach</u>12 (see Figure 2) which is based on the principles that the human body is vulnerable, humans make mistakes, and it is unacceptable that these mistakes

result in death and injury. It is critical to design and operate the streets and road system to keep impact energy on the human body at tolerable levels. Shared responsibility by all stakeholders is key, making it important that the stakeholders are collaborative and engaged partners when developing and implementing the Santa Fe Metropolitan Region LRSP.

The FHWA has recognized the Safe System approach as a method for eliminating traffic fatalities and serious injuries for all street and road users. The Safe System approach moves beyond the traditional approach of reacting strictly based on crash history to proactively identifying risk factors associated with severe crash types and implementing safety countermeasures systemically based on those factors. This LRSP includes the systemic implementation of



Figure 2. Safe Systems Approach (Source: FHWA)



strategies. All parts of the transportation system need to be strengthened to build in redundancy to accommodate failures of the system that may arise. Examples of redundancy include the installation of curve warning signs to alert motorists of conditions in which a slower speed is necessary combined with speed feedback signs and education and enforcement campaigns that help avoid behaviors that may result in crashes.

The Santa Fe Metropolitan Region LRSP uses the five elements of the Safe System approach as the framework for integrating emphasis areas and strategies. These elements encompass the 4Es of safety and accommodate human error:

**Safe Roads**: Streets and roads are the platform in which users move across the system. Safe roads incorporate engineering-related strategies during planning, design, construction, maintenance, and operations to prevent crashes and manage impacts to keep kinetic energy at tolerable levels should a crash occur.

**Safe Road Users**: This represents all users of all modes of travel. Their capabilities are influenced by factors such as age, level of impairment, and other behaviors. System owners and other stakeholders can use strategies such as signing, enforcement, and education campaigns to address these limitations and encourage behavior change.

<sup>12</sup> FHWA, Office of Safety, Safe System Approach flyer, SA-20-015, https://safety.fhwa.dot.gov/zerodeaths/docs/FHWA SafeSystem Brochure V9 508 200717.pdf

**Safe Speeds**: As speeds increase, the risk of death and serious injury dramatically increase. This is especially true for pedestrians (see Figure 3) where the risk of death doubles for a pedestrian when speeds increase from 32 mph to 42 mph, and triples at 50 mph. Safe speeds increase the likelihood of an individual surviving a crash. Appropriate speed limits and signing, as well as radar speed feedback signs, help reduce the speed of users. These can be reinforced with enforcement and education campaigns.

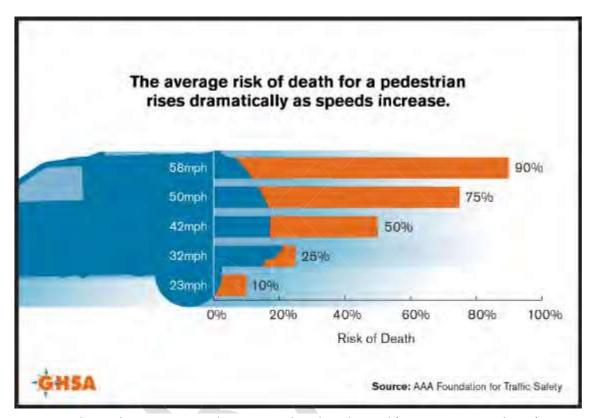


Figure 3. Relationship Between Pedestrian Crash Risk and Speed (Source: GHSA and AAA)

**Safe Vehicles**: Safe vehicles incorporate new technology and other features to prevent crashes from occurring, and if they do, reduce the severity of a crash.

**Post-Crash Care**: Post-crash care is critical when a crash occurs, and a person is injured. This includes first responders' being able to quickly locate and respond to the crash and stabilize and transport the individual. This also includes accurate and complete data collection and sharing of the data to facilitate improved decision-making and investments specific to safety.

Ultimately, the Safe System approach puts safety at the forefront and shifts how transportation investments are prioritized. The SFMPO and its stakeholders, through their combined efforts and application of the Safe System approach during the development and implementation of the Santa Fe Metropolitan Region LRSP, can have success in reducing traffic fatalities and serious injuries on its streets and roads.

### Equity

The transportation system is a vital component of the quality of life of the people in a community. It effects where people live, where and how they travel to work and school, and what services and recreational activities are available. Transportation equity seeks fairness in mobility and accessibility to meet the needs of all community members, especially those individuals traditionally underserved. It is important to note that transportation equity does not mean equal. The FHWA provides information, including pertinent Executive Orders, on its webpage <a href="Transportation Equity">Transportation Equity - Transportation Planning Capacity Building Program13</a>. Under Executive Order 13985 Advancing Racial Equity and Support for Underserved Communities (2021), the term "equity" means the consistent and systematic fair, just, and impartial treatment of all individuals, including individuals who belong to underserved communities that have been denied such treatment, such as Black, Latino, and Indigenous and Native American persons, Asian Americans and Pacific Islanders and other persons of color; members of religious minorities; lesbian, gay, bisexual, transgender, and queer (LGBTQ+) persons; persons with disabilities; persons who live in rural areas; and persons otherwise adversely affected by persistent poverty or inequality.

The Santa Fe metropolitan region has a diverse population with concentrated areas of minority populations, elderly, low-income families, and zero-vehicle households. Hispanics represent the largest racial/ethnic demographic in the region with over 50 percent of the region's population. Approximately 40 percent of the region's population is Non-Hispanic White, and 2.7 percent are Native Americans. Approximately five percent of the region's population identify solely as Black/African American, American Indian, Asian, or Native Hawaii/Pacific Islander. The areas where minority populations reside align closely with the low-income areas. The Santa Fe region has over 50,000 households, of which approximately 6,000 are considered low-income and 2,000 have zero-vehicles. The region also has a large aging population which exceeds the statewide average (18.5 percent). Over 20 percent of the citizens in the region are 65 years of age or older. It is essential to consider these various populations and communities early during the planning process to address potential impacts and transportation equity.

The SFMPO understands that the demographic composition (age, gender, race/ethnicity, ability/disability, income) of the region is critical to making informed transportation investment decisions and achieving the region's social equity goal of providing equitable investments in transportation to enable quality of life for all residents. The consideration of demographics and equity also influence safety of all road users. For example, houses with zero-vehicles likely means that there will be more people walking, biking, or using transit as a means of transportation. This increased exposure of these vulnerable road users would lead to a higher percentage of crashes in these communities. Implementation of safety countermeasures such as installing and properly maintaining sidewalks and bicycle lanes, adding high visibility crosswalks, evaluating intersections for safe pedestrian use, and placing transit stops to provide for safe travels of users in these zero-vehicle household blocks would improve traffic safety and address equity at the same time.

The SFMPO and its stakeholders considered transportation equity during each step of the LRSP development process. This included evaluating and comparing the locations of minority populations, low-income areas, and households with zero-vehicles with those streets and roads with higher concentration of fatal and serious injury crashes. The LRSP identifies strategies and projects that address the safety needs of all road users. Projects identified support the recognition that the needs of all road users should align with future transportation investments.

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<sup>13</sup> FHWA/Federal Transit Administration, Transportation Capacity Building, Transportation Equity

Vision, Mission, Goal

The stakeholders developed the Santa Fe Metropolitan Region LRSP Vision, Mission, and Goal statements. These statements reflect the Safe System approach principles that death and serious injuries are unacceptable and shared responsibility by all stakeholders is necessary. The Vision for the LRSP demonstrates the intent that all users of the local street and road system within the Santa Fe metropolitan region reach their destination safely. The Mission statement recognizes that a collaborative effort by all the safety partners is necessary to achieve the reductions in traffic-related fatalities and serious injuries set forth by the Goal. Strategies and action items identified in later sections of this LRSP reflect elements of the Safe System approach and support achieving the Vision, Mission, and Goal statements.

# Vision:

Create a transportation system that is safe for all users.

# Mission:

Prioritize safety through a data-driven, collaborative, multi-disciplinary effort which identifies and implements safety strategies equitably to reduce traffic related fatalities and serious injuries.

## **Goal:**

Reduce fatalities and serious injuries by 50 percent by 2027.

### LRSP Process Methodology

LRSPs are one of several <u>FHWA Proven Safety Countermeasures</u> and are developed using a collaborative six-step process (see Figure 4). The following sections describe each step. More detail can be found in later sections of

the plan. The Santa Fe Metropolitan Region LRSP builds upon past and ongoing safety activities and considers the unique needs and issues specific to the local road system within the planning area limits and the users of these streets and roads. The LRSP aligns with the 2021 New Mexico SHSP and its goals and strategies to eliminate traffic fatalities and serious injuries. This is supported by adopting the principles and elements of the Safe System approach. Implementation is key and has been kept in the forefront during the LRSP development process.

## Establish Leadership

The Santa Fe Metropolitan Region LRSP leadership team has a key role in the development and implementation of safety projects, programs, and policies. The leadership team is



Figure 4. LRSP Development Process (Source:

ultimately responsible for developing, adopting, and implementing the LRSP. The SFMPO served as the safety champion and led efforts to develop the LRSP. The SFMPO engaged multi-disciplinary federal, state, and local safety stakeholders representing 4Es: engineering, enforcement, education, and emergency response to provide input into the development of the LRSP. These partnerships and collaborative efforts recognize a shared responsibility to eliminate fatal and serious injury crashes and provide the opportunity to share knowledge, leverage resources, and maximize implementation of the LRSP. An initial kickoff meeting was held to identify additional stakeholders and sources of data. The New Mexico Local Technical Assistance Program (NMLTAP) Center is a stakeholder that should be engaged to help with LRSP implementation and evaluation efforts.

## Analyze Safety Data

Analysis of safety data (e.g., crash, traffic, street and road data) identifies crash trends, high-risk factors, and those locations with a higher concentration of fatal and serious injury crashes. The NMDOT and SFMPO provided safety data for the local streets and roads within the limits of the Santa Fe metropolitan planning area for the five-year period of 2015 to 2019. This overlaps the 2013 to 2019 analysis period for 2021 New Mexico SHSP. The safety analysis for the LRSP considered the over-representation of major crash types and their relationship between each other. This guided the selection of LRSP emphasis areas. Crash tree analysis helped to identify key combinations of factors that contribute to predominant crash types. This is especially beneficial to systemically address locations where crashes have not yet occurred. An assessment of crashes and key corridors identified a High Injury Network (HIN) where most fatal and serious injury crashes occur. An overlay of the HIN with equity area maps for minorities, low-income and zero-vehicle households showed a strong correlation between the HIN and equity areas of concentration. Systemwide analysis of intersections presents a significant challenge as NMDOT's roadway inventory database does not have specific codes or identifiers for intersections. The SFMPO 2020 - 2045 MTP identifies corridors and intersection locations from past analysis efforts and a strong correlation between intersection related crashes and pedestrians and bicyclists. Performing a safety field review helped to overcome this challenge and identify features that may contribute to crashes and safety countermeasures that are typically present to mitigate crashes. Ultimately, the analysis results and safety field review guided the selection of the emphasis areas and strategies and identification of potential projects.

## **Determine Emphasis Areas**

Emphasis areas in a LRSP enable the safety stakeholders to better focus available resources. The 2021 New Mexico SHSP contains 10 high-priority and 10 priority emphasis areas selected based on analysis results for the period of 2013 to 2019. The safety stakeholders considered these SHSP emphasis areas and the corresponding data analysis results for the local roads within the limits of the Santa Fe metropolitan planning area for 2015 to 2019. They selected the following nine emphasis areas for the Santa Fe Metropolitan Region LRSP.

- 15. Roadway Departure.
- 16. Distracted Driving.
- 17. Impaired Driving.
- 18. Speeding.
- 19. Intersections.
- 20. Older Drivers.
- 21. Younger Drivers.
- 22. Pedestrians.
- 23. Bicyclists.

Although crashes involving occupant protection as well as motorcycles are not included as emphasis areas in the LRSP, strategies related to these are integrated into the other emphasis areas. The five Safe System approach elements serve as "pillars," and each emphasis area aligns with the appropriate Safe System approach element.

## **Identify Strategies**

The LRSP identifies strategies and action items that support the appropriate Safe System element and align with each of the nine emphasis areas. This allows for the strategies to take all road users and modes of transportation into account (see Figure 5), while also ensuring that multiple emphasis areas can be addressed simultaneously. It also makes it easier for the various stakeholders to strategize and implement the Santa Fe Metropolitan Region

LRSP. Based on local knowledge and potential policy changes, the stakeholders considered the data analysis results, potential to address identified safety issues, different types of road users, equity, and how to ensure the strategies are actionable when identifying multidisciplinary countermeasures for inclusion in the LRSP. Many of the action items are considered as effective countermeasures by FHWA and National Highway Transportation Safety Administration (NHTSA) and are identified in the 2021 New Mexico SHSP as well as the New Mexico Highway Safety Plan (HSP).

## Prioritize and Incorporate Strategies

The stakeholders considered each strategy and action

item as well as the feasibility of implementation during the process to prioritize them. The cost and availability





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of resources as well as the ease of implementation or how a strategy could influence implementation of other strategies were factors that influenced the prioritization. Each action item is listed in priority order and includes the lead agency and partners, application method (e.g., regionwide), priority ranking, effectiveness, level of resources required (e.g., low, medium, or high), and an implementation time frame. Short-term actions are anticipated to be implemented within 3 years; medium-term actions can be implemented within 8 to 10 years; and long-term actions can be implemented within 15 years. Some actions are considered ongoing.

## **Evaluate and Update**

Transportation safety stakeholders including planners, designers, builders, operators, and maintenance personnel, law enforcement, post-crash personnel, road users and others all have a shared responsibility to reduce traffic fatalities and serious injuries on the street and road system within the Santa Fe metropolitan planning area. It is essential that this LRSP moves beyond a planning document. Implementation of the identified strategies and action items by the various stakeholders is key to achieving the goal set forth in this LRSP. The benefit of the alignment of the LRSP with the New Mexico SHSP is that it leverages existing funding sources to support LRSP implementation. The Bipartisan Infrastructure Law (BIL) establishes the new <u>Safe Streets and Roads for All (SS4A) Grant Program</u> and other eligible discretionary grants which can aid in implementation of the LRSP. The SS4A discretionary grant program has \$5-6 billion in grants available over the next five years to support regional, local, and Tribal initiatives to prevent roadway deaths and serious injuries.

The LRSP is a living document that should be evaluated and updated periodically. Tracking the allocation of resources, positive changes in user behavior, and the reduction in crashes as the various strategies and action items are implemented can be the mechanism with which the SFMPO and its safety stakeholders evaluate the effectiveness of the LRSP implementation. Evaluation will assist in identifying new action items, effective strategies to expand application, and determining resources for implementation. Based on the five-year update-cycle required for state SHSPs, it is anticipated that the 2021 New Mexico SHSP would be updated in 2026. The Santa Fe Metropolitan Region LRSP should continue to align with the New Mexico SHSP to leverage safety resources. SFMPO may want to reassess the LRSP during the next update of the SFMPO 2020-2045 MTP. This would provide an opportunity to identify and integrate strategies and action items into multi-year projects and continue to advance the region's safety priorities. The New Mexico Local Technical Assistance Program (NMLTAP) Center is a potential resource for assisting with the implementation, evaluation, and update of the LRSP.

## **Existing Efforts**

A review of pertinent documents, stakeholder discussion, and a field review of several miles of locally owned roads in the Santa Fe metropolitan planning area identified various existing efforts that have been implemented or are planned. The NMDOT recently transferred jurisdiction of a portion of Cerrillos Road and Saint Michaels Drive over to the City of Santa Fe, increasing the number of miles of locally owned streets and roads in the region to 1,664 miles.

The SFMPO and its stakeholders emphasize the importance of providing a transportation system that is safe for all users. For example, the goal of SFMPO's <u>Santa Fe Pedestrian Master Plan 2015-2040</u>14 is to "improve pedestrian safety through well-designed facilities along and across roadways, and by promoting safe driving, walking, and bicycling behaviors." They anticipate a substantive increase in bicycling and walking in the region. Therefore, the SFMPO and its stakeholders evaluate the roads with consideration of providing for safer alternative modes for transportation within the region, identify opportunities to address safety for all users, and implement improvements that will reduce fatal and serious injury crashes. The stakeholders use various approaches to improve safety for pedestrians and bicyclists within the region. Examples include items such as:

- 1. Adding separated/buffered bicycle lanes.
- 2. Constructing new sidewalks.
- 3. Constructing new trails.
- 4. Implementing road diets.
- 5. Constructing or paving shoulders to accommodate bicyclists.
- 6. Using signs to communicate bicycle travel ways (e.g., shared lanes, start/end of bicycle lanes).
- 7. Placing in-pavement markings.
- 8. Constructing underpasses.

Cerrillos Road is a heavily traveled multi-lane arterial. The completion of two of the three reconstruction phases provides designated lanes for commercial access, modernized intersections, bicycle lanes, sidewalks (see Figure 6). The SFMPO collaborated with the NMDOT to assess the streets and roads, land use, and the various road users and propose an improvement that balanced safety and capacity.



Figure 6. Cerrillos Road at Siler Road

(Source: FHWA, 2022)

<sup>14</sup> Santa Fe MPO, Pedestrian Master Plan 2015-2040, https://santafempo.org/plans/pedestrian-master-plan/

The region has successfully used road diets at various locations in the region to provide dedicated facilities for pedestrians and bicyclists within the existing right of way. This success has the SFMPO and its stakeholders planning for additional road diet projects. These projects include narrowing the lane width or reducing the number of travel lanes to help reduce motorists' speeds, providing a shorter distance for pedestrians to cross,

and increasing safety for vulnerable road users.

The region's efforts to provide for safe walking and biking promotes this same approach by others. Developers have designed and constructed streets and roads that separate vehicles, bicycles, and pedestrians to safely accommodate the various users (see Figure 7) in newer neighborhoods.

Existing shoulders, where feasible, accommodate bicycles. The SFMPO has identified that steeper cross-slopes, loose soil due to slope erosion, and debris on some of the shoulders may



result in bicyclists riding in the travel lane, placing them more at risk for injury should a crash occur.

Bicycle lanes on various roads Figure 7. Local roadway constructed by a developer that accommodates across the region have designated various road users in the Santa Fe region. (Source: FHWA, 2022)

pavement marking arrows and bicycle symbols (see Figure 7). Sharrows (bicycle logo with arrow on top) are placed in the travel lanes of streets and roads where bicyclists share the lane with motorists. The stakeholders use signs across the region to communicate to the road users where bicycle lanes exists and end and when shared used of the lanes is anticipated.

The existing efforts SFMPO and its stakeholders use to address pedestrian safety have included the following:

- 1. High visibility crosswalks and signing have been installed at multiple uncontrolled pedestrian crossings in region. (see Figure 8)
- 2. Inventorying the existing sidewalk network to identify gaps and repair needs which can be used to prioritize sidewalk improvement.
- 3. Include pedestrian and bicycle accommodations in the design and construction of roundabouts. (see Figure 5).
- 4. New Mexico Department of Health performs walkability assessments and considers the built environment and how it effects safety of pedestrians. Ultimately, the goal is to increase safety while promoting physical activity.
- 5. Radar speed indicator signs have been installed in a few locations.



Figure 8. Uncontrolled Pedestrian Crossing with marked crosswalk in City of Santa Fe (Source:

Old Santa Fe Trail is rural in nature and has several curves along the corridor. Sections of Old Santa Fe Trail have been recently resurfaced. This improvement included new pavement markings, advanced curve warning signs, and chevrons to provide enhanced visibility of the travel lane and delineation of numerous curves (see Figure 9).



Figure 9. Old Santa Fe Trail Curves and Chevron Installation (Source: FHWA, 2022)

The SFMPO and the stakeholders coordinate, identify, prioritize, and address the transportation needs of the region based on the available funding. The <u>Santa Fe 2020-2045 Metropolitan Transportation Plan</u>15 (MTP) guides transportation improvements for the region and includes a list of ranked projects that are prioritized based on a variety of evaluation criteria of which one is safety. For safety, the evaluation metric is "how well does the project improve safety for all users, and does it alleviate a known issue?"

The SFMPO develops the Transportation Improvement Program (TIP) to complement its MTP. The TIP is a short-term funded project list that includes the federally funded projects and any regionally significant projects. Table 1 lists those projects identified in the FFY2022-2027 SFMPO TIP that have significant safety emphasis.

Table 1. Safety Projects-FFY2022-2027 Santa Fe MPO Transportation Improvement Program (TIP) Improvement Plan (Source: SFMPO, 2022-2027 TIP)16

Project	Description	Estimate
Agua Fria St./Cottonwood Drive Intersection (HSIP).	Roundabout at the intersection.	\$1,796,000
Bishop's Lodge Road Reconstruction Study	Location Study, preliminary and final design to include ADA compliant sidewalks and bicycle lanes	\$800,000
Guadalupe Street Reconstruction-Road Diet (HSIP).	Milepost .51 to Milepost 1.19 (.679 mile). The proposed project was identified through the RSA and includes lane reduction, pedestrian and bicycle improvements, signalized intersections improvements, lighting, new signing, and striping.	\$10,709,444
Saint Michael's Drive (HSIP).	Rail Trail Pedestrian Crossing/Underpass, milepost 1 Proposed project was identified through the RSA.	\$4,984,999
Cerrillos Road Reconstruction	Reconstruction of Roadway, Sidewalk, ADA, and Drainage Improvements, and access management	\$30,500,000

The Highway Safety Improvement Program (HSIP) funds a number of local road safety projects identified in the TIP. Two safety improvement projects identified in the TIP and funded with HSIP, the Guadalupe Street Road Diet Reconstruction study (\$486,000) and improvement (\$10,709,444) as well as the Rail Trail Pedestrian Crossing/Underpass at Saint Michael's Drive, resulted from recommendations of road safety audits (RSA). HSIP

<sup>15</sup> Santa Fe 2020 – 2045 Metropolitan Transportation Plan, https://santafempo.org/wp-content/uploads/2021/11/Santa-Fe-MTP\_FINAL\_111621-low-res.pdf

<sup>16</sup> SFMPO, FFY2022-2027 SFMPO TIP, https://santafempo.org/programs/tip/

also funded the Agua Fria Street/Cottonwood Drive intersection improvement (\$49,500) study to construct a roundabout.

The NMDOT encourages local safety improvements using HSIP that are data-driven and focused on reducing traffic-related fatalities and serious injuries but also recognizes some challenges exist that have made it difficult to obtain HSIP funding for local projects. One identified challenge included receiving safety project applications that are not data-driven. Project development and delivery is another impediment to obligating HSIP funds. The process and time that it takes to complete studies and designs for a larger scale safety improvement can extend beyond the allowable timeframe to obligate federal funds. The NMDOT is developing a HSIP Manual which will provide a roadmap for implementation of the New Mexico HSIP. This can help local agencies understand what is required to submit a safety improvement application (e.g., data needs, scope of work, alignment with the New Mexico SHSP) and may provide additional information to guide them through the federal aid process. Several other actions needed to support local agencies and the New Mexico HSIP also include improvements to the Linear Referencing System for streets and roads data, improved coordination with safety stakeholders, and greater focus on pedestrian and bicyclist safety.

