Ramah Navajo Chapter SS4A

SAFETY ACTION PLAN

November 2025

THE RAMAH NAVAJO CHAPTER

SS4A VISION ZERO SAFETY ACTION PLAN

Adopted November 2025

DEDICATION

We want to dedicate this plan to our family, friends, and loved ones who have lost their lives on Ramah Navajo Chapter roadways.

The weight of their loss is immeasurable; a grief we all share in common.

With this plan, we intend to honor their legacy and strengthen our community to build a safer future for the the next generation.

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EXECUTIVE SUMMARY

01 EXECUTIVE SUMMARY

Vision Zero is a comprehensive initiative aimed at eliminating all traffic fatalities and severe injuries while promoting safe, healthy, and equitable mobility for all members of the Ramah Navajo Chapter. This Plan is both a safety initiative and a call to action, serving to address the historical disinvestment and systemic inequities faced by tribal communities.

The Ramah Navajo Chapter (Chapter) is committed to achieving zero traffic fatalities and serious injuries by 2030 through a Safe Systems-based approach. This strategy emphasizes designing transportation systems that anticipate human error and minimize the consequences of mistakes. The Safe Systems approach attempts to improve traffic safety through a holistic lens, pushing for safety improvements across all aspects of transportation network, from vehicle safety to post-crash care.

The Chapter prioritizes the creation of safe streets for all-pedestrians, cyclists, people with disabilities, elders, children, and motorists alike. A dedicated group of local stakeholders, known as the Vision Zero Task Force, is responsible for leading this effort for the Chapter. These stakeholders comprise local government representatives, emergency first responders, representatives from the Ramah Navajo Department of Transportation (RNDOT), and representatives from the Ramah Navajo School Board. Their goal is to promote and implement the informed, data-driven strategies outlined in this Plan to create a safer and more accessible transportation network for all roadway users. Priority areas include roadway design analysis, infrastructure improvement, safety data analysis, community education, policy advocacy, and building strong, inter-agency collaborations.

This Safety Action Plan addresses distinct traffic safety challenges faced by the Ramah Navajo Chapter. These include the high number of crashes in dark, unlit areas, frequent rollover incidents, elevated rates of crashes involving impaired drivers, and crashes involving wildlife and livestock. These patterns reflect broader systemic gaps, such as inadequate lighting, poor road conditions, and underinvestment in safety infrastructure—issues that disproportionately impact rural and tribal areas.

Findings are drawn from comprehensive analysis of crash data provided by the New Mexico Department of Transportation (NMDOT), as well as crash reports from local law enforcement, and enriched by community and Task Force input through public engagement sessions. These sessions were crucial in shaping the implementation plan and ensuring that the solutions reflect the lived experiences of the Ramah Navajo Chapter residents.

The Plan explicitly acknowledges the socioeconomic challenges facing the Ramah Navajo Chapter, including high poverty rates, limited access to services, and the necessary improvements needed on existing roadway infrastructure. These realities highlight the critical need for equitable investment in transportation safety.

Recommended projects (detailed in ***Section 10***) are phased across short-term (1–2 years), medium-term (3–5 years), and long-term (5–10 years) goals. The Vision Zero Task Force will continue to oversee implementation, actively pursuing partnerships and funding opportunities while evaluating progress and adapting strategies as needed.

To support the Vision Zero Task Force in their efforts to implement the recommendations, a supplemental Implementation Plan is included to provide a tier system that can be used during the project prioritization process.

Achieving Vision Zero in Ramah Navajo Chapter will require sustained collaboration, policy alignment, and community input. Partnership with tribal governments, local and state agencies, and most importantly, with residents themselves is key to accomplishing Vision Zero. Through this Plan, the Ramah Navajo Chapter aims not only to eliminate all traffic fatalities and serious injuries by 2030 but to advance equity and resilience in the community's transportation systems.

By embedding Vision Zero principles in planning and equitable investment, Ramah Navajo Chapter can create transportation networks that prioritize roadway safety, access, and mobility.

The adoption resolution of this SS4A Vision Zero Safety Action Plan can be seen below.

RAMAH DEPARTMENT OF TRANSPORTATION SS4A SAFETY ACTION PLAN ADOPTION RESOLUTION

Martha Garcia
President

Monica Yazzie
Vice-President

Raquel Yazzie
Secretary/Treasurer

RAMAH NAVAJO CHAPTER
HC 61, Box 13 Ramah, New Mexico 87321-9601
(505) 876-9656/9630/9517

Tribal Office

Norman M. Begay
Council Delegate
Navajo Nation Council

Leo L. Pino
Member
Eastern Navajo Land Board

RESOLUTION OF THE RAMAH NAVAJO CHAPTER

NO: 112505

AUTHORIZING THE RAMAH NAVAJO CHATPER TO FORMALLY ADOPT THE SAFETY ACTION PLAN FUNDED BY THE "SAFE STREETS FOR ALL (SS4A) GRANT".

WHEREAS:

1. Pursuant to Navajo Tribal Council Resolution CJ-20-55, the Ramah Navajo Chapter is a certified Chapter of the Navajo Nation, and the Chapter is uniquely situated as a satellite community of the Navajo Nation; and
2. By Resolution CAP-34-98, the Navajo Nation Council enacted the Navajo Nation Local Government Act Codified as 26 NNC establishing a new title exclusively for political subdivisions of the Navajo Nation to address the government function of chapters that improve the governmental structure and provides the opportunity for local chapters to make decisions over local matters; and allowing communities to excel and flourish, enable Navajo leaders to lead toward a prosperous future and improve the strength and sovereignty of the Navajo Nation, including custom and tradition; and
3. The Constitution of the Ramah Navajo of the Navajo Nation provides the Ramah Navajo Chapter ("Tribe") the authority to engage in activities on behalf of and in the interest of the welfare and benefit of the Tribe; and
4. 25 CFR Part 170 Subpart D governs the Tribal Transportation Long Range Transportation Planning requirements and §170.402 specifically provides that Tribes with BIA self-determination contracts may assume long-range transportation planning functions and prepare National Tribal Transportation Facility Inventory dada updates; and
5. The United States Department of Transportation (USDOT) launched the "Safe Streets for All (SS4A)" program to support local, regional, and Tribal initiatives to prevent roadway fatalities and serious injuries; and,
6. Eight individuals were needlessly killed, and seven individuals were seriously injured within the Chapter boundary between 2018 and 2022; and,
7. The Chapter recognizes the need for action to increase traffic safety and to prevent deaths and injuries; and,
8. The Vision Zero Safety Action Plan outlines specific strategies, project and policy recommendations, and an implementation plan to improve safety on Chapter roadways; and,
9. The adoption of the Safety Action Plan shows the Chapter's commitment to improving public safety and supports eligibility for future implementation funding through the SS4A program and additional funding sources; and,
10. The Chapter finds the adoption of the Safety Action Plan is in the best interest of public health, safety, and welfare.

NOW, THEREFORE BE IT RESOLVED THAT:

THE RAMAH NAVAJO CHAPTER NOW HEREBY ACCEPTS AND APPROVES THE ADOPTION OF THE RAMAH NAVAJO CHAPTER'S SS4A VISION ZERO SAFETY ACTION PLAN. IN CONCLUSION, THE RAMAH NAVJAO CHAPTER PRESIDENT, OR HER DESIGNEE, IS AUTHORIZED TO SUBMIT THE ADOPTED PLAN TO THE U.S. DEPARTMENT OF TRANSPORTATION IN FULFILLMENT OF THE SS4A GRANT REQUIREMENT

CERTIFICATION

We hereby certify that the foregoing resolution was duly considered by the Ramah Navajo Chapter at a duly called meeting in Mountain View, New Mexico, at which a quorum was present and that the same was passed by a vote of 17 in favor, 0 abstained, and 05 opposed this 19th day of November 2025.

Martha Garcia, President

Monica Yazzie, Vice-President

Raquel Yazzie, Secretary/Treasurer

Motion by: Kimberly Curley
Second by: Michael Eriacho

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November 19, 2025
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02

INTRODUCTION

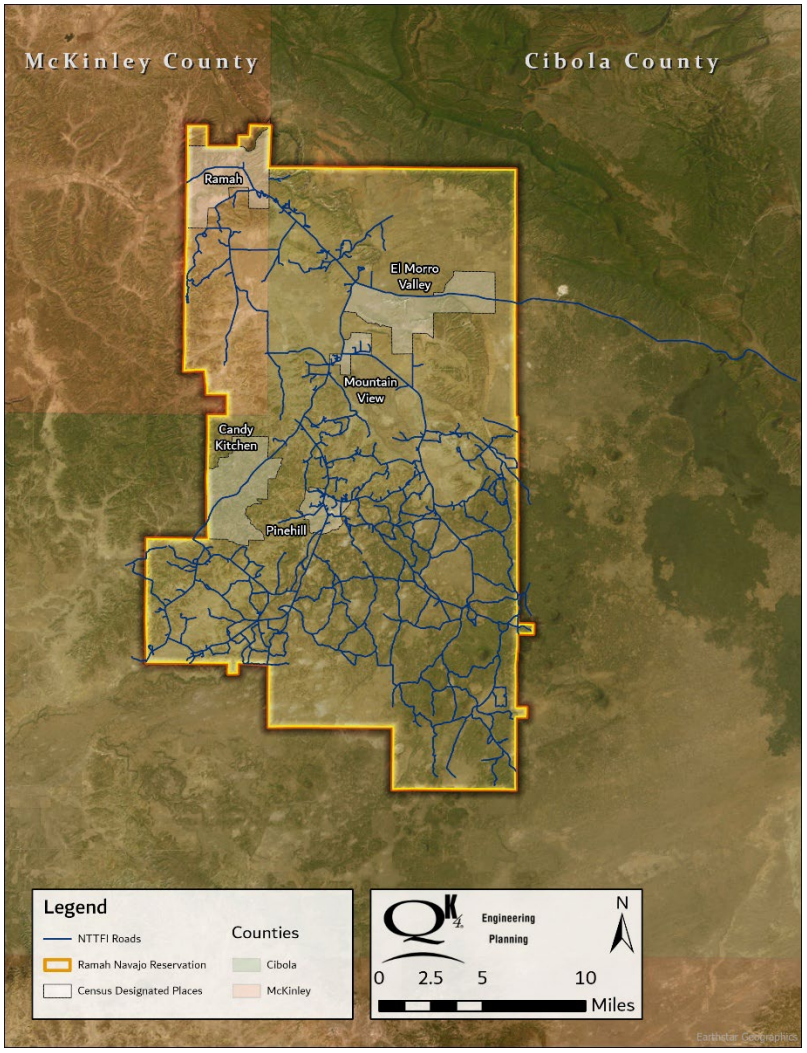
02 INTRODUCTION

This Vision Zero Safety Action Plan (Plan) recognizes that "Vision Zero is a strategy to eliminate all traffic fatalities and serious injuries while increasing safe, healthy, equitable mobility for all." Ramah Navajo Chapter (Chapter) has adopted a resolution of commitment towards zero traffic fatalities and serious injuries by the year 2030 to address unmet roadway safety needs. The goal of the Vision Zero initiative is to develop a transportation network that protects its users, with the goal of eliminating all roadway fatalities and serious injuries. This Vision Zero Safety Action Plan outlines areas of concern the Ramah Navajo Chapter as well as strategies to reduce crashes and offer equitable infrastructure safety improvements.

The Ramah Navajo Chapter is committed to achieving zero traffic fatalities and serious injuries by 2030 through a Safe Systems-based approach. This strategy emphasizes designing transportation systems that anticipate human error and minimize the consequences of mistakes. The Safe Systems approach attempts to improve traffic safety through a holistic lens, pushing for safety improvements across all aspects of transportation network, from vehicle safety to post-crash care.

This Plan was developed through data analysis of Ramah Navajo Chapter 2018-2022 crash data and public engagement and local stakeholders (Vision Zero Task Force) to determine areas of emphasis areas within the Chapter. From this information, an implementation plan was developed that combines policy efforts, infrastructure improvements, community engagement, and equitable action to create a clear path toward the Vision Zero goal: Safe Streets for All.

Figure 02-1. Ramah Navajo Chapter Boundary

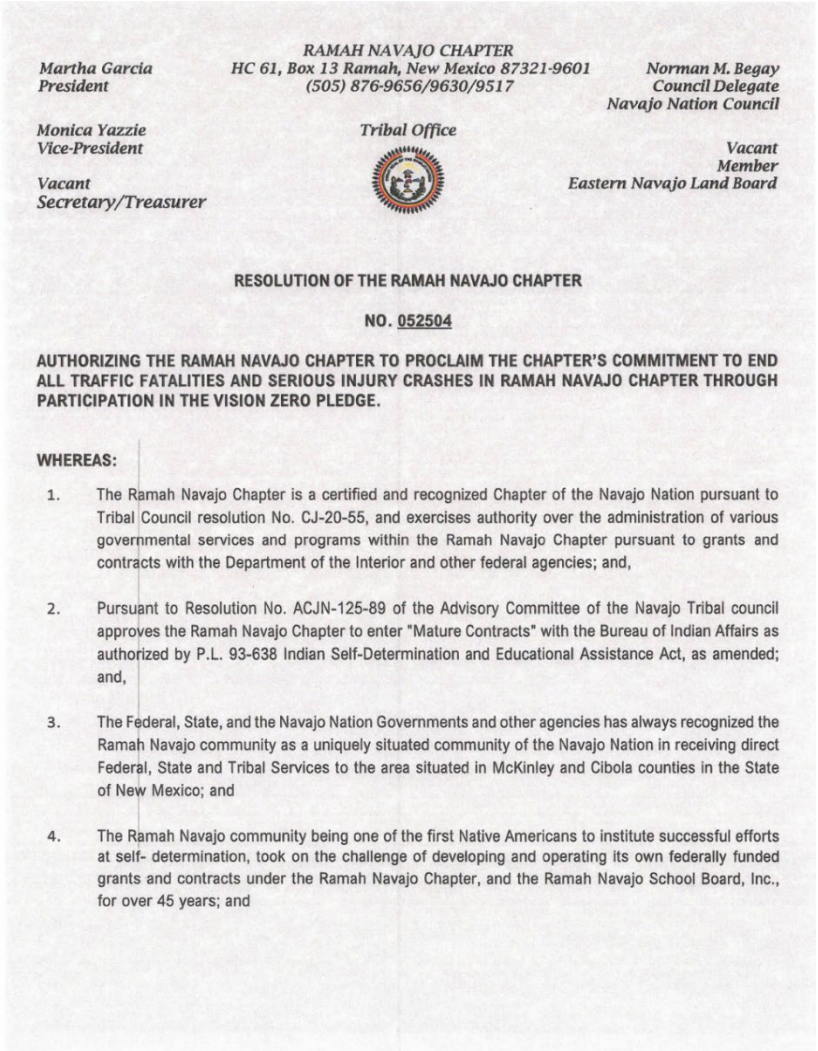


03

VISION & GOALS

RAMAH DEPARTMENT OF TRANSPORTATION SS4A VISION ZERO PLEDGE

Figure 02-3. Ramah Department of Transportation Vision Zero Pledge Page One



RAMAH NAVAJO CHAPTER
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Vice-President

Vacant
Secretary/Treasurer

Tribal Office

Norman M. Begay
Council Delegate
Navajo Nation Council

Vacant
Member
Eastern Navajo Land Board

RESOLUTION OF THE RAMAH NAVAJO CHAPTER

NO. 052504

AUTHORIZING THE RAMAH NAVAJO CHAPTER TO PROCLAIM THE CHAPTER'S COMMITMENT TO END ALL TRAFFIC FATALITIES AND SERIOUS INJURY CRASHES IN RAMAH NAVAJO CHAPTER THROUGH PARTICIPATION IN THE VISION ZERO PLEDGE.

WHEREAS:

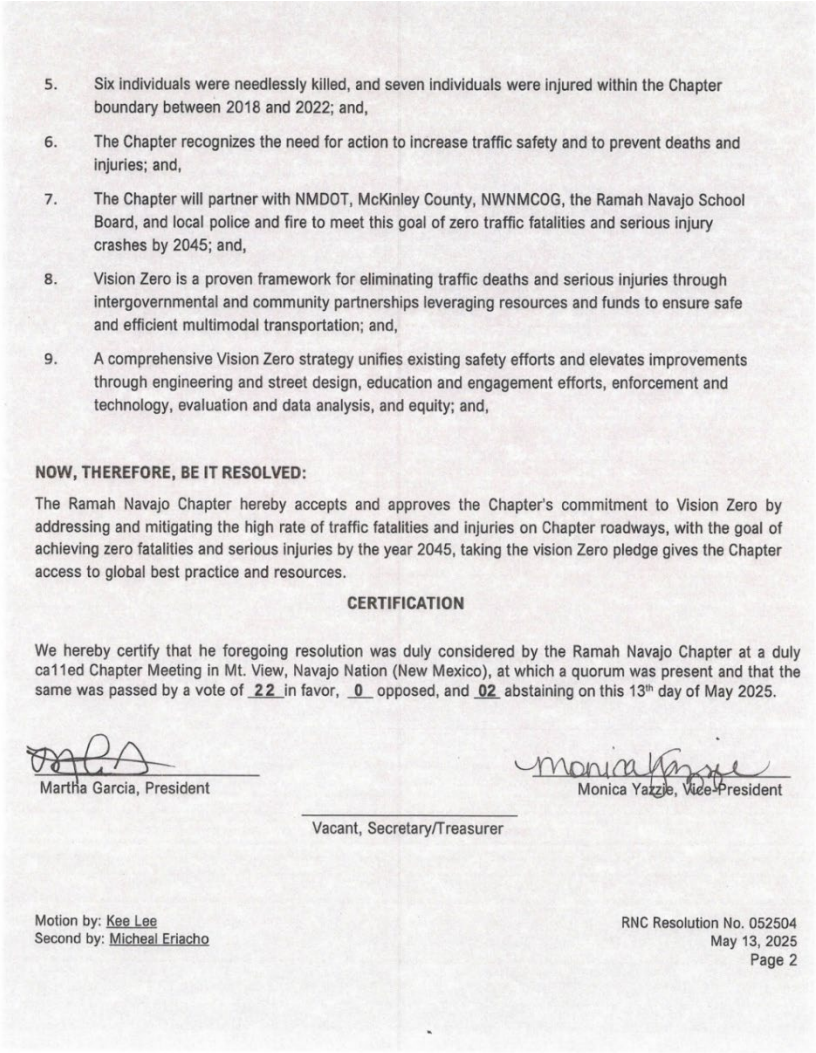
1. The Ramah Navajo Chapter is a certified and recognized Chapter of the Navajo Nation pursuant to Tribal Council resolution No. CJ-20-55, and exercises authority over the administration of various governmental services and programs within the Ramah Navajo Chapter pursuant to grants and contracts with the Department of the Interior and other federal agencies; and,

2. Pursuant to Resolution No. ACJN-125-89 of the Advisory Committee of the Navajo Tribal council approves the Ramah Navajo Chapter to enter "Mature Contracts" with the Bureau of Indian Affairs as authorized by P.L. 93-638 Indian Self-Determination and Educational Assistance Act, as amended; and,

3. The Federal, State, and the Navajo Nation Governments and other agencies has always recognized the Ramah Navajo community as a uniquely situated community of the Navajo Nation in receiving direct Federal, State and Tribal Services to the area situated in McKinley and Cibola counties in the State of New Mexico; and

4. The Ramah Navajo community being one of the first Native Americans to institute successful efforts at self- determination, took on the challenge of developing and operating its own federally funded grants and contracts under the Ramah Navajo Chapter, and the Ramah Navajo School Board, Inc., for over 45 years; and

Figure 02-2. Ramah Department of Transportation Vision Zero Pledge Page Two



5. Six individuals were needlessly killed, and seven individuals were injured within the Chapter boundary between 2018 and 2022; and,

6. The Chapter recognizes the need for action to increase traffic safety and to prevent deaths and injuries; and,

7. The Chapter will partner with NMDOT, McKinley County, NWNMCOG, the Ramah Navajo School Board, and local police and fire to meet this goal of zero traffic fatalities and serious injury crashes by 2045; and,

8. Vision Zero is a proven framework for eliminating traffic deaths and serious injuries through intergovernmental and community partnerships leveraging resources and funds to ensure safe and efficient multimodal transportation; and,

9. A comprehensive Vision Zero strategy unifies existing safety efforts and elevates improvements through engineering and street design, education and engagement efforts, enforcement and technology, evaluation and data analysis, and equity; and,

NOW, THEREFORE, BE IT RESOLVED:

The Ramah Navajo Chapter hereby accepts and approves the Chapter's commitment to Vision Zero by addressing and mitigating the high rate of traffic fatalities and injuries on Chapter roadways, with the goal of achieving zero fatalities and serious injuries by the year 2045, taking the vision Zero pledge gives the Chapter access to global best practice and resources.

CERTIFICATION

We hereby certify that he foregoing resolution was duly considered by the Ramah Navajo Chapter at a duly ca11ed Chapter Meeting in Mt. View, Navajo Nation (New Mexico), at which a quorum was present and that the same was passed by a vote of 22 in favor, 0 opposed, and 02 abstaining on this 13th day of May 2025.

Martha Garcia, President

Monica Yazzie, Vice-President

Vacant, Secretary/Treasurer

Motion by: Kee Lee
Second by: Micheal Eriacho

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May 13, 2025
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03 VISION & GOALS

THE VISION

The Vision Zero Safety Action Plan is a start to implementing the Ramah Navajo Chapter's commitment to safe streets for all roadway users as seen in the Chapter's commitment to Vision Zero. The Vision Zero and the Safe Systems approach creates the active implementation and long-term programming necessary to eliminate traffic fatalities entirely by 2030 and minimize serious injuries on all roadways through effective and equitable strategies.

To guide planning efforts, the Vision Zero Task Force carefully crafted the following vision statement:

"As representatives of the community of Ramah Navajo Chapter, we believe that everyone has the right to a safe route home, whether they walk, drive, or use any other form of transportation. We envision streets that are intentionally designed to be safe, accessible, comfortable, and inviting to all members of our community, especially those who are most vulnerable.

To achieve our Vision Zero target, Ramah Navajo Chapter will implement holistic design strategies and tools that: maximize safety for all road users, reduce driving speed in critical areas, ensure comprehensive progress towards Vision Zero goals through safe systems program, and continually develop and disseminate Chapter- wide communication and educational campaigns on Vision Zero street safety.

Our methods for engaging in these efforts will include:

- *Maintaining transparency in analysis of Vision Zero progress and providing appropriate information to our partner agencies and the public*
- *Making equitable and context-sensitive investments to our roadway infrastructure and programming*
- *Using data to drive our decision-making*
- *Establishing a culture of safety and embracing the 5 E's of Equity, Education, Enforcement, Evaluation, and Engineering"*

GOALS:

The goals of this Safety Action Plan outline the Chapter's specific methods for achieving their Vision statement and create the necessary conditions to eliminate fatal accidents entirely by 2030 and minimize injury accidents on all roadways within the community.

These goals will align with the Safe Systems approach by outlining strategic and measurable objectives that will track positive progress towards Vision Zero. Each goal is crafted to mitigate a specific gap in the safety of the transportation system, revealed via a thorough analysis of the existing conditions within the Chapter and feedback provided by the Vision Zero Task Force and community input.

Goal #1: Provide Inclusive and Equitable Roadway Infrastructure

Improve safety for people who walk, bike, or use vehicles as modes of transportation. The primary effort towards this goal is to update existing roadway infrastructure to significantly reduce barriers to safety and accessibility of public amenities.

Objective #1: Measure and evaluate implementation progress and maintenance using Safe Streets design standards.

Objective #2: Increase the quantity of safe multimodal transportation networks to essential services for all populations.

Goal #2: Strengthen Crash Data Collection and Analysis

Standardizing data collection and reporting protocols to assist with verifying data accuracy and reliability. Consistent and accurate data is an essential tool for monitoring progress towards Vision Zero.

Objective #1: Ensure comprehensive data collection for crash factors like roadway conditions, visibility, lighting, and vehicle safety features.

Objective #2: Usher data integration across tribal and surrounding county agencies to improve the consistent use of crash data for processing and analysis of crash trends and patterns.

Objective #3: Continuously perform maintenance of data collection tools and methodologies to stay ahead of changing crash reporting technology.

Goal #3: Expand Drivers' Education and Awareness Campaigns

Improve roadway user risk perception through the integration of targeted public education initiatives, coordinated law enforcement operations, and complementary engineering interventions.

Objective #1: Address local roadway safety challenges by implementing community-led awareness campaigns and safe driving pledge programs, integrated with behavior change strategies to promote long-term improvements in driver conduct.

Objective #2: Establish collaborative partnerships with community organizations, local school boards, and relevant task forces to expand the scope and availability of public educational outreach programs within the Chapter.

Objective #3: Engage in collaborative efforts to support national campaigns addressing cellphone use, texting while driving, and impaired driving due to alcohol or drug consumption.