In addition to infrastructure related improvements, the TIP also includes transit related projects which support Safe System elements (Safe Road Users and Safe Vehicles). These projects include Santa Fe Ride which is an origin to destination program that provides ride sharing as an alternative source of transportation for disabled (ADA Complementary Paratransit Service) and senior citizens of the City of Santa Fe. Another transit project provides funding to maintain and replace aging transit buses and vans which allows the region to acquire vehicles with the latest technology (Safe Vehicles). Transit provides an alternative mode of transportation for impaired drivers. Senior services received funding annually between 2017 and 2019 to provide transportation for elderly to participate in activities in the Santa Fe region. During the 2020 and 2021 period, this transportation service was reduced to only provide transport for elderly to and from doctor appointments. Increasing funding to prepandemic levels would support traffic safety related to older drivers and pedestrians.

New Mexico has some of the toughest and diverse traffic safety laws and policies in place. The stakeholders have implemented enforcement and outreach activities and campaigns to encourage safe behavior and reduce the number of traffic crashes, fatalities, and injuries in the region. These include:



- 1. ENDWI (see Figure 10)17
- 2. JUSTDRIVE18
- SLODWN/BKLUP19

<sup>17</sup> New Mexico DOT, Traffic Safety Division, ENDWI, https://www.endwi.com/

<sup>18</sup> New Mexico DOT, Traffic Safety Division, JUSTDRIVE, https://www.dntxtjustdrive.com/

<sup>19</sup> New Mexico DOT, Traffic Safety Division, SLODWN/BKLUP, https://www.slodwnbklup.com/

### 4. ZEROPROOF20

Information (laws, penalties, statistics) and resources (videos, new stories) for each of these programs are available on the NMDOT's website.

Based on population, fatality, and crash data, the NMDOT's Traffic Safety Division has provided behavior grants to support safety programs and initiatives in the Santa Fe region. This includes grants to the three law enforcement agencies (Santa Fe

County Sheriff's Office, City of Santa Figure 10. NMDOT ENDWI Campaign (Source: NMDOT, 2022)

Fe Police Department and Tesuque

Pueblo Police Department) within the region. The City of Santa Fe Police Department uses a data driven approach to direct their efforts. They develop real time enforcement areas using data from their Computer Aided Dispatch (CAD) system and crash reports.

## Impaired Driving.

Impaired driving laws in New Mexico are exceptionally strong. These include mandated ignition interlock installed on every vehicle driven by a convicted first or subsequent offender, license revocation, high Blood Alcohol Content (BAC) sanctions, mandatory jail time, and mandatory screening and treatment. In 2021, New Mexico passed legislation legalizing recreational use of cannabis by persons aged 21 years or older, which may create new safety challenges for the region.

NMDOT Traffic Safety Division utilizes evidenced-based, data-driven enforcement and high-visibility media and public awareness activities to support its Driving While Intoxicated (DWI) efforts and its ENDWI campaign.21

## Law Enforcement Liaisons (LEL):

NMDOT has three full time law enforcement liaisons (LEL) responsible for coordinating ENDWI activities with State, City, County, and Tribal law enforcement agencies. The Santa Fe region is part of the eastern region assigned to one LEL<sup>21</sup>.

### **DWI Enforcement:**

The City of Santa Fe Police Department and the County Sheriff's Office perform DWI enforcement and utilize local DWI grants. The County had the fourth highest number of DWI arrests statewide in 2019 and the City of Santa Fe had the second highest number of DWI arrests in the State. The City of Santa Fe Police Department prepares a monthly report by patrol area and shares with each patrol unit so that they can respond to areas of concern. The City of Santa Fe Police Department also includes an education and outreach component in their efforts. Their activities related to DWI checkpoints place an emphasis on education. In addition, representatives of the NMDOT Division of Traffic Safety will often come out to the checkpoints and distribute education pamphlets. The Santa Fe City Police Department also uses social media platforms to educate the public.

## **DWI Drug Courts:**

The region (Santa Fe County and the City of Santa Fe) has DWI drug courts which focus on alcohol and substance abuse as one way to address impaired driving. These courts serve as an alternative to imprisonment when

20 New Mexico DOT, Traffic Safety Division, ZEROPROOF, http://zeroproofnm.com/

21 NMDOT Traffic Safety Division, https://www.endwi.com/

convicted of impaired driving. This approach has been found to reduce relapse by as much as 50 to 60 percent and is less expensive than incarceration of the offender. The NMDOT's Traffic Safety Division directs NHTSA funding to provide training and travel for the Santa Fe County DWI/Drug Court team.

## **DWI Compliance Monitoring/Tracking:**

The NMDOT's Traffic Safety Division also pays for one full-time employee dedicated to supervising and monitoring eligible DWI offenders in Santa Fe County's DWI Compliance Monitoring/Tracking Program who are subject to ignition interlock restrictions. This project is focused on providing enhanced supervision of high-risk first-time offenders. NMDOT also funds a contract with



Mothers Against Drunk Driving (MADD) to gather information on impaired driving court cases in the region.

The Santa Fe region benefits from these programs as well as NMDOT's statewide DWI program activities.

## Occupant Protection.

New Mexico has a primary seat belt law and strong child safety seat laws. Observed seat belt use in New Mexico remains above 90 percent. NMDOT's Traffic Safety Division uses its SLODWN/BKLUP22 campaign (see Figure 11) for enforcement and outreach efforts to address speeding and seat belt use.

Santa Fe County Sheriff's Office, Santa Fe City Police Department and Tesuque Pueblo Police Department receive funds from NMDOT's Traffic Safety Division to support occupant protection activities. This includes participating in the 2022 Click It or Ticket National Enforcement Mobilization.

### **Child Safety Seats:**

<u>Safer New Mexico Now</u> 23 collaborates and supports NMDOT and the local agencies, stakeholders, and the citizens of New Mexico as well as the Santa Fe region to improve traffic safety through a variety of services related to child safety seats. These

Car seat fitting stations are currently operating in the region (City of Santa Fe) and offer appointments during regular hours of operation. These fitting stations serve at-risk populations which includes low-income families of all ethnic groups. The City participates in planned Child Restraint Inspection events. Child safety seat clinics are used to supplement the permanent fitting station activities and are on a "first come, first serve" basis. Virtual car seat checks are also available on a regular basis (<u>Safer New Mexico Now Calendar</u>)24 and can be attended through an appointment made online. The virtual car seat checks provide parents and caregivers of the region the opportunity to receive one-on-one education and instruction from certified child passenger safety

services include car seat fitting stations, clinics, training, and distribution of car seats.

<sup>22</sup> New Mexico DOT, Traffic Safety Division, SLODWN/BKLUP, https://www.slodwnbklup.com/

<sup>23</sup> Safer New Mexico Now, https://www.safernm.org/

<sup>24</sup> Safer New Mexico Now, Calendar of Events, https://www.safernm.org/calendar/

technicians on the proper selection, installation, and use of their car seats. Safer New Mexico Now also provides CPS certification training to law enforcement officers, fire and EMS personnel, health care professionals and other safety advocates.

New Mexico Child Safety Seat Distribution Program 25 distributes child safety seats to low income families throughout the Santa Fe region and New Mexico.

## Distracted Driving.

New Mexico prohibits all drivers from texting or typing on handheld mobile devices, including web site and navigation app use. Drivers may use a hands-free device to talk, except where prohibited by local ordinance. The New Mexico legislature added "Driver Inattention (includes cell phone/texting)" to the Uniform Crash Report as a contributing factor of crashes. This includes activities such as failing to stop or yield. This change allows for more accurate reporting and identification of distracted driving-related crashes. NMDOT's Traffic Safety Division's JUST DRIVE 26 (see Figure 12) campaign provides for enforcement and outreach to discourage distracted driving.

The City of Santa Fe Police Department participates in grants related to distracted driving and cell phone use. A challenge related to enforcement of distracted driving is that the officer must observe the use of a cell phone, and because most vehicles have tinted windows, it is Figure 12. NMDOT's JUST DRIVE address distracted difficult to identify this violation. Search warrants to verify that someone was using their phone are only issued when a crash results in a fatality.



driving (Source: NMDOT, 2022)

## Speeding.

<sup>25</sup> Safer New Mexico Now, Child Safety Distribution Program, https://www.safernm.org/car-seat-safety/newmexico-child-safety-seat-distribution-program/

<sup>26</sup> New Mexico DOT, JUSTDRIVE, https://www.dntxtjustdrive.com/

Addressing speeding in the region is accomplished through a variety of efforts. The City of Santa Fe Police Department have speed complaints from the public which frequently are related to speeding in those neighborhoods that have vehicles pass through to other areas of the City. The City of Santa Fe Police Department installs a small electronic device with radar capabilities and collects and evaluates data (the number of vehicles and speed (average, low, and high)). These are not used for speed enforcement but for data collection only. The City of has installed radar speed feedback signs (see Figure 13) in a few locations and the Police Department recently began using speed trailers to collect data and provide messages and feedback to motorists on their speed. The City of Santa Fe Police Department indicated that drag racing on the City of Santa Fe streets has become an issue, due in part, to less traffic on the road during the COVID-19 pandemic period. They took proactive measures to address this, directing significant resources and deploying police units to stop it.



Figure 13. Radar speed feedback signs encourage speed limit compliance (Source: FHWA, 2022)

Other enforcement efforts by City of Santa Fe Police Department include participation in the *Back to School Blitz* and the *Spring/Fall Blitz* campaigns sponsored by the NMDOT's

Traffic Safety Division. These include sobriety check points and saturation patrols, speed enforcement, and check compliance of safety belt laws. Law enforcement continues to implement activities related to Safe Routes to School.

The SFMPO law enforcement stakeholders participate in New Mexico's 100 Days and Nights of Summer Campaign 27 which is a NMDOT Traffic Safety Division enforcement program that focuses on DWI and distracted driving. The NMDOT encourages local law enforcement agencies to conduct checkpoints and saturation patrols during a 100-day period from June through September.

The New Mexico Motorcycle Safety Program provides motorcycle safety training courses in the Santa Fe region. Several motorcycle dealerships sponsor a "Safety Days" during the summer months of 2022 to provide a fun opportunity for new and experienced motorcyclists to learn and refresh their riding skills and listen to motorcycle experts.

The City of Santa Fe Police Department also tracks crashes to identify high crash areas. Monthly reports are sent to the Chief of Police's office and leadership of the government body. This is a good resource that can be used for LRSP implementation, especially by a Santa Fe Metropolitan Safety Committee.

<sup>27</sup> Safer New Mexico Now, 100 Days and Nights of Summer Campaign, https://www.safernm.org/resources/enhanced-law-enforcement-campaigns-reports/

## **Data Analysis**

The data analysis which forms the basis of this LRSP used statewide crash data from the NMDOT's Safety Analysis Management System (SAMS) for the five-year period of 2015 to 2019. The analysis focused on the 1,664 miles of local roads in the region. The severity of a crash is based on the assessment of the responding law enforcement officer using the KABCO scale as follows:

- 1. Fatality (K)
- Suspected serious injury (A)
- 2. Suspected minor injury (B)
- 3. Possible injury (C)
- 4. Property damage only (O)

Analysis results for the five-year period indicate that a total of 8,927 reported crashes occurred on the local roads within the limits of the Santa Fe metropolitan region planning area. Of these crashes, 2,852 involved a fatality or injury. A total of 109 KA crashes resulted in 118 fatalities and serious injuries. Santa Fe County is one of the top six counties in New Mexico for fatal and serious injury crashes. The City of Santa Fe is one of the cities with the highest number of total crashes.

Safety data analysis identifies trends and proportions in the types of crashes, risk factors, and locations with higher proportion of fatal and serious injury crashes. The objective of the analysis is to identify road safety priorities, emphasis areas, strategies, and action items that can be implemented by the various stakeholders. The analyses used crash trees which are diagrams that illustrates the breakdown of crash data into more detailed categories that help identify factors for the systemic application of safety countermeasures. Crash maps assisted with identifying High Injury Network (HIN) corridors with higher concentration of fatal and injury crashes. Mapping of the equity areas allowed for a comparison with these HIN corridors.

### **Emphasis Area Analysis**

The data analysis considered the over-representation of major crash types and their relationship between each other to guide the selection of the LRSP emphasis areas. The emphasis areas identified in the 2021 New Mexico SHSP serve as a starting point for the analysis. This ensures that the LRSP aligns with the SHSP while also addressing the safety needs on the local roads within the Santa Fe metropolitan region. The New Mexico SHSP identifies intersection-related crashes as an emphasis areas based on statewide analysis indicating that these crashes represent 40 percent of the fatalities and 61 percent of the serious injuries. NMDOT's roadway inventory database does not have specific codes or identifiers for intersections, making it difficult to perform network level analysis. NMDOT is working to address this challenge.

While the analysis period for this LRSP is 2015 to 2019, the 2021 New Mexico SHSP uses the period of 2013 to 2019. The two outside years of crash data do not significantly impact the comparison of the statewide fatality and serious injury numbers with the values for the Santa Fe metropolitan region. Local intersection data was not available for analysis for the plan. However, based on the statewide numbers, past analysis efforts by the SFMPO, the urban environment of the Santa Fe metropolitan region, the number of intersections, and the interaction between different road users, the SFMPO decided intersections are a significant focus area.

Table 2 shows distribution of crashes and injuries that have occurred on the local roads within the limits of the Santa Fe metropolitan region planning area considering the emphasis areas from the 2021 New Mexico SHSP,

except for intersections. These reflect major crash types or attributes that are likely to be a cause of fatal and serious injury crashes. Those emphasis areas that exceed the statewide average are bolded.

Table 2. SFMPO Local Roads Traffic-Related Crashes and Injuries 2015-2019 (Source: NMDOT 2021)

	SFMPO LOCAL ROADS (2015-2019)									STATEWIDE (2013-2019)	
	CRASHES							IRIES	INJURIES		
Emphasis Area/ Attribute	Percent of KA (109)	Number of KA (109)		Number of KABC (2,852)	Percent of All (8,927)	Number of All (8,927)		Number of KA Injuries (118)		Number of KA Injuries, NMSHSP (10,911)	
Distracted Driving	32%	35	34.0%	970	31%	2,736	32%	38	47%	5,071	
Streets and roads Departure	21%	23	11%	316	13%	1,187	23%	27	42%	4,598	
Impaired Driving	28%	31	7%	212	6%	508	30%	35	25%	2,719	
Restraint Not Used	23%	25	8%	234	5%	408	22%	26	19%	2,019	
Motorcycles	17%	18	5%	129	2%	177	16%	19	13%	1,437	
Older Drivers (65 years of age and older)	25%	27	25%	702	25%	2,187	24%	28	17%	1,889	
Younger Drivers (15- 20 years)	17%	18	16%	462	16 %	1,462	19%	22	17%	1,854	
Speeding	19%	21	9%	257	8 %	737	20%	23	35%	3,831	
Pedestrians	18%	20	5%	133	2%	140	17%	20	11%	1,211	
Bicyclists	7%	8	4%	114	1%	124	7%	8	2%	211	
Inclement Weather	5%	5	6%	165	7%	585	4%	5	9 %	1,013	
Heavy Vehicles	4%	4	2%	55	3%	280	3%	4	9%	990	
Sleepy/Fatigued	1%	1	1%	15	1%	33	1%	1	3%	354	
Wildlife Animal	1%	1	0.1%	4	1%	54	1%	1	1%	74	

Each of the potential emphasis categories represents at least 15 percent of the total fatalities and serious injuries on the local roads in the region: distracted driving, streets and roads departure, impaired driving, restraint not used, motorcycles, older drivers (65 years of age and older), younger drivers (15-20 years), speeding, and pedestrians. All of these except for streets and roads departure and speeding exceed the statewide average. Crashes involving distracted driving and impaired driving represent the highest number of fatalities and serious injuries in the Santa Fe region. Based on population size and crash data analysis, the NMDOT's Traffic Safety Division identifies Santa Fe County as high risk for crashes involving impaired driving, unbelted vehicle occupants, distracted driving, and speeding. Bicyclists only represent 7 percent of the total fatalities and serious injuries on the local streets and roads s in the region. However, these exceed the statewide average and the SFMPO anticipates a substantive increase in biking in the region.

The safety stakeholders selected the following nine LRSP emphasis areas based on the data presented in Table 2 and local expertise.

- 5. Roadway Departure.
- 6. Distracted Driving.
- 7. Impaired Driving.
- 8. Speeding.
- 9. Intersections.
- 10. Older Drivers.
- 11. Younger Drivers.
- 12. Pedestrians.
- 13. Bicyclists.

The emphasis area matrix shown in Table 3 illustrates the relationship between the selected LRSP emphasis areas, except for intersections. This relationship allows stakeholders to leverage resources and address multiple emphasis areas simultaneously. The matrix is read by selecting the primary emphasis area in the left column and then by reading across the row to determine that portion of fatal and serious injuries associated with the other emphasis areas. For example, looking in the left column at roadway departure emphasis area and across to impaired driving indicates that 56 percent of the streets and roads departure fatalities and serious injuries involve impaired driving.

Table 3. Santa Fe Metropolitan Region LRSP Emphasis Area Matrix, Number of KA Injuries 2015 to 2019.

KA Injuries (118)											
(2015-2019)											
Emphasis Area	<b>Distracted Driving</b>	Streets and roads Departure	Impaired Driving	Older Driver	Younger Driver	Pedestrian	Bicyclist	Speeding	Total KA	% of Total KA	
Distracted Driving		28%	28%	24%	10%	7%	3%	24%	38	32%	
Roadway Departure	32%		56%	24%	20%	0%	0%	36%	27	23%	
Impaired Driving	29%	50%		18%	29%	14%	0%	39%	35	30%	
Older Driver	27%	23%	19%		4%	4%	8%	8%	28	24%	
Younger Driver	21%	36%	57%	7%		0%	7%	50%	22	19%	
Pedestrian	25%	0%	50%	13%	0%		0%	13%	20	17%	

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Bicyclist	17%	0%	0%	33%	17%	0%		0%	8	7%
Speeding	39%	50%	61%	11%	39%	6%	0%		23	20%

Similar to statewide trends, the LRSP emphasis areas for distracted driving, roadway departure, impaired driving, and speeding are closely related. The implementation of recommended strategies and action items should consider this relationship.

When looking at each of the emphasis areas individually, more older drivers are distracted than young drivers. For younger drivers, impaired driving and speeding as well as roadway departure-related crashes are the major contributing factors of the fatalities and serious injuries.

Santa Fe County is one of 33 counties in New Mexico and is one of 6 counties with the highest number of alcohol-involved fatalities and serious injuries. It also has one of the highest crash rates. Most of these crashes in rural areas occurred on non-interstate roads in dark-not lighted conditions. The urban area alcohol-involved crashes occurred mostly in dark lighted or not-lighted conditions. Most alcohol-involved crashes occurred on the weekend (Friday through Sunday), primarily during the time periods of 6 pm to 3 am.

Pedestrians and bicyclists are the most vulnerable users of the system and are at greatest risk of death or serious injury when involved in a crash. Higher speeds increase the severity of injuries should a crash occur. The 2021 NMDOT Pedestrian Safety Action Plan (PSAP)28 identifies the top three contributing factors for pedestrian-involved crashes as pedestrian error (25 percent), alcohol/drug involvement (24 percent), and driver inattention (18 percent). This aligns with the data analysis results for the region except that alcohol was a factor in over 50 percent of the pedestrian fatalities and serious injuries and 25 percent involved distracted driving. For purposes of coding crashes, New Mexico classifies pedestrian error as the pedestrian failing to yield to right of way, crossing outside of a crosswalk, and other actions.

The number of bicyclists involved fatalities and serious injuries in the Santa Fe metropolitan region is much smaller (8) than those of the other emphasis areas. However, with such a robust bicycle network, and a substantial increase in bicycle use anticipated, ensuring that these users can operate safely on the network is essential. An analysis of bicycle crashes performed by the City of Santa Fe Police Department for the period of 2015 to 2018 indicated that many of the crashes documented occurred on higher speed and higher volume roads, primarily arterials, and at intersections. The main contributing factor was a failure to yield by both motorists and bicyclists with inattention as the second leading cause.

Although occupant protection and motorcycles are not included as LRSP emphasis areas, appropriate strategies and action items can be implemented with other LRSP emphasis areas (e.g., roadway departure, impaired driving) based on their relationship. In 2019, five counties including Santa Fe County accounted for over 45 percent of the New Mexico's unbelted crash fatalities and serious injuries. Santa Fe County represented 19 percent of the total for these five counties. Most unrestrained occupant fatalities and serious injuries occurred on rural non-interstate roads and on urban roads. Drivers on local roads had the lowest observed seatbelt use percentages, regardless of type of vehicle driven. The lowest observed belt use was by pickup truck occupants on local roads.

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<sup>28 2021</sup> New Mexico Department of Transportation, 2021 Pedestrian Safety Action Plan (PSAP), walksafenewmexico.com

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Figure 14 maps the locations of fatal and serious injury crashes involving vehicles occupants not using the proper occupant restraints. Several of these occur on Cerrillos Road, Airport Road, and Rodeo Road. Integration of activities that encourage proper use of occupant protection with other LRSP emphasis enforcement and outreach activities will maximize the safety benefits of these efforts.



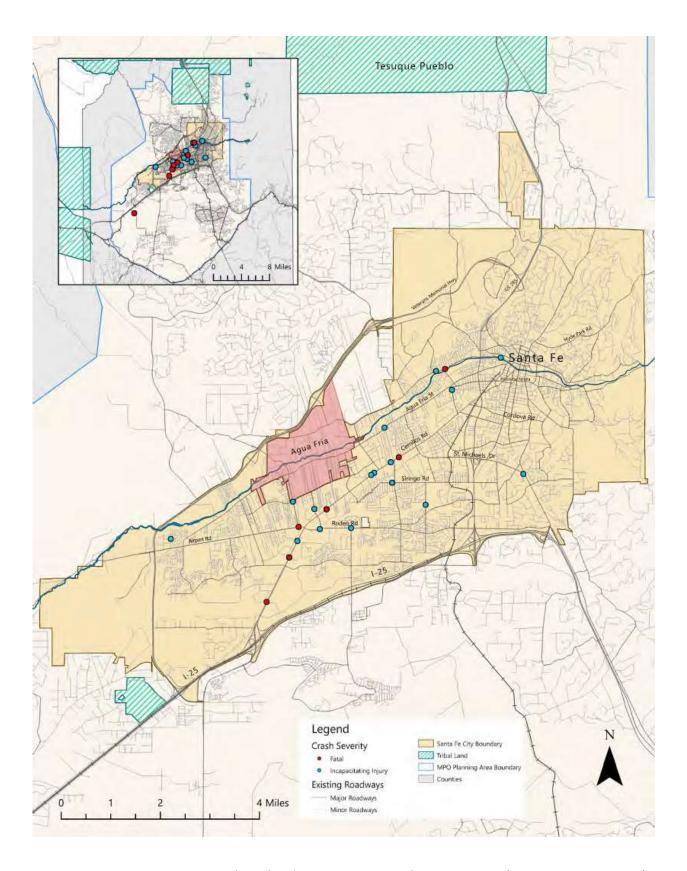


Figure 14. Occupant Restraint Not Used Fatal and Serious Injury Crashes, 2015-2019 (Source: NMDOT, 2021)

Figure 15 maps the locations of fatal and serious injury crashes involving motorcycles. Cerrillos Road has the largest number of these crashes. Similar to occupant protection, safety activities should consider motorcycle safety.

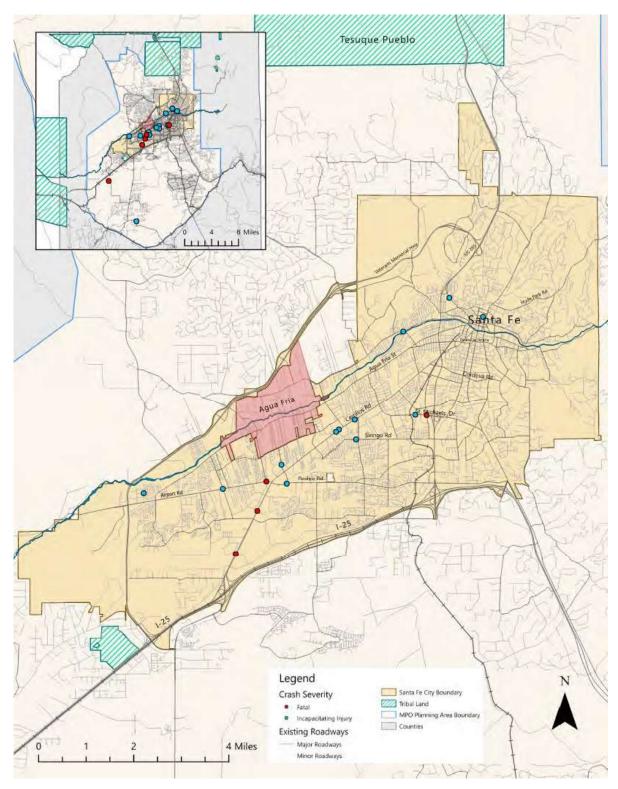


Figure 15. Motorcycle-Related Fatal and Serious Injury Crashes, 2015-2019 (Source: NMDOT, 2021)

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## High Injury Network (HIN)

The High Injury Network (HIN) are those streets and roads s that have a higher concentration of fatal and serious injury crashes than other streets and roads s in the MPO region. An analysis of the data identified 62 street and road segments representing 114 miles of local roads in the Santa Fe region as HIN (see Figure 16). This accounts for almost seven percent of 1,664 miles of local roads in the region, 83 percent (91) of the fatal and serious injury (KA) crashes, and 78 percent (567) of the KAB crashes. Table 5 in the Appendices provides a list of those streets and roads identified as HIN, the segment lengths, and the number of crashes by severity.

An evaluation of the 114 miles of HIN resulted in (?) a subset of 16 corridors listed in Table 4 as priority HIN. These priority corridors consist of approximately 44 miles (39 percent) of the HIN, or nearly 3 percent of the 1,664 miles of local roads in the region. Seventy percent of the fatal and serious injury (KA) crashes and 60 percent of the KAB crashes occurred on these priority HIN corridors. Table 4 includes the limits, length, and percentage of KA and KAB crashes for each priority HIN corridor segment.

The priority HIN corridors are primarily Urban Principal and Minor Arterials. Statewide, for New Mexico, urban principal arterials have the highest number of fatalities and serious injuries, with urban minor arterials having the second highest number of serious injuries. Cerrillos Road has the highest concentration of fatal and serious injury (KA) crashes (27 percent) and KAB crashes (21 percent). Airport Road has the second highest at 12 percent of KA crashes and 10 percent of the KAB crashes. Saint Michaels Drive and West Alameda Street have larger percentages of KA crashes than the remaining priority HIN corridors. The top 44 miles of the HIN should be priority for of safety improvements with Cerrillos Road, Airport Road, Saint Michaels Drive and West Alameda Street having the highest priority. This is further supported based on past analysis performed by the SFMPO for the MTP of crashes involving intersections, pedestrians, and bicyclists.

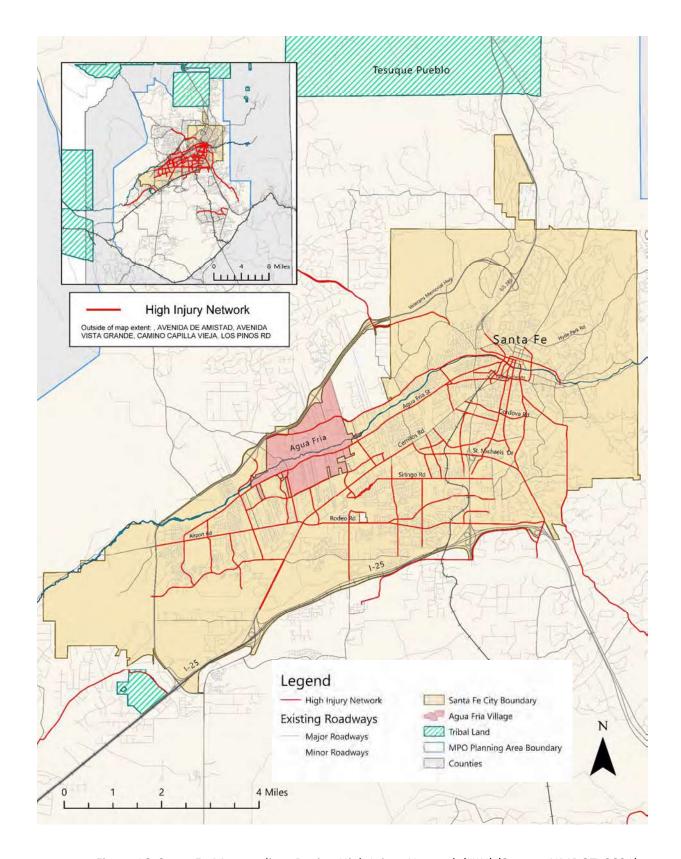


Figure 16. Santa Fe Metropolitan Region High Injury Network (HIN) (Source: NMDOT, 2021)

Table 4. Priority High Injury Network (HIN) Corridors (Source: NMDOT, 2022)

HIN Corridor	Start	End	Miles K	A	В	L	Locality KA	% of Locality KAB Crashes
Agua Fria Rd	Airport Rd	Siler Rd	4.01	0	2	24	2%	4%
Agua Fria St	Siler Rd	Alameda St	3.62	0	2	23	2%	4%
Airport Rd	Veterans Memorial Hwy	Cerrillos Rd	3.06	3	10	62	12%	10%
Camino Carlos Rey	Calle De Oriente Norte	Governor Miles Rd	1.88	2	2	10	4%	2%
Cerrillos Rd	Beckner Rd	St. Michaels Dr	5.92	10	20	121	28%	21%
Old Pecos Trail (N)	St. Michaels Dr	Old Santa Fe Trail	1.60	0	2	7	2%	1%
Old Pecos Trail (S)	St. Michaels Dr	W Old Agua Fria Rd	1.97	0	3	14	3%	2 %
Paseo De Peralta	S St. Francis Dr	Washington Ave Bishops Lodge Rd	1.92	1	3	14	4%	3%
Richards Ave	Historic Route 66	Rufina St	2.33	1	2	22	3%	4%
Rodeo Rd	Cerrillos Rd	Old Pecos Trail	4.35	1	4	38	5%	6%
Saint Michaels Dr	Cerrillos Rd	Old Pecos Trail	2.34	2	6	48	7%	8%
Siler Rd	Agua Fria St	Cerrillos Rd	0.63	1	3	17	4%	3%
South Meadows Rd	Alameda Frontage Rd	Jaguar Rd	2.41	0	3	12	3%	2%
W Alameda St	Via Abaio	Don Gaspar Ave	5.25	1	6	20	6%	4%
Zafarano Dr	Rufina St	Rodeo Rd	0.79	0	3	18	3%	3%
W. Zia Rd	Rodeo Rd	Botulph Rd	2.38	0	2	13	2%	2%

For intersections, previous analysis by SFMPO determined that between 2010 and 2019, 69 percent of all crashes on the state and local streets and roads network in the Santa Fe metropolitan planning area occurred at or within 100 feet of an intersection. These crashes occurred at 37 percent of the intersections. During this same period, 150 fatal crashes occurred on the state and local streets and roads network. Cerrillos Road, Airport Road, and Saint Michaels Drive are principal arterials and are the primary corridors for intersection-related fatal crashes. These corridors are multi-lane facilities with heavier traffic volumes and higher operating speeds.

The 2021 New Mexico Pedestrian Safety Action Plan also identifies Cerrillos Road, Airport Road, and Saint Michaels Drive as pedestrian-involved high crash corridors. Most of these crashes occurred at intersections. The statewide analysis results using data from 2012 to 2018 indicate that most of the pedestrian-involved crashes occurred on four-lane roads with a center median or turn lane and a posted speed limit of 35 mph to 45mph. Many of these pedestrian-involved high crash corridors have longer distances between the signalized intersections and are surrounded mostly by low- to mid-density commercial development. These factors may encourage pedestrians to cross mid-block and contribute to an increased risk of pedestrian crashes. Similarly,

crashes involving bicyclists occurred primarily on principal arterials such as Cerrillos Road, Airport Road, and Saint Michaels Drive.

A safety field review of the priority HIN corridors including Old Santa Fe Trail provided insight into risk factors and potential safety strategies that could be implemented systemically to address safety of all users and the various facilities. During the field review, vehicles were observed traveling faster than the posted speed limit. Use of radar speed indicator signs on Cerrillos Road, Airport Road, and Saint Michaels Drive, as a minimum, will increase motorist awareness and compliance of posted speed limits, especially when combined with enforcement.

The intersection of Saint Michaels and South Pacheco Street shown in Figure 17 is like many along the principal arterials in the region. The intersection is very wide with multiple lanes, requiring pedestrians to walk a longer distance to cross. High visibility crosswalks and stop bars are not present and reflective backplates on not on the signal heads. This was similar to other locations along the priority HIN corridors. These low-cost safety countermeasures increase the visibility of the intersection as well as the driver expectation for pedestrians and are effective at reducing fatalities and serious injuries.



Figure 17. Multi-lane, urban signalized Intersection of St. Michaels Drive and South Pacheco Street (Source: FHWA, 2022)

The safety field review of the HIN also noted the need for wider or separated pedestrian and bicycle facilities in some areas, improved connectivity of these facilities, and enhanced visibility of the existing traffic control devices and crosswalks at intersections across the network. Implementing strategies associated with these three key findings addresses crashes related to intersections, pedestrians, bicyclists, older drivers, and younger drivers.

Improved delineation of the bicycle lanes as well as separation of bicycle lanes from the vehicle travel lane, especially on higher speed principal arterials, have the potential to improve the safety of bicyclists. Improved connectivity of bicycle accommodations across the network also provides improved safety, especially as growth occurs in the region.

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Consistent application of chevrons and advance warning signs on rural and urban streets and roads s can help reduce streets and roads departure crashes. Old Santa Fe Trail (see Figure 18) is a two-lane streets and roads that has rural characteristic with several curves along the corridor. Some curves have chevrons and advanced warning signs while other curves along the corridor have similar characteristics but do not have any signing.

The safety field review also identified an opportunity to enhance uncontrolled pedestrian crossings using a pedestrian actuated Rectangular Rapid Flashing Beacon (RRFB). The RRFB enhances pedestrian conspicuity and increases driver awareness of these crossing locations.



Figure 18. Old Santa Fe Trail is a two-lane roadway that has rural design features and several curves along the corridor. Chevrons and advanced curve warning signs are not located

## **Equity Analysis**

The Santa Fe metropolitan region is comprised of a racial/ethnic and economically diverse population. It is essential to consider these various populations and communities during the planning process to address potential impacts and facilitate the equitable distribution of safety improvement in the region. During the development of the MTP, the SFMPO studied the population, household, and demographic data and produced a series of maps to graphically present the composition of the region. Focusing on equity in the LRSP development process improves the ability to respond to the safety needs of the various communities. Superimposing the HIN on the maps for the census block groups showing communities of color, low-income households, and zero-vehicle households allows for comparison of these concentrated areas. Many of these areas overlap with some streets and roads s identified as HIN. Addressing safety on these corridors can consider the specific needs of typical underserved populations and communities.

### **Racial or Ethnic Minorities**

Figure 18 shows the areas within the region that have the highest concentration of communities of color. These occur on the western part of the City of Santa Fe and around the Santa Fe Municipal Airport. Over 75 percent of residents in these areas are people of color. The southwest part of the region and near the Pueblo of Tesuque also have higher concentrations of communities of color.

### Low Income Households

Figure 19 shows the areas of low-income households in the region. These closely overlap with the areas that have higher concentrations of people of color.

### Zero-Vehicle Households

Households may not have vehicles due to a variety of reasons including income, personal preference, or disabilities. These zero-vehicle households, as shown in Figure 20, are concentrated in the highly urbanized area of the City and the southwest portion of the City.

### Older and Younger Populations

Those citizens 65 years of age and older represent over 20 percent of the population. These individuals primarily live in the northern part of the region and in the historic part of the City of Santa. The younger population lives western part of the urban center, primarily due to lower housing costs.

## **Disabled Population**

Approximately 19,000 people, or 13 percent of the total population, in the Santa Fe region have a disability related to hearing, vision, cognition, and ambulation. This disabled population have the highest concentration in the southern part of the region and the south and east portions of the center of the City of Santa Fe.

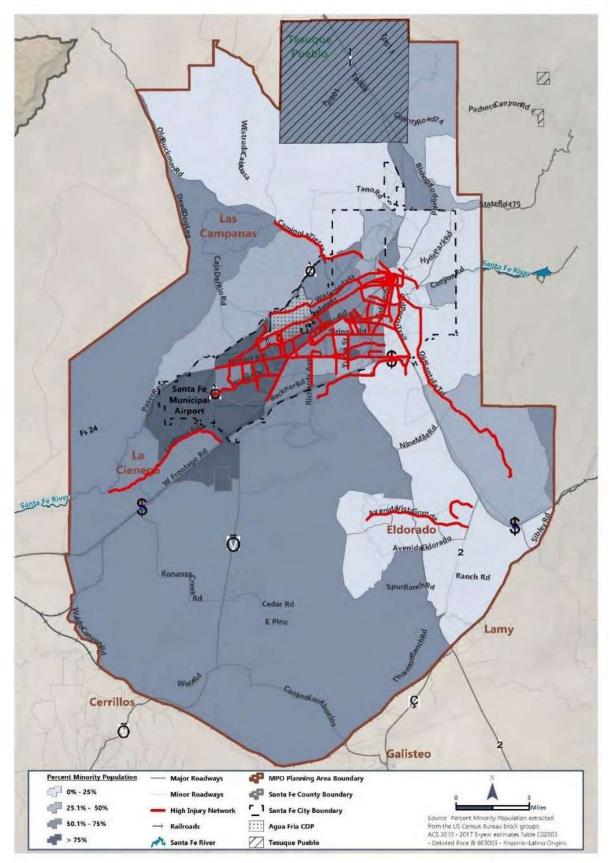


Figure 19. Communities of Color and Corresponding SFMPO High Injury Network (Source: 2019 SFMPO MTP,

## NMDOT 2022)



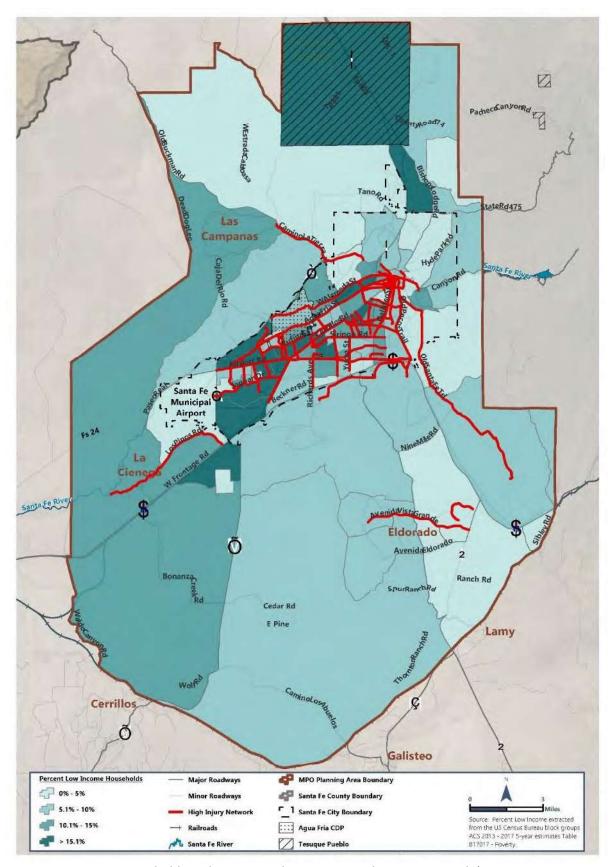


Figure 20. Low Income Households and Corresponding SFMPO High Injury Network (Source: 2019 SFMPO MTP,

NMDOT, 2021)



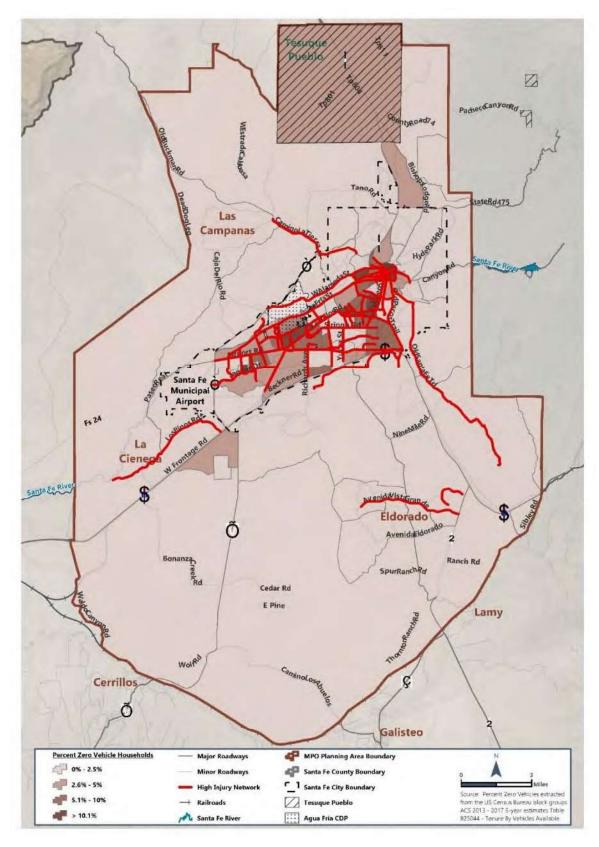


Figure 21. Zero Vehicle Households and SFMPO High Injury Network (Source: SFMPO and NMDOT, 2022)

**-** .

## Systemic Safety Analysis

Crashes are random in nature. A system-based approach looks beyond crashes at a specific location, evaluates risk across an entire street and road system, and proactively treats locations with identified risk where crashes have not yet occurred. Systemic safety analysis evaluates crash data to identify key combinations of factors that contribute to predominant crash types and guides the selection and systemic implementation of low-cost proven safety countermeasures. This proactive technique complements traditional site-specific analysis and supports the Safe System approach.

The systemic safety analysis used crash trees (see Figures 34 - 44 in the Appendices) for each LRSP emphasis areas to evaluate the local streets and roads within the limits of the Santa Fe metropolitan region. A safety field review supplemented the systemic and HIN analysis to identify risk factors that may contribute to the potential for fatal and serious injury crashes.

Roadway departure crashes occur after a vehicle crosses an edge line or a center line, or otherwise leaves the traveled way. These crashes include those involving hitting fixed objects as well as overturn crashes off streets and roads. The road departure crash tree (see Figure 34 in the Appendices) indicates that Over 80 percent of these crashes occurred on urban streets and roads, of which 35 percent involved curves. Nearly 60 percent of the fatal, serious injury, and possible injury roadway departure-related crashes involved curves on the rural local roads in the region. The largest number of roadway departure injury crashes involve driver impairment with nearly 70 percent occurring during dark conditions. A review of the crash tree for speeding (see Figure 37) indicates that all of the fatal and serious injury crashes and a majority of those that resulted in a possible injury occurred on urban roads in the region. Of these crashes, 40 percent involved curves. Chevrons, advanced signing, and higher visibility pavement markings are countermeasures that help keep motorists in their lane of travel, especially at night.

Distracted driving includes driver inattention, disregarding traffic signal, or passing a stop sign. The distracted driving crash tree (see Figure 35 in the Appendices) indicates the majority of the fatal and injury crashes involving distracted driving occur on urban local roads during daylight conditions across all age groups. Additionally, a notable number of older drivers over the age of 65 are involved in distracted driving crashes. The safety field review observed that some motorists drive faster than the posted speed limit. Speeding reduces the ability for motorists to react quickly to avoid a crash, especially when distracted.

The majority of fatal and injury crashes involving older drivers (65 years of age and older) (see Figure 38 and Figure 39 in the Appendices) occur during daylight conditions. Three primary factors for these crashes are following too closely, failure to yield the right of way, and driver inattention. Mapping of the older driver fatal and serious injury crashes (see Figure 30) indicates a higher concentration of intersection-related crashes on corridors such as Cerrillos Road, Rodeo Drive, Agua Fria Street, and Alameda Street. Properly judging gaps in traffic for turning movements is a common contributing factor related to crashes involving older drivers. Assessing signal timing at intersections with high turning movements on these corridors would determine applicability to addressing older driver crashes. The primary factors related to younger drivers (aged 15-20 years) (see Figure 40) are impaired driving, following too closely, failure to yield the right of way, and driver inattention in urban areas.

Understanding trends such as time of day and highest months for crashes can guide systemic application of strategies that target users or events. Figure 22 shows the fatal and serious injury (KA) and total injury (KABC) crashes for the five-year analysis period. During this period, the highest number of total injury (KABC) crashes

occurred between August and October. The months of March and June had the highest number of fatal and serious injury crashes.

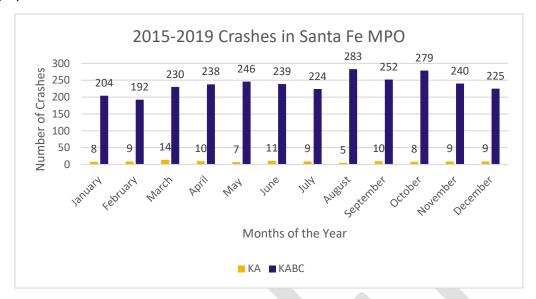


Figure 22. Injury crashes in Santa Fe metropolitan region by month, 2015-2019 (Source: NMDOT, 2021)

Figure 23 shows the fatal and serious injury (KA) crashes and total injury (KABC) crashes for the five-year analysis period. A large differential in frequency of fatal and all injury crashes on local roads occurs at 7 am and after 7pm. These KABC crashes peak at 6pm. This aligns with the typical work schedule and the commuter traffic patterns. Most of the fatal and serious injury (KA) crashes occur between 6 am and 10 pm, with a higher concentration occurring from 4pm to 10 pm and peaking at 5pm to 6 pm. The later hours align with impaired driving crashes that result in a fatality or serious injury.