Goal #4: Increase State & Regional Partnerships and Collaborations

State and Regional partnerships are essential to enhance the effects of shared roadway challenges while simultaneously optimizing resources and advancing shared visions and goals.

Objective #1: Establish a regional system for data sharing that enables Chapter, state, and regional agencies to access resources and foster the coordination of implementation of safety improvement projects.

Objective #2: Strengthen partnerships that support collaborative transportation policy development among tribal, county, state, and regional agencies to promote a unified culture of safety.

Goal #5: Prioritize Wildlife Land Management

Mitigating wildlife vehicle collisions ensures the sustainability of wildlife, human populations, and roadway safety.

Objective #1: Identify wildlife corridors within the Chapter along high-impact roadways to implement consistent monitoring and maintenance implementation practices that reduce frequency and severity of wildlife collisions.

04

SAFETY PARTNERS

04 SAFETY PARTNERS AND VISION ZERO TASK FORCE MEMBERS

To properly address the needs of the communities in this Plan, the project team created a Vision Zero Task Force consisting of key stakeholders (seen below) to assist in the development of the Safety Action Plan. The Task Force members comprised knowledgeable individuals from the Ramah Navajo Chapter and community organizations who offered relevant information and recommendations throughout the Safety Action Plan process.

A dedicated group of local stakeholders, known as the Vision Zero Task Force, is responsible for leading this effort for the Ramah Chapter (Chapter). These stakeholders comprise representatives from the Ramah Navajo Department of Transportation (RNDOT) P.L. 93-638 programs, other local government representatives, emergency first responders, and representatives from the Ramah Navajo School Board. Their goal is to promote and implement the informed, data-driven strategies outlined in this Plan to create a safer and more accessible transportation network for all roadway users.

The role of a task force is to serve as strategic advisors to address complex dilemmas within the community. All members have a diverse range of skills and knowledge that contribute to outcome-based solutions and program used to support the project's mission and objectives. Task force members and safety partners are committed to addressing specific issues through assisting in the development of relevant policies, implementation of policies, programming and community development activities.

The Vision Zero Task Force members are listed below. This Task Force is crucial to the success and implementation of this Plan and should commit to meeting at minimum, twice a year, to discuss progress, potential partnerships, intergovernmental collaboration, funding mechanisms, and necessary updates to the Plan.

MUNICIPAL REPRESENTATIVES

Ramah Navajo Chapter

Task Force Representatives:

Martha L. Garcia, Chapter President

Monica L. Yazzie, Chapter Vice President

Raquel Yazzzie, Chapter Secretary Treasurer

Norman M. Begay, Ramah Chapter Navajo Nation Council Delegate

Ramah Navajo Office of Grants and Contracts

Task Force Representative:

Priscilla Wayne, Ramah Navajo Chapter Controller

Ramah Navajo Department of Transportation (RNDOT)

Task Force Representatives:

Dorothy Claw, Transportation Director

Michael Eriacho, Transportation Technician

Michael Henio, Trust Services

Kimberly Chee, Procurement Specialist

Ramah Navajo Law Enforcement

Task Force Representatives:

Rory Aticitty, Chief of Police

Wallace Edison, Captain

COMMUNITY PARTNERS

Ramah Navajo School Board

Task Force Representative:

Timothy Nelson, Executive Director

REGIONAL REPRESENTATIVES

Bureau of Indian Affairs (BIA)

Task Force Representative:

Ermelinda Henio, Southwest Region Office (SWRO) Field Representative

Navajo Nation

Task Force Representative:

Juanita Tom, Navajo Nation Division of Community Development Representative

Northwest New Mexico Council of Governments (NWNMCOG)

Task Force Representative:

Brandon Howe, Planner

FUTURE PARTNERSHIPS

The Vision Zero initiative is designed to adapt to the changing safety concerns of the Chapter over time. The Vision Zero Task Force established with the development of the Plan should grow with the community as the Plan is implemented. The agencies discussed in this section did not have named Task Force representatives at the time of the development of this Plan but could be valuable partners in the continuing implementation of initiatives of this Plan.

Friends of 53

Friends of 53 is a community organization of individuals who have organized to advocate for the protection, enhancement, and promotion of New Mexico State Highway 53. The group wishes to see a safety study performed on the highway and speed limits reduced.

ThinkFirst Navajo

ThinkFirst Navajo is a local branch of a national injury prevention organization. ThinkFirst would be a natural partner for any transportation-safety related education effort. The organization provides speakers for schools and community events regarding preventing injuries, hosts bike safety events, and offers free helmets. The speakers are Navajo, bilingual and fluent in Navajo.

Regional Healthcare Providers

The Indian Health Service in Albuquerque provides an injury prevention program that promotes awareness about the injury disparity problem faced by tribal communities. The program works to build the capacity of tribal communities by sharing effective solutions and assisting communities in implementing injury prevention programs.

Regional Public Safety Agencies

The New Mexico State Police, Candy Kitchen Volunteer Fire Department, Ramah Volunteer Fire Department, Cibola Emergency Services Department, and Gallup-McKinley Emergency Services Department could all serve as valuable partners in implementing safety educational goals and related to enforcement of safety-related laws as this Safey Action Plan is implemented over time.

Native Public Media (NPM)

Native Public Media (NPM) provides services that encourage the expansion and strengthening of Native media through platforms that are community-based, local, and democratic. NPM provides leadership, centralized resources, and strategic and coordinated approaches to successfully strengthen the Native Broadcast System; services include legal guidance, broadcast leadership training and education, and telecommunications and communications policymaking.

05

PLAN DEVELOPMENT PROCESS

05 PLAN DEVELOPMENT PROCESS

Figure 05-1. The Safety Action Planning Process

The Ramah Navajo Chapter has diligently worked on previous traffic, safety, and design projects throughout prior years to develop this comprehensive and implementable Vision Zero Safety Action Plan in 2025. This planning process (see ***Figure 05-1*** *below*) has included the development of vision and goals, crash and existing conditions analysis, safety countermeasures and recommendations, and implementation planning, all while engaging the Vision Zero Task Force, the public, and consistently collaborating with Chapter staff.

HOW TO USE THIS SAFETY ACTION PLAN

This Safety Action Plan serves as a guiding tool for Ramah Navajo Chapter to enhance community health and wellbeing while encompassing cultural sensitivity and inclusivity. This plan will highlight goals for the Ramah Chapter, as well as implementation strategies followed by potential funding mechanisms that will support improved infrastructure and long-term Chapter resilience. This Plan will support the continuation of relationships with other regional and national organizations.

Below is an outline of steps that a community can follow to use and implement a Safety Action Plan:

1) Assessment and Identification
2) Equity Analysis
3) Establishment of Task Force
4) Development of Response Strategies
5) Local and Regional Partnerships
6) Annual Plan Reviews and Updates

PUBLIC ENGAGEMENT

To develop a successful Vision Zero strategy, connecting with the local community is for implementation of recommendations. The Ramah Navajo Chapter sought to inform their Chapter members of the benefits of Vision Zero initiatives as well as gather supplemental information to support the safety data analyses through a public meeting and an online survey.

Online Survey

The survey was a total of six questions. Five of the six questions were multiple choice one question open response. This survey received a total had 39 responses. The survey was open to the public for 481 days from the time frame of September 2024 to May 2025. The survey was posted in a variety of digital media forums as well as throughout a few frequently visited locations within the Chapter. Forums included: Ramah Navajo Chapter website, Pinehill Schools, local newspaper and Chapter's Facebook page. The questions addressed various concerns throughout the Ramah Navajo Chapter region including infrastructure quality, traffic law enforcement, bike and pedestrian amenities and other factors related to vehicular and pedestrian crashes. The following table contains a summary of comments from Chapter members categorized by common themes in their responses. See ***Appendix B*** for a full online survey summary.

Table 05-1. Online Survey Comments Summary

	ONLINE SURVEY COMMENTS
BIA 125	- Road repair - Roaming wildlife on roads - Crosswalks and signs for pedestrians - Widen intersection - Turnouts at Hwy 53 – BIA 125, BIA 125 – 122 and BIA 125 – 175 intersections - Bad visibility at intersections
PINEHILL MARKET	- Frequent speeding - Road repair - Crosswalks and Signs for pedestrians
MOUNTAIN VIEW	- Needed speed bumps - Increased enforcement - Increase passing zones from Mountain View to Unit 5 - Safer crosswalks and lighting at Mountain View and BIA 125 - Frequent elk accidents along Mountain View south to Pine Hill - Wider intersection at mile marker 4
BIA 122	- Heavy freight vehicles are damaging roads - Frequent speeding - No bike paths - High volumes of traffic - Fully pave roads - Heavy freight vehicles are damaging roads

	ONLINE SURVEY COMMENTS
HWY 53/ BIA 125	- Increase speed limits - Turnout at Hwy 53-BIA 125 intersection - Frequent speeding - Bad visibility at intersections
BIA 120	- Add turnouts to intersection - Frequent speeding around turns - Unsafe turnouts
ROUTE 140	- Needs road repair. - Needs increased enforcement - Frequent speeding

Public Meeting

Public meetings are an excellent engagement tool to inform the public of initiatives that are planned for their community. The project team hosted a public meeting at Ramah Navajo Department of Transportation Yard on May 22nd, 2025. Participants included Ramah Navajo Chapter staff, New Mexico Department of Transportation, Ramah Navajo Department of Transportation (RNDOT), Task Force members, and members of Ramah Navajo community.

A public meeting flyer was posted in multiple locations throughout Ramah several weeks in advance of the meeting to best attract an inclusive and representative group of community members.

The goal of this meeting was to educate community members on the purpose and benefits of the Vision Zero initiative and gather community input to inform strategy development listed below:

Inform – A representative of the project team presented a high-level overview on the Vision Zero initiative. The presentation included information about the goals of the program, the success of Vision Zero in other communities, an overview of local crash data, and preliminary recommendations for the Ramah Navajo Chapter.

The meeting was attended by a reporter with a local newspaper, The Independent, who published an article informing the broader community about the Vision Zero Safety Action Plan. A snapshot of the article is shown here in ***Figure 5-2.***

Figure 05-2. Independent Newspaper Coverage of Public Engagement Efforts

NM measles cases rise to 78, Page 2

Trump orders to boost nuclear power, Page 17

THE TRUTH WELL TOLD

Independent

Weekend

May 24-25, 2025

Indy 500

Page 9

3.2M people would lose SNAP benefits under GOP bill

Nygren touts support for language initiatives, older adults, eco devo

City OKs variance for new recreational facility

Resident: 'The city has not maintained the gutter systems'

Potholes, dirt and reckless drivers

Ramah-Navajo develops road safety plan

NMDWS expands career pathways with major pre-apprenticeship programs in aerospace, STEM, and infrastructure development

Engage – In addition to hosting task force and public meetings, an online public survey was developed and distributed. The purpose of this survey was to reach a larger network of individuals and households within the Ramah Navajo Chapter to hear feedback on existing issues and concerns in the Chapter. A total of 39 responses were received by the end of May 2025.

Figure 05-3. May 22nd Public Meeting

Following the presentation, the project team facilitated a public meeting to engage the community and receive additional input. Activities at the meeting included engagement exercises with the community members focused on gathering roadway and safety information pertaining to current Chapter concerns. One exercise, shown in ***Figure 05-4***, involved a large map of the Chapter area, where community members could mark areas where they had safety concerns. Another exercise presented to attendees at the public meeting presented examples of safety improvement opportunities, shown in ***Figure 05-5***, that would address traffic safety issues and members were offered the opportunity to select which types of improvements they would most like to see.

The project team representatives facilitated the exercises by offering examples of safety issues that are addressed by Vision Zero initiatives and positive impacts in the community and providing clarification where needed.

Figure 05-4. Mapping Exercise

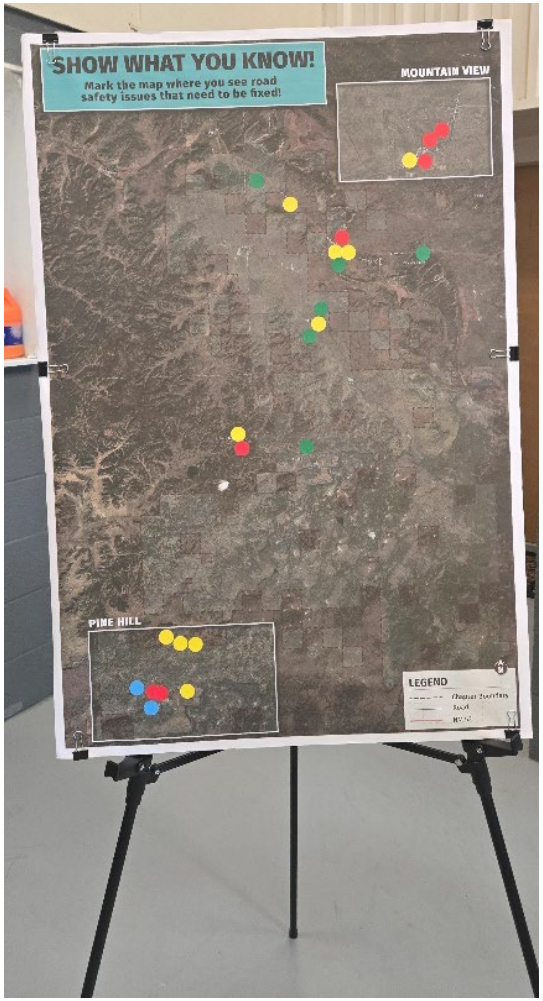


Figure 05-5. Safety Improvement Selection Exercise

Community Feedback

Community feedback from the public meeting and survey provided unique insight into the traffic safety concerns of Ramah Navajo Chapter members. Survey respondents provided detailed information about specific locations throughout the Chapter along with the issues they saw that need to be addressed.

- ***Increased Traffic Enforcement***: Many respondents emphasized the need to reduce speeding and improve driver compliance.
- ***Turnouts***: Requests for wider turnouts were frequent, especially at BIA 125-to BIA 122, BIA 175, NM 53, and BIA 120.
- ***Lighting***: Survey respondents and specific feedback from the Chapter President, highlighted poor visibility on NM 53 and BIA 125 during evening hours along with requests for more street lighting.
- ***School Crossings***: There is a need for better-marked school crossings and signage near bus stops to alert drivers to slow down.
- ***Signage and Road Markings***: Concerns were raised about faded or missing signage and striping. Respondents wanted more frequent, clear signage and repainted road lines.
- ***Road Conditions***: BIA 125 and roads in areas like Mountain View and Pine Hill Market were reported as uneven or unsafe. Requests included road resurfacing, debris removal, and winter maintenance.
- ***Animal Collisions***: Several reports of wildlife collisions, particularly elk near Mountain View to Pine Hill, which prompted calls for better signage and wildlife management.

06

EXISTING EFFORTS

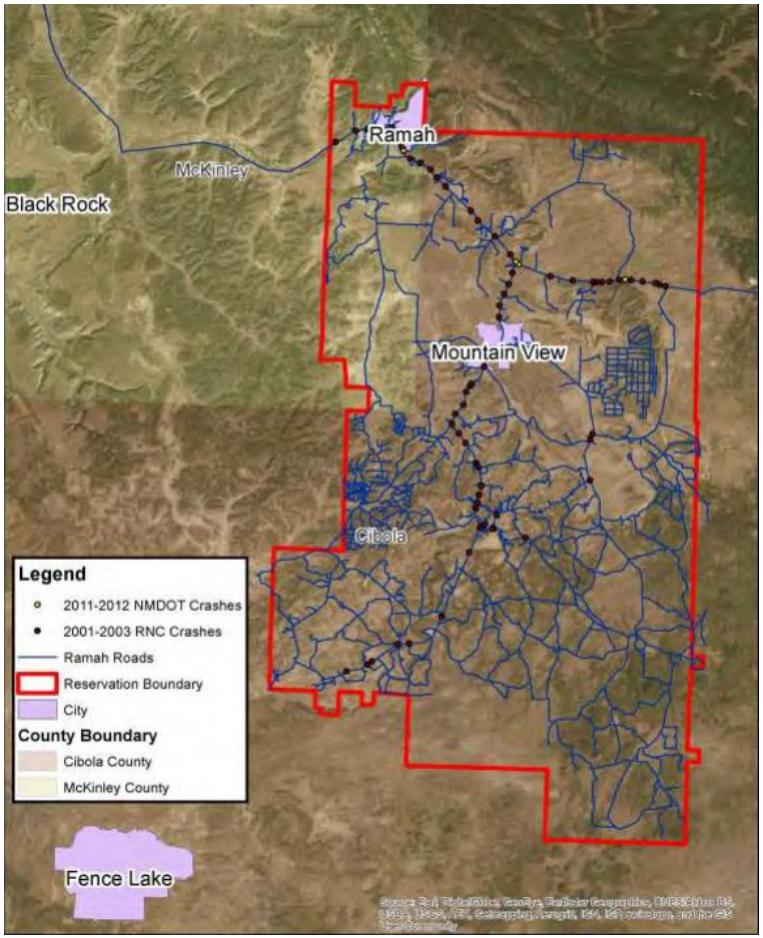
06 EXISTING EFFORTS

The Safety Action Plan for the Ramah Navajo Chapter exists within a regional context that should be incorporated into the recommendations of this Plan. Existing efforts by the Ramah Chapter, regional municipalities, and NMDOT are used to develop an understanding of the existing transportation safety concerns in the region and identify remaining gaps that need to be addressed in this Plan. The following plans and projects emphasize the need for safety infrastructure improvements and policy implementation in the region to support growth and sustainability. These plans were also reviewed for project and policy recommendations. Recommended future projects and policies that have not been implemented are included in the safety countermeasures table in ***Section 10*** as they align with the vision and goals (see ***Section 3***) of this Safety Action Plan.

RAMAH NAVAJO CHAPTER STRATEGIC TRANSPORTATION SAFETY PLAN 2016

The transportation network on the Ramah Navajo Reservation includes approximately 480 miles of roadway. Of these, 29.1 miles are paved, and 451.3 miles are gravel and dirt roadways. Ramah Navajo Chapter (RNC) seeks to provide safe travel options for community members and visitors, which includes vehicular, pedestrian, and other modes of transportation. Ramah Navajo Chapter's Strategic Transportation Safety Plan was developed to identify unsafe conditions associated with the community's transportation infrastructure and establish a plan for protecting the life and safety of community members. Some projects identified in this safety plan will be capital projects related to road improvement or construction projects, while others will be primarily administrative efforts.

Figure 06-1. Ramah Navajo Reservation



2016 Transportation Safety Emphasis Areas

Reducing transportation fatalities and serious injuries with any sustained success requires that all four elements of highway safety be addressed – engineering, enforcement, education, and emergency services. Data collection and analysis provides technical staff and decision makers with the ability to identify and prioritize safety needs. Crash data, roadway data, and citation information provide a basis for developing the safety plan, proposing strategies, and developing needed education programs on tribal lands.

Tribal Transportation Safety Program

Transportation fatalities and injuries severely impact the quality of life in Indian country. Each year under the Bipartisan Infrastructure Law (BIL) to address transportation safety issues identified by federally recognized Indian tribes, to reduce fatal and serious injuries in transportation related incidents, such as motor vehicle crashes.

Pedestrian and Bicyclist Safety

Research pointed to three primary issues concerning pedestrian and bicyclist safety on the Reservation:

- School bus access: need for better separation between pedestrians and the bus at the BIA 120/BIA 125 bus stop and additional school bus stop turnarounds
- Low rate of use of helmets for bike riders
- Lack of pedestrian facilities/ADA compliant facilities in Mountain View and near Pine Hill School

The goal for this safety emphasis area is to provide sufficient bus turnarounds, improve the rate of helmet use among bike riders, and provide adequate and ADA compliant pedestrian facilities in Mountain View and near Pine Hill School.

Intersection Safety

This Plan identified five intersections along RN 125 and an additional five intersections along NM 53 that had various safety concerns. Common concerns included lack of deceleration lanes, high speed limits, lack of signage, high traffic, and speed differentials. To address these concerns the 2016 Plan recommended Roadway Safety Audits to develop an appropriate plan of action for each intersection

The ten Roadway Safety Audits that were recommended by the plan were completed as of May 2025; see pages 27 and 28 of the Chapter's 2016 Plan for these locations.

Alcohol Impaired Driving

Alcohol reduces reaction time and dramatically decreases a driver's ability to make good judgements and drive safely. According to the NMDOT's annual crash report in 2016, alcohol was involved in 42 percent of crash fatalities state-wide. Impaired driving was a common concern among RNC members at the time of this Plan's development, with the dangers of drunk driving perceived to be exacerbated by the large geographic area the RNC reservation spans.

Emergency Services Access

Two main concerns during the planning effort regarding emergency access are the following: impact of poor road surface condition on emergency response time and water access. Road surface conditions through much of RNC are poor on both gravel and paved surfaces, with rutting, potholes, ponding, and erosion

of roadway edges, particularly near culverts. Poor surface conditions necessitate slower travel by emergency vehicles, impacting response time. The size of the RNC means that emergency services must often travel considerable distances to respond, and poor surface conditions result in additional driving time.

Roadway Conditions

Maintenance on RNC routes has been largely deferred over an extended period of time, resulting in roadway surfaces, signage, and livestock containment structures in very poor condition. Some roadways require complete reconstruction, while others need major surface improvements. Conditions of RNC routes are poor on both gravel and paved surfaces, with rutting, potholes, ponding, and erosion of roadway edges, particularly near culverts. In some cases, drivers must deviate from the normal travelled way to avoid potholes or ponding. Poor road conditions also slow emergency response time on RNC routes, and they make it difficult for RNC members to reliably access jobs and services.

RAMAH NAVAJO CHAPTER LONG-RANGE TRANSPORTATION PLAN 2024-2044

The Ramah Navajo Chapter adopted their 2024- 2044 Long-Range Transportation Plan (LRTP). This plan presents similar goals and perceived challenges as the 2016 Strategic Transportation Safety Plan. It outlines six priorities that will guide the Chapter's efforts to improve the transportation network:

1. A safe transportation network for Chapter members and the public
2. Clear route guidance using current signage system components and standards
3. All-season access to the tribal programs and community destinations
4. System connectivity to provide an efficient network of routes on Chapter lands
5. Improvement of deteriorated roadway conditions within Chapter planning boundaries
6. A sustainable transportation network, optimizing available resources and working toward a high quality of life and economic security for Chapter members

The Plan emphasizes the need for accessibility across a broad range of criteria including the physical construction of roadways, lack of active transportation facilities, and unsafe school crossings and bus stops.

School Bus Transportation

Pine Hill School transports 200 students daily using eight buses across six routes. These routes cover between 12 and 96 miles each day, resulting in round-trip journeys that can exceed an hour for many students. The routes do not have designated stops, typically picking up and dropping off at individual residences or at informal unpaved bus stops.

Gallup-McKinley County Schools provides additional busing for 260 students in Cibola County to attend Ramah Elementary and Mid/High School. Through a subcontractor they operate four bus routes through the Candy Kitchen area along BIA Route 122. These routes are typically 70 miles per day or 45 minutes per

trip, with the special education route spanning nearly 100 miles per day. The bus services provided by Gallup-McKinley County School do not provide transport within the Pine Hill area per an agreement between these two districts.

Students who do not live near paved roads must drive to locations along bus routes, typically along unpaved roads in poor conditions. Families are reimbursed by milage for the trips to and from bus routes through a statewide program.

Dedicated bus stops and additional funding for bus routes could make trips to and from school shorter for students and potentially address gaps in service for students living in between service areas.

Transit Facilities

Navajo Transit System (NTS) provides public transportation for Navajo Nation. Despite the need for public transit in the Ramah Chapter, NTS does not operate any routes that connect to the Ramah Navajo Chapter. In general, there is a need for transit of some kind in the Chapter as there are little to no resources for individuals who do not have access to a personal vehicle.

Planned Projects

The Ramah Navajo Chapter LRTP outlines a list of projects spanning short-, mid- and long-term timeframes. Short-term projects are expected to be scheduled between zero and five years from Plan adoption, mid-term projects five to ten years, and long-term projects scheduled ten or more years from Plan adoption.

In the short term, the Ramah Chapter plans to perform a full pavement reconstruction of RN 125 South, with no additional efforts programmed in this timeframe. Mid-term projects include Earth to Gravel Conversions, Roadway Safety Audits, Guardrail Installation, an ADA Compliance Study, and a Signage Inventory. Long-term projects focus primarily on pavement updates with most projects being Earth to Gravel Conversions or Gravel Reconstruction, with some additional Chip Seal, Overlay, and Pavement Application projects programmed as well. Two Road Safety Audits are programmed as well as Cattle Guard replacement.

Specific roadways slated for improvement in the LRTP include:

- RN 125
- RN 145
- RN122
- RN 139
- RN 195
- RN 135
- RN 112
- RN 128
- RN 140
- RN 120
- RN 130
- RN 143
- RN 129
- RN 179
- RN 184
- RN 211
- RN 175
- RN 216
- RN 190
- RN 127
- RN 215
- RN 259

A detailed list of projects are included in this Safety Action Plan's Implementation Table.