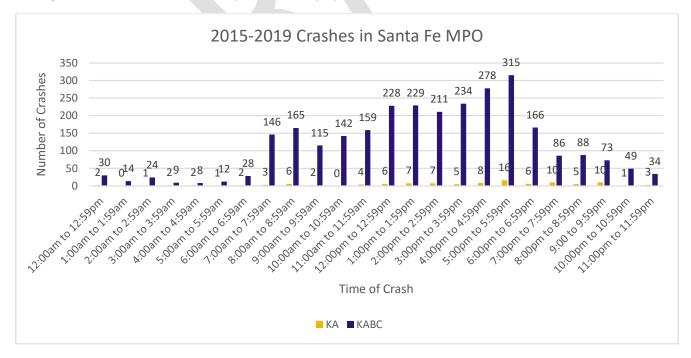


Figure 23. Injury crashes in Santa Fe metropolitan region by time of day, 2015-2019 (Source: NMDOT, 2021)

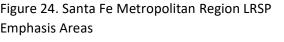
## **Emphasis Areas**

The Santa Fe Metropolitan Region LRSP contains the nine emphasis areas shown in Figure 24 which offer the greatest opportunity to achieve significant reductions in traffic-related fatal and serious injury crashes and meet the safety goal of the LRSP. The five elements of the Safe System approach provide the framework into which each of these emphasis areas are integrated.



**Pedestrians** 

**Bicyclists** 

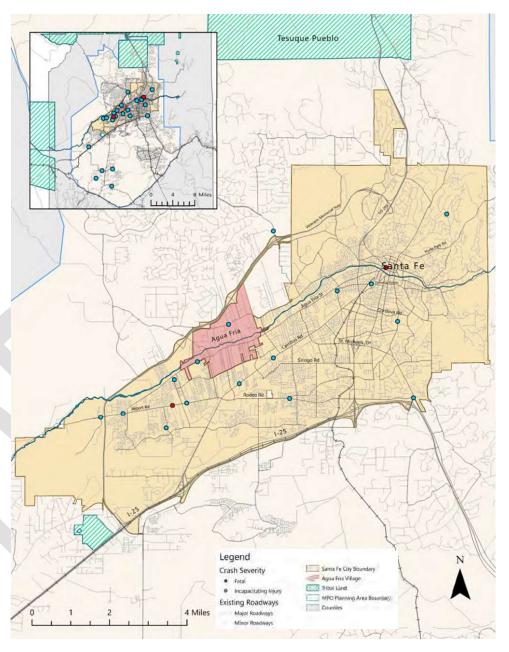


## Roadway Departure

As defined in the NMSHSP, road departure crashes are those that occur after a vehicle crosses an edge line, road edge, or a centerline, or otherwise leaves the travel lane 29. These crashes include head-on, fixed objects, overturned, rollover, sideswipe opposite direction, and sideswipe same direction. Of the total number of roadway departure crashes that occurred on the local streets and roads in the Santa Fe region, 23 resulted in a fatal and serious injury, and 293 resulted in a possible injury.

A review of the crash data indicates a majority of those occur during dark conditions. **Impaired** driving, distracted driving, and speed are the three major contributing factors to fatalities and serious injuries involving roadway departure crashes. Curves represent 43 percent of fatal and serious injury crashes. Figure 25 maps the location of the fatal and serious injury (incapacitating injury) crashes.

Wider pavement markings, chevrons, advance warning signs, and increasing the size and retro-reflectivity signs are low cost safety countermeasures that address roadway departure crashes. These engineering related countermeasures combined with enforcement and education strategies can help reduce roadway departure crashes.



<sup>29</sup>New Mexico Department of Transportation, New Mexico 2021 Strategic Highway Safety Plan Safe Mobility for Everyone, bc275f2c-9ec3-406a-94fa-6be73e85187f (realfilef260a66b364d453e91ff9b3fedd494dc.s3.amazonaws.com)

Figure 25. Roadway Departure Fatal and Serious Injury Crashes, 2015-2019 (Source: NMDOT, 2022)

## **Distracted Driving**

Distracted driving is any activity that takes a person's attention away from the primary task of driving. This includes activities such as use of cell phones and other electronic devices, talking and eating. Crashes involving distracted driving are the leading cause of fatalities and serious injuries in the Santa Fe region. These exceed the statewide average for New Mexico. The State Legislature changed the law to include "driver inattention" to the crash report. Driver inattention may result in failing to yield at a stop at an intersection. Combined with speeding, these crashes can result in fatalities and serious injuries of all types of road users.

Many of these crashes occur on urban roads. As shown in Figure 26, Cerrillos Road, Airport Road, and Agua Fria Street are the primary streets and roads where these crashes have resulted in fatalities and serious injuries. A review of the crash data indicates that most of the crashes involving distracted driving occur during daylight conditions.

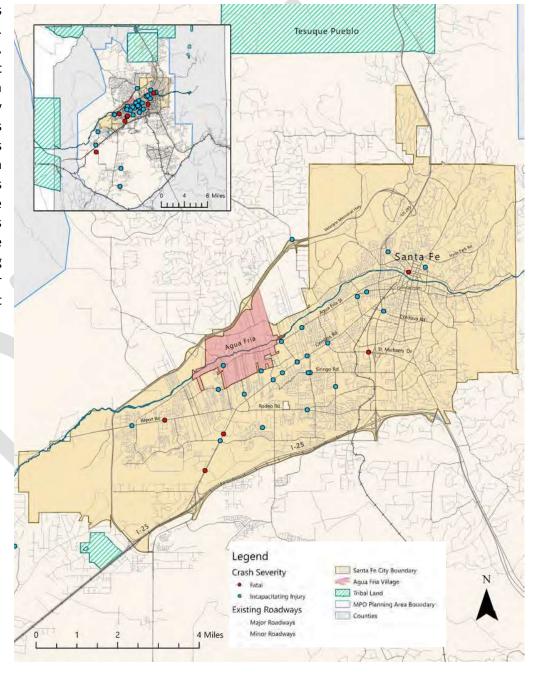


Figure 26. Distracted Driving-Related Fatal and Serious Injury Crashes, 2015-2019 (Source: NMDOT, 2022)

#### **Impaired Driving**

New Mexico defines an impaired driving-related crash as a crash where drugs/alcohol was a contributing factor, a person in control of a motor vehicle, a bicyclist, or a pedestrian was suspected of being under the influence of drugs/alcohol, or a Driving While Intoxicated (DWI) citation was issued to the person30. Impaired driving is the second leading cause of traffic fatalities and serious injuries in the Santa Fe region and exceeds the statewide average for fatalities and serious injuries.



<sup>30</sup> https://gps.unm.edu/gps\_assets/tru\_data/Crash-Reports/Community-Reports/2020-community-reports/State\_NewMexico.pdf

Roadway departure, speeding Tesuque Pueblo and distracted driving are the major contributing factors for impaired driving-related traffic fatalities and serious injuries. Impaired driving represents almost 60 percent of the fatalities and serious injuries involving younger drivers (15-20 years). It is a factor in 50 percent of the pedestrian related fatalities and serious injuries. As shown on Figure 27, Santa Fe a majority of these crashes occur on Cerrillos Road, Airport Road, and Saint Michaels Drive. Legend Crash Severity Santa Fe City Boundary Agua Fria Village · Fatal Tribal Land Incapacitating Injury MPO Planning Area Bou **Existing Roadways** Major Roadways Minor Roadways a they atom

Figure 27. Impaired Driving Fatal and Serious Injury Crashes, 2015-2019 (Source: NMDOT, 2022)

#### Speeding

As speeds increase, the risk of death and serious injury dramatically increases, especially when pedestrians and bicyclists are involved. Higher speeds require longer stopping distances and influence the ability of drivers to control their vehicle and avoid a crash. Of the total number of speed-related crashes, 21 result in a fatal or serious injury and 236 result in possible injury. The majority of these crashes occur in urban areas.

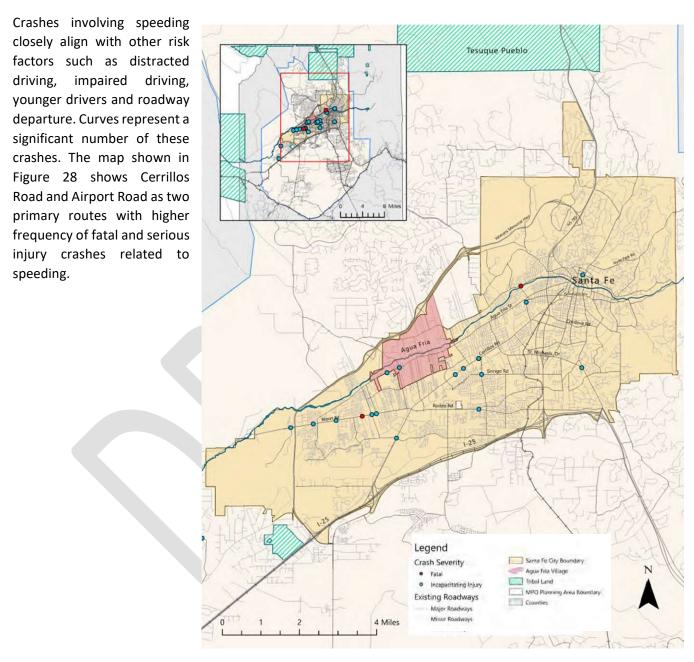


Figure 28. Speeding-Related Fatal and Serious Injury Crashes, 2015-2019 (Source: NMDOT, 2022)

#### Intersections

Intersections create natural points of conflict due to the various types of maneuvers (turning and crossing) as well as the various types of users (vehicles, pedestrians, bicycles). Because of these factors, greater demand is placed on road users when making decisions. Pedestrians and bicyclists are at greater risk at these locations for crashes. An analysis of the state and local intersections from 2010-2019 within the region by SFMPO identified that 65 percent of the intersection related crashes occurred at 35 percent of the intersections. This represented

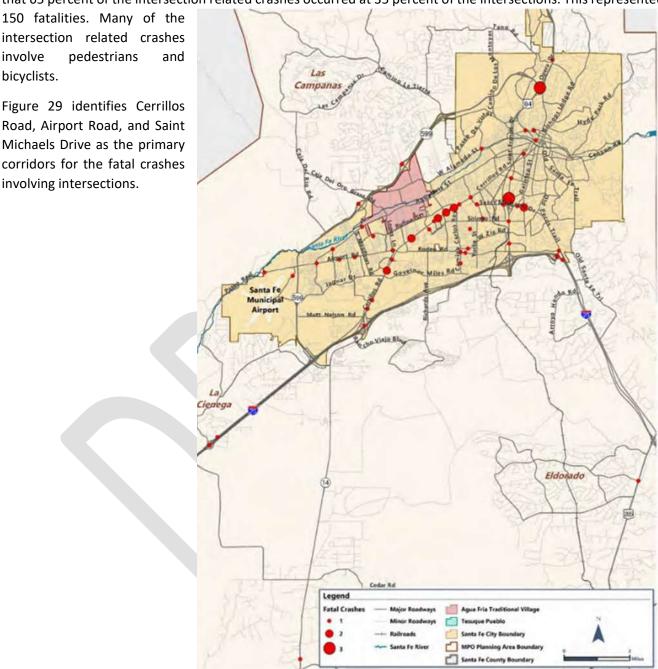


Figure 29. Intersection-Related Fatal Crash Locations, 2010-2019 (Source: SFMPO2020-2045 MTP)

#### **Older Drivers**

The Santa Fe region has an aging population. Crashes involving older drivers (65 years of age and older) represent 25 percent of the fatalities and serious injuries. This exceeds the statewide average. Three primary factors related to these older drivers are following too closely, failure to yield the right of way, and driver inattention. Figure 30 indicates many of these crashes occur at intersections.

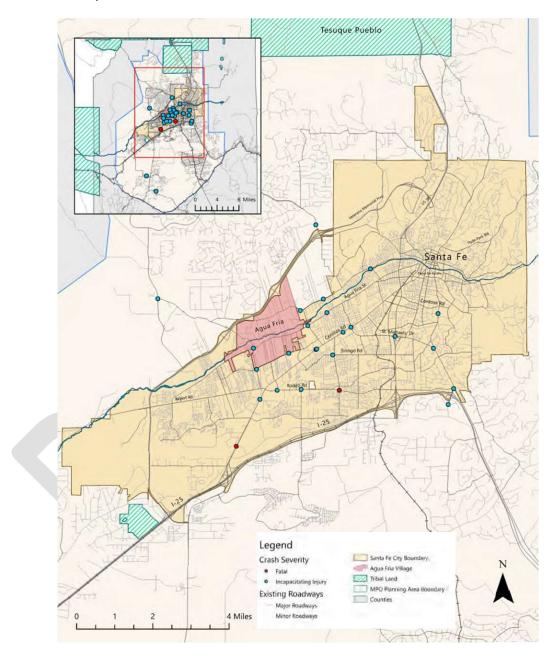


Figure 30. Older Drivers Fatal and Serious Injury Crashes, 2015-2019 (Source: NMDOT, 2022)



#### **Younger Drivers**

Crashes involving younger drivers (15-20 years) represents 17 percent of the fatalities and serious injuries in the region. This exceeds the statewide average. The primary factors related to these younger drivers are impaired driving, following too closely, failure to yield the right of way, and driver inattention in urban areas. The two primary routes (see Figure 31) where these crashes have occurred in Cerrillos Road and Airport Road.

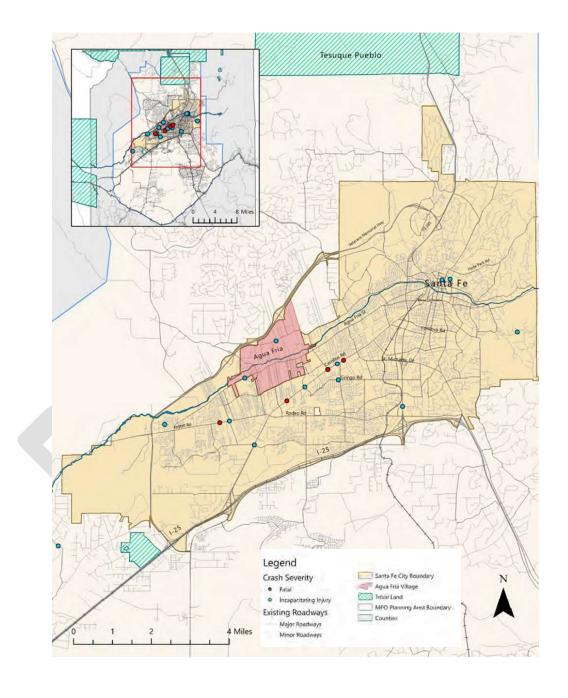


Figure 31. Younger Drivers Fatal and Serious Injury Crashes, 2015-2019 (Source: NMDOT, 2022)

#### **Pedestrians**

Pedestrians are the most vulnerable road user. Crashes involving pedestrians resulted in 20 fatalities and serious injuries and 113 resulted in possible injury. This exceeds the statewide average. Alcohol and drugs were a factor in 60 percent of the fatal and serious injury crashes. Pedestrian error, failure to yield the right of way are primary factors in these crashes. Four-lane roads with a center median or turn lane and a posted speed limits of 35 mph to 45mph have a higher risk for pedestrian related crashes. Figure 32 shows Cerrillos Road, Airport Road, and Saint Michaels Drive as the primary corridors where pedestrian fatalities and serious injuries have occurred.

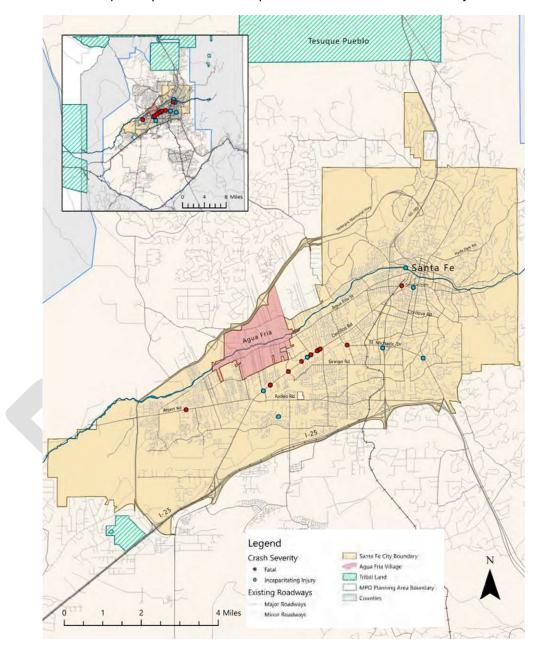


Figure 32. Pedestrian Involved Fatal and Serious Injury Crashes, 2015-2019 (Source: NMDOT, 2022)

#### **Bicyclists**

Bicycle-related fatalities and serious injuries in the Santa Fe region exceeded the statewide average. These crashes resulted in eight fatalities and serious injuries and 106 resulted in a possible injury. The majority of these occurred during daylight conditions in urban areas. Bicycle travel demand is anticipated to expand. Crashes involving bicyclists occurred primarily on principal arterials (see Figure 33) such as Cerrillos Road, Airport Road, and Saint Michaels Drive.



Figure 33. Bicyclist-Involved Fatal and Serious Injury Crashes, 2015-2019 (Source: NMDOT, 2022)

#### **Action Tables**

The SFMPO and its stakeholders evaluated the results of the data analysis, the safety concerns, and priorities of the region, and established the strategies and action items represented in the LRSP with consideration of the Safe System approach. Each Safe System element: Safe Roads, Safe Speeds, Safe Road Users, Safe Vehicles, and Post-Crash Care acts as the pillar for which implementation occurs. LRSP emphasis areas, strategies, and action items are correlated with the Safe System elements which when implemented with leadership and partnership support and input will achieve the Santa Fe Metropolitan Region LRSP safety goals. However, in a cost-constrained environment, not all actions will take place simultaneously.

They used multiple resources to develop the appropriate safety strategies and action item and identify the effectiveness (if available). These include the following:

- 1. FHWA's Proven Safety Countermeasures (see Figure 33)31
- 2. NHTSA's "Countermeasures that Work" 32
- 3. FHWA's Crash Modification Factors Clearinghouse 33
- 4. New Mexico SHSP
- New Mexico HSP

The effectiveness of an engineering-related action item is measured by a crash modification factor (CMF) from the FHWA <u>Crash Modification Factors Clearinghouse</u>.<sup>33</sup> NHTSA's publication <u>Countermeasures That Work: A Highway Safety Countermeasure Guide for State Highway Safety Offices<sup>32</sup></u> contains star ratings to measure the effectiveness of behavior-related (education and enforcement) countermeasures that are used most regularly by State Highway Safety Offices.

**Behavior Countermeasure Star Ratings** 

**★★★★** or **★★★★★** Effective

★★★ Promising, and Likely To Be Effective

☆☆ Effectiveness Still Undetermined

☆ Limited or No High-Quality Evaluation Evidence

(Source: NHTSA Countermeasures That Work)32

<sup>31</sup> https://safety.fhwa.dot.gov/provencountermeasures/

<sup>32</sup> https://www.nhtsa.gov/sites/nhtsa.gov/files/2021-09/15100\_Countermeasures10th\_080621\_v5\_tag.pdf

<sup>33</sup> http://www.cmfclearinghouse.org/

#### What is a crash modification factor (CMF)?

A CMF is an estimate of the change in crashes expected after implementation of a countermeasure. For example, an intersection is experiencing 100 angle crashes and 500 rear-end crashes per year. If you apply a countermeasure that has a CMF of 0.80 for angle crashes, then you can expect 80 angle crashes per year following the implementation of the countermeasure (100 x 0.80 = 80). If the same countermeasure also has a CMF of 1.10 for rear-end crashes, you will also expect 550 rear-end crashes per year following implementation (500 x 1.10 = 550).

(Source: FHWA CMF Clearinghouse)33



Figure 34. FHWA Proven Safety Countermeasures (Source: FHWA, 2022)

#### SANTA FE METROPOLITAN REGION LOCAL ROAD SAFETY PLAN

#### Safe Roads

Streets and roads are the platform in which users move across the system. The Safe System element, Safe Roads, considers the interaction of all users and incorporates engineering-related strategies during planning, design, construction, maintenance, and operations of the system to prevent crashes and minimize impact should a crash occur. Many of the identified strategies address multiple LRSP emphasis areas and through implementation, can help reduce fatalities and serious injuries for all road users.



r Comment 10ps		ty Strategy. I (RSAs).		ture Priority re Lines, for
Source of Strategy or Comment from Workshops		NM SHSP Priority Safety Strategy. FHWA Proven Safety Countermeasure (PSC) (RSAs).		NM SHSP Road Departure Priority Safety Strategy. FHWA PSC (Wider Edge Lines, Enhanced Delineation for Horizontal Curves).
Emphasis Area		■		Roadway Departure
Cost		Low		Pow
Priority (Ranked as 1-highest, 3-lowest) Timeline		Priority 1 Short		Priority 1 Short
Application Priority Locations		NIH		N N N N N N N N N N N N N N N N N N N
Partners		, County City PD,		
Lead Agency Ir	A)	SFMPO, City NMDOT PW, FHWA, ( Sheriff, County PW LEL	shes	County PW SFMPO
CMF/ NHTSA Star Rating	Audits (RS	Not Available	oarture Cra	0.60-0.89
Strategy/Action	1. Conduct Road Safety Audits (RSA)	Conduct RSAs on priority corridors and implement recommendations.	2. Reduce Roadway Departure Crashes	Install, enhance, or maintain 0.60-0.89 City PW center line and edge line pavement markings to provide enhanced visibility of the travel lane, especially through curves.  Consider 6" wide edge lines on HIN, where lane width is adequate.
		ti		<del>Li</del>

Source of Strategy or Comment from Workshops	NIM SHSP Road Departure Priority Safety Strategy. FHWA PSC (Enhanced Delineation for Horizontal Curves).
Emphasis Area	Roadway Departure
Cost	Pow
Priority (Ranked as 1- highest, 3- lowest)	Priority 1 Short
Application Priority Locations	HIN- Systemic
Partners	NMDOT, SEMPO
Lead Agency r	0.78-0.94 City PW County PW
CMF/ NHTSA Star Rating	0.78-0.94
Strategy/Action	1. Provide curve delineation using advance curve warning signs, chevrons, reflective strips on signposts, and pavement markings.

Strategy/Action CMF/	Lead Agency	Partners	Application	Priority	Cost	Emphasis	Source of Strategy or Comment
NHTSA Star Rating	star		Priority Locations	(Ranked as 1- highest, 3- lowest)		Area	from Workshops
				Timeline			
1. Install 0.79 SafetyEdge <sup>S</sup> Mon local roads, as appropriate , to address edge drop- offs and give drivers the opportunity to return to the travel lane and maintain control of	City PW County PW	NMDOT, FHWA, SFMPO	NIH	Priority 1 Short	Low	Roadway Departure	NM SHSP Road Departure Priority Safety Strategy. FHWA PSC (SafetyEdge <sup>SM</sup> ).
Widen and/or pave shoulders 0.80-0.81 on rural local roads, providing recovery area for drivers and safe riding area for bicyclists.	city PW County PW	NMDOT, SFMPO	Rural HIN	Priority 1 Medium	Medium	Roadway Departure	NM SHSP Road Departure Priority Safety Strategy.
Install rumble stripes on rural 0.60 local roads to address roadway departure crashes, considering bicyclists.	City PW County PW	NMDOT, SFMPO	Rural HIN	Priority 1 Short	Medium	Roadway Departure	NM SHSP Road Departure Priority Safety Strategy. FHWA PSC (Longitudinal Rumble Strips and Stripes).