2021 NAVAJO NATION LONG RANGE TRANSPORTATION PLAN

The Navajo Nation roadway network consists of 16,317 miles of roads; of these, 5,194 miles are BIA roads, 881 miles are state routes, 816 miles are county routes, and 9,426 miles are Tribal routes. Only 14 percent of the total roadway network is paved. **Figure 06-2** below summarizes the roadway ownership responsibilities.

Figure 06-2. Navajo Nation Roads (mi)

Ownership Entity	Miles of Road	% of System
BIA	5,194	31.8
Tribal	9,426	57.8
State	881	5.4
County	816	5.0
TOTAL	16,317	100

Source: 2020 Official NTTFI Dataset

Land Use Patterns

Navajo Nation Chapters are each required to develop a CLUP (Community Land Use Plan). Historically, the CLUP has had minimal information relating to transportation related needs. Navajo DOT is now looking to use the CLUP for criteria for future project selection to make sure the applications for a project are consistent with local planning efforts. To achieve this, Navajo DOT is recommending that the following topics be included in future CLUP updates:

- Identify the highest priority dirt roads that should be bladed/graded (15-mile lists) and potentially upgraded to gravel, chip seal or pavement in the future (Take Care of the System).
- Describe any paved or gravel roads that need additional maintenance (Take Care of the System).
- Describe any sidewalks (if there are any) that need additional maintenance (Take Care of the System)
- Describe how any proposed transportation enhancements will promote economic development identified in the CLUP-C Plan (Promote Economic Development).
- Describe any roads that you believe have transit, motorist, bicycle and/or pedestrian safety issues (Enhance Safety).

MCKINLEY COUNTY NEW MEXICO 2024 TRANSPORTATION MASTER PLAN

The 2024 McKinley County Transportation Master Plan is in the draft stages with completion geared towards the end of 2025. The goal of the 2024 TMP update is to establish a comprehensive multimodal approach to the transportation facilities that serve McKinley County through focusing on connections between transportation and economic development. These connections will support the cumulative goal for this transportation plan, to improve the quality of life for McKinley County residents while creating an effective and frequently utilized transportation network.

Location of Plan

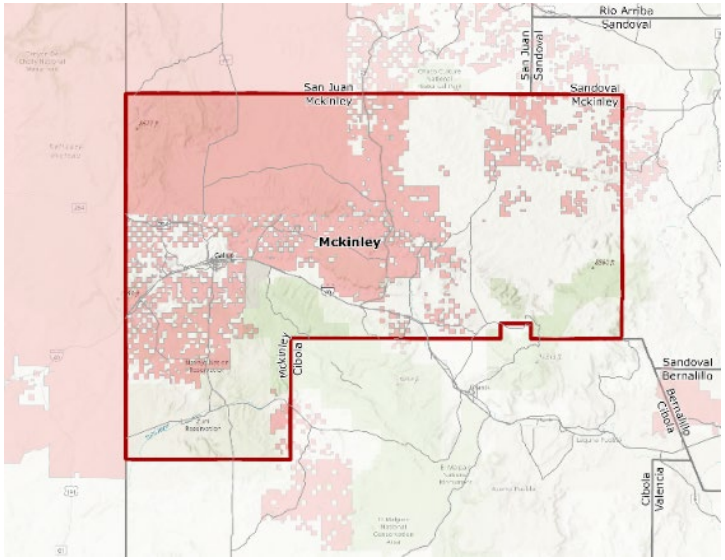
McKinley County is in a notable area for growing regional development. It contains both Interstate 40 and US 491, both significant interstate commerce corridors, and hosting BNSF Railway. The listed notable features make McKinley County a well-positioned place for the movement of goods and people. ***Figure 06-3*** shows the McKinley County boundary.

Existing Conditions

The existing conditions of the McKinley County Transportation Master Plan gives an in-depth assessment of the current transportation system. The plan highlights road conditions, traffic patterns, safety issues and multimodal infrastructure. Several initiatives, including the NM Bike Plan, are being implemented to address safety concerns across the County.

As the plan is still in development, there is no additional information available about the planned improvements or regional goals for the McKinley County transportation network. The Ramah Navajo Chapter resides between McKinley County and Cibola County as well. This location necessitates the need for continued coordination between these municipalities and the Chapter as they plan for the future of the region.

Figure 06-3. McKinley County Area



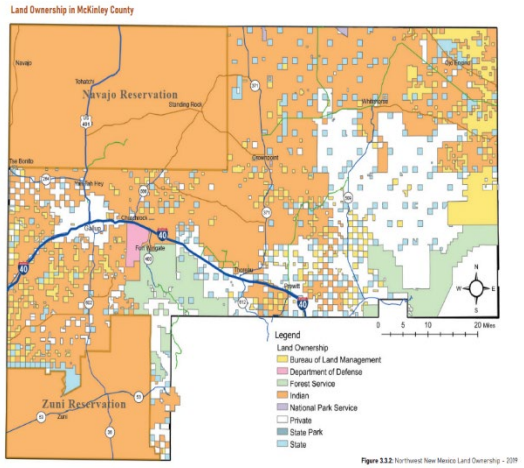
MCKINLEY COUNTY COMPREHENSIVE PLAN VISION 2020

The McKinley County Comprehensive Plan Vision 2020 is a plan set forth by the NWNMCOG. This plan creates the goals and strategies that guide the policies, projects, and resource management decisions.

Land Use and Communities

McKinley County includes approximately 50 historic communities. As shown in ***Figure 06-4***, the region's complex landownership patterns influence potential land uses, particularly in relation to economic development and transportation planning. Tribal lands make up about 75 percent of the County. Highway 602 is the primary route connecting Gallup, the county seat, with the Zuni Pueblo and Ramah Chapter area. This roadway plays a vital role in enabling residents to travel to other parts of the state.

Figure 06-4. McKinley County Landownership



Transportation

The roadway system in this region is connected primarily through north-to-south corridors, connecting the Navajo Nation—Ramah Navajo Chapter, and Zuni Pueblo to Interstate 40. Current interconnectivity between north-south corridors is sparse and underdeveloped, whilst east-to-west corridors end abruptly at the Navajo Nation border. Road continuation in the chapter are typically dirt or gravel roads. These road styles can be difficult to drive on and unsafe for residents. Unpaved road conditions are especially prevalent in the Zuni Pueblo and Ramah Navajo Chapter areas.

The comprehensive plan recommends the County extend partnerships with Zuni and Ramah Navajo agencies. With these partnerships, roads that do not meet the minimum transportation standards could be fixed. The issues on these roads include inadequate drainage and severe erosion, which causes flooding and unsafe driving surfaces. The proposed partnerships would provide collaboration and funding to address and maintain connecting roads.

Senior Centers

The County maintains several senior center facilities for public use. The plan emphasizes the need to prioritize and funding improvements to rural County senior center. Transportation connectivity to senior center facilities is a significant factor in accessibility, especially for residents living in areas with under-maintained roads and long travel distances.

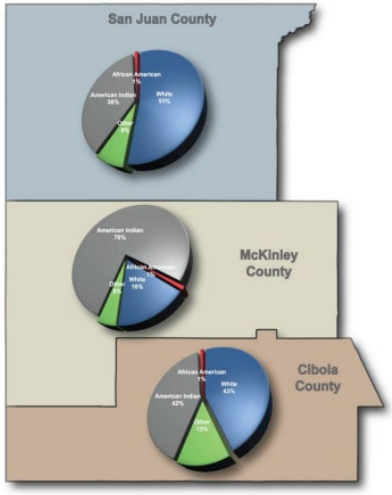
NORTHWEST NEW MEXICO REGIONAL TRANSPORTATION PLAN (2021)

The Northwest New Mexico Regional Transportation Plan is part of the New Mexico Transportation Plan which is a requirement for the state of New Mexico. The goal of the RTP (Regional Transportation Plan) is to apply the State's vision, goals, objectives and strategies at the regional level.

One of these goals was to increase coordination between different jurisdictions in the Northwest region. Currently, some coordination has been achieved when needed.

Demographics

Figure 06-5. Demographics of the Northwest Region, by County



The population of the region influences what issues need to be addressed. In McKinley County, there are four distinct tribal communities: Ramah Navajo, Zuni and the mainland Navajo Nation. The needs and goals of these communities greatly influence the goals and strategies outlined at the regional level. The region's demographic profile is highlighted in ***Figure 06-5.***

Mobility and Accessibility

The future prosperity of New Mexico requires better use of programs that enhance mobility to resources such as employment opportunities, education, businesses, and recreational opportunities. Balancing the interests and uses of the state highways is a priority in the region and especially for the Ramah Navajo Chapter. The state highways, especially Highway 53, need to provide mobility, safety, and access to local culture and activities. On this highway, there is significant truck traffic, overweight loads, and often speeding. All these factors are major concerns for safety and restrictive towards active transportation modes including walking and biking. Appropriate planning for these routes will protect both vulnerable system users and support the long-term maintenance of the highway.

Along with highway improvement, communities in the Northwestern region would like to see the development of a regional transit system. Due to the size of the region and the high number of rural communities this is a challenging prospect. Recent transit services were extended to the Ramah Navajo Chapter Area through a collaborative effort between the Zuni Pueblo, Ashiwi Transit, and Gallup Express

Scenic Byways

Scenic Byways are road corridors that obtain scenic, natural, recreational, cultural, historic, or archaeological significance. Highway 53, near the Ramah Navajo Chapter, includes the Trail of the Ancients Byway. Most of these scenic byways are not properly maintained and need to include ways to preserve and enhance the communities that lie along these Byways.

Preservation methods include reduced speed limits in business and community zones, local informed policies to maintain rural lifestyle and promote tourism, utilization of technology, special signage and notification and smaller byway section management plans. Special signage enforced during community events such as the Ramah Pioneer Days and the Ancient Way Harvest Festivals along the Trail of the Ancients Byway would help support the local economy and bolster tourism in the area.

Specific Project Priority

The RTP focused on one specific project in the Ramah Navajo region which hopes to improve mobility and accessibility for the region. The project is the Ramah Navajo 113 reconstruction from NM 53 to Ramah Middle & High Schools, adjacent Ramah 110.

NEW MEXICO 2015 AND 2020 HIGHWAY SAFETY PLAN

The New Mexico Department of Transportation's Traffic Safety Division is responsible for creation of the state's Strategic Highway Safety Plan (NM SHSP). New Mexico is a Pedestrian Safety Focus State due to an increase in the trend of pedestrian fatalities and serious injuries from vehicle-pedestrian crashes. Pedestrian safety is identified as an area of emphasis in the current update effort for the SHSP. The SHSP includes key objectives and strategies for the pedestrian crash emphasis area and was vetted by a large group of stakeholders.

The 2015 SHSP identifies six of the National Program Areas identified by the National Highway Transportation Safety Administration and FHWA as priority improvement areas: alcohol/impaired driving, occupant protection, police traffic services, traffic records, motorcycle safety, and pedestrian and bicyclist safety. New Mexico's goal is to reduce the number of traffic fatalities, reduce fatalities per vehicle miles travelled, reduce urban fatalities and reduce the number of serious injuries throughout all communities of New Mexico. Below are ***Figure 06-6*** and ***Figure 06-7*** of tables displaying data for General Safety Trends during 2009-2013 and 2011- 2015 for New Mexico including: fatalities, serious injuries, fatality rate and serious injury rate.

Figure 06-6. Overview of General Safety Trends 2009-2013

Performance Measures*	2009	2010	2011	2012	2013
Number of fatalities	422	395	368	358	347
Number of serious injuries	1908	1920	1843	1752	1555
Fatality rate (per HMVMT)	1.64	1.52	1.41	1.39	1.36
Serious injury rate (per HMVMT)	7.23	7.43	7.19	6.87	6.11

*Performance measure data is presented using a five-year rolling average.

Figure 06-7. Overview of General Safety Trends for 2011-2015

Performance Measures*	2011 (5-yr avg)	2012 (5-yr avg)	2013 (5-yr avg)	2014 (5-yr avg)	2015 (5-yr avg)
Number of fatalities	395	368	358	347	352
Number of serious injuries	1941	1871	1819	1697	1567
Fatality rate (per HMVMT)	1.52	1.41	1.39	1.36	1.39
Serious injury rate (per HMVMT)	7.45	7.19	7.06	6.65	6.17

*Performance measure data is presented using a five-year rolling average.

Figure 06-8 showcases the latest Performance Report for New Mexico for the years 2016- 2019. New Mexico is disciplined in its agenda to decrease year over year roadway fatalities and serious injuries.

Figure 06-8. Performance Report

All common core measure data with the exception of alcohol-impaired fatalities are based on 5-year rolling averages. Alcohol-impaired fatalities and the behavioral measure are based on annual data.

	Performance Measure	2016 Baseline	2019 HSP Target	2019 Projected Data	Difference (Projected vs. 2019 Target)	Status
C1	Limit the Increase - Total Fatalities	352.6	375.0	376.7	+1.7	In Progress
C2	Reduce Serious Injuries	1,333.8	1,100.0	1143.4	+43.4	In Progress
C3	Limit the Increase - Fatality Rate	1.343	1.318	1.342	+0.024	In Progress
C4	Limit the Increase - Unrestrained Occupant Fatalities	105	116	119	+3	In Progress
C5	Limit the Increase – Alcohol-impaired Fatalities	118	125	129	+4	In Progress
C6	Reduce Speeding-related Fatalities	130	143	138	-5	In Progress
C7	Reduce Motorcyclist Fatalities	47	45	47	+2	In Progress
C8	Reduce Unhelmeted MC Fatalities	27	27	25	-2	In Progress
C9	Reduce Under-21 Drivers in Fatal Crashes	42	48	47	-1	In Progress
C10	Limit the Increase – Pedestrian Fatalities	62	75	74	-1	In Progress
C11	Maintain Bicyclist Fatalities	5	4	6	+2	In Progress
		2017 Baseline	2019 HSP Target	2019 Projected	Projected vs. 2019 Target	Status
B1	Increase Seatbelt Use Percent	91.5	92	90.7	- 1.3%	In Progress

NEW MEXICO COMPREHENSIVE TRANSPORTATION SAFETY PLAN: FFY 2014

The New Mexico Transportation Safety Plan: FFY 2014 Update identifies safety emphasis areas for the state based on crash data and other research. Under the "Native American" emphasis area within the report, data states that traffic fatality rates for Native Americans communities in New Mexico are higher than other New Mexico ethnic populations. The plan notes that "Improving traffic and crash information sharing between the State and the Native American community must be established as a priority."

The development of the countermeasure strategies and projects proposed in this FFY14 Highway Safety Plan are the following:

- Alcohol/ Impaired Driving Program
- Occupant Protection Program
- Traffic Records Program
- Motor Cycle Safety Program
- Media and Marketing
- Planning and Administration

NEW MEXICO 2040 PLAN (2040 PLAN)

New Mexico's 2040 Plan, completed in September of 2015, identifies future needs for its transportation system and provides strategic direction to achieve these goals. The Vision of the plan is "a safe and sustainable multimodal transportation system that supports a robust economy, fosters healthy communities, and protects New Mexico's environment and unique cultures." The 2040 Plan presents "Preservation First" as a priority of New Mexico with the goal to preserve existing infrastructure and allocate limited funds to those routes that are critical to the state. Safety funds focus on vulnerable system users in the plan.

The New Mexico 2040 Plan outlines five goals:

1. Operate with Transparency and Accountability
2. Improve Safety for All System Users
3. Preserve and Maintain Our Transportation Assets for the Long Term
4. Provide Multimodal Access and Connectivity for Community Prosperity
5. Respect New Mexico's Cultures, Environment, History, and Quality of Life.

New Mexico Transportation Plan: Northwest Regional Transportation Plan

The Northwest Regional Transportation Plan was completed in October 2015 and updated in January 2022. In this report, Ramah Navajo Community is identified as an important population with predominance of culture with geography. The New Mexico Northwest Regional COG indicate a need for state highways improvements that provide balance between mobility, safety, and local community culture and activities.

One of the priorities expressed is balancing interest and uses along NM 53 through the Ramah Chapter. Currently, large truck traffic, overweight loads, and speeding are major concerns for safety. The overarching goal is to encourage active transportation modes (walking and bicycling), protecting agriculture and vulnerable system users, and long-term maintenance of the highway.

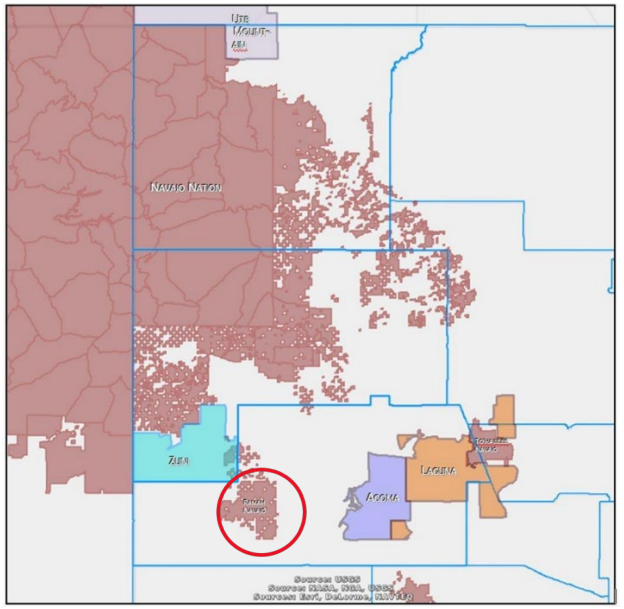
An additional priority mentioned is the commitment to Ramah Chapter and increasing bicycle facilities along NM 53. State highways need appropriate and safe shoulders to accommodate users, bicycle tours, and travelers, especially on desired routes including State Scenic Byways and especially along Highway 53 where high occurrences of accidents have already occurred.

The Northwest Regional Transportation Plan focuses on planning for movement of people and goods in the northwest portion of New Mexico. Goals identified in this plan mirror the goals of the statewide 2040 Plan. Strategies were identified for each of the five goals, which echo those in the NMDOT 2040 Plan:

Improve Safety for All System Users

1. Preserve and Maintain Our Transportation Assets for the Long Term
2. Provide Multimodal Access and Connectivity for Community Prosperity
3. Respect New Mexico's Cultures, Environment, History, and Quality of Life

Figure 06-9. American Indian Lands in Northwest New Mexico



NEW MEXICO DEPARTMENT OF TRANSPORTATION 2045 NEW MEXICO TRANSPORTATION PLAN (NMTP)

NMDOT's 2045 New Mexico Transportation Plan (NMTP) provides the foundation for seven Regional Transportation Plans (RTP) in New Mexico. The RTPs share NMDOT's goals and strategies, however, since each region has its own unique identity and set of challenges, the statewide framework has been adapted to each region and will be carried out on a regional basis.

Figure 06-10. NMTP Vision and Goals

07

EQUITY ANALYSIS

07 EQUITY ANALYSIS

Safe transportation systems require a holistic approach that supports preventable traffic fatalities. Safe systems implementation helps to address structural and institutional racism by correcting previous community disinvestment to close safety gaps.

The five E's framework for safety encompasses prioritization of actionable safety approaches, efficacy, and risk reduction. The five E's of safety are: Equity, Education, Engineering, Enforcement and Evaluation. This approach allows for comprehensive and systematic planning and implementation specific to the priorities of the Ramah Navajo Chapter.

The equity data presented below is archived from Justice40 Initiative equity tool. This tool is designed to analyze inequity in communities with the goal of guiding the implementation of federal grant programs to prioritize financial investment into disadvantaged communities.

Equity

Equity requires recognizing that communities have been differentially impacted by a variety of circumstances, structures, and historical contexts that have unjustly advantaged some, while unjustly disadvantaging others. An equitable approach to planning centers on filling historical resource gaps by allocating more resources to the communities and projects that will see the most positive benefits. Equity is a powerful tool in the safety planning process as Education, Engineering, and Enforcement can all be addressed with equity as a problem-solving lens.

Education

Educating the community about roadway safety is a continued process that involves participation of community members, local law enforcement, and local government. Educational outreach efforts will support continual roadway safety by informing Chapter members of best practices for drivers and pedestrians with the goal of reducing serious injuries and fatalities on Chapter roadways.

Engineering

Ensuring that all roadways in the transportation network adhere to the appropriate engineering guidelines is an important part of the Safe Systems approach. Rigorous engineering guidelines are developed at the federal and state level to ensure the safety of all roadways. These guidelines vary with a road's context and the niche that it fills in the greater network. As communities grow and change over time, so does the transportation network. This change can create safety gaps when a roadway is functioning under conditions for which it was not originally designed.

Through the Safe Systems approach, roadway design elements can be added or improved to create a safe transportation network that appropriately serves the needs of the Ramah Navajo Chapter.

Enforcement

Enforcement is a shared responsibility amongst both the community and law enforcement agencies. The purpose of enforcement is to ensure that the safety regulations of the road are followed consistently with the goal of minimizing the risk of accidents. By deterring dangerous driving behaviors through

enforcement, the frequency of fatal and serious injuries from crashes should decrease.

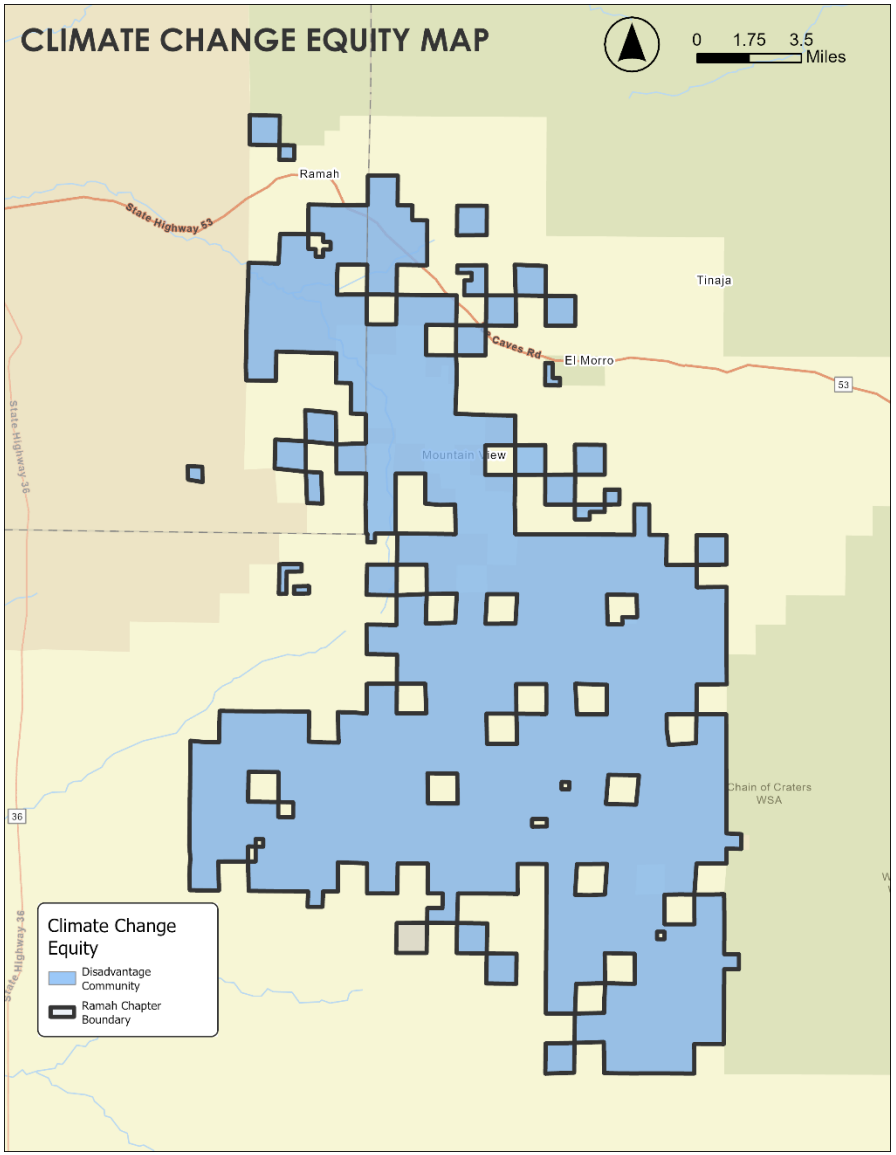
Ramah Navajo Chapter

According to the Council on Environmental Quality's (CEQ) Climate and Economic Justice Screening Tool, the Ramah Navajo Chapter is identified as a disadvantage community. The Ramah Navajo Indian Reservation tract is considered disadvantaged because it meets more than one burden threshold and the associated socioeconomic threshold. As of January 22nd, 2025, this screening tool is no longer published publicly by the White House CEQ, though data presented in this section was gathered before this date. Subsequent updates to this Plan should consider alternative resources to discuss equity and environmental justice as it relates to transportation safety. This section will provide the following categories that indicate criteria where greater equity analysis can be considered: Climate Change, Energy, Housing, Transportation, Health, and Workforce Development.