	Strategy/Action	CMF/ NHTSA Star Rating	Lead Agency	Partners	Application Priority Locations	Priority (Ranked as 1- highest, 3- lowest) Timeline	Cost	Emphasis Area	Source of Strategy or Comment from Workshops
4.	Improve clear zones on rural 0.56-0.92 local roads, especially at curves.		City PW County PW	NMDOT, SFMPO	Rural HIN	Priority 1 Medium	Medium	Roadway Departure	NM SHSP Road Departure Priority Safety. FHWA PSC (Roadside Design Improvements at Curves).
	<ol> <li>Improve Intersection Safety</li> </ol>	ection Safety							
	1. Impleme signal timing modifica modifica ns (e.g., Yellow Change Interval) serve all modes/u	nt 0.50-0.88 tio	City PW County PW	NMDOT, SFMPO	Systemic	Priority 1 Short	Low	Intersections, Pedestrians, Bicyclists, Older Drivers, Younger Drivers	NM SHSP Intersection Priority Safety Strategy. FHWA PSC (Yellow Change Interval).

Source of Strategy or Comment from Workshops	NM SHSP Intersection Priority Safety Strategy. NM Pedestrian Safety Action Plan (PSAP). FHWA PSC (LPI).	NM SHSP Intersection Priority Safety Strategy. FHWA PSC (Lighting).
Emphasis Area	Intersections, Pedestrians, Older Drivers, Younger Drivers	Intersections, Pedestrians, Bicyclists, Older Drivers, Younger Drivers
Cost	Low	low
Priority (Ranked as 1-highest, 3-lowest) Timeline	Priority 1 Short	Priority 1 Short
Application Priority Locations	NH	NH NH
Partners	SFMPO	NMDOT, SFMPO
Lead Agency ar	County PW	0.58-0.72 City PW County PW
CMF/ NHTSA Star Rating	Implement 0.87 Leading Pedestrian Interval (LPI); consider adding NO RIGHT TURN blank out signs to balance safety and capacity.	street lighting to improve visibility of intersection s and pedestrians
Strategy/Action	2 2 3 4 7 7 8 8 6 7 7 8 8 8 7 7 8 8 8 9 9 8 8 9 8 8 9 8 8 8 8	e. ε. ε. ε. ε. ε. σ. σ

Source of Strategy or Comment from Workshops	NM SHSP Intersection Priority Safety Strategy. FHWA PSC (Systemic Application of Multiple Low-Cost Countermeasures at Stop- Controlled Intersections);	NM SHSP Signalized Intersection Safety Strategy C1.
Emphasis Area	Intersections, Pedestrians, Bicyclists, Older Drivers, Younger Drivers	Intersections, Pedestrians, Bicyclists, Older Drivers, Younger Drivers
Cost	Pow	Low
Priority (Ranked as 1- highest, 3- lowest) Timeline	Priority 1 Short	Priority 1 Short
Application Priority Locations	Systemic	Z I
Partners	SFMPO	NMDOT, SFMPO
Lead Agency	City PW County PW	City PW
CMF/ NHTSA Star Rating	0.73-0.90	
	Improve visibility of intersection s and traffic control devices (signs and signals) using low-cost counterme asures (signing, reflective backplates for signals, delineation, pavement markings).	Verify sight 0.53 triangles and eliminate obstruction s.
Strategy/Action	4	ம்

Safe System Element: Safe Roads

Source of Strategy or Comment from Workshops	FHWA PSC (Roundabouts, Reduced Left-Turn Conflict intersections)	FHWA PSC (Reduced Left-Turn Conflict Intersections)	FHWA PSC (Corridor Access Management.
Emphasis Area	Intersections, Older Drivers, Younger Drivers	Intersections, Pedestrians, Bicyclists, Older Drivers, Younger Drivers	Intersections, Pedestrians, Bicyclists, Older Drivers, Younger Drivers
Cost	High	Low	High
Priority (Ranked as 1-highest, 3-lowest) Timeline	Priority 2 Medium	Priority 1 Medium	Priority 1 Medium
Application Priority Locations	NIH	Divided Highways, HIN	NH
Partners	NMDOT, SFMPO	NMDOT,	SFMPO
Lead Agency	City PW County PW	City PW County PW	County PW
CMF/ NHTSA Star Rating	0.42-0.80	0.46-0.78	0.53-0.95
Strategy/Action	6. Increase use of roundabout s.	7. Redesign intersection s to reduce left and right turn conflicts.	8. Manage corridor access, particularly at intersection s.

Improve Safe Access to Transit

	Strategy/Action	tion	CMF/	Lead Agency	Partners	Application	Priority	Cost	Emphasis	Source of Strategy or Comment
			NHTSA Star Rating			Priority Locations	(Ranked as 1- highest, 3- Iowest)		Area	from Workshops
							Timeline			
<del>Е</del>	Continue to implement the City's Bus Stop and Connectivity Assessment program to adjust transit stop locations and improve accessibility to ensure safety of road users.	he : ve fety	Not Available ,	City PW County PW	NMDOT, SFMPO	NH	Priority 1 Medium	High	Intersections, Pedestrians, Bicyclists, Older Drivers, Younger Drivers	NM SHSP Signalized Intersection Safety Strategy
	1.	Adopt	Not	City PW	NMDOT,	NIH	Priority 1	Low	Intersections,	NM SHSP Pedestrian Safety Priority

Source of Strategy or Comment from Workshops	NM SHSP Pedestrian Priority Safety Strategy FHWA PSC (Crosswalk Visibility Enhancement, Lighting)
Emphasis Area	Intersections, Pedestrians, Older Drivers, Younger Drivers
Cost	Low
Priority (Ranked as 1-highest, 3-lowest) Timeline	Short Short
Application Priority Locations	MH
Partners	NMDOT,
Lead Agency	W
CMF/ NHTSA Star Rating	0.58-0.75
Strategy/Action	2. Install high- 0.58-0.75 City PW visibility crosswalks and stop/vield bars (pavement markings), lighting, and signing at intersection s and other appropriate crossing locations.

Source of Strategy or Comment from Workshops	NM SHSP Pedestrian Safety Priority Strategy FHWA PSC (Walkways)
Emphasis	Intersections, Pedestrians,
Cost	Medium
Priority (Ranked as 1- highest, 3- lowest) Timeline	Priority 1 Short
Application Priority Locations	NIH
Partners	SFMPO
Lead Agency r	City PW County PW
CMF/ NHTSA Star Rating	Complete 0.11-0.35 sidewalk gaps via the City's Pedestrian Improveme nt Program developed by the SFMPO including repairs and phased implementa tion to ensure connectivit y.
Strategy/Action	3. Complete ( sidewalk gaps via the City's Pedestrian Improveme In Program developed by the SFMPO including repairs and phased implementa tion to ensure connectivit y.

or Comment hops	Safety Priority	Priority Safety	and ands in urban
Source of Strategy or Comment from Workshops	NM SHSP Pedestrian Safety Priority Strategy	NM SHSP Pedestrian Priority Safety Strategy. FHWA PSC (Lighting).	FHWA PSC (Medians and Pedestrian Refuge Islands in urban and Suburban Areas).
Emphasis Area	Intersections, Pedestrians, Bicyclists, Older Drivers, Younger Drivers	Intersections, Pedestrians, Older Drivers, Younger Drivers	Intersections Pedestrians
Cost	Medium	Low	Medium
Priority (Ranked as 1-highest, 3-lowest) Timeline	Priority 1 Short	Priority 1 Short	Priority 1
Application Priority Locations	All roads	No.	<u>Z</u>
Partners	NMDOT, SFMPO	NMDOT, SFMPO	NMDOT, SFMPO
Lead Agency ir	City PW County PW	City PW County PW	City PW County PW
CMF/ NHTSA Star Rating	Explicitly Varies include the safety of all road users in the design of transportati on projects, including maintenanc e projects.	street lighting on arterials to improve pedestrian visibility.	Install 0.44-0.54 medians and pedestrian refuge islands.
Strategy/Action	4.	 - w := w := q >	

Source of Strategy or Comment from Workshops	NIM SHSP Pedestrian Priority Safety Strategy. FHWA PSC (Road Diet-Road Reconfiguration).
Emphasis Area	Intersections, Pedestrians, Bicyclists
Cost	Low
Priority (Ranked as 1- highest, 3- lowest) Timeline	Priority 1 Short
Application Priority Locations	NE
Partners	SFMPO SFMPO
Lead Agency r	City PW County PW
CMF/ NHTSA Star Rating	0.53-0.81 City PW County P
Strategy/Action	7. Install traffic calming strategies, such as road diets, speed tables, chicane, and narrowing lanes, in the appropriate streets and roads sections.

Source of Strategy or Comment from Workshops	NM SHSP Pedestrian Priority Safety Strategy. FHWA PSC (RRFB).
Emphasis Area	Intersections, Pedestrians
Cost	Pow
Priority (Ranked as 1-highest, 3-lowest) Timeline	Priority 1 Short
Application Priority Locations	NE
Partners	SFMPO
Lead Agency ar	City PW County PW
CMF/ NHTSA Star Rating	o.53 llar d s s s s s s s s s s s s s s s s s s s
Strategy/Action	8. Install Rectangular Rapid Flashing Beacon (RRFB) at uncontrolle d, marked crosswalks at locations where pedestrian safety is enhanced by increased driver awareness of a crossing location.

Source of Strategy or Comment from Workshops	NM SHSP Pedestrian Priority Safety Strategy. FHWA PSC (PHB).	NM SHSP Pedestrian Priority Safety Strategy. FHWA PSC (Crosswalk Visibility Enhancements, Walkways, Bicycle Lanes, RRFB, medians and Pedestrian Refuge Islands, PHB, and Road Diets).
Emphasis Area	Intersections, Pedestrians	Intersections Pedestrians, Bicyclists
Priority Cost (Ranked as 1- highest, 3- lowest) Timeline	Priority 1 Low Short	Priority 1 Low Short
Application Priority Locations	NIH	N N
Partners	SFMPO	NMDOT, SFMPO
Lead Agency	City PW County PW	City PW County PW
CMF/ NHTSA Star Rating	ian 0.45-0.85 ians ross oads lock ss colle	Implement Varies Safe Routes to School projects
Strategy/Action	9. Install pedestrian hybrid beacon (PHB) to help pedestrians safely cross higher- speed roads at midblock crossings and uncontrolle d intersection s.	10. Implement Safe Routes to School projects

	Strategy/Action	CMF/	Lead Agency	Partners	Application	Priority	Cost	Emphasis	Source of Strategy or Comment
		NHTSA Star Rating			Priority Locations	(Ranked as 1- highest, 3- lowest)		Area	from Workshops
						Timeline			
	11. Amen	Amend the 0.11-0.35	City PW	SFMPO	Regionwide	Priority 1	Medium	Pedestrians	SENADO and stakeholder workshop
	Count	County/City				ţ		;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;	recommendation
	Land Use	Use	County PW			Snort		Intersections	יברסווווים וממנוסוו.
	Policy to	/ to							
	docun	nent							
	local								
	agenc	<i>ب</i> د							
	sidewalk	alk							
	maint	maintenanc							
	Đ								
	respo	responsibili							
	ty anc	ty and							
	coord	linate							
	maint	maintenanc							
	e activities	vities							
	with the	the							
	appro	appropriate							
	agency.	cy.							
(									
w.	. Improve Bicycle Routes	<u>e</u>							

Source of Strategy or Comment from Workshops	NM SHSP Bicycle Safety Priority Strategy
Emphasis	Bicyclists, Roadway Departure Intersections
Cost	Low
Priority (Ranked as 1- highest, 3- lowest) Timeline	Priority 1 Short
Application Priority Locations	NH NH
Partners	NMDOT, SFMPO
Lead Agency	City PW County PW
CMF/ NHTSA Star Rating	Add signing Not and Available pavement markings (Share the Road, Bicycle Routes and Sharrows) to alert motorists of the potential presence of bicyclists.
Strategy/Action	1. 1. Span Poof Span Span Span Span Span Span Span Span

Source of Strategy or Comment from Workshops	NM SHSP Bicycle Safety Priority Strategy	NM SHSP Bicycle Safety Priority Strategy
Emphasis Area	Bicyclists, Roadway Departure	Pedestrians Bicyclists Intersections, Older Drivers, Younger Drivers
Cost	Low	Pow
Priority (Ranked as 1-highest, 3-lowest) Timeline	Priority 1 Short	Priority 1 Short
Application Priority Locations	NH	N H
Partners	NIMDOT, SFMPO	NMDOT, SFMPO
Lead Agency	City PW County PW	County PW
CMF/ NHTSA Star Rating	0.51-0.70	VAR
Strategy/Action	2. Include bicycle usage and safety considerati ons on shoulders for resurfacing and maintenanc e projects	3. Include safe interaction and connectivity y of transity, pedestrians, and bicycle modes in the planning and design of facilities.

#### Safe Road Users

This represents all users of all modes of travel. Their capabilities are influenced by factors such as age, level of impairment, and other behaviors. System owners and other stakeholders can implement engineering, enforcement, and education strategies to address these road user behaviors and limit the impact when a crash occurs.



	Strategy/Action	CMF/ NHTSA Star Rating	Lead Agency r	Partners	Application Priority Locations	Priority (Ranked as 1-highest, 3-lowest)	Cost	Emphasis Area	Source of Strategy or Comment from Workshops
1. Si	Strengthen Partnerships					Imeline			
ti	Establish a Santa Fe Metropolitan Region Safety Committee consisting of safety stakeholders which will focus on road safety in the region including implementing and updating the LRSP.	<b>لا</b>	SFMPO	County PW and Regionwide Sheriff, City PW and PD, NMDOT, FHWA, and other key stakeholders	Regionwide	Priority 1 Short	Non	ΠΑ	Best Practice.
4	Share and discuss findings from Police Department's and Sheriff's Office traffic investigation team for crashes and speed data.	AN	County Sheriff, City PD	SFMPO, County Regionwide PW, City PW, NMDOT, FHWA	Regionwide	Priority 1 Short	Pow	٩II	Best Practice.
	2. Conduct Education and Outreach to Address Road User Behaviors	and Outreac	h to Address R	oad User Behavio	ırs				
ti	Host informational meetings ★★★ and press events and provide editorials to local news to inform the public of the region's safety activities.	* * *	SFMPO	NMDOT-TSD, R County Sheriff, City PD	Regionwide	Priority 1 L Short	Low	TA THE	NHTSA Countermeasures That Work.

	Strategy/Action N	CMF/ NHTSA Star Rating	Lead Agency	Partners	Application Priority Locations	Priority (Ranked as 1-highest, 3-lowest)	Cost	Emphasis Area	Source of Strategy or Comment from Workshops
~i	Promote New Mexico's ***- ENDWI, ZeroProof, Just Drive, **** and DNTXT34 safety campaigns and other similar campaigns on regional, county, city, and other stakeholders' websites.	, * * * * *	SFMPO	City and County Regionwide stakeholders	Regionwide	Short	Low	Impaired Driving, Younger Drivers, Distracted Driving, Speeding, Older Drivers	Impaired Driving, NM SHSP Strategies.  Younger Drivers, Supports NM HSP Strategies  Distracted Driving, NHTSA Countermeasures That  Work.  Speeding, Includes Occupant Protection as a focus.
ന്	Promote use of New Mexico ★★★ Child Restraint Inspection Stations and virtual inspections in the region to increase proper child restraint use.	* *	NMDOT-TSD SFMPO County City PD LEL	, Sheriff,	Regionwide	Priority 1 Short	Now	Streets and roads Departure, Intersections	NIM SHSP and HSP Occupant Protection Strategy. NHTSA Countermeasures That Work.
4	Support training for Certified ★★★ Child Seat Inspectors.		NMDOT-TSD SFMPO County City PD	Sheriff, , LEL	Regionwide	Priority 1	Low	Streets and roads Departure, Intersections	Streets and roads <i>NM SHSP and HSP Occupant</i> Departure, <i>Protection Strategy.</i> Intersections

**NHTSA Countermeasures That** 

<sup>34</sup> New Mexico DOT, Traffic Safety Division, https://www.dot.nm.gov/planning-research-multimodal-and-safety/modal/traffic-safety/

	Strategy/Action	CMF/	Lead Agency	Partners	Application	Priority	Cost	Emphasis	Source of Strategy or Comment
		NHTSA Star Rating			Priority Locations	(Ranked as 1- highest, 3- lowest)		Area	from Workshops
						Timeline			
ហំ	Support licensing and training for motorcycle riding skills.	ক ক	NMDOT-TSD S	NMDOT-TSD SFMPO, County Regionwide Sheriff, City PD, LEL		Short	Гом	Impaired Driving, <i>NM SI</i> Speeding, <i>NHTS</i> , Distracted Driving, <i>Work</i> Older Drivers, Younger Drivers	NM SHSP Motorcycle Safety Strategy, NHTSA Countermeasures That Work
છં	Support driver education riprograms to address high-risk behavior.	\$2 \$2	School N districts, S S	NMDOT-TSD, Re SFMPO, County Sheriff, City PD, LEL	Regionwide	Short	Low	Impaired Driving, Speeding, Distracted Driving, Younger Drivers	NM SHSP Younger Driver Safety Strategy
	Promote outreach and education, addressing youth alcohol and drug issues. Promote policies and programs to restrict alcohol access to minors.	₽ ₽	NMDOT-TSD County health department		Regionwide	Short	Low	Impaired Driving, Younger Drivers	Impaired Driving, <i>NM SHSP Impaired Driving Safety</i> Younger Drivers <i>Strategy</i>

					Application	Priority	Cost	Emphasis	Source of Strategy or Comment
	HV.	NHTSA Star Rating			Priority Locations	(Ranked as 1-highest, 3-lowest)		Area	from Workshops
						Timeline			
8. Promo transp for imp	Promote safe ride alternative ★★★ transportation (e.g., transit) for impaired road users.		NMDOT-TSD SFMPO, Sheriff, C	SFMPO, County Re Sheriff, City PD, LEL	County Regionwide lity PD,	Short	Low	Impaired Driving, Younger Drivers, Older Drivers	NM SHSP Impaired Driving Safety Strategy
9. Use the d simulator and other community schools to impact of behavior.	Use the distracted driving ** simulator, rollover convincer, and other exhibits at community events and high schools to demonstrate impact of risky driver behavior.		Sheriff, City PD	School districts, Regionwide NMDOT-TSD, LEL		Short	Low- Medium	Younger Drivers, Older Drivers, Distracted Driving, Roadway Departure, Intersections	Younger Drivers, Used by other law enforcement Older Drivers, agencies.  Distracted Driving, Including Occupant Protection as a focus area to integrate with other Departure, emphasis area activities.  Intersections
m <sup>i</sup>	Enforce the Rules of the Road	Road							

	Strategy/Action	CMF/ NHTSA Star Rating	CMF/ Lead Agency TSA Star Rating	Partners	Application Priority Locations	Priority (Ranked as 1- highest, 3- lowest)	Cost	Emphasis Area	Source of Strategy or Comment from Workshops
						Timeline			
ij	Conduct High Visibility saturation patrols for	* * *	, s, City	NMHP, NMDOT-TSD,	Regionwide, HIN Short		Medium	Impaired Driving, Roadway	Impaired Driving, NIM SHSP Impaired Driving Priority Roadway Safety Strategy.
	impaired driving including participating in <i>ENDWI</i> and		Police					Departure	NM HSP DWI Strategy
	National Drive Sober or Get Pulled Over Impaired								NHTSA Countermeasures That Work
	Driving35 campaigns.								
7.	Participate in the Click It or		County		Regionwide HIN Short		Medium	Roadway	NM SHSP Occupant Protection
	Ticket National Enforcement Mobilization and BUCKLUP	***	Sheriffs, City NMDOT-TSD, Police LEL	NMDOT-TSD, LEL				Departure, Intersections,	Priority Safety Strategy.
	campaigns.							Younger Drivers, Older Drivers	NM HSP Occupant Protection (OP) Strategy.
									NHTSA Countermeasures That

Work

<sup>35</sup> New Mexico DOT, Traffic Safety Division, https://www.dot.nm.gov/planning-research-multimodal-and-safety/modal/traffic-safety/

Source of Strategy or Comment from Workshops	Distracted Driving, <i>NM SHSP Distracted Driving</i> **Priority Safety Strategy.**  **NM HSP Distracted Driving Older Drivers Strategy.  **NHTSA Countermeasures That  **Work.**	NM HSP Safety Strategy. NHTSA Countermeasures That Work. Include Occupant Protection as a focus.	NM HSP DWI Strategy. NHTSA Countermeasures That Work. Include Occupant Protection as a
Emphasis Area	Distracted Driving, I Younger Drivers, I Older Drivers	Impaired Driving, / Speeding, / Distracted Driving /	Impaired Driving, // Younger Drivers, // Distracted Driving, // Speeding
Cost	Medium	Medium	Low
Priority (Ranked as 1-highest, 3-lowest)	Short	Short	Short
Application Priority Locations	Regionwide HIN	Regionwide HIN Short	Regionwide
Partners	NMHP, NMDOT-TSD, LEL	NMHP, NMDOT-TSD, LEL	NMDOT-TSD, LEL, NMHP
Lead Agency	County NMHP, Sheriffs, City NMDOT-TSD, Police LEL	County NMHP, Sheriffs, City NMDOT-TSD Police LEL	County NMDOT-TS Sheriffs, City LEL, NMHP Police
CMF/ NHTSA Star Rating	* * *	* * * * * * * * * * * * * * * * * * *	t NA G
Strategy/Action	Increase high visibility enforcement of cellphone/ texting laws.	Perform integrated enforcement of impaired driving, speeding, occupant protection, and distracted driving including participating in Superblitz enforcement campaign.	Engage LEL for training, grant NA assistance, and coordination of enforcement activities and initiatives.
	mi	4	ம்

focus.

Emphasis Source of Strategy or Comment from Workshops Area	Impaired Driving, <i>NM SHSP Impaired Driving Priority</i> Younger Drivers <i>NM HSP DWI Strategy. NHTSA Countermeasures That Work.</i>	Impaired Driving  Strategy.  Distracted Driving  HSP Safety Strategy.  Speeding  NHTSA Countermeasures That  Work	Impaired Driving NM SHSP Impaired Driving Priority Safety Strategy. NM HSP DWI Strategy.
Cost	Medium	Medium	Medium
Priority (Ranked as 1-highest, 3-lowest) Timeline	Short	Short-Term, Ongoing	Short
Application Priority Locations	Regionwide	NIT	Regionwide
Partners	NMDOT-TSD, LEL, NMHP	NMDOT-TSD, LEL, SFMPO	NMDOT-TSD, LEL, NMHP, SFMPO, stakeholders
Lead Agency	County NMDOT-TS Sheriffs, City LEL, NMHP Police	County N Sheriff, City LE Police	County NMDOT-TSC Sheriffs, City LEL, NMHP, Police SFMPO, stakeholders
CMF/ NHTSA Star Rating	* *	* * *	* * *
Strategy/Action	Conduct well publicized compliance check of alcohol retailers to reduce sales to underage persons.	Participate in 100 Days and Nights of Summer Enforcement Program36	Support Santa Fe County's DWI Compliance Monitoring/ Tracking Program
	<b>.</b>	۲.	∞ <b>i</b>

<sup>36</sup>Safer New Mexico Now, 100 Days and Nights of Summer Campaign, https://www.safernm.org/resources/enhanced-law-enforcement-campaigns-reports/

Cost Emphasis Source of Strategy or Comment  Area  Area	Low Impaired Driving, <i>NM HSP Motorcycle Safety</i> Speeding, NHTSA Countermeasures That Distracted Driving Work		Low Distracted Driving, <i>NM SHSP Distracted Driving Safety</i> Strategy  Younger Drivers, Older Drivers	Low Intersections, Younger Drivers, Older Drivers, Pedestrians, Bicvclists
Priority (Ranked as 1-highest, 3-lowest) Timeline	Short		Short	Short
Application Priority Locations	Regionwide		Regionwide	Regionwide
Partners	NMDOT-TSD, LEL, NMHP, SFMPO, stakeholders		NMDOT-TSD, LEL, NMHP, SFMPO, stakeholders	NMDOT-TSD SFMPO, County Regionwide Sheriff, City PD, LEL
Lead Agency r	County NMDOT-TSE Sheriffs, City LEL, NMHP, Police SFMPO, stakeholder		County NMDOT-TSD Sheriffs, City LEL, NMHP, Police SFMPO, stakeholders	NMDOT-TSD
Strategy/Action CMF/ NHTSA Star Rating	Partner with motorcycle ☆☆ dealerships and other safety stakeholders (e.g., insurance companies) to sponsor a "Safety Days" during the summer months.	4. Improve Data Collection	Improve data collection and reporting of distracted driving crashes.	Improve collection of intersection crash data.
	တ်		ri .	7

Source of Strategy or Comment from Workshops	Pedestrians, NM SHSP Pedestrian Priority Safety Distracted Driving, <i>Strategy.</i> Speeding, NHTSA Countermeasures That Work Intersections	
Emphasis Area	Pedestrians, Distracted Drix Speeding, Intersections	Speeding, Pedestrians, Roadway Departure,
Cost	Low	Low
Priority (Ranked as 1- highest, 3- lowest) Timeline	Short	
Application Priority Locations	Regionwide HIN	Regionwide, HIN Short
Partners	NMDOT, City and County	NMDOT, City and County PW
CMF/ Lead Agency TSA Star Rating	SFMPO	SFMPO
CMF/ NHTSA Star Rating		
Strategy/Action	Collect pedestrian and bicycle volume/ exposure data.	Improve collection of speed and volume data.
	m	4

Intersections

### Safe Speeds

Safe speeds increase the likelihood of an individual surviving a crash and can be accomplished through implementation of engineering, education, and enforcement strategies. Designing streets and roads with all users in mind and maintaining appropriate speed limits help reduce fatalities and serious injuries. Traffic calming strategies and radar speed feedback signs have proven to lower speeds.



	Strategy/Action	CMF/ NHTSA Star Rating	Lead Agency	Partners	Application Priority Locations	Priority (Ranked as 1-highest, 3-lowest)	Cost	Emphasis Area	Source of Strategy or Comment from Workshops
τi	Conduct Speed Management					Timeline			
ь	Set speed limits based on the ★★★★★use of appropriate engineering practices.		City PW County PW	SFMPO, NMDOT, FHWA,	Regionwide	Priority 1 Low Short, Ongoing	3	Speeding, Roadway Departure,	NM SHSP
								Impaired Driving, Distracted Driving	
2.	Implement Specific Complete 0.53-0.81 Streets Design Standards to improve safety for all road		City PW County PW	SFMPO, NMDOT, FHWA,	Z .	Priority 1 Low Medium	>	Speeding, Roadway Departure,	NM SHSP Speeding Strategy. FHWA PSC (Road Diets)
	users and Road Diets to provide context-sensitive street design.							Impaired Driving, Distracted Driving	
m <sup>i</sup>	Use radar speed feedback 0.9 signs to notify drivers of reduced speed limits, especially at rural/urban	0.95	City PW County PW	SFMPO, NMDOT, FHWA,	N N	Priority 1 Short Low	>	Speeding, Roadway Departure,	City of Santa Fe has used speed feedback signs.
	transition areas.							Impaired Driving, Distracted Driving	

Medium Departure  Medium Distracted Driving, Pedestrians, Bicyclists  Short Low Speeding For vulnerable road users.  Medium Distracted Driving, Pedestrians  Bicyclists  Short Regionwide Priority 1 Low Speeding For vulnerable road users.  Bicyclists	Strategy// 4. Implement tr	Strategy/Action Implement traffic calming measures.37	CMF/ NHTSA Star Rating Varies	Lead Agency City PW County PW	Partners SFMPO, NMDOT, FHWA,	Application Priority Locations HIN	Priority (Ranked as 1-highest, 3-lowest) Timeline Priority 1 Short	Cost	Emphasis Area Speeding Roadway	Source of Strategy or Comment from Workshops FHWA PSC (Road Diets)
Modify Level of Service (LOS) Not SFMPO City PW, Regionwide Priority 1 Low policies to incorporate Available County PW, Short for vulnerable road users.							Medium		Departure Distracted Driving Pedestrians, Bicyclists	
		evel of Service (LOS) o incorporate ntion of safe speeds rable road users.	Not Available	SFMPO	City PW, County PW, NMDOT	Regionwide	۸ <del>۱</del>	» o	Speeding Pedestrians Bicyclists	

Conduct Speed Enforcement

	Strategy/Action	CMF/ NHTSA Star Rating	CMF/ Lead Agency TSA Star Rating	Partners	Application Priority Locations	Priority (Ranked as 1- highest, 3- lowest)	Cost	Emphasis Area	Source of Strategy or Comment from Workshops
						Timeline			
τi	Conduct high visibility speed ★★★ enforcement.	* * *	County NMDOT- TSI Sheriff, City LEL, SFMPO	NMDOT- TSD, LEL, SFMPO	NIH	Ongoing	Medium	Speeding	NM SHSP Speeding Safety Priority Strategy. HSP Safety Strategy.
			Police						NHTSA Countermeasures That
									Work
5	Participate in 100 Days and Nights of Summer	* *	County Sheriff, City	NMDOT-TSD, LEL, SFMPO	NH.	Short-Term, Ongoing	Medium	Speeding	NM SHSP Speeding Safety Priority Strategy. HSP Safety Strategy.
	Enforcement Program38		Police						NHTSA Countermeasures That
									Work
			1						

38Safer New Mexico Now, 100 Days and Nights of Summer Campaign, https://www.safernm.org/resources/enhanced-law-enforcement-campaigns-reports/

	Strategy/Action	CMF/ NHTSA Star Rating	Lead Agency	Partners	Application Priority Locations	Priority (Ranked as 1-highest, 3-lowest)	Cost	Emphasis Area	Source of Strategy or Comment from Workshops
						Timeline			
ന്	Support legislation to allow automated speed enforcement.	* * * *	County Sheriff, City Police	NMDOT-TSD, SFMPO, Stakeholders	N	Medium	Medium	Speeding	NHTSA Countermeasures That Work. FHWA PSC (Speed Safety Cameras).
O	Conduct Outreach Efforts								
гi	Conduct educational campaigns to reinforce safe speeds.	* *	SFMPO	County Sheriff, Regionwide City Police, NMDOT-TSD	Regionwide	Short	Low	Speeding	NHTSA Countermeasures That Work.
7	Continue law enforcement initiative to collect speed data, use radar speed trailers, and enforce speed limits as appropriate in response to speeding complaints.	₹a	County Sheriff, City Police	County PW, City PW, NMDOT-TSD, LEL, SFMPO	로 도	Short-Term, Ongoing	Medium	Speeding	NM SHSP Speeding Safety Strategy.

### SANTA FE METROPOLITAN REGION LOCAL ROAD SAFETY PLAN

### Post-Crash Care

Post-crash care is critical to the survivability of a crash victim. The ability of emergency responders to quickly locate and respond to a crash and stabilize and transport an individual injured in a crash influences the chances of survivability. The crash location will factor in the response time of emergency medical personnel. The distance from medical care will play a role in whether person survives a crash. For these reasons, accurate and complete data collection and the sharing of data is important to facilitate improved decision-making and investments specific to safety. Communication and collaboration between all stakeholders are necessary to improve post-crash care and reduce the potential of crashes resulting in fatalities and serious injuries.



# 2. Safe System Element: Post-Crash Care

Application Priority Cost Emphasis Area Recommendation Source (Ranked as 1- highest, 3- Priority lowest)  Locations Timeline	ide Short Low All NIM SHSP EMS Priority Strategy.	ride Short Low All NM SHSP EMS Priority Strategy.
	Regionwide	Regionwide
	City PW Santa Fe RECC, NM Bureau of EMS, NMDOT, SFMPO	County Santa Fe RECC, Sheriffs, City NM Bureau of Police EMS, NMDOT, FHWA, SFMPO
NHTSA Star Ratin	1. Coordinate Not with EMS Available officials to determine road issues related to getting crash victims medical care and determine strategies for improvement and training opportunities.	2. Educate and Not partner with Available EMS and other emergency personnel (fire, police) to plan and

# 2. Safe System Element: Post-Crash Care

Recommendation Source	NM SHSP EMS Priority Strategy.
Emphasis Area	All
Cost	Low/ Medium
Priority (Ranked as 1-highest, 3-lowest) Timeline	Medium
Application Priority Locations	Regionwide
Partners	NM Bureau Santa Fe RECC, Regionwide of EMS County, City, NMDOT-TSD, SFMPO
CMF/ Lead Agency TSA Star Ratin	NM Bureau of EMS
H	incident/scene management. Improve data Not collection and Available analysis capabilities related to EMS tracking and reporting.
Strategy/Action	m <sup>i</sup>

### Safe Vehicles

Safe vehicles incorporate new technology and other features to prevent crashes from occurring, and if they do, reduce the severity of a crash.



### SANTA FE METROPOLITAN REGION LOCAL ROAD SAFETY PLAN

### Safe System Element: Safe Vehicles

Strategy/Action	Action	CMF/ NHTSA Star Rating	Lead Agency r	Partners	Application Priority	Priority (Ranked as 1- highest, 3- lowest)	Cost	Emphasis Area	Source of Strategy or Comment from Workshops
					Locations	Timeline			
5.1 Coordinate Efforts to Address Safe Vehicles	to Address Safe								
<del>, i</del>	Maintain and increase alternative transportation options in the region, especially in underserved communities	A A		Santa Fe Trails Regionwide Santa Fe Pick- Up NCRTD NM Park & Ride Rail Runner Express NMDOT, City, County	Regionwide	Medium	Medium	Impaired Driving, Older Drivers, Younger Drivers, Pedestrians, Bicyclists	Impaired Driving, Santa Fe MPO MTP. Older Drivers, Younger Drivers, Pedestrians, Bicyclists
.5	Build and maintain the appropriate infrastructure to support implementation of the SFMPO's Regional Architecture Intelligent Transportation	AN USAN	City	SFMPO, FHWA	Regionwide	Long	Medium High	ΑII	FHWA TSMO.

### Safe System Element: Safe Vehicles

Emphasis Area Source of Strategy or Comment	from Workshops				
Emphasis					
Cost					
Priority	(Ranked as 1-	highest, 3-	lowest)	Timeline	
Partners Application			Priority	Locations	
Partners					
CMF/ Lead Agency	_				
CMF/	NHTSA Star		Kating		
Strategy/Action					



### Implementation and Evaluation

The Santa Fe Metropolitan Region LRSP builds on past and ongoing efforts, strengthens partnerships, and enhances the ability to leverage limited funds and resources. Moving the LRSP from planning to implementation is essential to reduce fatalities and serious injuries occurring on the local roads in the region. This section provides a road map to guide implementation of the LRSP and evaluate success. It identifies potential funding sources, a detailed list of strategies and action items using the Safe System approach as the framework, and a list of projects that represent regional safety priorities.

A key benefit of the Santa Fe Metropolitan Region LRSP is its alignment with the New Mexico SHSP. As the NMDOT uses the New Mexico SHSP and its emphasis areas to guide its safety funding, the alignment of the Santa Fe Metropolitan Region LRSP strategies and actions with State priorities enhances their eligibility for Federal and State funds. Accessing HSIP funds to support the region's street and road infrastructure safety projects is predicated on this linkage to emphasis areas in the SHSP. Accessing these HSIP funds helps to supplement local funding for projects stemming from this LRSP. Additionally, Federal behavioral grant funding from NHTSA and managed by the State highway safety office is available on an annual basis. The NMDOT's Traffic Safety Division manages these funds for New Mexico and solicits grant applications on an annual basis.

Establishment of a Santa Fe Regional Safety Committee provides a leadership group to facilitate LRSP implementation. Membership from the multi-disciplinary LRSP stakeholder group can facilitate a seamless transition to this new Safety Committee. Activities can include coordinating with the various existing committees, collaborating with key stakeholders, prioritizing safety projects, and pursuing potential funding opportunities that support implementation of LRSP strategies and actions across the region. This Safety Committee can include NMDOT to share safety related information and to ensure the safety activities of the region align with the State safety priorities.

Evaluation of the LRSP will be in the form of process and outcomes. Process evaluation involves reviewing each numbered action under the strategies in the LRSP and determining if progress has been made. Outcome evaluation looks at the impact of activities. For some projects, such as site-specific projects, it is relatively straightforward to determine safety impact based on pre-construction and post-construction crash statistics. For other projects, it may be a combination of several activities that lead to a change in crash frequency. For example, a change in the frequency of impaired driving crashes may be a result of a combination of educational and enforcement initiatives. Therefore, because of the interrelationship between different safety activities in the region, it is ideal to evaluate outcomes at the emphasis area level. The LRSP can use fatalities and injuries as the metric for annual progress in each of the emphasis areas.

In addition to crash frequency, evaluations should also consider other metrics, if data allow. Changes in traffic volumes, crash severity, and characteristics of crashes also provide meaningful insight into the effect of safety countermeasures. Part B of the Highway Safety Manual (HSM) 39 is a useful resource that provides further information on different performance measures and evaluation methods.

The SFMPO and its stakeholders recognize that some strategies may take several years to fully implement. Additionally, it may take several years to realize the benefit of the strategies through a reduction of fatal and serious injury crashes. The LRSP is a living document and should be reviewed on an on-going basis. Like the New Mexico SHSP, a full update of the LRSP is anticipated to be completed every five years. However, more frequent updates to

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<sup>39</sup> https://www.highwaysafetymanual.org/Pages/default.aspx

the individual strategies and actions may take place to reflect the Plan's progress and any new policies that affect implementation. The SFMPO will be the primary agency responsible for updating the LRSP with support from the stakeholders.

Additional resources to guide the implementation of the LRSP can be found in Chapter 3 of FHWA's reference, Implementing a Local Road Safety Plan40.

### **Funding Sources**

Funding is critical to implement the strategies and action items in this LRSP and may come from a variety of sources: Federal, State, local, and the private sector. These include standard funding program mechanisms and grants as well as new initiative grants. Some sources of funding include the following:

- Local Agency Funding. Local agencies have various funding sources that can be used to improve and maintain streets and roads and perform other safety activities. Consideration of the LRSP strategies during the allocation of funding, especially for maintenance activities or other street and road improvement projects can support implementation of the LRSP.
- 2. <u>Highway Safety Improvement Program (HSIP.)</u>41 The NMDOT manages <u>New Mexico's HSIP programs.</u>42 This core Federal-aid highway program funds projects and strategies that are data-driven, align with the State SHSP, and through implementation, help reduce traffic-related fatalities and serious injuries on all public roads, including locally-owned public roads and roads on Tribal lands. The HSIP supports advancing implementation of the Safe System approach and LRSPs. NMDOT distributes application information through the MPOs. HSIP funds require a 10 percent match by the participating agency, unless otherwise determined by NMDOT, and use the MPO planning process to program them. Distribution of funds is through Cooperative Agreements with tribal and local agencies.
- 3. <u>Safe Streets and Roads for All.</u> The Bipartisan Infrastructure Law (BIL) establishes the new Safe Streets and Roads for All (SS4A) discretionary program that will provide \$5-6 billion in grants over the next 5 years. Funding supports regional, local, and Tribal initiatives through grants to prevent street and road deaths and serious injuries.
- 4. <u>Federal NHTSA Grant Funding</u>. The NMDOT <u>Traffic Safety Division</u>43 manages the various federal NHTSA grant funding that New Mexico receives to support enforcement, education, and emergency response activities to improve driver behavior and reduce deaths and injuries from motor vehicle-related crashes. The NMDOT Traffic Safety Division receives grant applications annually in early spring and approval by NHTSA, typically in July.

40 FHWA, Office of Safety, Implementing a Local Road Safety Plan, https://safety.fhwa.dot.gov/local\_rural/training/fhwasa20025/chap3.cfm

41 FHWA, Office of Safety, HSIP Eligibility Guidance, https://safety.fhwa.dot.gov/hsip/rulemaking/docs/BIL\_HSIP\_Eligibility\_Guidance.pdf

42 New Mexico Department of Transportation, HSIP, https://www.dot.nm.gov/planning-research-multimodal-and-safety/planning-division/multimodal-planning-and-programs-bureau/highway-safety-improvement-program/

43 New Mexico Department of Transportation, Traffic Safety Division, Traffic Safety Programs, https://www.dot.nm.gov/planning-research-multimodal-and-safety/modal/traffic-safety/

### SANTA FE METROPOLITAN REGION LOCAL ROAD SAFETY PLAN

- 5. <u>Federal Section 164 Impaired Driving Repeat Offender Safety Program Funding.</u> NMDOT's Traffic Safety Division uses its allocated Federal Section 164 program funds to maintain and expand impaired driving enforcement activities statewide. As the Santa Fe metropolitan region has high rates of DWI crashes, the law enforcement agencies should continue to pursue grants. The NMDOT Traffic Safety Division funds a Law Enforcement Liaison44 to coordinate enforcement initiatives.
- 6. <u>Congestion Mitigation and Air Quality Improvement (CMAQ) Program:</u> These federal funds are made available to State and local governments for transportation projects and programs to help meet the requirements of the Clean Air Act.
- 7. <u>Technology Transfer (T2).</u> These federal funds are managed by the FHWA Division office and are used for research development, technology and innovation transfer, outreach and communication activities (e.g., peer exchanges, scan tours). They are completely reimbursable for travel. A 20 percent match is required for other activities.
- 8. <u>FHWA Grants</u>. FHWA may make other funding available through grants to advance various safety activities. Other initiatives through FHWA that can provide resources to assist locals with LRSP activities include the Local Road Safety Focus Approach.

Implementation of Strategies and Action Items

Each of the strategies and action items in the following tables addresses the nine emphasis areas identified within the Santa Fe Metropolitan Region LRSP using the Safe System approach. Agency leads, priority locations, potential funding sources and timeframe for implementation have been provided for each emphasis area strategy and action item. The implementation time frame identified as "Short" is for a period of now to three years; "Medium" covers three to eight years; "Long" covers a period over eight years.

The strategies and actions in the LRSP can also link to the current and future updates of SFMPO-led programs including the Long Range Transportation Plan, the Transportation Improvement Program, Bicycle/Pedestrian Master Plan, and Regional Transit Plan. Bringing together the LRSP with these other plans and programs has the potential to reduce administrative burden, encourages the use of consistent data and analysis methods, and allocates resources to identified locations and programs that address the greatest safety needs in the region.