Climate Change

Ramah Navajo Chapter is currently at a disadvantage for climate vulnerability. Climate change and drought are leading contributors to wildfires and wildlife migration. As the Ramah Navajo Chapter urban interfaces expands to larger territories of open space, preventative mitigation such as Wildlife Corridors and Wildlife Refuge, is important for more equitable wildlife management as preventative mitigation.

Figure 07-1. Climate Change Equity Map



Energy

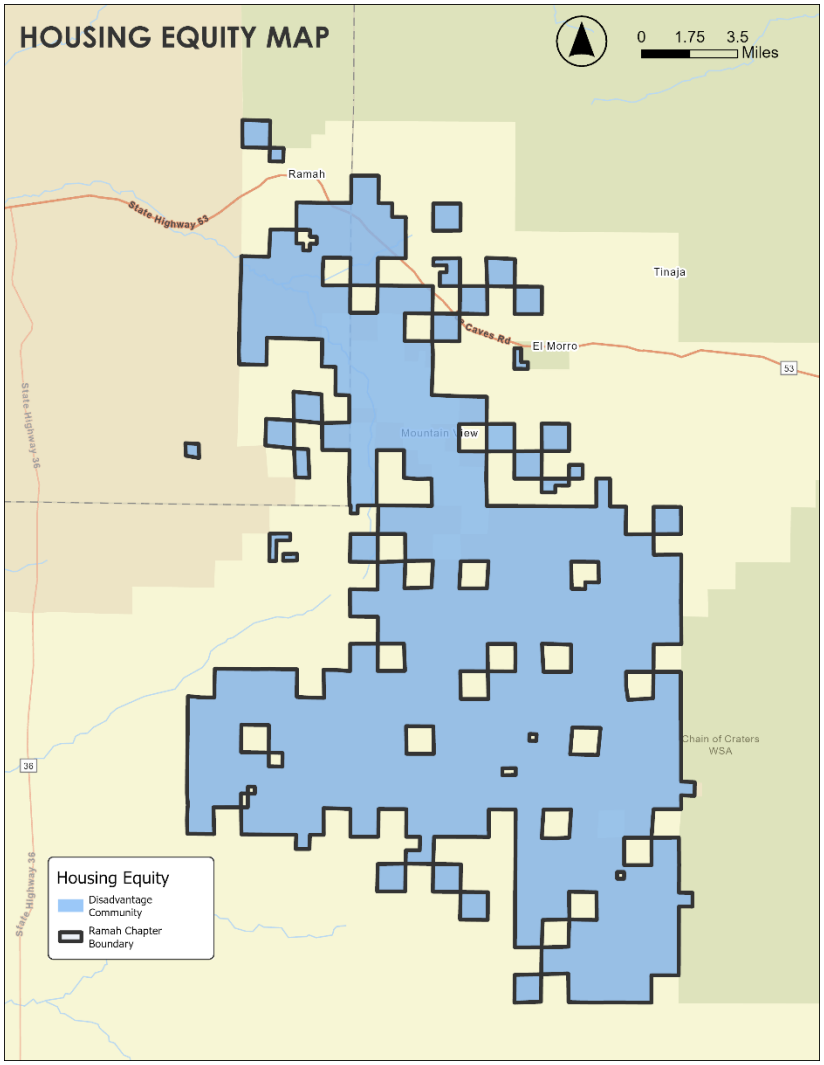
The Ramah Navajo Chapter is experiencing an energy burden, ranking in the 97th percentile of environmental vulnerability. According to U.S. Department of Energy Office of Energy Efficiency and Renewable Energy, energy burden is defined as an annual energy cost expenditure that is eight percent or higher of gross household income. By this definition, residents in Ramah Chapter experience three times higher burden than non-low-income households in nearby McKinley and Cibola counties.

Electricity access is a current limitation for households in the Ramah Chapter. Electricity is critical for the Chapter population as it is the dominant source for heating fuel in the winter and air conditioning demand during the summer. Additionally, the places addition burden on the RNDOT as the lack of electricity imposes limitations to roadway infrastructure updates and Intelligent Technology Systems (ITS).

Housing

Housing access and housing quality are current limitations for inequity throughout the Chapter. The Ramah Chapter meets the Housing burden threshold with a combination of ranking in the 99th percentile for Census tracts having housing without indoor plumbing and ranking in the 96th percentile of Census tracts with a high percentage of low-income households, where household income is less than or equal to twice the federal poverty level. Households within the Ramah Chapter are also often located on roadways that are unpaved or poorly maintained with limited options for micro transit or public transit amenities.

Figure 07-2. Housing Equity Map



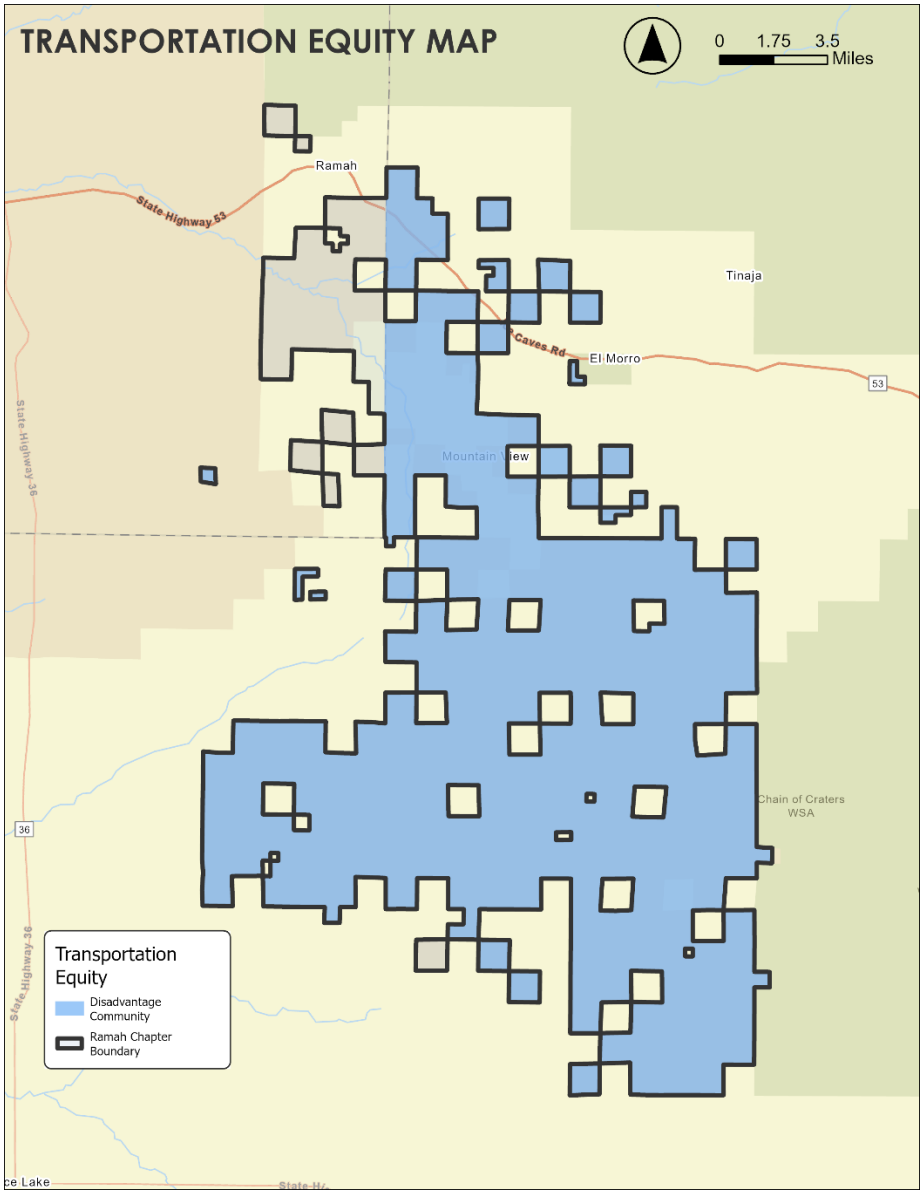
Transportation

Ride pooling and private vehicle ownership is the primary mode of transportation that residents rely on for mobility. Ramah Chapter commuters are ranked in the 99th percentile for transportation barriers, those being a high average of relative transportation cost and time spent on transportation. More than half of Ramah Chapter households meet the federal criteria for low-income status and thus have little or no disposable income to allocate towards individual household car ownership.

Health

Accessibility to public and active transportation is linked to reducing health disparities and simultaneously promotes healthy active living. Increasing Ramah Navajo Chapter's equity score by providing access and connectivity to community resources, medical care, employment, and services and daily necessities allows for greater social and economic inclusion, improved quality of life, and the empowerment of residents to thrive in the community. Providing public transportation improves air quality and air pollution, physical activity and reduces chronic conditions (risk of obesity, respiratory and cardiovascular diseases).

Figure 07-3. Transportation Equity Map

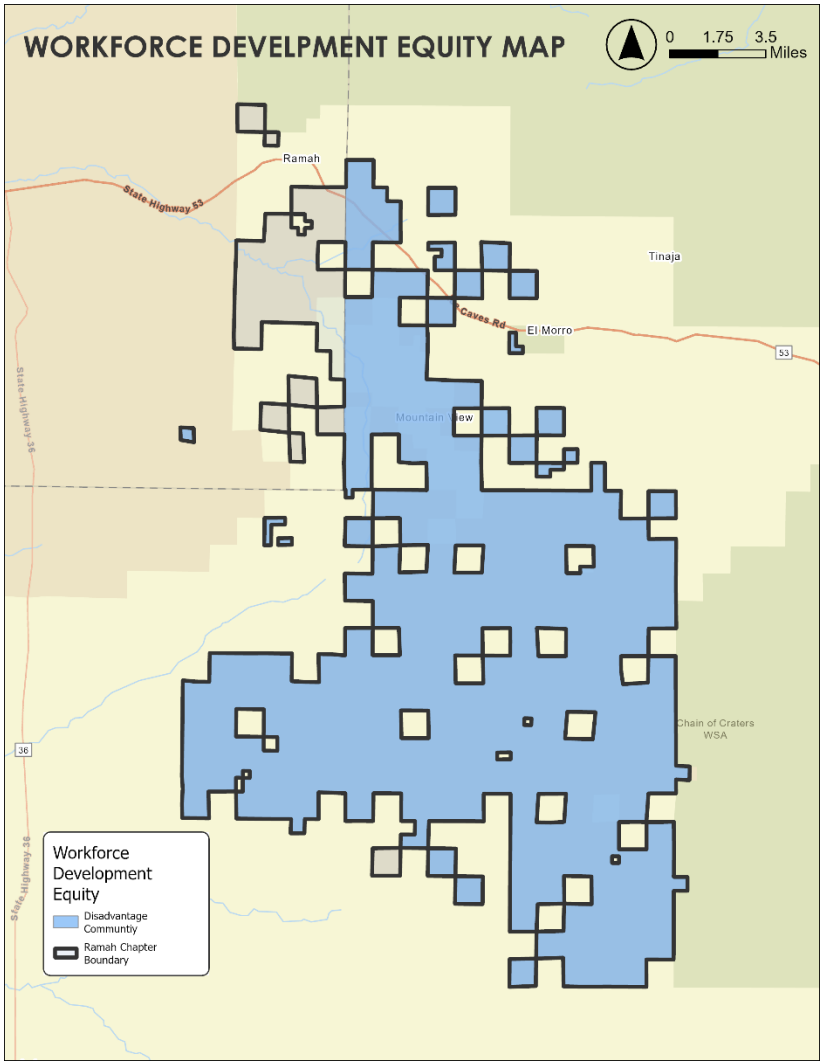


Workforce Development

Ramah Navajo Chapter's goal is to expand opportunities for employment and career advancement for all households. Currently, poverty and household unemployment are existing barriers to workforce development and employment within the Ramah Chapter. In the Chapter, households are linguistically isolated where large percentages of the working aged households have little English proficiency, further inhibiting household ability transition out of poverty. Ramah Navajo Chapter is ranked in the 96th percentile of households living in poverty where household income is at or below the federal poverty level. This impact is compounded by the fact that the Chapter also is in the 96th percentile for low-income households. Further exacerbating the economic burdens within the Chapter, 24 percent of the population have an education level less than that of a high school diploma. Notably, this percentage is more than double the burden threshold, which is 10 percent of the population.

Investment into the transportation infrastructure within the Navajo Chapter can help make progress towards unburdening the Chapter community by providing safe and convenient access to economic opportunities.

Figure 07-4. Workforce Development Equity Map



08

CRASH DATA ANALYSIS

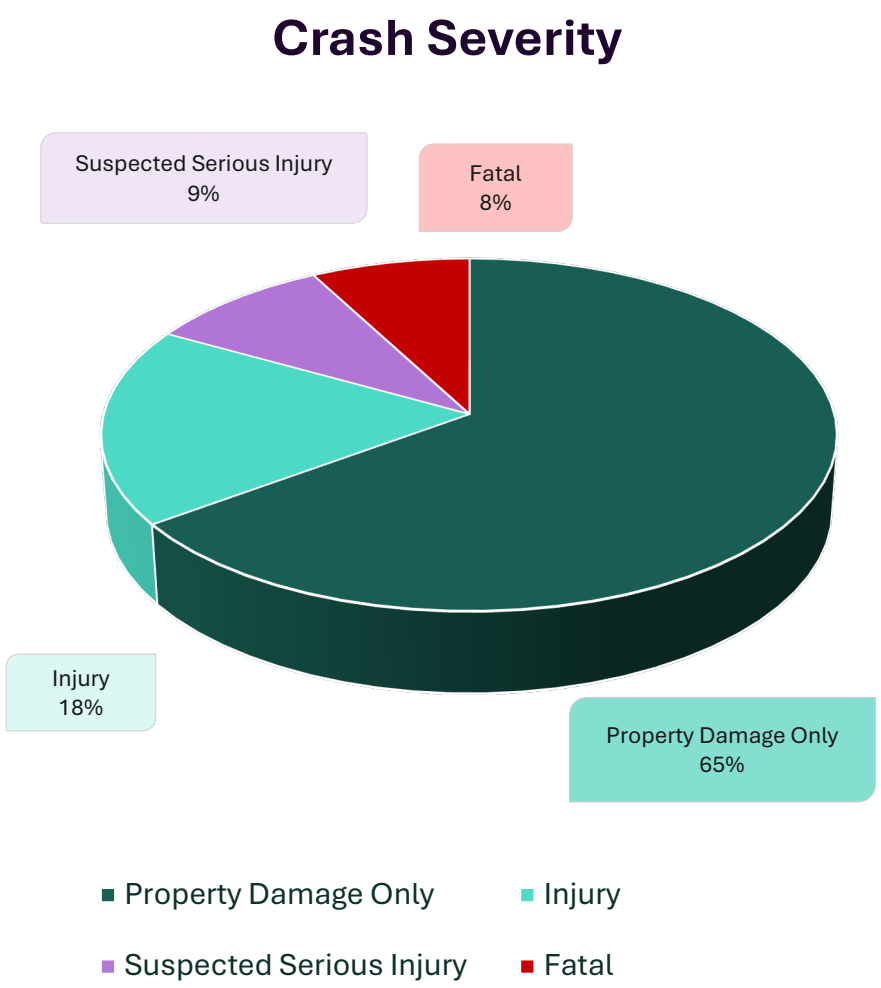
08 DATA SUMMARY & ANALYSIS

To develop the dataset and analysis for this study, the project team utilized the DiExSys Vision Zero Suite software. This tool is widely used by the U.S. Department of Transportation (USDOT) as a database and analytical tool to process crash data. The DiExSys database was cross-referenced with data from the New Mexico Department of Transportation (NMDOT) for quality control and no discrepancies were found.

In the study period between 2018 and 2022 (the most recent available data at the commencement of this Plan), there were 77 crashes recorded in or near the Ramah Navajo Chapter transportation network. ***Figure 07-1*** summarizes severity for all the crashes in Ramah Navajo Chapter. Of these 77 crashes, six (eight percent) were fatal and seven crashes (nine percent) resulted in a suspected serious injury, or a cumulative killed and serious injury (KSI) collision percentage of 17 percent.

Though small in value, these percentages translate to an immensely high human cost that is an incredible burden for a any community to bear. For scale, the whole of McKinley County has a fatality rate of two percent for a population 50 times the size of the Ramah Navajo Chapter. Ultimately, the goal of the Vision Zero process is to see these rates reach zero, whether that rate is two percent initially or eight percent.

Figure 07-1. Crash Severity Table



FATALITY ANALYSIS REPORTING SYSTEM (FARS)

FARS is a yearly census managed by NHTSA that tracks of all fatal crashes in the United States. The data is publicly available through the Fatality and Injury Reporting System Tool (FIRST) and can be queried by NHTSA region, State, County, or City for a given year. FARS data can be used to verify the number of fatal crashes in a specific area to confirm the state DOT crash data. Given that the Ramah Chapter is a part of a tribal nation, they are not mandated to report fatality information to NHTSA, therefore, specific FARS data cannot be queried for the Ramah Chapter area.

To support future safety planning efforts, the Ramah Navajo Chapter has made a goal of this Plan to improve crash reporting and data collection within the Chapter and increase collaboration with neighboring governments and agencies.

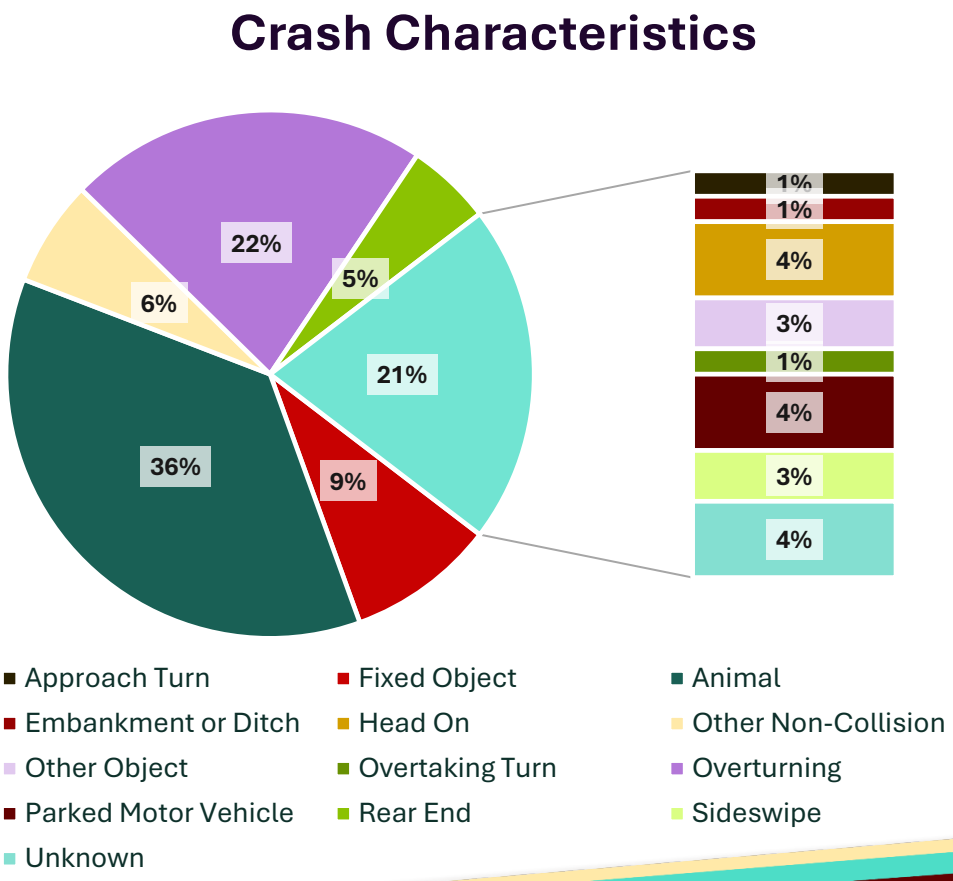
COLLISION MANNER

Figure 08-2 shows the relative frequency of the different types of crashes occurring in Ramah Navajo Chapter. Crashes with Animals were the most common, comprising 36 percent of all crashes. Overturning collisions were the second most common, at 22 percent of all crashes. The third most common singular crash type was Fixed Object collisions, comprising nine percent of the total area crashes.

Notably, 21 percent of crashes were unique events comprised of eight different crash types, most involving some kind of maneuvering error such as Sideswipe and Head On collisions.

Based on the crash data from 2018 through 2022, there were no incidents involving a pedestrian or cyclist. Typically, these are the most severe forms of collision, with the highest likelihood of a resulting fatality or serious injury. This result is consistent with the road conditions in Ramah Navajo Chapter, with most crashes occurring on rural highways or unpaved access roads, both of which are not typically frequented by pedestrians or cyclists.

Figure 08-2. Crash Types

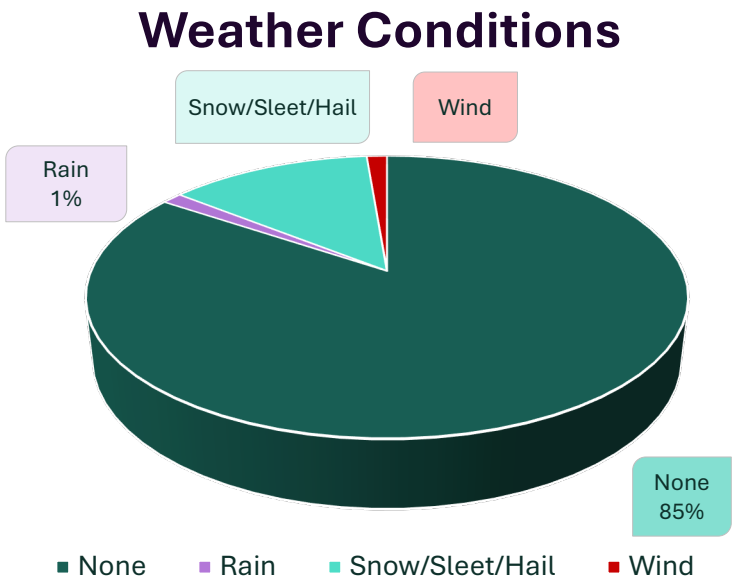


ENVIRONMENTAL FACTORS

Weather Conditions

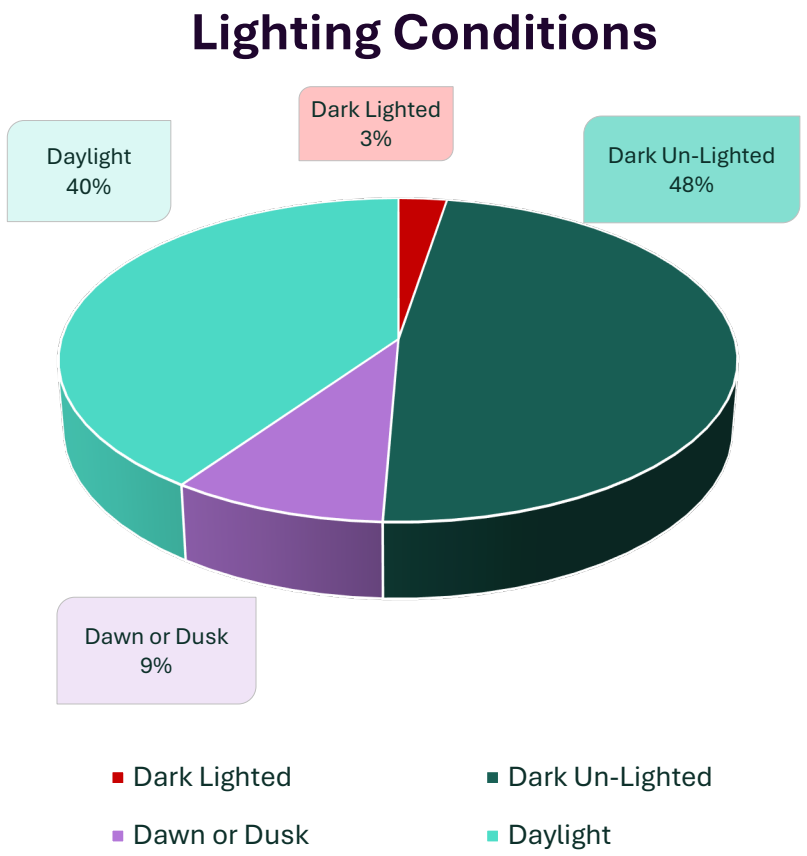
Figure 08-3 shows that road conditions may have been a factor in 14 percent of crashes, with 13 percent occurring snow, sleet, or hailing weather and another one percent occurring in the rain. Based on additional data gathered in the literature review and public engagement efforts, inclement weather restricts access to roadways and in some locations renders roadways completely non-functional. During inclement weather, roadways may become so dangerous or unusable that Chapter members forgo driving all together.