<sup>44</sup> New Mexico Department of Transportation, Traffic Safety Division, LEL Contact Information and list of Law Enforcement Agencies conducting ENDWI activities (rtsclients.com)

)				)			
Rank	Project Name and Description	Lead Agency	Cost (Low, Medium, High)	Safe System Element	Emphasis Area	Equity	Time Frame
11	Systemic Safety Improvement: Intersection and Pedestrian Conspicuity: Systemic application of traffic signal backplates, high-visibility crosswalks, stop bars.	City of Santa Fe Santa Fe County SFMPO	Low	Safe Roads Safe Users	Intersections Pedestrians Bicyclists Older Drivers		<b>(</b>
	Systemic Safety Improvement: Road Safety Audit; Traffic Calming; Restriping; Street & Road Redesign; ADA Compliance; Pedestrian Safety Countermeasures: Systemic application of analysis and implementation of fundamental street and road design elements intended to increase safety for all users	City of Santa Fe	Low, Medium and High	Safe Roads Safe Users	Pedestrians Bicyclists Older Drivers Younger Drivers		
7	Systemic Curve Enhancement: Systemic application of Chevrons and Advanced Warning Signs to ensure consistent application on rural two-lane streets and roads s.	City of Santa Fe Santa Fe County SFMPO	Low	Safe Roads	Roadway Departure	<u>√</u> )	<b>N</b>
	Systemic Safety Improvement: Adding bicycle facilities City of Santa Fe where feasible: Systemic narrowing of travel lanes, and application of shoulders, bike lanes, sharrows, and/or buffer strips upon road restriping whenever road restriping is implemented and the road configuration allows. Review of existing bike lanes to make sure that	City of Santa Fe Santa Fe County	Low	Safe Roads Safe Users	Bicyclists		<b>I</b>

	Equity Time Frame	
	Equity	
E Frame = Long Time Frame	Safe System Emphasis Area Element	
	Cost (Low, Medium, High)	
e Frame	Cost (Low, I High)	
= Medium Time Frame	Lead Agency	
= Short Time Frame	Description	Carolina Language Carolina Car
Legend:	Project Name and Description	opolico opolico no non on on
Legend:	Rank	

	re e	)		•	)			)			)	
		4			H		V V	4			H	
	Intersections	Pedestrians	Bicyclists	Pedestrians			Intersections	Pedestrians	Bicyclists	Intersections	Pedestrians	Bicyclists
	Safe Roads	Safe Users	Safe Speeds	Safe Roads	Safe Users		Safe Roads	Safe Users	Safe Speeds	Safe Roads	Safe Users	Safe Speeds
	Low			Low			Low	(\$50,000)45		High	(\$30M) <sup>45</sup>	
				City of Santa Fe	Santa Fe County	SFMPO	Santa Fe County			St. NMDOT		
proper signage exists where bike lanes end or where users must merge with traffic.	Review of codes, ordinances, and development plans	tor compliance with complete street design and recognition of all modes, updating and enforcing these	where necessary. Include review of sidewalk policies.	Rectangular Rapid Flashing Beacon (RRFB): Installation City of Santa Fe	of RRFB at, a minimum two midblock crossing locations.		Bishops Lodge Road and Tesuque Village Road	Multimodal Road Safety Audit (RSA).		Cerrillos Road Reconstruction (St. Michaels Drive to St.	Francis Drive): Reconstruct to add medians, drainage, bike lanes, sidewalks, and transit facilities. To be turned	over to City after construction.
				m			4			2		

<sup>45</sup> Santa Fe 2020-2045 Metropolitan Transportation Plan, https://santafempo.org/wp-content/uploads/2021/11/Santa-Fe-MTP\_FINAL\_111621-low-

Legend: = Equity Area = Short Time Frame = Medium Time Frame = Long Time Frame

Rank	Project Name and Description	Lead Agency	Cost	Safe System	Emphasis Area	Equity	Time
			(Low, Medium, High)	Element			Frame
			Í		Older Drivers		
					Younger Drivers		
					Speeding		
9	S100440 - NM 466 (St. Michaels): Study, design, and	NMDOT	High	Safe Roads	Intersections		
	construction of the St. Francis Drive/ St. Michaels Drive interchange; pedestrian ADA improvements; pavement		(\$15.54M)45	Safe Users	Pedestrians	<del> </del> 4	)
	preservation; bridge reconstruction.				Older Drivers		
					Younger Drivers		
					Speeding		
7	S100460 - Guadalupe Street Road Diet & Paseo de	City of Santa Fe	High	Safe Roads	Intersection		
	Peralta/Guadalupe Street Intersection Improvements: Reduce the roads from 4 to 3 lanes, add bike lanes,		(\$4.15M) <sup>46</sup>	Safe Users	Pedestrians		D
	widen sidewalks, and add additional pedestrian crossing	25		Safe Speeds	Bicyclists		
	Reconfigure intersection to improve pedestrian crossings and upgrade traffic signals.				Speeding		
∞	S100122 - South/East Connector: ROW acquisition,	Santa Fe County	High	Safe Roads	Streets and roads		
	design, and construction of a new road.		(\$4.750) <sup>46</sup>	Safe Users	Departure		)
				Safe Speeds	Intersection		
				-	Pedestrians		

Legend:  $\overrightarrow{\Delta} \overrightarrow{\Delta} = \text{Equity Area}$ 

= Short Time Frame

Equity	Frame			) H				D H		
Safe System Emphasis Area		Bicyclists Speeding	Intersection	Pedestrians	Bicyclists	Intersection	Intersection	Pedestrian	Older Drivers	
Safe System	Element		Safe Roads	Safe Users		Safe Roads	Safe Roads	Safe Users		
Cost	(Low, Medium, High)		High	(\$4.70M) <sup>46</sup>		High (\$1.775M) <sup>46</sup>	High (\$3.150M)46			
Lead Agency			City of Santa Fe			City of Santa Fe	s: City of Santa Fe			
Project Name and Description			S100470 - St. Michaels' Underpass; Design and	construction of an underpass along the Rail Trail.		S100370 - Agua Fria Street/Cottonwood Drive Intersection Safety Improvements: Construct a roundabout at the intersection.	Agua Fria/South Meadows Intersection Improvements: City of Santa Fe	Reconfigure intersection to include left turn bays on Agua Fria and improve pedestrian crossings and	upgrade traffic signals.	
Rank			6			10	11			

<sup>46</sup> Santa Fe 2020-2045 Metropolitan Transportation Plan, https://santafempo.org/wp-content/uploads/2021/11/Santa-Fe-MTP\_FINAL\_111621-low-

0				)			
Rank	Project Name and Description	Lead Agency	Cost	Safe System	Emphasis Area	Equity	Time
			(Low, Medium, High)	Element			Frame
12	Cerrillos/Sandoval Intersection Improvements:  Dedestrian improvements strining signage reconfigure	City of Santa Fe	High	Safe Roads	Intersection		ě
	medians.		(\$1.80M) <sup>46</sup>	Safe Users	Pedestrians		)
13	Bishop's Lodge Road: Redesign and reconstruction	City of Santa Fe	High	Safe Roads	Pedestrians	<u>[]</u>	
	including the addition of sidewalks, curb gutter, bike lanes, and associated drainage facilities.		(\$4.50M) <sup>47</sup>	Safe Users	Bicyclists	4	)
					Intersections		
14	Camino del Monte Sol: Expand the streets and roads to add shoulders and repave from Camino de Cruz Blanca	to City of Santa Fe	Low (\$120K) <sup>47</sup>	Safe Roads	Streets and roads Departure		ř
	to Old Santa Fe Trail.			Safe Users	Bicyclists		)
15	St. Francis Drive Pedestrian Intersection improvement: NMDOT/City of	NMDOT/City of	Low-Medium	Safe Roads	Pedestrians		
	Pedestrian improvements at all the intersections along St. Francis Drive.	Santa Fe via Agreement	(\$600K)47	Safe Users	Intersections		
16	sion	of City of Santa Fe	High (\$8.0M) <sup>47</sup>	Safe Roads	Streets and roads Departure	<u>√</u>	
	Planned development. The streets and roads will include 2 travel lanes, bicycle lanes, sidewalk, lighting			22000	Pedestrians		
	and landscaping.				Bicyclists		
					Intersections		

Legend:  $\overrightarrow{\Delta} \overrightarrow{\Delta} = \text{Equity Area}$ 

Short Time Frame

= Medium Time Frame

= Long Time Frame

Rank	Project Name and Description	Lead Agency	Cost	Safe System	Emphasis Area	Equity	Time
			(Low, Medium, High)	Element			Frame
17	Sandoval/Montezuma Intersection Improvements:	City of Santa Fe	Low-Medium	Safe Roads	Intersections		ě
	Pedestrian improvements, striping, signage.		(\$850K)47	Safe Users	Pedestrians		
				Safe Speeds			
18	San Felipe Road Reconstruction: Reconstruct streets	City of Santa Fe	High (\$1.6M) <sup>47</sup>	Safe Roads	Bicyclists		ř
	and roads from Airport Road to Agua Fria Street and add bike lanes, curb and gutter, sidewalk.			Safe Users	Pedestrians	4	
19	Rancho Viejo Boulevard Bike Lanes (Shoulders): Widen Santa Fe County	Santa Fe County	Medium (\$1.0M) <sup>48</sup>	Safe Roads	Bicyclists		i C
	from NM 14 to Avenida del Sur to add bike lanes.			Safe Users			
18	Bishop Lodge Road bicycle, pedestrian, ADA, and	Santa Fe County	High	Safe Roads	Intersections	V)	<b>(</b>
	transit improvements.		(\$4M)48	Safe Users	Pedestrians	4	

<sup>47</sup> Santa Fe 2020-2045 Metropolitan Transportation Plan, https://santafempo.org/wp-content/uploads/2021/11/Santa-Fe-MTP\_FINAL\_111621-lowres.pdf

<sup>48</sup> Santa Fe 2020-2045 Metropolitan Transportation Plan, https://santafempo.org/wp-content/uploads/2021/11/Santa-Fe-MTP\_FINAL\_111621-lowres.pdf

)	-			)			
Rank	Project Name and Description	Lead Agency	Cost	Safe System	Emphasis Area	Equity	Time
			(Low, Medium, High)	Element			Frame
			Í		Bicyclists		
19	Agua Fria Road/Henry Lynch Street Intersection	City/Santa Fe County Low	у Low	Safe Roads	Intersections	<u>[]</u>	Į.
	Roundabout-Study.		(\$130,000)48			4	
20	<b>St. Francis Street Lights:</b> Between W. San Mateo and Cerrillos.	NMDOT	Low-Medium (\$500K) <sup>48</sup>	Safe Roads	Pedestrians	<del> </del>	
21	Rufina Street/Lopez Lane Intersection Improvements: City of Santa Fe	City of Santa Fe	High	Safe Roads	Pedestrians	V	
	Pedestrian improvements, striping, signage, reconfigure medians.		(\$1.8M) <sup>48</sup>		Intersections	<del>)</del>	
22	Beckner Road/Richards Avenue Intersection	City of Santa Fe	High	Safe Roads	Pedestrians		<b>(</b>
	Improvements: Pedestrian improvements, striping, signage.		(\$2.0M) <sup>48</sup>		Intersections		
23	Tesuque Village Road Bike Lanes: Extend bike lanes	Santa Fe County	High	Safe Roads	Bicyclists	V V	
	trom the Tesuque Pueblo Fire Department to the Pueblo of Tesuque boundary.		(\$1.65M) <sup>48</sup>	Safe Users		4	
24	Acequia Trail Extension (Otowi to La Cieneguita):	City of Santa Fe	High	Safe Roads	Pedestrians		
			(\$3 M)	Safe Users	Bicyclists		
26	Buckman Road Bike and Pedestrian Improvements City of Santa Fe	City of Santa Fe	High (\$1.25 M)	Safe Roads	Pedestrians		

Rank	Project Name and Description	Lead Agency	Cost	Safe System	Emphasis Area	Equity	Time
			(Low, Medium, High)	Element			Frame
			Í	Safe Users	Bicyclists		
27	Cerrillos – Sandoval Intersection Improvements	City of Santa Fe	High (\$1.7 M)	Safe Roads	Intersections		
				Safe Users	Pedestrians		
					Bicyclists		
28	Calle Po Ae Pi Extension	City of Santa Fe	High (\$1.5 M)	Safe Roads			
29	Delgado St - SF River Bridge Replacement	City of Santa Fe	High (\$2.0 M)	Safe Roads			
30	South Capital Area Road Reconstruction	City of Santa Fe	High (\$1.5 M)	Safe Roads			
				Safe Users			
31	Paseo de Peralta - SF River Bridge Rehab	City of Santa Fe	High (\$2.5 M)	Safe Roads			
32	Bicycle & Pedestrian Wayfinding System	City of Santa Fe	Med (\$0.4 M)	Safe Users	Pedestrians		
					Bicyclists		
33	Cerro Gordo Reconstruction	City of Santa Fe	High (\$6.0 M)	Safe Roads	Pedestrians		
				Safe Users	Bicyclists		
34	West Alameda St. Drainage/bike lanes	City of Santa Fe	High (\$9.4 M)	Safe Roads	Bicyclists		
35	Transit Fixed Route Vehicle Replacement	City of Santa Fe	High (\$5.3 M)	Safe Vehicles			

Rank	Project Name and Description	Lead Agency	Cost	Safe System	Emphasis Area	Equity	Time
			(Low, Medium, High)	Element			Frame
36	Arroyo De Los Chamisos Crossing	City of Santa Fe	High (\$11.8 M)	Safe Roads	All		
				Safe Users			
37	St. Michael's Drive Reconstruction	City of Santa Fe	High (\$23.0 M)	Safe Roads	All		
				Safe Users			
38	San Felipe Pedestrian and Bicycle Improvements	City of Santa Fe	High (\$1.6 M)	Safe Roads	Pedestrians		
				Safe Users	Bicyclists		
40	Bishop's Lodge Road Reconstruction	City of Santa Fe	High (\$10.2 M)	Safe Roads	All		
				Safe Users			
41	Rufina St & Lopez Lane Intersection Improvements City of Santa Fe	City of Santa Fe	High (\$2.5 M)	Safe Roads	Intersections		
				Safe Users	Pedestrians		
					Bicyclists		
42	Cerrillos Phase III Ped and Bike Improvements	City of Santa Fe	High (\$5.0 M)	Safe Roads	Pedestrians		
				Safe Users	Bicyclists		
43	New Entrance Road Regional Airport	City of Santa Fe	High (\$9.0 M)	Safe Roads	All		
				Safe Users			

Equity Time Fram		
Safe System Emphasis Area Element	Pedestrians	Bicyclists
	Safe Roads	Safe Users
Cost (Low, Medium, High)	High (\$2.5 M)	
Lead Agency Cost (Low, I	City of Santa Fe	
Project Name and Description	Lopez Lane Bicycle & Pedestrian Improvements	
	Lopez Lane	
Rank	44	

US-285 Frontage Road Corridor Study through the Pueblo of Tesuque.

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NMDOT, Pueblo of Low (\$0.2 M) Tesuque, SFMPO

Bicyclists Safe Users

**Pedestrians** 

Safe Roads

### **Appendices**



### Regional Crash Trees

Roadway Departure Crashes

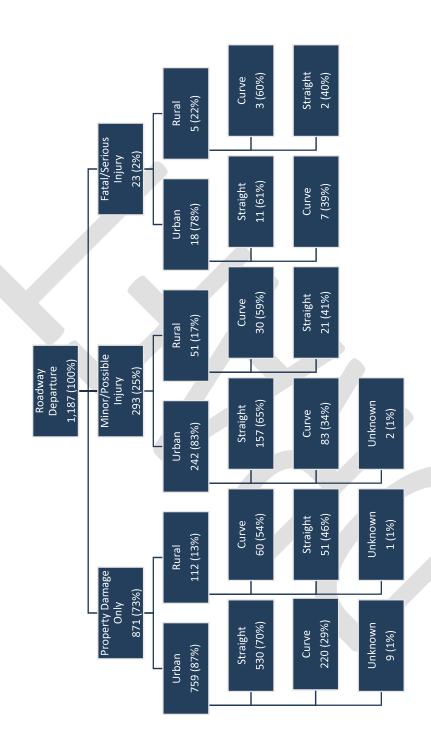


Figure 35. Roadway Departure Fatal and Injury Crashes, 2015-2019 (Source: NMDOT, 2021)

or serious injury and 290 resulted in a possible injury. Over 80 percent of these crashes occurred on urban roads, of which 35 percent involved curves. Nearly 60 percent of the fatal, serious injury, and possible injury roadway departure-related crashes involved curves on the rural local roads in the region. A review of the The crash tree shown in Figure 35 shows that of the total number of roadway departure crashes on the local roads in the Santa Fe region, 23 resulted in a fatality crash data indicates a majority of the roadway departure crashes occurred during dark conditions.

### **Distracted Driving Crashes**

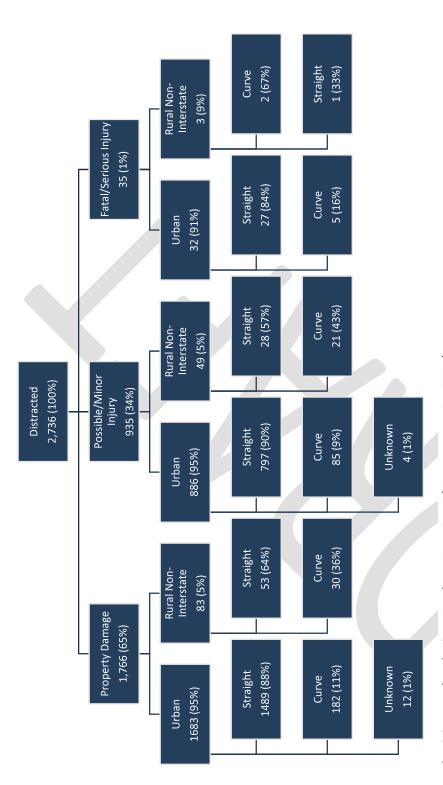


Figure 36. Distracted Driving Fatal and Injury Crashes, 2015-2019 (Source: NMDOT, 2021)

The distracted driving crash tree shown in Figure 36 reflects the crashes from NMDOT's SAMS database that are listed as driver inattention, disregarding traffic signal, or passed stop sign. Of the total number of distracted driving crashes on the local roads in the Santa Fe region, 35 resulted in a fatal and serious injury crash, and 935 resulted in possible injury. These crashes primarily occurred on urban local streets and roads, with the majority on straight streets and roads. Distracted driving is a factor on rural roads in the region. A review of the crash data indicates that many of the crashes involving distracted driving occur during daylight conditions.

### **Impaired Driving Crashes**

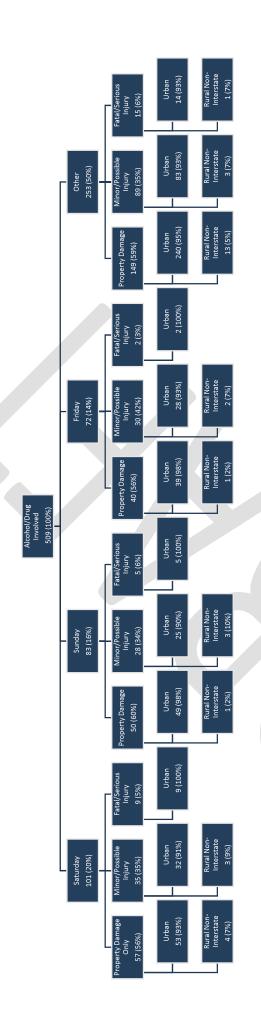
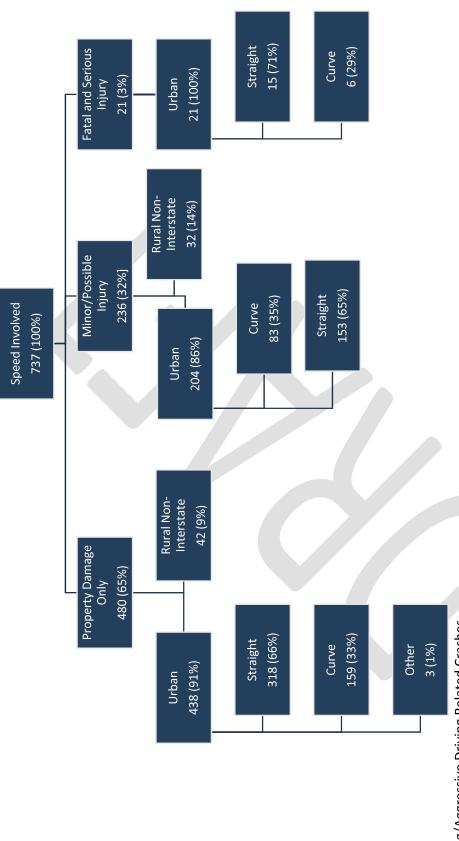


Figure 37. Impaired Driving Crashes, 2015-2019 (Source: NMDOT, 2021)

The impaired driving crash tree shown in Figure 37 indicates those crashes in the Santa Fe region that have alcohol or drugs identified in the SAMS database as a factor in the cause of the crash. Approximately 50 percent of the total impaired driving crashes occur on Friday, Saturday, and Sunday. On these three days of the week, all of the fatal and serious injury crashes occurred on the urban local roads in the region. A review of the data indicates that the largest number of impaired driving crashes occurred during dark conditions.

Figure 38. Speeding-Related Crashes, 2015-2019 (Source: NMDOT, 2021)



Speeding/Aggressive Driving Related Crashes

The crash tree shown in Figure 38reflects the crashes involving speeding and aggressive driving on local roads in the Santa Fe region. Of the total number of speedrelated crashes, 21 resulted in a fatal or serious injury and 236 resulted in a possible injury. All of the fatal and serious injury crashes and a majority of those that resulted in a possible injury occurred on urban roads in the region. Of these crashes, 40 percent involved curves.

### Older Driver Involved Crashes

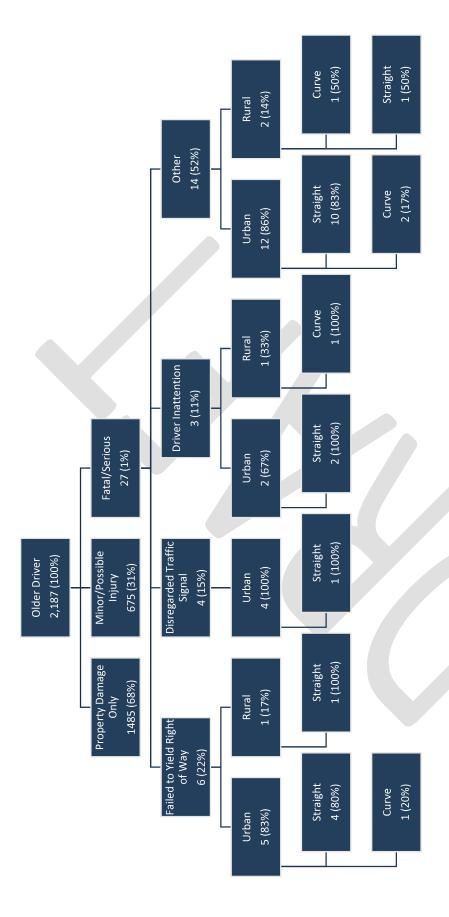


Figure 39. Older Driver-Involved Fatal and Injury Crashes, Detailed Fatal and Serious Injury Crashes, 2015-2019 (Source: NMDOT, 2021)

The crash tree shown in Figure 39 indicates that of the total number of crashes involving older drivers (65 years of age and older), 27 resulted in a fatality or serious injury and 675 resulted in a possible injury. Three primary factors related to the fatal and serious injury crashes involving older drivers are failure to yield the right of way, disregarded a traffic signal, and driver inattention. These crashes primarily occurred in urban areas. Figure 39 provides more information regarding older drivers involved in crashes resulting in a possible injury.

## Older Driver Involved Crashes

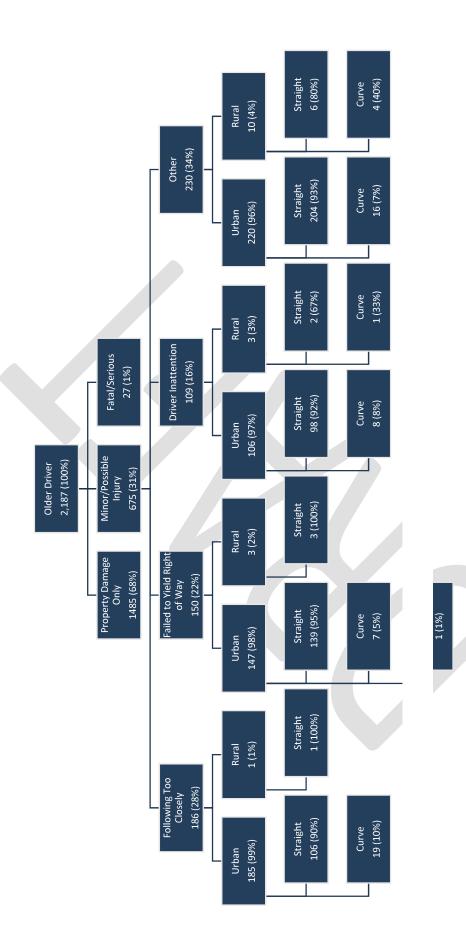


Figure 40. Older Driver-Involved Possible Injury Crashes, 2015-2019 (Source: NMDOT, 2021)

Three primary factors related to these crashes are following too closely, failure to yield the right of way, and driver inattention. These occurred on urban local The crash tree shown in Figure 40 indicates that of the total number of crashes involving older drivers (65 years of age and older), 675 resulted in a possible injury. roads in the region. Curves are a factor in these crashes.