Figure 08-3. Weather Conditions



48 percent of the crashes occurred in darkness where there was no street lighting or other sources of light. As shown in ***Figure 08-4***, another 12 percent of crashes occurred in conditions where visibility could be suboptimal.

Figure 08-4. Lighting Conditions



HUMAN CONTRIBUTING FACTORS

The following human factors contributed to the crashes that occurred during the study period:

- **Impairment** – Alcohol was determined as a factor in 67 percent of all fatal crashes in the Chapter during the study period
- **Older Adults** – 33 percent of fatal crashes involved a driver aged 80 or older and 10 percent of all crashes involved a driver over the age of 70 and another 26 percent involved drivers over the age of 60

IMPORTANT LOCATIONS

- **El Morro National Monument** – Although this monument is not within the Chapter boundary, it is a popular location along NM 53. 38 percent of KSI (killed or serious injury) crashes occurred near El Morro National Monument, 40 percent of which were fatal due to driver fatigue
- **Intersections** – 23 percent of KSI crashes occurred near and intersection with a BIA service road and eight percent of all crashes involved a left-turn movement

CRASH FINDINGS AND DATA ANALYSIS SUMMARY

Between the years of 2018 and 2022, the Ramah Navajo Chapter recorded a crash fatality rate of eight percent and a rate of nine percent for Suspected Serious Injury (SSI) crashes. The Ramah Navajo Chapter had a fatality rate more than eight times higher than the fatality rate for the State of New Mexico in the same time frame. Combined, the Chapter saw a KSI rate of 17 percent. For comparison, an additional 18 percent of crashes resulted in some form of injury. This distribution presents a troubling picture of road safety conditions within the Chapter. Drivers on Chapter roadways are nearly as likely to experience a minor injury as they are a life-altering injury.

36 percent of the Chapter crashes were involved with a domestic or wild animal, with one of these crashes resulting in an SSI crash. Of all crash types, the highest ranked and decidedly more dangerous is Overturning crashes with 22 percent of total crashes. 54 percent of KSI crashes were Overturning crashes, with Overturning comprising 67 percent of all fatal crashes. Additionally, 67 percent of fatal crashes involved alcohol impairment, though not all resulting in Overturning.

A significant factor in all crashes, regardless of severity, was lighting conditions, with 48 percent of all crashes occurring in dark, unlighted conditions. This is statistically high compared to the statewide percentage, which is much lower, at 12 percent over crashes over the same five-year study period.

The analysis of the crash factors and conditions in the Ramah Navajo Chapter indicates that driving conditions on Chapter roadways are perilous. Dark, unlighted road conditions are difficult to navigate and yields crashes that are more severe. A high rate of wildlife vehicle collisions is reflective of these road conditions, and a high rate of overturning crashes is indicative of how severe these crashes can be. Rigorous safety countermeasures should be implemented to address the dire circumstances within the Ramah Navajo Chapter.

09

HIGH INJURY NETWORK

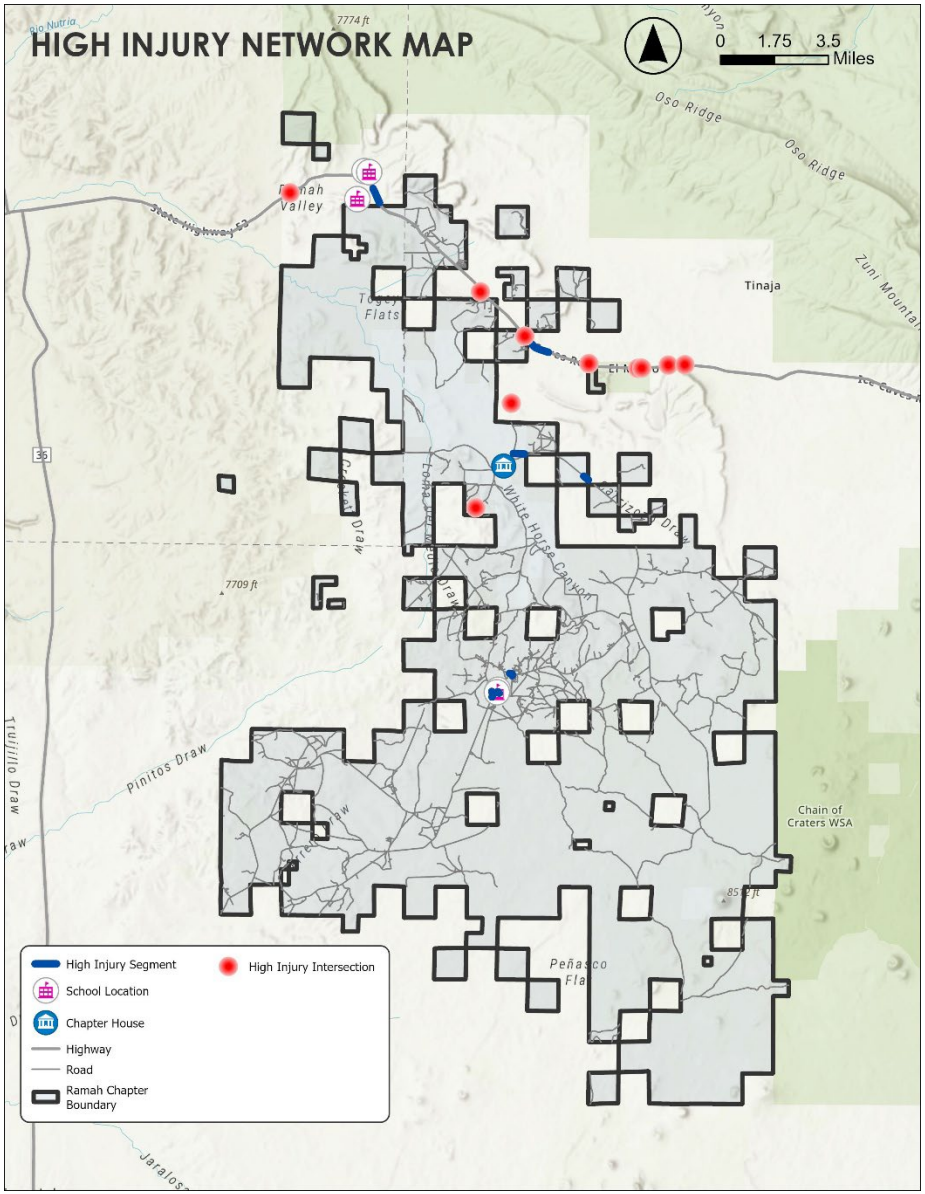
09 MAP OF HIGH INJURY NETWORK

This section highlights existing High Injury Network locations within and adjacent to the Ramah Navajo Chapter. High Injury Network identifies roadway segments (shown in ***Figure 09-1*** in blue) and intersections (shown in ***Figure 09-1*** in red) with a high concentration of severe and fatal crashes. This data visualization helps with prioritizing safety improvements where they are most needed.

Given the fractional nature of the Ramah Chapter jurisdictional boundary, some crashes that occurred outside the Chapter limits were included in this analysis. This is especially true of crashes along NM 53, where several crashes occurred at intersections where NMDOT and RNDOT jurisdictions overlap. To best evaluate the crash factors influencing these severe incidents, additional data was included to capture a larger segment of NM 53, using the westernmost and easternmost limits of the Ramah Chapter boundary as a guide. Though RNDOT and the Ramah Chapter do not have jurisdictional authority over this entire segment, conditions along this corridor impact the safety of Chapter residents and their access to essential resources.

Figure 09-1 is a map of crash data filtered by level of severity. The map serves as a supportive tool to assist data-driven decision-making and equitable resource allocation. It serves as an asset in advancing Vision Zero alongside other traffic safety initiatives aimed at reducing serious injuries and fatalities.

Figure 09-1. High Injury Network Map



CRASH TREE DIAGRAMS

Crash trees serve as an analytical tool for assessing the relationship between multiple crash characteristics to better understand the unique circumstances within the Ramah Navajo Chapter.

Crash Classification Tree

This crash tree shows the relationship between different types of crashes that occurred in Ramah Navajo Chapter and the road characteristics on which they occurred. The tree subdivides the full set of crashes into two locations: State Highway and Other Public Roads, which are further divided into environmental factors, Dark-Unlighted and Lighted, and Wet and Dry conditions.

Lighted conditions included all crashes that had some amount of natural or artificial light as a factor, including dawn and dusk crashes. Wet conditions included rain, snow, and ice as they all impact vehicle maneuverability similarly.

Many Ramah Navajo Chapter crashes (77 percent) occurred along a State Highway NM 53, in Dark, Unlighted conditions. Crashes on Other Public Roads occurred more frequently in lighted conditions, at 61 percent. Regardless of the road system and lighting conditions, the weather conditions had little to no impact on the severity of crashes, with no fatal crashes occurring in wet conditions and only one SSI crash occurring in wet conditions (one percent).

The strongest correlation between road conditions and crash class is the high frequency of animal-involved highway crashes in Dark, Unlit conditions. They comprised 62 percent of crashes of Dry, State Highway crashes.

Additionally, dark-unlit state highways had the highest incidence of severe overturning crashes and severe crashes in general. 67 percent of overturning crashes in these conditions resulted in a fatality or suspected serious injury and these conditions had the highest number of severe crashes for any one set of conditions.

These findings align with the conclusions of the primary data analysis and offer insight into the most effective countermeasures to address compounding crash factors. A targeted set of countermeasures aimed at addressing dark road conditions, highway speeds, and a high wildlife presence will have the greatest impact in reducing the frequency of all crashes and the most severe crashes in the Ramah Navajo Chapter. The full crash tree is included ***Appendix A*** of this Plan.

10

EMPHASIS AREAS & COUNTERMEASURES

10 EMPHASIS AREAS & COUNTERMEASURES

The next step in the safety planning process is to synthesize the crash data analysis and geospatial analysis into a concise strategy to increase the safety of the transportation network within the Ramah Chapter.

This strategy starts with defining "Emphasis Areas," which will connect the data analysis with the overarching goals of the Plan to focus the implementation efforts on the areas of the transportation network that have the most room for improvement.

Countermeasures are developed within these Emphasis Areas as the data-driven foundation of the Implementation Plan. These countermeasures encompass all facets of the transportation system from road construction to educational outreach to policy initiatives. They are targeted solutions to improve specific gaps in the safety performance of the transportation network. Each countermeasure is selected to improve safety performance within each Emphasis Area.

There were 77 total crashes in the Ramah Navajo Chapter Area between the years of 2018 and 2022. Of those 77 crashes, 13 resulted in suspected serious injury or fatality. The Emphasis Areas and Countermeasures outlined in this section will address the factors and characteristics of the most severe crashes and the most common crashes to help establish a strategy for achieving Vision Zero.

EMPHASIS AREAS

Improve Function

Roadways in the Ramah Chapter area will benefit from systematic, small-scale improvements to functionality. These improvements align with the zero-tolerance policy for fatal and severe crashes established by this Plan, by providing additional safety features.

These features are designed to help drivers navigate roads in a safe manner, even when they might make a small error. Features such as reflective signposts and pavement makers can mitigate the risk of driving in unlighted conditions by making road features easily visible. Improvements to pavement striping and signage can make curve geometry safer to navigate. Functional roadway improvements are proven crash reduction tools that will address the variety of crash classifications and crash factors at play to reach the Ramah Chapter's goal of creating inclusive and equitable road infrastructure.

Create Safety Culture

Human factors played a significant role in the severe crashes and all crashes throughout the Ramah Chapter area. Behavioral characteristics such as speeding and impaired driving were prevalent in both fatal and SSI crashes.

Speeding was a significant factor in Overturning/Rollover crashes, which comprised over 20 percent of all crashes during the study period. Both road enhancements and behavioral enhancements can reduce the incidence of these crashes.

Additionally, alcohol was involved in 67 percent of fatal crashes, making it a significant behavioral factor to address.

Countermeasures that improve behavioral outcomes will reduce the frequency of alcohol-involved crashes and reduce the incidence of severe and fatal crashes overall.

While designing roadways to be forgiving of human error is one important step in addressing the human factors in road safety, countermeasures like policy initiative and educational outreach can correct behavioral trends to reduce the frequency of severe crashes. With a focus on safe systems, the Plan will simultaneously address human error through both design and behavioral improvement recommendations.

Enhance Environment

An effective Safety Action Plan aims to address system-wide safety concerns before they become significant problems. This involves enhancements to roadway infrastructure that will improve accessibility and driving experience in anticipation of maintaining the principles of Vision Zero in the long term.

Based on the crash analysis over the course of the study period, most crashes involved an animal, specifically elk or deer. This is not an alarming statistic given the ecological environment of the Ramah Chapter area, though these crashes could become more frequent if the area experiences more vehicle traffic due to regional growth. Addressing wildlife crashes will improve the overall experience of driving on Chapter roadways and protect the wildlife that lives in the area.

Another improvement that would improve the safety of Chapter roadways in the long term, is paving existing unpaved roadways. There is a myriad of benefits to adding pavement including improvements to navigation, maneuverability, mobility, accessibility, and overall roadway safety. Installing pavement typically requires supporting signage and drainage improvements that can help mitigate environmental crash factors.

COUNTERMEASURES

Safety countermeasures encompass traffic control modifications, road design modifications, policy recommendations, enforcement strategies, and any other programs or initiatives that could mitigate the incidence of severe vehicle crashes.

These countermeasures are derived from federal guidelines provided by the Federal Highway Administration (FHWA) and the National Highway Traffic Safety Administration (NHTSA) to reduce crash frequencies and reduce crash severity. This data-based foundation is further supplemented by feedback from the public engagement efforts and Vision Zero Task Force input to create a tailored approach for the Ramah Chapter to implement.

System-Wide Countermeasures

A safe systems approach to crash reduction relies on the compounding effects of countermeasures across various aspects of the transportation system. These countermeasures will support an overall reduction in crashes throughout the Ramah Chapter by addressing crash factors across all the Emphasis Areas defined in the Plan.

The FHWA's Proven Safety Countermeasures initiative (PSCi) consists of 28 countermeasures and strategies effective in reducing roadway fatalities and serious injuries on the Nation's highways. Each countermeasure addresses at least one safety focus area – speed management, intersections, roadway

departures, or pedestrians & bicyclists – while others are crosscutting strategies that address multiple safety focus areas.

Based on the crash data analysis of the Ramah Navajo Chapter area, there are four FHWA proven safety countermeasures that would be most effective across all three Emphasis Areas.

A) Variable Speed Limits

B) Roadside Design Improvements at Curves

C) Enhanced Delineation for Horizontal Curves

D) Roadway Reconfiguration

These countermeasures can address the high incidence of rollover/overturning crashes, wildlife crashes, and unlighted conditions.

Variable Speed Limits

Variable speed limits, shown in ***Figure 10-1,*** provide the ability to manage speeds in key corridors to mitigate the risks of high speeds without compromising the flow of traffic. This method has proven to reduce fatal and severe crashes by 51 percent (per FHWA data through 2020).

This countermeasure would address overturn and rollover crashes as well as crashes due to inclement weather, such as snowy or icy roads.

Figure 10-1. Variable Speed Limit Sign

Roadside Design Improvements at Curves

This countermeasure addresses the risks posed by the configuration and location of roadways at curves. Curves pose the highest risk for road departure incidents, though these strategies would address road departures on flat or straight road geometry as well.

To mitigate roadway departure incidents and the severity of roadway departure incidents, the roadway design can be altered to have a flatter slope, wider shoulders, and a larger clear zone. ***Figure 10-2*** shows the impact of shoulder widening efforts in areas with difficult geometry.

An increase in clear zone space from 16.7 feet to 30 feet is accompanied by a 44 percent reduction in crashes. In constrained areas, even a 16.7-foot clear zone will provide a 22 percent reduction in crashes.

Figure 10-2. Widened, Paved Shoulders

Enhanced Delineation for Horizontal Curves

This countermeasure addresses the visibility and navigation of horizontal curves. This can include additional or enhanced warning signage, dynamic signage, and in-lane markings.

In-lane markings alone can provide a reduction in crashes of up to 38 percent. The most impactful strategy to implement, with a 60 percent reduction in crashes, is sequential dynamic chevrons. This system combines typical chevron warning signs with high visibility flashing beacons, shown below in ***Figure 10-3***.

Figure 10-3. Sequential Dynamic Chevron Warning Signage

Signage improvements can also by supported by further improvements to pavement markings, including delineators and wider markings. ***Figure 10-4*** illustrates the impact that additional delineation measures can have on roadway visibility.

Figure 10-4. Visibility Enhancement Through Roadway Design Improvements

Underperforming Roadway:

Updated Roadway:

Countermeasures - Improve Function

Crash Factors – Overturn and Rollover & Lighting

Overturning crashes comprised 54 percent of all KSI crashes. This crash factor was slightly more frequent in fatal crashes, with 67 percent of fatal crashes occurring in this manner. Of the suspected serious injury crashes, 43 percent involved an overturn or rollover.

Dark, unlighted conditions also played a role in overturning crashes, with 57 percent of these crashes occurring on an unlighted roadway. In general, 46 percent of KSI crashes occurred in dark, unlighted conditions, with 57 percent of SSI crashes and 33 percent of fatal crashes occurring in these conditions.

The FHWA outlines a variety of countermeasures to address rollover crashes. The recommended approach addresses both speeding and road design. These countermeasures include:

A) Variable Speed Limits

B) Roadside Design Improvements at Curves

C) Enhanced Delineation for Horizontal Curves

Countermeasure 1:

Consider implementing advanced curve warning systems along NM 53 alongside additional advance warning signage and markings throughout the project area.

Countermeasure 2:

Consider implementing a road safety audit or corridor study of NM 53 through the Ramah Chapter Area and implement findings for crash reduction.

Countermeasure 3:

Increase roadside clear zone to a minimum of 16 feet or current NMDOT standards, whichever guarantees a higher crash reduction factor throughout the project area.

Countermeasure 4:

Implement frequent, low-cost road signage and marking updates to ensure traffic control devices are visible in dark unlighted conditions.

Countermeasure 5:

Implement variable speed limits along key corridors, such as Ice Caves Road, specifically after sundown to reduce incidences of overturn crashes due to speeding.

Crash Factors – Intersections

At least three fatal and severe crashes occurred near an intersection with a BIA service road, or similar unpaved driveway. Though none of the crashes were coded as intersection crashes, there are risks associated with vehicles merging into high-speed traffic from a stop.

From a preliminary assessment of these locations from publicly available mapping data, many of these driveways or junctions are lacking proper signage. To address these visibility concerns, it would be effective to implement several low-cost improvements, per FHWA proven safety countermeasures.

Countermeasure 1:

Install high-visibility signage, including retroreflective posts to make junctions more visible to passing traffic.

Countermeasure 2:

Consider implementing flashing beacons at key junctions to provide advance warning of slowing, merging, or diverging traffic.

Countermeasures -Enhance Environment

Crash Factors – Animals

Animal crashes accounted for 36 percent of all crashes in the Ramah Navajo Chapter during the study period. Only one of these crashes resulted in a severe injury, but given the high frequency of these incidents, there is potential for crash reduction.

Most of these incidents occurred in dark-unlighted conditions (82 percent). FHWA proven safety countermeasures to address lighting would be effective in supporting targeted countermeasures to address the frequency of wildlife entering roadways.

Countermeasure 1:

Consider installing large sections of wildlife fencing along key corridors such as NM 53. Large sections of fencing can serve as a crossing deterrent for large wildlife such as deer and elk.

Countermeasure 2:

Consider a feasibility study for a wildlife crossing over NM 53 in conjunction with Countermeasure 1. Though expensive, given the concentrated number of crashes in this area, the cost-benefit ratio may favor investment.

Countermeasure 3:

Consider implementing variable speed limits after sundown along key wildlife crossing corridors during seasons of high animal crossings. Based on crash data, these periods are April-May and October-November, with most wildlife crashes occurring in November.

Roadway Characteristics – Road Conditions

While most crashes occurred on NM 53, a NMDOT maintained roadway, many of the local connections are unpaved or undermaintained. To complement the road safety measures outlined in this plan, modernizing the BIA service roads and local connections would address safety concerns before they arise.

Countermeasure 1:

Continue efforts to complete the road inventory in the Ramah Chapter area to establish a targeted list of roadways to be resurfaced, replaced, or paved.

Countermeasure 2:

Install permanent pavement surface for access roads that connect to NM 53 or other major highways.

Environmental Factors – Weather

Weather was not a specific factor in KSI crashes, though overall, inclement weather was a factor in 14 percent of all crashes. The majority of these crashes occurred in snowy or icy conditions. The FHWA outlines a proven safety countermeasure of Pavement Friction Management that has an injury crash reduction percentage of 48 percent for horizonal curves.

Countermeasure 1:

Consider implementing high friction pavement surface treatment (HFST) throughout the project area to increase friction in wet conditions.

Countermeasure 2:

Consider implementing variable speed limits during inclement weather events and/or during hours before maintenance crews can clear roadways.

Countermeasures – Support Community

Human Factors – Alcohol Impairment

Alcohol was involved in 67 percent of all fatal crashes in the Ramah Navajo Chapter between the years of 2018 and 2022.

Countermeasures to tackle high incidence of alcohol impairment vary in cost, efficacy, and implementation effort. Between traffic safety organizations like the NHTSA and public health organizations like the Center for Disease Control (CDC), the most effective, low-cost solution to alcohol-impaired driving is a lower legal blood alcohol limit (BAC). At the time of this study, a lower legal BAC of 0.05 g/dL was able to generate a 20 percent reduction in crashes when implemented in Utah in 2018.

Other effective DWI reduction countermeasures include interlock devices, lower BAC limits for DWI offenders, and alcohol screenings. Interlock devices and mandatory alcohol screenings are already required for first time DWI offenders in New Mexico.

Countermeasure 1:

Consider establishing an organizational body to develop an impaired-driving strategic plan or coordinate with existing organizations to develop a plan of action.

Countermeasure 2:

Consider amending the Chapter rules to install passenger limits for Graduated Drivers' License (GDL) holders and/or install nighttime driving limits for GDL holders.

Human Factors - Fatigue

Countermeasure 1:

Consider developing a feasibility study for a rest area near El Morro National Monument as high volume of crashes and severe injuries occur on at this location along NM 53. A high percentage of fatal and severe incidents occurred within 5 miles of this area, with at least 2 of the 13 incidents due to driver fatigue. A rest stop area could support the tourist economy and strategic development efforts could provide funding for future road safety projects.

Human Factors – Older Adults

33 percent of fatal crashes involved a driver aged 80 or older. 10 percent of overall crashes involved an older driver (70 years old

or greater), and 26 percent of area-wide crashes involved a driver aged 60 and older.

Given the high percentage of fatalities in older drivers, it would be prudent to implement countermeasures targeted at making roadways safer for older drivers.

The NHTSA recommends implementing license screening and testing, license restrictions, and medical review protocols to address individuals who may be a driver with a high-risk profile. All mentioned methods are highly effective and cost-effective.

Based on area demographic information, it would be burdensome to the community to implement policies that reduce the mobility of a significant portion of the population without offering alternative modes of transportation. The countermeasures recommended in this plan will serve as foundational efforts to improve safety in the short term and support multi-modal accessibility in the long-term.

Countermeasure 1:

Consider adopting a high-visibility signage standard throughout the Ramah Navajo Chapter. This could include larger signs with larger lettering and retroreflective signposts.

Countermeasure 2:

Consider developing a feasibility study for micro-transit or other point-to-point shuttle service to offer alternative modes for older adults. Coordinate with Zuni Pueblo nearby to expand service options and eligible driver pool.

11

IMPLEMENTATION & EVALUATION

11 IMPLEMENTATION & EVALUATION

PHASED IMPLEMENTATION

The implementation section of this Plan seeks to synthesize the data analysis, existing efforts, and policy goals into measurable actions that will guide Ramah Navajo Chapter towards Vision Zero.

These actions can be categorized into one of three phases: short-term, medium-term, and long-term. Actions and projects are categorized by a myriad of factors, such as urgency, funding availability, and coordination efforts needed. Some general factors are listed below to illustrate the framework of the implementation plan.

Short-Term

- Immediate effort required in the following one to two years from Plan adoption
- Project funding sources exist and may be currently allocated
- Project may be currently listed in an existing planning document
- Projects may be currently listed on the City's Tribal Transportation Improvement Program (TTIP)

Medium-Term

- Near-term effort required within three to five years from Plan adoption
- Funding source may not yet be identified
- Projects should be publicized and coordinated with all agency partners

Long-Term

- Longer-range efforts are to be implemented five- ten plus years from Plan adoption

Table 11-1 below lists the recommended actions of this Plan to achieve the goals outlined in ***Section 03***. These actions encompass design improvements, studies, policy changes, enforcement methodologies, education efforts, and any additional efforts that will help to address the safety gaps revealed in the development of this Plan.

Each action is categorized by the goal it is supporting, its phased implementation timeframe, and the five E's of safety it addresses. *Some projects listed in this table are recommendations for safety improvements or policies that may occur on roadways just outside of the Chapter boundary, but would require coordination and organization between adjoining communities and the Ramah Navajo Chapter.*

Table 11-1. Implementation Projects

#	Priority Tier	Action	Location/Jurisdiction	Potential Partnerships	Timeframe	Planning Level Cost	5 E's				
							Equity	Education	Engineering	Enforcement	Evaluation
Goal #1: Provide Inclusive and Equitable Roadway Infrastructure											
1.1	1	Conduct transit feasibility study to determine need for a micro-transit service that offers point-to-point trips to key destinations within the Chapter	Ramah Navajo Chapter	RNDOT	Short	-	✓	✓	✓	✓	✓
1.2	2	Develop road signing and striping standard guidelines that emphasizes high-visibility signage	East and West Intersections on BIA Road 125 & BIA 140 at Pine Hill Schools Campus, Intersection of NM-53/BIA Road 125, BIA Road 136, BIA Road 143	NMDOT, RNDOT, BIA	Short	-	✓		✓		✓
1.3	3	Add enhanced curve delineation measures such as large advance warning signs, in-lane warning marking, and advance dynamic radar signs for speed enforcement	BIA Road 125; BIA Road 143 (from Chapter Boundary to Carrizozo Road Intersection), NM-53 (from Bond Street to Chapter Boundary); BIA Road 136	NMDOT, RNDOT	Short	signs: $9,246 each markings: $22,110 each speed radar sign: $92,192 each chevrons: $67,804/mile			✓		✓
1.4	3	Implement targeted re-striping efforts along NM-53 and other state highways in the Chapter. Utilize retroreflective or thermoplastic paint along with retroreflective raised pavement markers	NM-53 (from Bond Street to Chapter Boundary); BIA Road 143 (Chapter Boundary to Carrizozo Road)	NMDOT, RNDOT	Medium	$39,798/mile - $47,168/mile			✓		✓
1.5	2	Enhance intersection crossings on high-volume roadways to include high-visibility pedestrian crossings	Intersection of BIA Road 140/ BIA Road 125; Intersection of BIA Road 125/NM-53 ; Intersection of BIA Road 143/BIA Road 179; Intersection of BIA Road 120/ BIA Road 125; Intersection of BIA Road 125/BIA Road 111; Intersection of BIA Road125/BIA Road 131; Intersection of BIA Road 140/BIA Road 184	NMDOT, RNDOT	Medium	$55,342 per RRFB, $14,740 per crosswalk	✓		✓		✓
1.6	1	Consider installing overhead lighting in key pedestrian areas to enhance safety and quality of pedestrian experience	BIA Road 125 (from NM 53 to Chapter Boundary); Ramah Navajo Chapter Schools East and West Intersection; BIA Road 140 (from BIA Road 125 to BIA Road 140)	NMDOT, RNDOT	Medium	$51,322 per solar pole, $1,385,560/mile connected to existing power	✓		✓		✓
1.7	2	Reconfigure intersection for enhanced visibility and adherence to current NMDOT design standards	Intersection of BIA Road 125/BIA Road 140; Intersection of Pine Hill School / BIA Road 140; Intersection BIA Road 166/NM-53; Intersection of NM-53 / BIA Road 133	NMDOT, RNDOT	Long	signal: $769,160 each crosswalk: $14,740 each	✓		✓		✓
1.8	1	Establish variable speed corridors and/or strategic road closures during inclement weather events	NM-53 (from Bond Street to Chapter Boundary); BIA Road 125 (from NM-53 to Chapter Boundary)	NMDOT, RNDOT	Short	VSL: $325,620/mile permanent DMS: $921,920 each				✓	✓
1.9	1	Update roadways to include raised pavement markers, retroreflective striping, wider edge lines, and center and outside rumble strips	NM-53 (from Bond Street to Chapter Boundary); BIA Road 125 (from NM-53 to BIA Road 140)	NMDOT, RNDOT	Medium	$90,048/mile			✓		✓
1.10	1	Establish variable speed limit corridors during evening hours	BIA Road 125 (from Chapter Boundary to NM-53); NM-53 (from Bond Street to Chapter Boundary)	NMDOT, RNDOT	Medium	VSL: $325,620/mile permanent DMS: $921,920 each				✓	✓
1.11	1	Consider a roadway inventory and pavement condition study to address unpaved roadways throughout the Chapter	Ramah Navajo Chapter	NMDOT, RNDOT	Medium	-	✓		✓		✓
1.12	1	Consider signal warrant analysis at existing stop-controlled intersections near high-traffic corridors to evaluate future signalization for enhanced safety	Intersection of NM-53/BIA Road 125; Intersection of NM-53/BIA Road 136, Intersection of BIA Road 125/BIA Road 120; Intersection of NM-53/BIA Road 166; Intersection of BIA Road 25/BIA Road 208	NMDOT, RNDOT, Ramah Navajo Law Enforcement	Short	signal: $769,160 each			✓		✓
1.13	1	Improve/increase the number of pedestrian facilities at or near the Chapter Office (BIA Road 125) and other high-pedestrian traffic areas	BIA Road 125; BIA Road 140; RNSB Campus Area; Navajo Housing Authority Area	RNDOT, NMDOT, Ramah Navajo School Board	Short	sidewalk: $1,354,740/mile crosswalk: $14,740 each RRFB: $55,342 each	✓				

#	Priority Tier	Action	Location/Jurisdiction	Potential Partnerships	Timeframe	Planning Level Cost	5 E's				
							Equity	Education	Engineering	Enforcement	Evaluation
1.14	1	Improve intersection visibility along major thoroughfares. This can include additional signing and striping as well as reconfiguration of intersections	Intersection of BIA Road 125 / BIA Road 171; Intersection of NM-53 Ice Caves Road / BIA Road 125;	NMDOT, RNDOT, Navajo Law Enforcement	Medium	small area (4,200 SF): $38,860 medium area (22.5k SF): $140,700 large area (70k+ SF): $412,720					
1.15	2	Consider the establishment of a chapter roadway maintenance crew	Ramah Navajo Chapter	NMDOT, RNDOT, Ramah Navajo Law Enforcement, BLM, BIA	Short	-					
1.18	1	Implement "Hidden Driveway" signage as needed in the Chapter	Driveways along BIA Road 125 (from NM-53 to Chapter Boundary); Driveways along NM-53 (from Bond Street to Chapter Boundary)	NMDOT, RNDOT	Short	$9,246 each					
1.19	1	Add Matrix Message Signage (portable message feedback) for seasonal roadway changes (ex. inclement weather, wildlife migration)	NM- 53 (from Bond Street to Chapter Boundary); BIA Road 125 (from NM-53 to Chapter Boundary)	RNDOT, NMDOT, Ramah Navajo School Board	Short	permanent DMS: $921,920 each mobile DMS: $22,000 each					
1.20	2	Increase street maintenance efforts to maintain proper clear zone along Chapter roadways within public right-of-way	BIA Road 125 (from NM-53 to Chapter Boundary)	Ramah Navajo Chapter, Ramah Department of Transportation, Navajo Department Of Transportation, NMDOT, Ramah Navajo School Board	Medium	$1,026,440/mile					
1.21	1	Develop a Safe Routes to School Plan	Ramah Navajo Chapter	RNDOT, NMDOT, Ramah Navajo School Board	Short	-					
1.22	2	Conduct a School Bus Stop Roadway Safety Audit	Ramah Navajo Chapter	RNDOT	Short	-					
1.22	1	Add 'School Speed Limit' signage	BIA Road 125 (from BIA Road 122 to BIA Road 111); BIA Road 140 (from BIA Road 125 to BIA Road 184)	RNDOT, NMDOT, Ramah Navajo School Board	Short	$9,246 each					
1.23	3	Add Intelligent Technology System (ITS) facilities to increase viewshed	NM- 53 (from Bond Street to Chapter Boundary); BIA Route 125 (from NM-53 to BIA Road 208); Pine Hill Market; NHA Housing; RNSB Campus; along BIA Road 122, South bound BIA Road 125 entering Mountain View, Hilltop of NM-53	RNDOT, NMDOT, Ramah Navajo School Board	Medium	$92,192 each					
1.24	1	Add 'Smart Crosswalk' flashing beacon roadway signage	BIA Route 125 (from NM-53 to BIA Route 208); Intersection of BIA Route 125 /Pine Hill Market, NHA Housing; RNSB Campus; along BIA Route 122; Intersection of BIA Route 125/ Carrizozo Road; Yucca Route	RNDOT, NMDOT, Ramah Navajo School Board	Short	$55,342 each					
1.25	1	Add 'Bus Stop' roadway signage	Bus Stops along BIA Route 125 (from NM-53 to Chapter Boundary); Pine Hill Market; NHA Housing; RNSB Campus; BIA Route 122; Yucca Route	RNDOT, NMDOT, Ramah Navajo School Board	Short	$9,246 each					
1.26	2	Conduct a Ramah chapter feasibility study for public transportation accessibility locations	Ramah Navajo Chapter	RNDOT, Cibola County, City of Gallup, Zuni Pueblo, McKinley County	Short	-					
1.27	3	Conduct road surfacing on BIA Road 125	BIA Road 125	RNDOT	Short	$1,420,400/mile					
1.28	3	Conduct road surfacing on BIA Road 122	BIA Road 122	RNDOT, Cibola County	Medium	$1,420,400/mile					
1.29	1	Install informational signage to designate segment of northbound road shoulder along BIA Road 125 as a pullover "cell service area"	BIA Road 125 (from Pinehill to NM-53)	RNDOT	Short	$9,246 each					
1.30	1	Update advance curve warning signage for enhanced visibility	BIA Road 125; NM- 53; Pine Hill Market; NHA Housing; RNSB Campus; BIA Road 122; Yucca Route	RNDOT, NMDOT	Short	$67,804/mile					

#	Priority Tier	Action	Location/Jurisdiction	Potential Partnerships	Timeframe	Planning Level Cost	5 E's				
							Equity	Education	Engineering	Enforcement	Evaluation
1.31	1	Update 'Speed Change' signage	BIA Road 122; BIA Road 125; BIA Road 128	RNDOT, NMDOT	Short	$55,342 each			✓	✓	✓
Goal #2: Strengthen Data Collection and Analysis											
2.1	1	Conduct road safety audit to better determine roadway improvements such as guardrail, slope flattening, and/or additional clear zone	NM-53 (from Bond Street to Chapter Boundary); BIA Road 136 ; BIA Road 113; Intersection of NM-53/BIA Road 264; BIA Road 125 (from Mile Marker 7 to BIA Road 138); BIA Road 125 (from Mile Marker 8 to BIA Road 120), RN 125 / RN 122 (MV) Intersection Roadway Safety Audit; RN 125 / RN 140 Intersection Roadway Safety Audit; RN 125 / RN 122 (PH) Intersection Roadway Safety Audit 34°57'11"N/ 108°26'29"W; RN 125 / RN 122 (PH) Intersection Roadway Safety Audit 34°54'16"N/ 108°25'13"W; NM-53 / BIA 135 Intersection Roadway Safety Audit; RN 125 / RN 139 Intersection Roadway Safety Audit; NM-53 / BIA 125 Intersection Roadway Safety Audit; NM-53 / BIA 130 Intersection Roadway Safety Audit; NM-53 / BIA 137 Intersection Roadway Safety Audit;	RNDOT, NMDOT, BIA, BLM, Ramah Navajo Law Enforcement	Medium	-			✓		✓
2.2	2	Provide updated technology systems for Ramah Navajo Law Enforcement staff to capture crash reporting	Ramah Navajo Chapter	RNDOT, Ramah Navajo Law Enforcement	Short	-	✓			✓	✓
2.3	1	Add additional training programs for law enforcement to maintain and improve consistent and complete crash reporting	Ramah Navajo Chapter	RNDOT, Ramah Navajo Law Enforcement	Short	-	✓	✓		✓	✓
Goal #3: Increase Public Education and Awareness Campaigns											
3.1	1	Develop a restorative plan for first-time DWI offenders that implements evidence-based methodoligies to reduce rates of second offences	Ramah Navajo Chapter	RNDOT, BIA, Ramah Navajo Law Enforcement, Navajo Department of Health, Cibola County, McKinley County	Medium	-		✓		✓	✓
3.2	1	Implement high-visibility seat belt enforcement and media campaigns	Ramah Navajo Chapter	RNDOT, NMDOT, Ramah Navajo Law Enforcement	Short	-		✓		✓	
3.3	1	Continue Vision Zero Task force consisting of multidisciplinary groups and agencies for continued oversight	Ramah Navajo Chapter	RNDOT, NMDOT, Ramah Navajo Law Enforcement, Navajo Department of Health, Cibola County, McKinley County	Short	-	✓	✓			✓
3.4	1	Create a "Safe People" Community Ambassador opportunity within the Vision Zero Task Force to allow for additional community participation	Ramah Navajo Chapter	RNDOT, NMDOT, Ramah Navajo Law Enforcement, Navajo Department of Health, Cibola County, McKinley County	Short	-	✓	✓		✓	✓
3.5	1	Provide educational safety courses for young drivers	Ramah Navajo Chapter	RNDOT, Ramah Navajo Law Enforcement, NMDOT, Navajo Department of Transportation, Ramah Navajo School Board (RNSB)	Short	-	✓	✓		✓	✓
3.6	1	Launch local campaign efforts to educate drivers about wildlife hazards and the importance of staying alert	Ramah Navajo Chapter	RNDOT, Ramah Navajo Law Enforcement, NMDOT, Navajo Department of Transportation, Ramah Navajo School Board (RNSB), Cibola County, Pine Hill Schools, El Morro National Monument	Short	-		✓			✓
3.7	1	Create a taskforce in coordination with Navajo groups comprised of landowners, local farmers, ranchers, school districts, and community leaders to aid in wildlife management and mitigation	Ramah Navajo Chapter	RNDOT, Ramah Navajo Law Enforcement, NMDOT, Ramah Navajo School Board (RNSB), Cibola County, Pine Hill Schools, BLM	Short	-	✓	✓			✓
3.8	1	Run awareness programs and drivers education campaigns to educate drivers about drunk driving hazards on rural roads and promote safe driving practices	Ramah Navajo Chapter	RNDOT, Ramah Navajo Law Enforcement, NMDOT, Ramah Navajo School Board (RNSB), Cibola County, McKinley County	Long	-		✓			✓
3.9	1	Partner with Native Public Media to promote roadway safety, training, and educational resources	Ramah Navajo Chapter	RNDOT, Ramah Navajo Law Enforcement, Native Public Media	Long	-		✓			

#	Priority Tier	Action	Location/Jurisdiction	Potential Partnerships	Timeframe	Planning Level Cost	5 E's				
							Equity	Education	Engineering	Enforcement	Evaluation
Goal #4: Increase State & Regional Partnerships and Collaborations											
4.1	1	Amend local laws to establish nighttime driving limits for GDL holders (young drivers under the age of 18)	NM-5 (from Bond Street to Chapter Boundary); BIA 125 (from NM-53 to Chapter Boundary)	NMDOT, RNDOT, BIA	Medium	-				✓	✓
4.3	3	Increase public private partnerships to assist with improvement to open source street level mapping information	Ramah Navajo Chapter	RNDOT, NMDOT, Navajo Public Media, Ramah Navajo School Board (RNSB), Navajo Housing Authority	Medium			✓			✓
4.4	2	Increase enforcement measures, such as sobriety checkpoints, to address high rate of impaired drivers	NM-53 (from BIA 125 to Forest Road 157)	RNDOT, NMDOT, Ramah Navajo Law Enforcement, McKinley County, Cibola County, Navajo Department of Health	Short	-				✓	
4.5	3	Develop a Ramah Chapter comprehensive wildlife management plan in coordination with Navajo Nation, New Mexico, and federal agencies	Ramah Navajo Chapter	RNDOT, NMDOT, BIA, BLM, Navajo Nation Department of Game and Wildlife	Medium	-		✓			
4.6	2	Conduct a wildlife-vehicle collisions (WVCs) hot spot study to develop targeted mitigation efforts as WVCs comprise 36% of all crashes in the Chapter between 2018-2022	Ramah Navajo Chapter; NM-53 (from Bond Street to Chapter Boundary)	RNDOT, NMDOT, BIA, BLM, Navajo Nation Department of Game and Wildlife	Medium	-			✓	✓	✓
Goal #5: Prioritize Wildlife Management											
5.1	2	Identify locations for wildlife crossing structures and/or wildlife corridors. This can include overpasses, wildlife fencing, underpasses, or ecological bridges	Ramah Navajo Chapter; El Morro National Monument	RNDOT, NMDOT, Navajo Department Of Transportation, BIA, BLM, Navajo Nation Department of Game and Wildlife, Navajo Nation Department of Fish and Wildlife (NNDFW)	Medium	sign: $9,246 each warning system: $597,640 each fencing: $1,744,680/mile underpass crossing: $3,333,920 each overpass crossing: $5,847,760 each			✓		✓
5.2	1	Run awareness programs and drivers education campaigns to educate drivers about wildlife hazards on rural roads and promote safe driving practices	Ramah Navajo Chapter	RNDOT, Ramah Navajo Law Enforcement, NMDOT, Ramah Navajo School Board (RNSB), Cibola County, McKinley County	Medium	-	✓	✓			✓
5.3	1	Engage local businesses for sponsorships or partnerships in promoting wildlife safety efforts	Ramah Navajo Chapter	RNDOT, NMDOT, BIA, BLM, Navajo Nation Department of Game and Wildlife, Navajo Nation Department of Fish and Wildlife (NNDFW)	Medium	-		✓			✓
5.4	1	Use seasonal signage that is specific to times of high wildlife activity, such as during migration periods or calving seasons	NM-53 (from Bond Street to Chapter Boundary); BIA Road 125 (from NM-53 to Chapter Boundary)	RNDOT, NMDOT, BIA, BLM, Navajo Nation Department of Game and Wildlife, Navajo Nation Department of Fish and Wildlife (NNDFW)	Short	permanent DMS: $921,920 each mobile DMS: $22,000 each			✓		✓
5.5	2	Coordinate with NMDOT and New Mexico statewide current roadway performance measures	Ramah Navajo Chapter	RNDOT, NMDOT	Long	-	✓	✓		✓	✓
5.6	2	Develop a *Vulnerable Road User Safety Analysis Assessment* to examine crashes to address traffic safety patterns	Ramah Navajo Chapter	RNDOT, NMDOT, BLM, Navajo Nation Department of Game and Wildlife, Navajo Nation Department of Fish and Wildlife (NNDFW)	Short	-	✓	✓	✓		✓
5.7	3	Consider a *Biological Resource Land-Use Clearance Study* update for focal point locations to construct chapter wide wildlife vehicle collision (WVC) mitigation measures	Ramah Navajo Chapter	RNDOT, NMDOT, BIA, BLM, Navajo Nation Department of Game and Wildlife, Navajo Nation Department of Fish and Wildlife (NNDFW)	Short	-		✓			✓

POLICY AND PARTNERSHIPS FOR IMPLEMENTATION AND EVALUATION

This section outlines decision-making frameworks that cohesively shape transportation safety within the Ramah Chapter. These frameworks will support the implementation of this plan. Below are effective policies that can support and guide infrastructure investments, influence driver and pedestrian behavior, and establish accountability for safety outcomes. This section identifies recommended policies that support safety, equitable mobility, and highlights opportunities for improvement in alignment with Vision Zero principles to reducing traffic-related injuries and fatalities.

Policy Efforts

1) *Provide well maintained public roadway facilities and infrastructure*

   Goal: Minimize traffic accidents, fatalities, and injuries by ensuring well maintained roadways.

   Action: Conduct routine roadway assessments, inspections, and proactive maintenance within Chapter semiannually.

2) *Develop a regional New Mexico Navajo Nation multi-jurisdictional transportation plan to support long term active mobility and infrastructure goals*

   Goal: Improve Navajo Nation public transportation linkages to ensure efficient roadway flow using Safe Street and Safe Systems Approach.

   Action: Conduct RSA on high intensity Chapter roadways to acknowledge locations that support active mobility, public transit, and multimodal infrastructure development.

3) *Collaborate with Ramah Navajo School Board, law enforcement and transportation agencies to establish safety toolkit*

   Goal: Identify transportation and safety risks, coordinate safety programs, and develop culturally relevant outreach and enforcement.

   Action: Identify speed reduction management treatments, create unified Chapter safe pedestrian access and crossing, and provide advance warning signage.

4) *Establish a protected wildlife corridor*

   Goal: Protect and enhance biodiversity and reduce traffic accidents and fatalities.

   Action: Identify key corridors of high impact and use design tools to further mitigate accidents and fatalities and improve biodiversity connectivity.

5) *Create a comprehensive crash data collection reporting system*

   Goal: Ensure that traffic safety decisions are effective, active, and reliable.

   Action*:* Implement standardized crash reporting formats and tools to share aggregated crash data across multi-

jurisdictions supporting access to up-to-date information.

6) *Integrate crash data with public health data*

Goal: To influence and promote active transportation that minimizes traffic related injuries. Ensure that transportation safety improvements and public health benefits are accessible to all communities

Action*:* Incorporate public health principles into the design of transportation infrastructure to make roads and transit systems safer and more accessible.

7) *Implement a comprehensive roadway maintenance toolkit*

Goal: Ensure all communities and their members have equitable and safe access to efficient roadways.

Action: Address infrastructure gaps to roadway design by conducting routine preventive maintenance to pedestrian and roadway facilities.

8) *Ensure timely and effective emergency response*

Goals: Minimize the impact of incidents on public safety to strengthen the collaboration and communication between various agencies.

Actions: Implement standardized annual review of emergency services response times and assess qualitative feedback from personnel to assess any barriers they are encountering.

Evaluation Mechanisms

The evaluation mechanisms outlined in this Plan will establish procedures and parameters that will guide the implementation efforts of the Ramah Navajo Chapter and track progress towards Vision Zero.

Each year following the plan's adoption, the Safey Action Plan (SAP) should be revisited by the Chapter to assess the efficacy of the methods recommended. This process should include an annual re-evaluation of crash metrics (as feasible) to track progress towards the goal of Vision Zero by 2030. It should also include a revised implementation plan that is adjusted to reflect completed items and new items that have become more pertinent. By 2030, the Plan will be completely re-evaluated, with tailored Plan goals, implementation strategies, and recommendations to maintain or improve Vision Zero initiatives that will address current gaps inhibiting the progress of the Ramah Chapter.

Each of the five overarching goals of the Plan should be re-evaluated on an annual basis via the following categories: projects or implementation items, frequency of crashes, and funding allocation. These categories will have metrics that can be tracked to indicate positive improvement towards the Plan goal of Vision Zero. The positive indicators shown here are a small subset of possible positive trends to track, though they do encompass the most immediate indicators of progress in the right direction.