Younger Driver-Involved Crashes

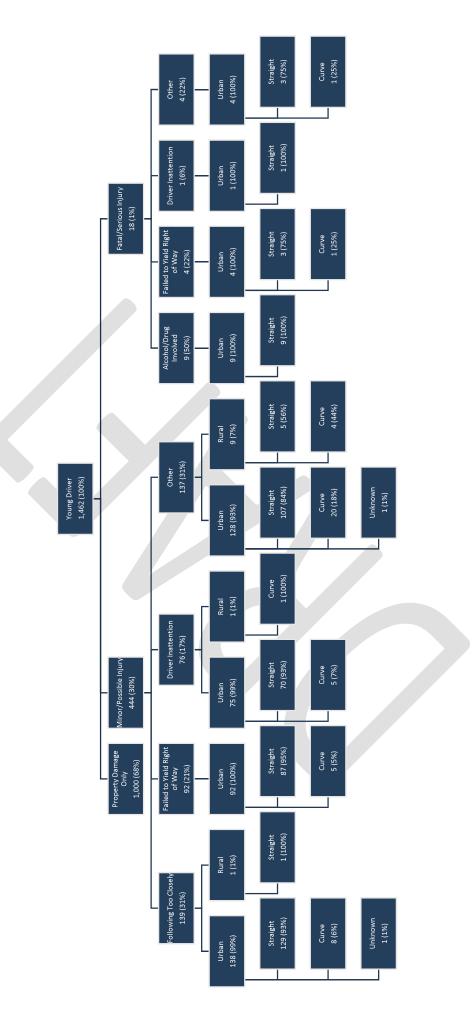


Figure 41. Younger Driver-Involved Crashes, 2015-2019 (Source: NMDOT, 2021)

a possible injury. Alcohol or drug involvement represents 50 percent (9) of the fatal and serious injury crashes involving younger drivers in the region and all of The crash tree shown in Figure 41 indicates that of total number of crashes involving younger drivers, 18 resulted in a fatality or serious injury and 444 resulted in these occurred on urban local roads. Other factors related to these younger drivers are following too closely, failure to yield the right of way, and driver inattention in urban areas. Although most of the crashes occurred on straight streets and roads, curves are a factor in almost 10 percent of all of the injury crashes involving younger drivers.

Pedestrian-Involved Crashes

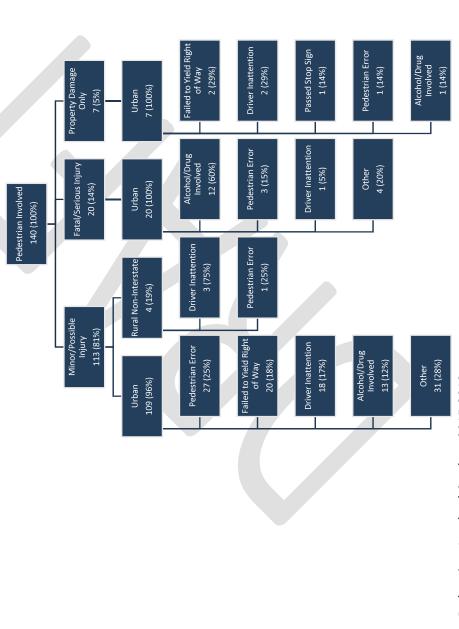


Figure 42. Graphic. Pedestrian -Involved Crashes, 2015-2019.

The crash tree shown in Figure 42 indicates that 140 total crashes on local roads in the region involved pedestrians. Of these, 20 resulted in a fatality or serious injury and 113 resulted in a possible injury. These crashes occurred primarily on urban roads. Alcohol and drugs were a factor in 60 percent of the fatal and serious injury crashes. Pedestrian error, failure to yield the right of way, and driver inattention are the primary factors in pedestrian-involved crashes.

**Bicyclist-Involved Crashes** 

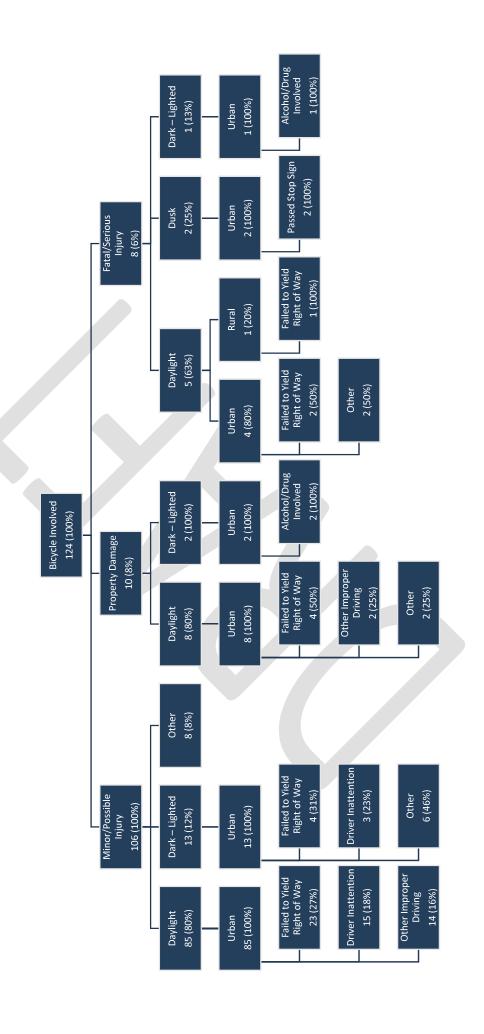
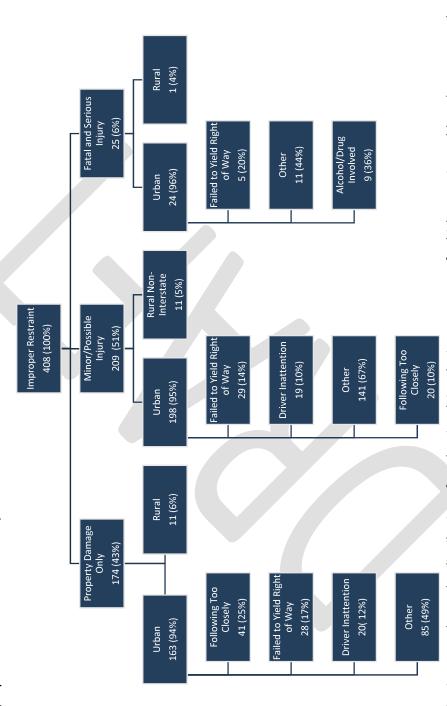


Figure 43. Graphic. Bicycle-involved crashes 2015-2019

The crash tree shown in Figure 43 indicates that of the total number of bicycle-involved crashes, eight resulted in a fatality and serious injury and 106 resulted in a possible injury. All of these crashes except for 1 occurred on urban local roads. The majority of these occurred during daylight conditions. Failure to yield the right of way is a common factor in these crashes.

Improper Restraint Use in Crashes

Figure 44. Graphic. Improper Restraint Use in Crashes, 2015-2019



The crash tree shown in Figure 44 shows the distribution of crashes involving the improper use of vehicle restraints. Although not an emphasis area for the LRSP, improper use of vehicle restraints contributes to 23 percent of the fatal and serious injury crashes in the Santa Fe region. Of the total number of crashes involving improper restraint use by the vehicle occupant, 25 crashes resulted in a fatal and serious injury and 209 crashes in a possible injury. These primarily occurred on the region. Other urban local roads within

contributing factors in these crashes include failure to yield the right of way, following too closely, and alcohol or drug involvement. A review of the data indicates that over one-quarter of these drivers were aged 65 or over. Over 50 percent of the fatal and injury crashes with a restraint not used occurred during daylight conditions.

Motorcycle-Involved Crashes

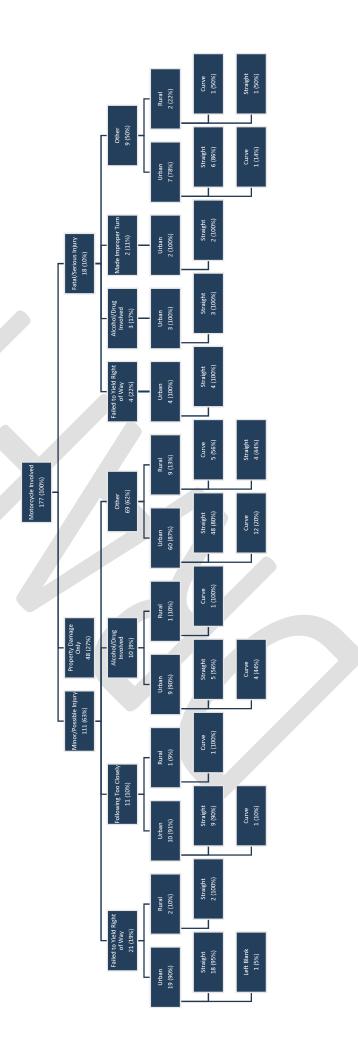


Figure 45. Motorcycle-Involved Fatal and Injury Crashes, 2015-2019 (Source: NMDOT, 2021)

The crash tree shown in Figure 45 represents crashes involving motorcycles on local roads. Although not a LRSP emphasis area, addressing motorcycle crashes in in a fatality and serious injury and 111 resulted in a possible injury. These crashes are primarily in urban areas and on straight sections of streets and roads. Failure combination with other emphasis areas can result in reductions of fatalities and serious injuries. Of the total number of motorcycle-involved crashes, 18 resulted to yield right of way, alcohol or drug involvement, and making an improper turn are common factors in these crashes.

# High Injury Network (HIN)

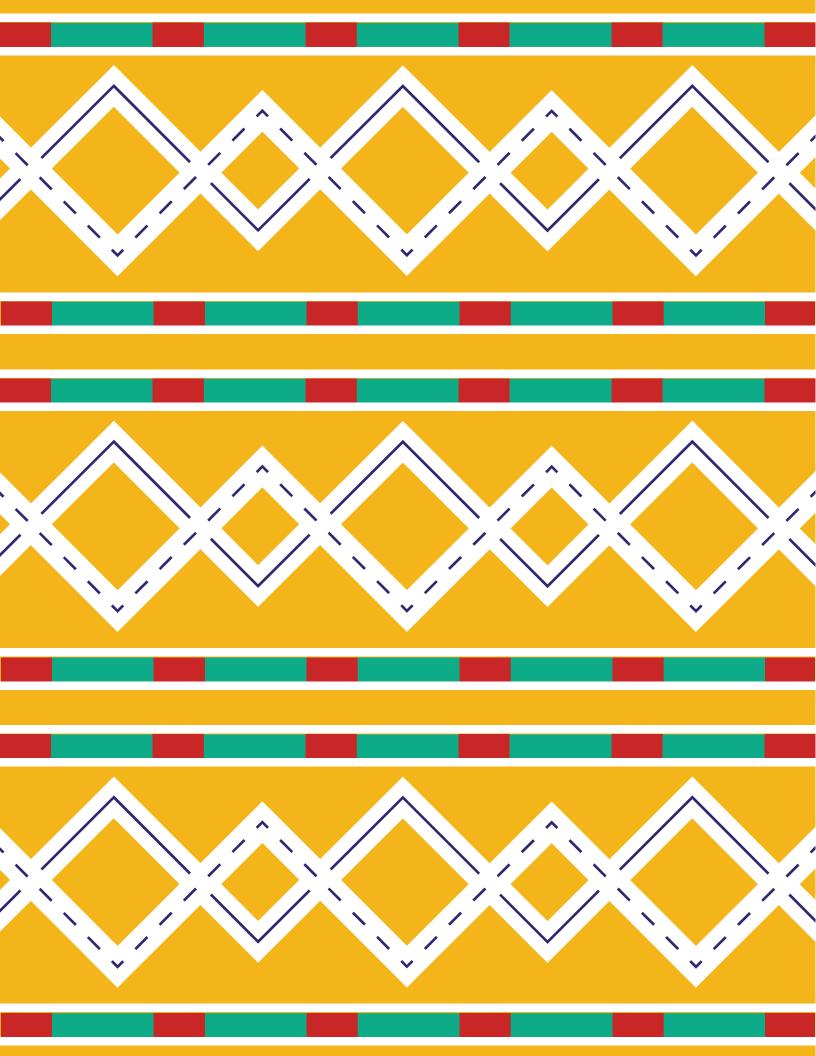
Table 5. High Injury Network (HIN), Source: NMDOT, 2022

	l amount				A 71		0/ -61 []+ 8 4:1
TIN Koule	mana	N CIASHES	A Crasiles	b Clashes	% Of Locality NA % Of Locality Crashes KAB Crashes	% of Locality KAB Crashes	% OI LOCAIILY WIIES
AGUA FRIA RD	4.01	0	2	24	1.83%	3.59%	0.24%
AGUA FRIA ST	3.62	0	2	23	1.83%	3.45%	0.22%
AIRPORT RD	3.06	3	10	62	11.93%	10.36%	0.18%
ALAMEDA FRONTAGE RD	0.49	0	0	2	0.00%	0.28%	0.03%
ALTA VISTA ST	0.89	0	0	0	%00:0	%00:0	0.05%
AVENIDA DE AMISTAD	1.64	0	0	2	%00:0	0.28%	0.10%
AVENIDA VISTA GRANDE	4.42	0	0	3	%00:0	0.41%	0.27%
BACA ST	0.56	0	1	2	0.92%	0.41%	0.03%
BUCKMAN RD	1.71	0	0	2	%00.0	0.28%	0.10%
CALLE ATAJO	1.07	0	0	4	%00:0	0.55%	%90.0
CAMINO ALIRE	0.41	0	0	9	%00.0	0.83%	0.02%
CAMINO CAPILLA VIEJA	1.44	0	0	0	%00:0	%00.0	%60'0
CAMINO CARLOS REY	1.88	2	2	10	3.67%	1.93%	0.11%

HIN Route	Length	K Crashes	A Crashes	B Crashes	% of Locality KA Crashes	% of Locality KAB Crashes	% of Locality Miles
CAMINO DE LA FAMILIA	80:0	0	0	0	%00.0	%00:0	%00:0
CAMINO LA TIERRA	4.55	0	2	4	1.83%	0.83%	0.27%
CERRILLOS RD	5.92	10	20	121	27.52%	20.86%	0.36%
COUNTRY CLUB RD	92.0	0	2	2	1.83%	0.97%	0.05%
DON GASPAR AVE	1.95	0	0	4	0.00%	0.55%	0.12%
E CORDOVA RD	0.44	0	0	2	0.00%	0.28%	0.03%
E PALACE AVE	1.05	0	0	2	%00.0	0.28%	%90.0
FIFTH ST	96.0	0	0	4	%00.0	0.55%	%90.0
GALISTEO ST	2.53	0	2	8	1.83%	1.38%	0.15%
HICKOX ST	0.62	0	1	3	0.92%	0.55%	0.04%
HOPEWELL ST	0.50	0	Т	2	0.92%	0.41%	0.03%
JAGUAR DR	3.02	0	1	8	0.92%	1.24%	0.18%
JAMES AVE	0.18	0	0	0	%00.0	0.00%	0.01%
JORGENSEN LN	0.16	1	0	1	0.92%	0.28%	0.01%
LLANO ST	0.52	0	1	11	0.92%	1.66%	0.03%
LOPEZ LN	1.09	0	2	3	1.83%	%69:0	0.07%
LOS PINOS RD	4.47	0	0	∞	%00.0	1.10%	0.27%
N GUADALUPE ST	0.73	0	1	2	0.92%	0.83%	0.04%
OLD PECOS TRL (N)	1.60	0	2	7	1.83%	1.24%	0.10%

HIN Route	Length	K Crashes	A Crashes	B Crashes	% of Locality KA Crashes	% of Locality KAB Crashes	% of Locality Miles
OLD PECOS TRL (S)	1.97	0	ĸ	14	2.75%	2.35%	0.12%
OLD SANTA FE TRL	10.70	0	0	10	0.00%	1.38%	0.64%
PACHECO ST	0.91	Ţ	0	11	0.92%	1.66%	0.05%
PASEO DE PERALTA	1.92	Ţ	8	14	3.67%	2.49%	0.12%
PASEO DEL SOL	1.22	0	1	2	0.92%	0.83%	0.07%
PASEO DEL SOL WEST	1.03	0	0	8	%00.0	1.10%	%90.0
PASEO NOPAL	0.05	0	0	1	%00.0	0.14%	%00.0
RABBIT RD	4.62	0	1	4	0.92%	%69:0	0.28%
RICHARDS AVE	2.33	1	2	22	2.75%	3.45%	0.14%
RODEO RD	2.00	1	4	38	4.59%	5.94%	0.30%
RUFINA ST	2.72	0	2	6	1.83%	1.52%	0.16%
S GUADALUPE ST	0.58	1	1	9	1.83%	1.10%	0.03%
S PACHECO ST	0.36	Н	0	13	0.92%	1.93%	0.02%
SAINT MICHAELS DR	2.34	2	9	48	7.34%	7.73%	0.14%
SAN FELIPE RD	0.35	0	2	4	1.83%	0.83%	0.02%
SANDOVAL ST	0.50	1	0	8	0.92%	0.55%	0.03%
SAWMILL RD	0.71	0	1	6	0.92%	1.38%	0.04%
SECOND ST	0.42	0	0	0	%00.0	%00:0	0.03%
SILER RD	0.63	1	ю	17	3.67%	2.90%	0.04%

HIN Route	Length	K Crashes	A Crashes	B Crashes	% of Locality KA % of Locality Crashes KAB Crashes	% of Locality KAB Crashes	% of Locality Miles
SIRINGO RD	3.62	0	2	18	1.83%	2.76%	0.22%
SOUTH MEADOWS RD	2.41	0	8	12	2.75%	2.07%	0.14%
W ALAMEDA ST	5.25	T	9	20	6.42%	3.73%	0.32%
W CORDOVA RD	98.0	0	1	4	0.92%	%69:0	0.05%
W MANHATTAN AVE	0.76	0	0	H	0.00%	0.14%	0.05%
W PALACE AVE	0.17	0	0	0	0.00%	%00.0	0.01%
W SAN FRANCISCO ST	0.77	T	0	3	0.92%	0.55%	0.05%
W SAN MATEO RD	1.27	0	0	5	%00.0	%69.0	0.08%
W ZIA RD	2.38	0	2	13	1.83%	2.07%	0.14%
YUCCA ST	1.36	0	2	4	1.83%	0.83%	0.08%
ZAFARANO DR	0.79	0	8	18	2.75%	2.90%	0.05%



## Santa Fe MPO

## Santa Fe Metropolitan Planning Organization









### Santa Fe MPO Staff Report

Technical Coordinating Committee: August 22, 2022 Transportation Policy Board: August 25, 2022

Matter of Approval: Approval of 2022-2027 TIP Amendment 4

**RECOMMENDED ACTION:** Approval of the FFY 2022-2027 TIP Amendment 4 via this Self-Certificate formally adopting the amendment.

### **Background:**

Formal amendments to the Transportation Improvement Program (TIP) occur every quarter for additions of new projects to the TIP or significant project changes. Amendment 4 to the 2022-2027 TIP is following the below schedule:

SFMPO - Call for Amendment Proposals	7/01/2022
SFMPO – Deadline for Submittal of Amendment Proposals	7/20/2022
SFMPO – TCC Amendment Review	7/25/2022
SFMPO – Release for Public Review	7/28/2022
SFMPO – Close of 15 Day Public Review	8/11/2022
SFMPO – TCC Review and Public Comment and Recommendation	8/22/2022
SFMP – TPB Public Hearing and Approval	8/25/2022

No public comment was received during the 15 day Public Review period.

### The proposed amendments are:

TIP ID	Agency	DOC	Project Title	Туре	Change
S100640	Santa Fe	22-04	Arroyo Hondo	Bicycle and	\$278,380 additional CMAQ
	County		Segment 3	Pedestrian (28)	funds awarded due to
					construction cost increases.
					Total cost is now \$1,955,249.
S100780	Santa Fe	22-04	Rail Trail -	Bicycle and	\$847,681 In American Rescue
	County		Spur Ranch	Pedestrian (28)	Plan Funds allocated to construct
			Road to 285		the Rail Trail from Spur Ranch
					Road in Eldorado to 285.

The next call for formal amendments will be October 3, 2022 through October 29, 2022.

## Santa Fe MPO

## Santa Fe Metropolitan Planning Organization









### MPO SELF-CERTIFICATION

## Amendment 4 to the FFY 2022-2027 TIP Approved on August 25th, 2022 by the Santa Fe MPO Transportation Policy Board

In accordance with 23 U.S.C. 450.334, the New Mexico Department of Transportation (NMDOT), and the Santa Fe Metropolitan Planning Organization (SFMPO) for the Santa Fe urbanized area hereby certify that the transportation planning process, specifically Transportation Improvement Program (TIP) Amendment 4 meets the Performance-Based Planning and Programming (PBPP) requirements established in 23 CFR 450.326(d), 49 CFR 625, and 49 CFR 630. The projects selected in the FFY 2022 – 2027 Transportation Improvement Program (TIP) were developed from the priorities outlined in the NMDOT Asset Management Plan, the New Mexico Strategic Highway Safety Plan, and the New Mexico Freight Plan; and from the priorities outlined in the Santa Fe Trails Transit Asset Management Plan, and the Santa Fe MPO 2020-2045 Metropolitan Transportation Plan and its formally adopted Master Plans.

The programmed projects included in this Amendment 4 to the TIP support the adopted Performance Targets of the Santa Fe MPO for Performance Measure 1 (Safety), Performance Measure 2 (State of Good Repair), Performance Measure 3 (System Performance), and Transit Asset Management. The TIP and each formal amendment were developed, reviewed and processed by the Santa Fe MPO in accordance with the Santa Fe MPO Public Participation Plan and the Santa Fe MPO Title VI Plan. The Santa Fe MPO also certifies that the transportation planning process is addressing the major issues in the metropolitan planning area and is being conducted in accordance with all applicable requirements of:

- (1) The fiscal constraint required in 23 C.F.R. 450;
- (2) 49 U.S.C. 5323(1), 23 U.S.C. 135, and 23 U.S.C. 450.220;
- (3) Title VI of the Civil Rights Act of 1964 and the Title VI assurance executed by each State under 23 U.S.C. 324 and 29 U.S.C. 794;
- (4) Section 1101(b) of the Transportation Equity Act for the 21st Century (Pub. L. 105-178) regarding the involvement of Disadvantaged Business Enterprises in FHWA and FTA funded planning projects (Sec. 105(f), Pub. L. 97-424, 96 Stat. 2100; 49 CFR, Subtitle A, Part 26);
- (5) The provisions of the Americans with Disabilities Act of 1990 (Pub. L. 101-336, 104 Stat.327, as amended) and U. S. DOT implementing regulation;
- (6) The provision of 49 U.S.C. Part 20 regarding restrictions on influencing certain activities; and
- (7) Sections 174 and 176(c) and (d) of the Clean Air Act as amended (42 U.S.C. 7504, 7506(c) and (d).

The projects and revisions that were part of the amendment are as follow:

### PROPOSED PROJECTS TO BE AMENDED:

TIP ID	Agency	DOC	Project Title	Туре	Change
S100640	Santa Fe	22-04	Arroyo Hondo	Bicycle and	\$278,380 additional CMAQ
	County		Segment 3	Pedestrian (28)	funds awarded due to
					construction cost increases.
					Total cost is now \$1,955,249.
S100780	Santa Fe	22-04	Rail Trail -	Bicycle and	\$847,681 In American Rescue
	County		Spur Ranch	Pedestrian (28)	Plan Funds allocated to
			Road to 285		construct the Rail Trail from
					Spur Ranch Road in Eldorado to
					285.