Goal 1: Provide Inclusive and Equitable Roadway Infrastructure

- **Partners:** RNDOT, NMDOT, Ramah Office of Grants and Contracts, Zuni Pueblo, City of Gallup, NWNMCOG
- **Metrics:**
  - Mileage of active transportation facilities (sidewalks, multi-use paths, trails),
  - Mileage of paved roadways and mileage of gravel roadways
  - Frequency of high-visibility pedestrian crossings within 200 ft of school property
  - Frequency of school bus stop's location and arrival/departure times
  - Count of total population participation in public engagement workshops/meetings related to transportation projects
  - Percentage of transportation projects delivered as planned
- **Positive Indicators:**
  - Zero cyclist and pedestrian related crashes
  - Increase in grant funding awarded for active transportation projects
  - Increase in public participation in community engagement efforts annually to reach 30 percent of the Chapter population.
  - 80 percent of schools, health clinics, and Chapter houses are accessible by paved road or awarded funded to complete pavement by 2030

Goal 2: Strengthen Crash Data Collection

- **Partners:** RNDOT, NDOT, NMDOT, Ramah Law Enforcement, Ramah Office of Grants and Contracts
- **Metrics:**
  - Total officers or staff certified to use crash reporting tools
  - Count of formal Memorandum of Understanding (MOUs) or agreements in place for crash data access and exchange
  - Percentage of reports with all required fields (e.g., time, location, severity, weather, road condition) filled out
  - Formal audits of crash data for accuracy and consistency
  - Percentage of total crash reports filed through electronic or mobile reporting systems
  - Number of crash data summaries/reports produced annually
  - Meetings held to assess crash patterns and enforcement strategies
- **Positive Indicators:**
  - Maintenance of annual qualitative traffic safety survey
  - Crash reporting system with an appropriate turnaround
  - 100 percent of traffic enforcement personnel are competent with the electronic crash reporting system
  - Increase in funds secured for data governance projects

Goal 3: Expand Drivers' Education and Awareness

- **Partners:** RNDOT, Ramah Navajo School Board, Pine Hill School Board, Ramah Law Enforcement, Gallup-McKinley County School Board
- **Metrics:**
  - Total count of classes or workshops conducted
  - Schools Boards and Community Programs who host training (youth and adults)
  - Percentage of eligible youth (ages 15–20) attending driver training
  - Percentage of attendees who successfully pass driving assessments
  - Public outreach efforts on seatbelt use, DUI prevention, pedestrian safety, etc.
  - Number or rate of crashes involving impaired drivers
- **Positive Indicators:**
  - Decrease in alcohol-involved crashes year over year
  - Decrease in severity of alcohol-involved crashes
  - Positive community sentiment towards awareness campaigns
  - Decrease in rate of second DUI offences
  - Increase in funding dollars awarded for public health programs or services centered on mental health
  - Increase in funding dollars awarded for public awareness campaigns
  - Increase in school staff or teacher headcount for dedicated driving safety instructors

Goal 4: Increase State and Regional Partnerships

- **Partners:** RNDOT, NDOT, Navajo Nation, Zuni Pueblo, NWNMCOG, City of Gallup
- **Metrics:**
  - Number of meetings attended or co-hosted
  - Number of co-sponsored programs, safety projects, and initiatives completed by 2030
  - Frequency of Requests for crash data, GIS support, funding guidance, etc.
  - Number of data-sharing agreements or systems integrated with DOT, MPOs and COG
  - Response rate to tribal communications or project requests from partner agencies
  - Quantity of projects that are completed from TIPs
  - Dollar amount secured via joint applications with state, regional, or federal partners
  - Number of staff trained through state or regional training opportunities
- **Positive Indicators:**
  - Increase in frequency of coordination opportunities with other nearby municipalities
  - Increase in scale of transportation projects funded

Goal 5: Prioritize Wildlife Land Management

- **Partners:** RNDOT, NMDOT, El Morro Monument
- **Metrics:**
  - Total count of reported wildlife vehicle collisions (WVC) per year
  - Percentage of roadway segments with frequent WVC hotspots identified through geolocation and mapped
  - Number of wildlife crossing signage and structures initiated
  - Number of roadways modified to reduce wildlife attractants
  - Frequency of wildlife population and species movement studies conducted
  - Number of roads assessed for ecological impact
- **Positive Indicators:**
  - Decrease in rate of WVCs year over year
  - Increase milage of wildlife fencing along roadways
  - Long-term completion of a wildlife crossing within the Chapter area

FUNDING MECHANISMS

New Mexico State Grant Program

State and Community Highway Safety Grant

Section 402 State and Community Highway Safety Grant Program provides grants to states to improve drivers' behavior and reduce deaths and injuries from motor vehicle- related crashes.

State Highway Safety Data Improvement Grants

National Highway Traffic Safety Administration established a new program of $171 Million in incentive grants to encourage States, territories, and tribal nations to upgrade crash data collection systems. Goals include adopting and implementing effective programs to improve the timeliness, accuracy, completeness, uniformity, and accessibility of State data that is needed to identify priorities for national, State, and local highway and traffic safety programs; to evaluate the effectiveness of efforts to make such improvements.

Child Passenger Education Program

Funded by the New Mexico Department of Transportation Traffic Safety Division, the New Mexico Child Safety Seat Distribution Program (NMCSSDP) helps provide car seats and education on how to properly use them to low-income New Mexico families at a low cost.

Alcohol-impaired Driving Countermeasures Incentive Grants

Section 2004 of TEA-21 amended the alcohol-impaired driving countermeasures incentive grant program (under Section 410 of chapter 4 of Title 23) to encourage States to adopt and implement effective programs to reduce traffic safety problems resulting from individuals driving while under the influence of alcohol. A state may use these grant funds only to implement and enforce impaired driving programs.

Safety Incentive Grants for the Use of Seat Belts

Safety Incentive Grants for the Use of Seat Belts is a program of incentive grants to encourage the state to increase seat belt rates. A state is eligible for an incentive grant if the state has a seat belt use rate greater than the national average for two preceding calendar years. Additionally, states are eligible if state's seat belt use rate in the previous calendar year was higher than the state's "base seat belt use rate."

Federal Funding

Tribal Transportation Program Safety Fund (TTPSF)

Under the Bipartisan Infrastructure Law (BIL), as enacted by the Infrastructure Investment and Jobs Act, 4% of the available TTP funds are set aside to address transportation safety issues identified by federally recognized Indian tribes through a competitive, discretionary program. Projects are chosen whose outcomes will reduce fatal and serious injuries in transportation related incidents, such as motor vehicle crashes.

Transportation Infrastructure Finance and Innovation Act (TIFIA)

Authorized by the Bipartisan Infrastructure Law (BIL), assists public entities in exploring innovative financing and delivery opportunities, including facilitation and evaluations of public-private partnerships for Transportation Infrastructure Finance and Innovation Act.

Transportation Alternatives Program (TAP)

The New Mexico Department of Transportation Alternatives Program (TAP) is a federal reimbursement program authorized through the FAST Act as part of the Surface Transportation Block Grant (STBG) Program. TAP funds can generally be used for bicycle and pedestrian infrastructure and activities, in addition to other projects, as outlined in the NM Active Transportation and Recreational Programs Guide. Each state's department of transportation administers the program using its own competitive process, in accordance with the law. The local match is 14.56 percent. Applications are due annually in September to the local MPO/RTPO for submittal to NMDOT.

Recreational Trails Program (RTP)

The New Mexico Department of Transportation Recreational Trails Program (RTP) is a federal reimbursement program and provides funding to eligible entities within New Mexico to develop and maintain recreational trails and trail-related facilities for both non-motorized and motorized uses. These Federal funds benefit recreationists who enjoy hiking, bicycling, in-line skating, equestrianism, cross-country skiing, snowmobiling, off-road motorcycling, all-terrain vehicle riding, and off-road four-wheel driving. NMDOT is pleased to provide access to funding for quality, diverse recreational trail projects that will improve New Mexicans' quality of life and safety across the state. The local match is 14.56 percent. Applications are due annually in September to the local MPO/RTPO for submittal to NMDOT.

Local Government Planning Fund (LGPF)

The New Mexico Finance Authority LGPF provides capital necessary for proper planning of vital public projects, including infrastructure, water and wastewater preliminary engineering reports, long-term master plans, water conservation plans, economic development plans or energy audits. Eligible project types include: Preliminary Engineering Reports (PER), Environmental Information Documents, Plans to implement the Local Economic Development Act Plans to reduce blight pursuant to the Metropolitan Redevelopment Act, Water Conservation Plans, Comprehensive Plans, Priority Infrastructure Projects identified in Infrastructure Capital Improvement Plans (ICIP), Asset management Plans, Master Plans, Economic Development Feasibility Studies, and Energy audits. Applications are accepted year-round, and the maximum award amount is $50,000, which may consist of a 100 percent grant or grant/match combination.

Community Development Block Grant Program (CDBG)

The New Mexico Department of Finance and Administration CDBG program assist's local government entities, local representatives, and citizens with the appropriate use of public funds and to strengthen their ability to better serve New Mexico communities to improve their quality of life. The Department of Finance and Administration, Local Government Division (LGD),

provides administrative and technical support to local entities throughout the State of New Mexico. Eligible activities include community infrastructure, such as water, sewer, storm drain, and street improvements.

Capital Outlay

The New Mexico Department of Finance and Administration, Capital Outlay Projects Bureau defines a "capital outlay project" as the acquisition, improvement, alteration or reconstruction of assets of a long-term character that are intended to continue to be held or used, including land, buildings, machinery, furniture and equipment.

Capital outlay funding cannot be used for operating expenses; salaries; materials and supplies; events, brochures, pamphlets, and publications; and retroactive reimbursements of previous purchases. Eligible activities include equipment having a value over $10,000 dollars and a useful life of ten years or more; major renovations or repairs; acquisitions of something already in existence; plan and design specific to a capital project; new structures, meaning the construction of new buildings; and non-structural improvements to land, meaning the grading, leveling, drainage, and landscaping thereof and the construction of roadways, fences, ditches, and sanitary sewers. Funding is 100 percent grant, and applications are due annually during the New Mexico Legislative Session.

Municipal Arterial Program (MAP)

This New Mexico Department of Transportation program assists municipalities to construct and reconstruct streets, which are principal extensions of the rural highway system and other streets which qualify under New Mexico Department of Transportation (NMDOT) criteria. Project eligibility for this program is the degree to which the route would assist in the distribution of state highway system traffic. The four general criteria are: (1) a thorough extension of state highway routes, (2) major connections between state highway routes, (3) major streets of services to state highways, and (4) major local services streets. The local match is 25%. Applications are due annually by March 15th to the local NMDOT district office.

Local Government Transportation Project Fund

Eligible projects include environmental and transportation studies, planning, design, construction and acquisition of rights of way necessary for the development of transportation infrastructure and includes highways, streets, roadways, bridges, crossing structures, parking facilities, including all areas for vehicular, transit, bicycle or pedestrian use for travel, ingress, egress and parking.

Public Project Revolving Fund (PPRF)

PPRF finances public projects such as infrastructure improvements, road projects, water system upgrades, fire and law enforcement equipment, public buildings, hospitals and healthcare facilities, electric and broadband utilities, quality of life projects, and more.

State Funded and Administered

Highway Safety Improvement Program (HSIP)

HSIP is a strategic approach to improving highway safety on all public roads that focuses on performance. HSIP is guided by the Strategic Highway Safety Plan (SHSP), a statewide,

comprehensive effort to reduce fatalities and incapacitating (serious) injuries on New Mexico's roadways for all modes and users (motorists, pedestrians, bicyclists, and other transportation users).

Local Technical Assistance Program (NMLTAP)

The New Mexico Local Technical Assistance Program (LTAP) Center provides local and tribal agencies with a variety of adaptable tools—training events, infrastructure management, highway safety, and personalized on-site heavy equipment training—to improve their transportation operations. The goal of this program is to offer proven solutions to many transportation problems.

Enforcement Programs (STEP)

This program is funded through U.S. Department of Transportation's Indian Highway Safety Law Enforcement Protection Grants Program to provide financial support for activities specifically related to selective highway traffic enforcement and programs.

12

CONCLUSION

12 CONCLUSION

The Vision Zero Safety Action Plan for the Ramah Navajo Chapter is a testament to the community's proactive stance. It represents a comprehensive and collaborative approach to roadway safety, committing to eliminating traffic fatalities and severe injuries by 2030. Through the Chapter's commitment, the community is taking a significant step towards achieving safe, healthy, and equitable mobility for all residents.

Through robust data analysis, community engagement, and strategic partnerships, the Plan outlines clear goals and actionable strategies to enhance roadway safety. The coordinated efforts of local governments, regional councils, and state agencies, supported by various funding mechanisms, will be crucial in implementing the recommended safety countermeasures.

Regular monitoring, transparent reporting, and adaptive planning are essential to the Plan's success. The Ramah Navajo Chapter can and will continually refine its strategies based on new data and emerging best practices. By treating the Vision Zero Safety Action Plan as a living document, the Chapter maintains that its roadway safety measures are always up-to-date and effective.

Ultimately, the success of the Vision Zero initiative relies on the continued commitment to its principles and the collaborative efforts of all stakeholders. The Ramah Navajo Chapter is poised to create a safer, more inclusive transportation network that benefits all roadway users, paving the way for a future free of traffic fatalities and severe injuries.

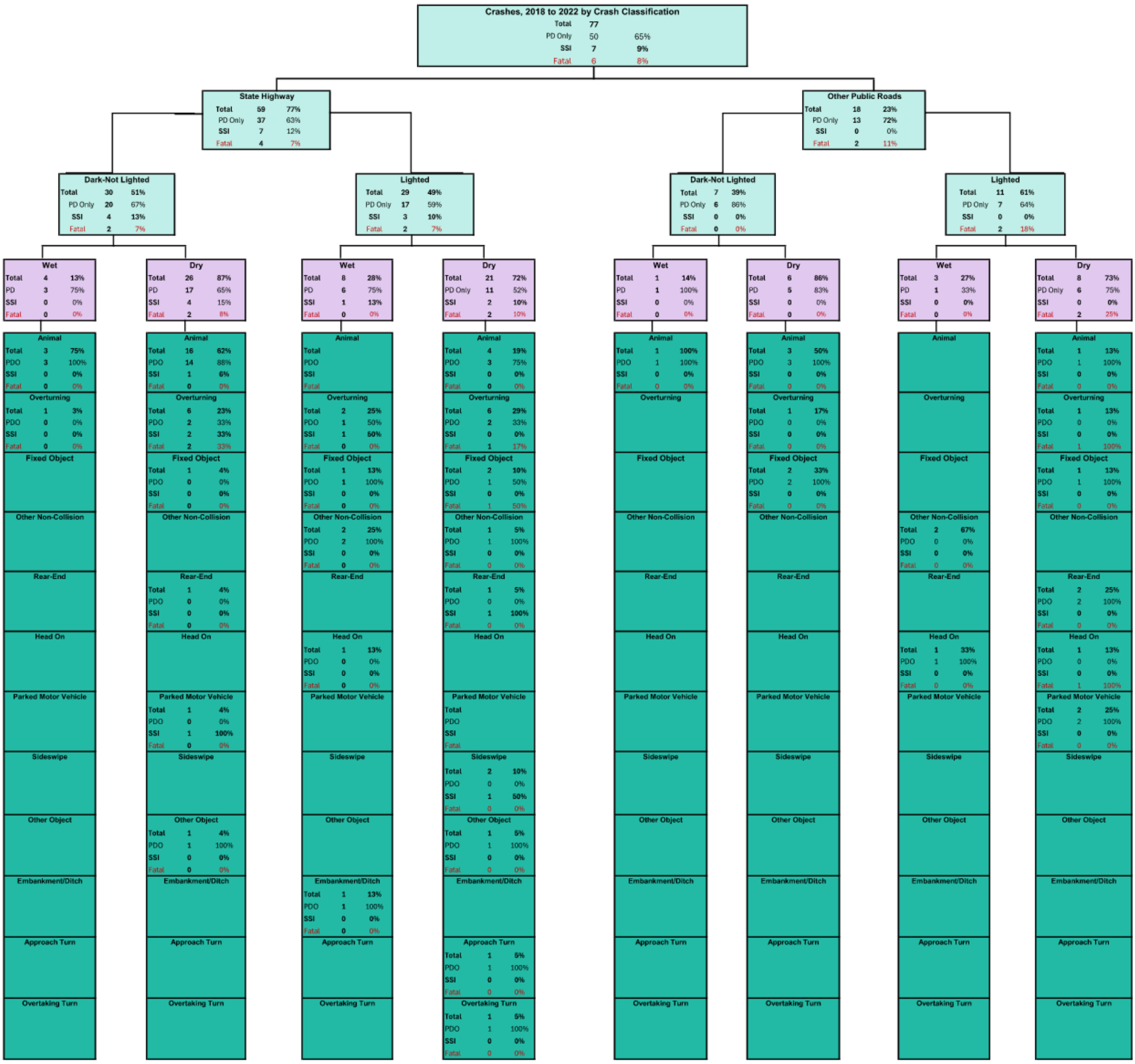
To support the next steps in the implementation efforts of this Plan, a supplemental Implementation Plan is included in ***Appendix C.*** This document provides a template that can be used by the Chapter to help prioritize the implementation of important safety projects (see ***Table 11-1***) in the future.

13

APPENDIX A

13 APPENDIX A: CRASH CLASSIFICATION TREE

Figure 13-1. Crash Classification Tre



14

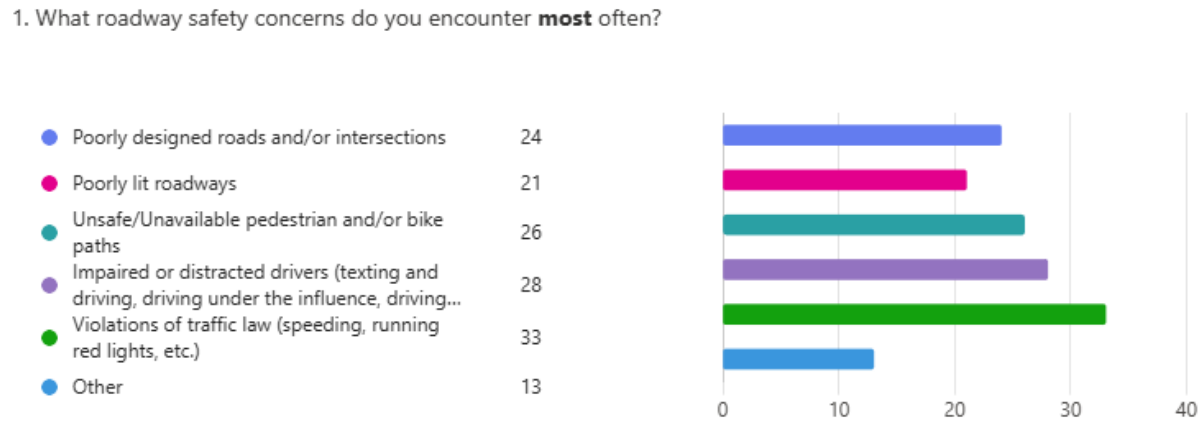
APPENDIX B

14 APPENDIX B: Online Survey Summary

ONLINE SURVERY SUMMARY

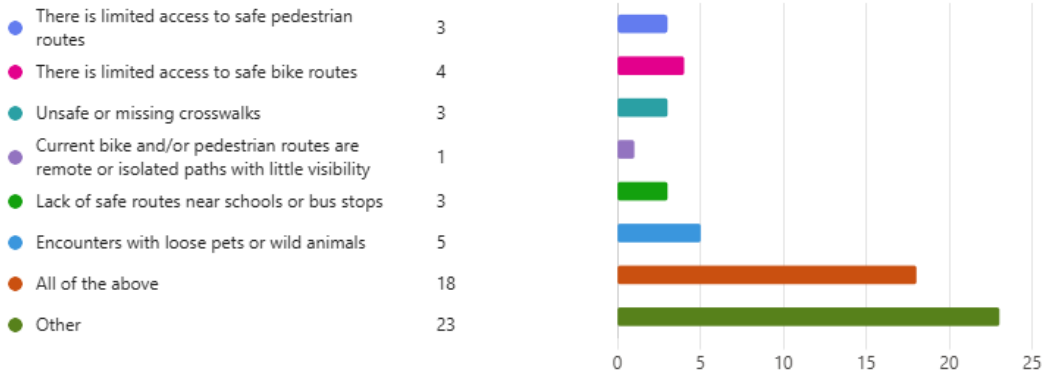
The survey was a total of six questions. The survey was a total of six questions. Five of the six questions were multiple choice one question open response. This survey received a total had 39 responses. The survey was open to the public for 481 days from the time frame of September 2024 to May 2025. The survey was posted in a variety of digital media forums as well as throughout a few frequently visited locations within the Chapter. Forums included: Ramah Navajo Nation website, Pinehill Schools, local newspaper and Chapter's Facebook page. The questions addressed various concerns throughout the Ramah Navajo Nation region including infrastructure quality, traffic law enforcement, bike and pedestrian amenities and other factors related to vehicular and pedestrian crashes.

Below is the analysis for each question asked on the public survey:



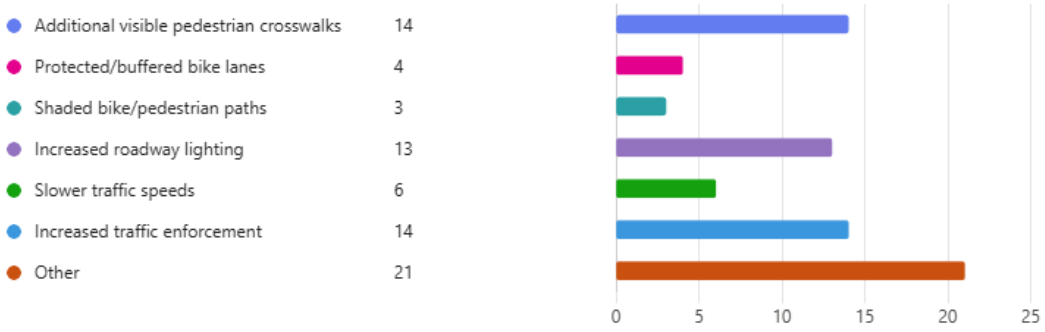
Question 1 received a total of 39 responses. Respondents were asked to select roadway safety concerns that they encounter most often. There were three top concerns identified. The top concern recorded from respondents was "Violations of traffic law (speeding, running red lights, etc.)" receiving 23 percent of votes. The second highest selected concern was "Impaired or distracted drivers (texting and driving, driving under the influence, driving tired)" receiving 19 percent of votes. The third most selected concern is "Unsafe/ unavailable pedestrian and/or bike paths" with 18 percent of votes.

2. What are your top two safety concerns for pedestrians and/or bicyclists in your community? More details



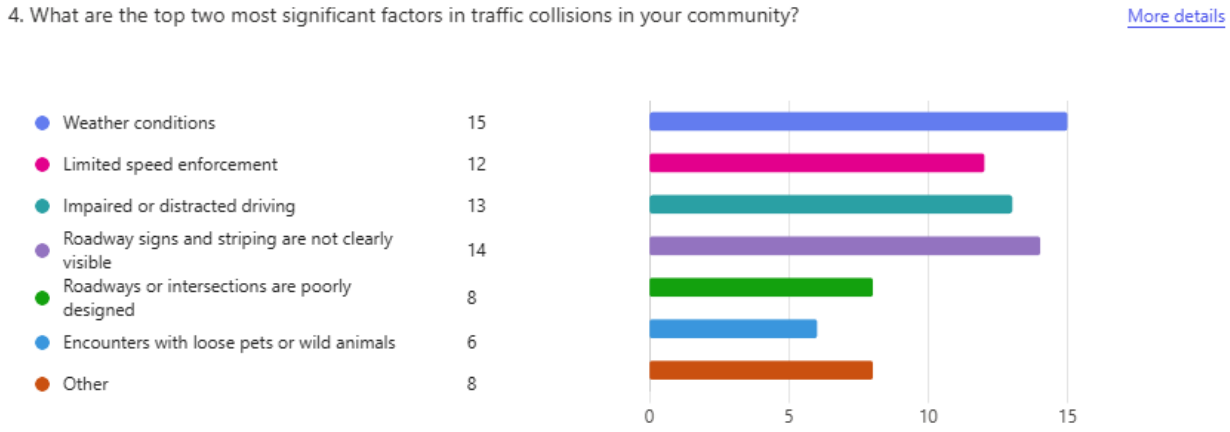
Question 2 received a total of 39 responses. Respondents was asked about safety concerns involving pedestrians and cyclists. There were two top concerns identified. The top concern recorded from respondents was “Other” receiving 28 percent of votes. The second highest selected concern was “All of the above” receiving 30 percent of votes. The individual responses did not specify what was considered the most concerning safety issue or what measures would most effectively enhance safety. Survey results indicate that there are wholistically safety concerns with the existing pedestrian and cyclist amenities.

3. Below is a list of safety improvement strategies for bicyclists and pedestrians. Which strategies do you think would b e **most impactful** in your community? More details

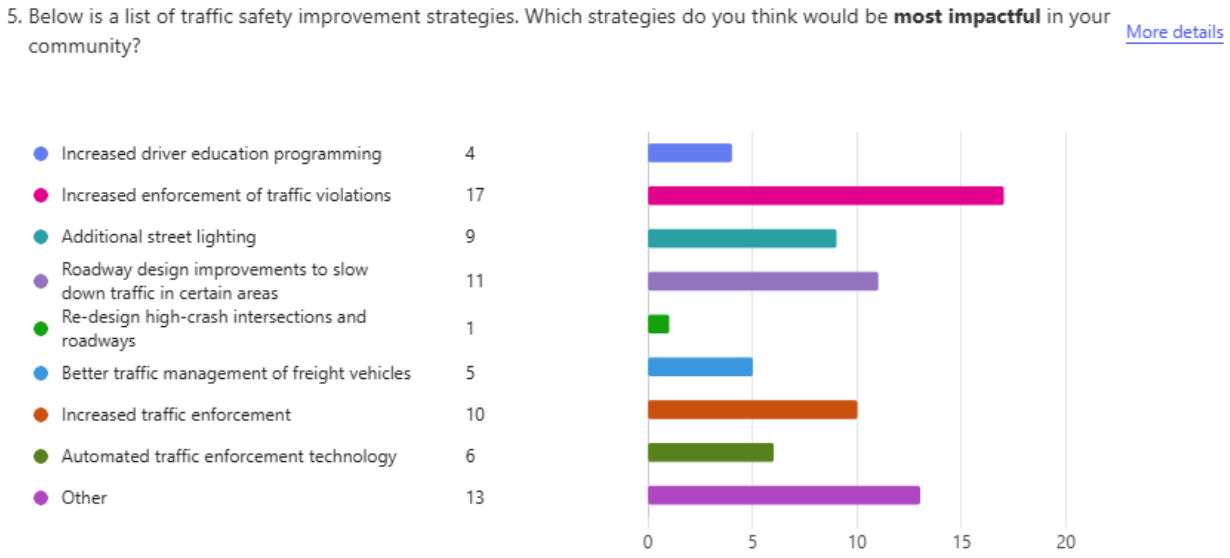


Question 3 received a total of 39 responses. Respondents were asked to select the most impactful safety improvement strategies for bicycles and pedestrians that will benefit their community. There were three top strategies identified as the most impactful. The highest voted strategy voted by respondents was “Other” receiving 28 percent of votes. There was a tie in votes received for the second preferred improvement strategy. Respondents selected “Increased traffic enforcement” and “Additional visible pedestrian sidewalks”. Results from constituents highlights that there are additional strategies that can be better suited for the community. Strategy

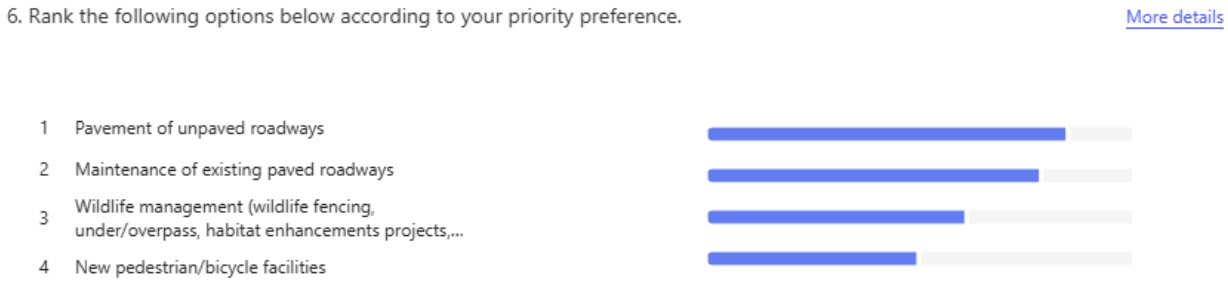
recommendations for additional considerations are included in the in-person public meeting summary.



Question 4 received a total of 39 responses. Respondents were asked to pick the two most significant factors in traffic collisions in their community. There were two top factors identified. The most significant factor voted by respondents was “Weather conditions” receiving 20 percent of votes. The second most significant factor voted by respondents was “Roadway signs and striping are not clearly visible” receiving 18 percent of votes.



Question 5 received a total of 39 responses. Respondents were asked to pick the most impactful traffic safety improvement strategy in their community. There were 2 top strategies identified. The most impactful strategy voted by respondents was “Increased enforcement of traffic violations” receiving 22 percent of votes. The second most impactful strategy voted by respondents was “Other” receiving 17 percent of votes. Results from respondents shows that there are additional strategies that could be better suited for the community.



Question 6 received a total of 22 responses. Respondents were asked to rank options according to their preference of priority improvements in the community. There were three top project priorities identified. The highest ranked improvement project was “Pavement of unpaved roadways” with 45.5 percent of votes. The second highest voted improvement project is “Maintenance of existing paved roadways” with 45 percent. The third highest ranked improvement project is “Wildlife management" with 32 percent of votes.

Question 7 required written input from the respondents. Question 7 asked respondents to indicate specific roadways and intersections where they experience traffic safety issues. A total of 14 residents responded BIA 125, Pine Hill Market, Mountain View, BIA 122, Hwy 53, Candy Kitchen and Route 140 being mentioned several times.

ONLINE SURVEY COMMENTS

BIA 125	- Road repair - Roaming wildlife on roads - Crosswalks and signs for pedestrians - Widen intersection - Turnouts at Hwy 53 – BIA 125, BIA 125 – 122 and BIA 125 – 175 intersections - Bad visibility at intersections
PINEHILL MARKET	- Frequent speeding - Road repair - Crosswalks and Signs for pedestrians
MOUNTAIN VIEW	- Needed speed bumps - Increased enforcement - Increase passing zones from Mountain View to Unit 5 - Safer crosswalks and lighting at Mountain View and BIA 125 - Frequent elk accidents along Mountain View south to PineHill - Wider intersection at mile marker 4
BIA 122	- Heavy freight vehicles are damaging roads - Frequent speeding - No bike paths - High volumes of traffic - Fully pave roads - Heavy freight vehicles are damaging roads
HWY 53	- Increase speed limits - Turnout at Hwy 53-BIA 125 intersection - Frequent speeding - Bad visibility at intersections - Increase speed limits
CANDY KITCHEN	- Add turnouts to intersection - Frequent speeding around turns - Unsafe turnouts - Add turnouts to intersection
ROUTE 140	- Needs increased enforcement - Frequent speeding - Needs road repair. - Needs increased enforcement - Frequent speeding

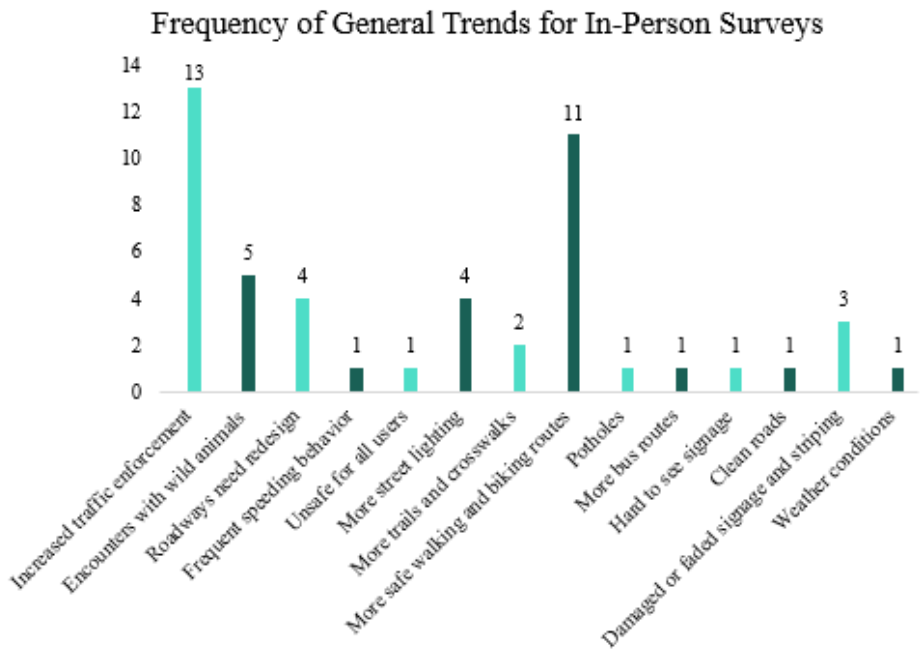
IN PERSON SURVEY SUMMARY

An additional form of participation was conducted at a Vision Zero public meeting held at the Chapter's RNDOT Yard on May 22nd, 2025 in McKinley County, New Mexico. Attendees were given an additional opportunity to take the survey in person. Navajo language translation was available on permise to allow all meeting participants accessibility and equity. At this meeting, an additional18 surveys were completed. General trends were recorded from individual's' survey for the purpose of continued evaluation of the communities concerns.

Below is a table that organizes the general trends or frequently acknowledged concerns from meeting participants that completed the survey.

The major general trends from the surveys were as follows:

Increased traffic enforcement	More safe walking and biking routes
Encounters with wild animals	Potholes
Roadways need redesign	More bus routes
Frequent speeding behavior	Hard to see signage
Unsafe for all users	Clean roads
More street lighting	Damaged or faded signage and striping
More trails and crosswalks	Weather conditions


Frequency of General Trends for In-Person Surveys
14
12
10
8
6
4
2
0
13
5
4
1
1
4
2
11
1
1
1
1
3
1
Increased traffic enforcement
Encounters with wild animals
Roadways need redesign
Frequent speeding behavior
Unsafe for all users
More street lighting
More trails and crosswalks
More safe walking and biking routes
Potholes
More bus routes
Hard to see signage
Clean roads
Damaged or faded signage and striping
Weather conditions

In addition to the completed questions, respondents were given the opportunity to provide more detailed comments to expand on or clarify their concerns. Examples of some of the comments are below:

"BIA 125 Southwest of PineHill Market needs road repair. BIA 125 has roaming livestock. BIA 140 and School Campus bus lanes need repaired."

"*Mountain View Community needs speed bumps and lights."*

"Turnouts at Hwy 53 - BIA 125, BIA 125 – 122, BIA 125 – 175 and Candy Kitchen."

"Trail for walkers and bikers on Hwy 125. Signs to warn visitors to slow down."

"Drivers slow down near them (dirt road)."

"Walkways in Mtn View."

"Add guard rails."

"Safer crosswalks, lighting and signage at Mt. View 125 and at 125 PineHill Market."

"Wider turnouts and more noticeable signs."

"Elk accidents along BIA 125 especially Mt View South to PineHill."

"Maintain road during winter months. Trim weed along the road."

"Unit 1 – 5 replace cattle guard, signs are not visible and unpaved roads."

"Candy Kitchen turn off is unsafe, add ramps to the curve for safety."

"BIA 122 to be paved all the way around."

"BIA 125 Ramah Detention turn off mile marker 1.5 wider intersection. BIA 125/122 Mt. View wider intersection. Mt. View Business area wider cross pedestrian warning light during business hours. BIA 125/122 Pine Hill wider intersection."

"NM State Road 53 and BIA 125 intersection, hard visibility."

15

APPENDIX C

15 APPENDIX C: IMPLEMENTATION PLAN

RAMAH NAVAJO CHAPTER VISION ZERO

Ramah Navajo Chapter SS4A

IMPLEMENTATION PLAN

Safety Action Plan

November 2025

01 INTRODUCTION

This Vision Zero Safety Action Plan (Plan) recognizes that "Vision Zero is a strategy to eliminate all traffic fatalities and serious injuries while increasing safe, healthy, equitable mobility for all." Ramah Navajo Chapter (Chapter) has adopted a resolution of commitment towards zero traffic fatalities and serious injuries by the year 2030 to address unmet roadway safety needs. The goal of the Vision Zero initiative is to develop a transportation network that protects its users, with the goal of eliminating all roadway fatalities and serious injuries. This Vision Zero Safety Action Plan outlines areas of concern the Ramah Navajo Chapter as well as strategies to reduce crashes and offer equitable infrastructure safety improvements.

The Ramah Navajo Chapter is committed to achieving zero traffic fatalities and serious injuries by 2030 through a Safe Systems-based approach. This strategy emphasizes designing transportation systems that anticipate human error and minimize the consequences of mistakes. The Safe Systems approach attempts to improve traffic safety through a holistic lens, pushing for safety improvements across all aspects of transportation network, from vehicle safety to post-crash care.

This Implementation Plan was developed through data analysis of Ramah Navajo Chapter 2018-2022 crash data (most publicly available data at the time of this Plan) and public engagement and local stakeholders (Vision Zero Task Force) to determine areas of emphasis areas within the Chapter. From this information, an implementation plan was developed that combines policy efforts, infrastructure improvements, community engagement, and equitable action to create a clear path toward the Vision Zero goal: Safe Streets for All.

This Implementation Plan is designed to guide the Vision Zero Task Force as they take steps towards Vision Zero pledge. It will outline a system that can be used to prioritize projects to advance into the next stage of development.

02 SAFETY ACTION PLAN VISION & GOALS

THE VISION

The Vision Zero Safety Action Plan is a start to implementing the Ramah Navajo Chapter's commitment to safe streets for all roadway users. The Vision Zero and the Safe Systems approach creates the active implementation and long-term programming necessary to eliminate traffic fatalities entirely by 2030 and minimize serious injuries on all roadways through effective and equitable strategies.

To guide planning efforts, the Vision Zero Task Force carefully crafted the following vision statement:

> *"As representatives of the community of Ramah Navajo Chapter, we believe that everyone has the right to a safe route home, whether they walk, drive, or use any other form of transportation. We envision streets that are intentionally designed to be safe, accessible, comfortable, and inviting to all members of our community, especially those who are most vulnerable.*
>
> *To achieve our Vision Zero target, Ramah Navajo Chapter will implement holistic design strategies and tools that: maximize safety for all road users, reduce driving speed in critical areas, ensure comprehensive progress towards Vision Zero goals through safe systems program, and continually develop and disseminate Chapter- wide communication and educational campaigns on Vision Zero street safety.*
>
> *Our methods for engaging in these efforts will include:*
>
> - *Maintaining transparency in analysis of Vision Zero progress and providing appropriate information to our partner agencies and the public*
> - *Making equitable and context-sensitive investments to our roadway infrastructure and programming*
> - *Using data to drive our decision-making*
> - *Establishing a culture of safety and embracing the 5 E's of Equity, Education, Enforcement, Evaluation, and Engineering"*

GOALS:

The goals of this Safety Action Plan outline the Chapter's specific methods for achieving their Vision statement and create the necessary conditions to eliminate fatal accidents entirely by 2030 and minimize injury accidents on all roadways within the community.

These goals will align with the Safe Systems approach by outlining strategic and measurable objectives that will track positive progress towards Vision Zero. Each goal is crafted to mitigate a specific gap in the safety of the transportation system, revealed via a thorough analysis of the existing conditions within the Chapter and feedback provided by the Vision Zero Task Force and community input.

Goal #1: Provide Inclusive and Equitable Roadway Infrastructure

Improve safety for people who walk, bike, or use vehicles as modes of transportation. The primary effort towards this goal is to update existing roadway infrastructure to significantly reduce barriers to safety and accessibility of public amenities.

Objective #1: Measure and evaluate implementation progress and maintenance using Safe Streets design standards.

Objective #2: Increase the quantity of safe multimodal transportation networks to essential services for all populations.

Goal #2: Strengthen Crash Data Collection and Analysis

Standardizing data collection and reporting protocols to assist with verifying data accuracy and reliability. Consistent and accurate data is an essential tool for monitoring progress towards Vision Zero.

Objective #1: Ensure comprehensive data collection for crash factors like roadway conditions, visibility, lighting, and vehicle safety features.

Objective #2: Usher data integration across tribal and surrounding county agencies to improve the consistent use of crash data for processing and analysis of crash trends and patterns.

Objective #3: Continuously perform maintenance of data collection tools and methodologies to stay ahead of changing crash reporting technology.

Goal #3: Expand Drivers' Education and Awareness Campaigns

Improve roadway user risk perception through the integration of targeted public education initiatives, coordinated law enforcement operations, and complementary engineering interventions.

Objective #1: Address local roadway safety challenges by implementing community-led awareness campaigns and safe driving pledge programs, integrated with behavior change strategies to promote long-term improvements in driver conduct.

Objective #2: Establish collaborative partnerships with community organizations, local school boards, and relevant task forces to expand the scope and availability of public educational outreach programs within the Chapter.

Objective #3: Engage in collaborative efforts to support national campaigns addressing cellphone use, texting while driving, and impaired driving due to alcohol or drug consumption.

Goal #4: Increase State & Regional Partnerships and Collaborations

State and Regional partnerships are essential to enhance the effects of shared roadway challenges while simultaneously optimizing resources and advancing shared visions and goals.

Objective #1: Establish a regional system for data sharing that enables Chapter, state, and regional agencies to access resources and foster the coordination of implementation of safety improvement projects.

Objective #2: Strengthen partnerships that support collaborative transportation policy development among tribal, county, state, and regional agencies to promote a unified culture of safety.

Goal #5: Prioritize Wildlife Land Management

Mitigating wildlife vehicle collisions ensures the sustainability of wildlife, human populations, and roadway safety.

Objective #1: Identify wildlife corridors within the Chapter along high-impact roadways to implement consistent monitoring and maintenance implementation practices that reduce frequency and severity of wildlife collisions.

03 PHASED IMPLEMENTATION

This Implementation Plan seeks to synthesize the data analysis, existing efforts, and policy goals into measurable actions that will guide Ramah Navajo Chapter towards Vision Zero.

These actions can be categorized into one of three phases: short-term, medium-term, and long-term. Actions and projects are categorized by a myriad of factors, such as urgency, funding availability, and coordination efforts needed. Some general factors are listed below to illustrate the framework of the implementation plan.

Short-Term (0-2 Years)

- Immediate effort required in the following one to two years from Plan adoption
- Project funding sources exist and may be currently allocated
- Project may be currently listed in an existing planning document

Medium-Term (3-5 years)

- Near-term effort required within three to five years from Plan adoption
- Funding source may not yet be identified
- Projects should be publicized and coordinated with all agency partners

Long-Term (5- 10+ years)

- Longer-range efforts are to be implemented five- ten plus years from Plan adoption

Table 1 lists the recommended actions of this Plan to achieve the goals outlined in ***Section 03*** of this Plan. These actions encompass design improvements, studies, policy changes, enforcement methodologies, education efforts, and any additional efforts that will help to address the safety gaps revealed in the development of this Plan.

Each action is categorized by the goal it is supporting, its phased implementation timeframe, and the five E's of safety it addresses.

Some projects listed in this table are recommendations for safety improvements or policies that may occur on roadways just outside of the Chapter boundary, but would require coordination and organization between adjoining communities and the Ramah Navajo Chapter.

04 PROJECT PRIORITIZATION

In order to efficiently execute the implementation projects outlined in this Plan, the projects are categorized into three priority tiers based on project readiness and timeframe (short, medium, and long-term), cost, funding availability, applicable emphasis areas for each project, and overall safety impact. Both projected timeframes, as described above, and project cost are typical and expected constraints for the implementation of any project, regardless of project type. To best meet the safety goals outlined in the Safety Action Plan, projects were weighed on the strength of their safety impact alongside the feasibility constraints posed by time and cost barriers. The safety impact of a project is defined through the Five Es of Safety: Equity, Education, Engineering, Enforcement, and Evaluation. Though not all projects can address all five categories, projects that have the ability to address multiple will have a broad safety impact that can use time and funding resources efficiently. Priority tiers and safety impact categories are shown in ***Table 1*** for each implementation item proposed in the Plan.

The highest priority projects will be ranked in **Tier One** (shown in *purple* in Table 1), due to their high-level of safety impact with regards to the Five Es as well as a feasible planning-level cost and short implementation timeframe to meet the goal year of 2030.

Considering this same horizon year of 2030, projects that have high or unknown costs and long or unpredictable timeframes will have a reduced safety impact, regardless of the efficacy of the proposed countermeasures. Projects with these barriers are included in **Tier Three** (shown in *yellow* in Table 1) of this implementation plan as they are valid safety improvement projects but may not be most effective in the timeframe outlined in the Plan. As the Safety Action Plan is updated by the two municipalities, the prioritization tier of these projects can be reevaluated with new information and/or changing priorities and available funding.

Tier Two (shown in *blue* in Table 1) projects fall in between Tier One and Tier Three; they encompass projects that will have positive safety impacts that are in line with the goals of the Safety Action Plan, but have a prohibitively higher cost or longer timeframe that could reduce the impact of the project within the timeframe of the Safety Action Plan. It is important to note that no project included in this Plan has a low safety impact or is unfeasible. All included projects are highly valuable and proven-effective countermeasures to improve transportation safety for all road users in these two municipalities.

Table 1. Implementation Projects

#	Priority Tier	Action	Location/Jurisdiction	Potential Partnerships	Timeframe	Planning Level Cost	5 E's				
							Equity	Education	Engineering	Enforcement	Evaluation
Goal #1: Provide Inclusive and Equitable Roadway Infrastructure											
1.1	1	Conduct transit feasibility study to determine need for a micro-transit service that offers point-to-point trips to key destinations within the Chapter	Ramah Navajo Chapter	RNDOT	Short	-	✓	✓	✓	✓	✓
1.2	2	Develop road signing and striping standard guidelines that emphasizes high-visibility signage	East and West Intersections on BIA Road 125 & BIA 140 at Pine Hill Schools Campus, Intersection of NM-53/BIA Road 125, BIA Road 136, BIA Road 143	NMDOT, RNDOT, BIA	Short	-	✓		✓		✓
1.3	3	Add enhanced curve delineation measures such as large advance warning signs, in-lane warning marking, and advance dynamic radar signs for speed enforcement	BIA Road 125; BIA Road 143 (from Chapter Boundary to Carrizozo Road Intersection), NM-53 (from Bond Street to Chapter Boundary); BIA Road 136	NMDOT, RNDOT	Short	signs: $9,246 each markings: $22,110 each speed radar sign: $92,192 each chevrons: $67,804/mile			✓		✓
1.4	3	Implement targeted re-striping efforts along NM-53 and other state highways in the Chapter. Utilize retroreflective or thermoplastic paint along with retroreflective raised pavement markers	NM-53 (from Bond Street to Chapter Boundary); BIA Road 143 (Chapter Boundary to Carrizozo Road)	NMDOT, RNDOT	Medium	$39,798/mile - $47,168/mile			✓		✓
1.5	2	Enhance intersection crossings on high-volume roadways to include high-visibility pedestrian crossings	Intersection of BIA Road 140/ BIA Road 125; Intersection of BIA Road 125/NM-53 ; Intersection of BIA Road 143/BIA Road 179; Intersection of BIA Road 120/ BIA Road 125; Intersection of BIA Road 125/BIA Road 111; Intersection of BIA Road125/BIA Road 131; Intersection of BIA Road 140/BIA Road 184	NMDOT, RNDOT	Medium	$55,342 per RRFB, $14,740 per crosswalk	✓		✓		✓
1.6	1	Consider installing overhead lighting in key pedestrian areas to enhance safety and quality of pedestrian experience	BIA Road 125 (from NM 53 to Chapter Boundary); Ramah Navajo Chapter Schools East and West Intersection; BIA Road 140 (from BIA Road 125 to BIA Road 140)	NMDOT, RNDOT	Medium	$51,322 per solar pole, $1,385,560/mile connected to existing power	✓		✓		✓
1.7	2	Reconfigure intersection for enhanced visibility and adherence to current NMDOT design standards	Intersection of BIA Road 125/BIA Road 140; Intersection of Pine Hill School / BIA Road 140; Intersection BIA Road 166/NM-53; Intersection of NM-53 / BIA Road 133	NMDOT, RNDOT	Long	signal: $769,160 each crosswalk: $14,740 each	✓		✓		✓
1.8	1	Establish variable speed corridors and/or strategic road closures during inclement weather events	NM-53 (from Bond Street to Chapter Boundary); BIA Road 125 (from NM-53 to Chapter Boundary)	NMDOT, RNDOT	Short	VSL: $325,620/mile permanent DMS: $921,920 each				✓	✓
1.9	1	Update roadways to include raised pavement markers, retroreflective striping, wider edge lines, and center and outside rumble strips	NM-53 (from Bond Street to Chapter Boundary); BIA Road 125 (from NM-53 to BIA Road 140)	NMDOT, RNDOT	Medium	$90,048/mile			✓		✓
1.10	1	Establish variable speed limit corridors during evening hours	BIA Road 125 (from Chapter Boundary to NM-53); NM-53 (from Bond Street to Chapter Boundary)	NMDOT, RNDOT	Medium	VSL: $325,620/mile permanent DMS: $921,920 each				✓	✓
1.11	1	Consider a roadway inventory and pavement condition study to address unpaved roadways throughout the Chapter	Ramah Navajo Chapter	NMDOT, RNDOT	Medium	-	✓		✓		✓
1.12	1	Consider signal warrant analysis at existing stop-controlled intersections near high-traffic corridors to evaluate future signalization for enhanced safety	Intersection of NM-53/BIA Road 125; Intersection of NM-53/BIA Road 136, Intersection of BIA Road 125/BIA Road 120; Intersection of NM-53/BIA Road 166; Intersection of BIA Road 25/BIA Road 208	NMDOT, RNDOT, Ramah Navajo Law Enforcement	Short	signal: $769,160 each			✓		✓
1.13	1	Improve/increase the number of pedestrian facilities at or near the Chapter Office (BIA Road 125) and other high-pedestrian traffic areas	BIA Road 125; BIA Road 140; RNSB Campus Area; Navajo Housing Authority Area	RNDOT, NMDOT, Ramah Navajo School Board	Short	sidewalk: $1,354,740/mile crosswalk: $14,740 each RRFB: $55,342 each	✓				

#	Priority Tier	Action	Location/Jurisdiction	Potential Partnerships	Timeframe	Planning Level Cost	5 E's				
							Equity	Education	Engineering	Enforcement	Evaluation
1.14	1	Improve intersection visibility along major thoroughfares. This can include additional signing and striping as well as reconfiguration of intersections	Intersection of BIA Road 125 / BIA Road 171; Intersection of NM-53 Ice Caves Road / BIA Road 125;	NMDOT, RNDOT, Navajo Law Enforcement	Medium	small area (4,200 SF): $38,860 medium area (22.5k SF): $140,700 large area (70k+ SF): $412,720	✓		✓		✓
1.15	2	Consider the establishment of a chapter roadway maintenance crew	Ramah Navajo Chapter	NMDOT, RNDOT, Ramah Navajo Law Enforcement, BLM, BIA	Short	-				✓	✓
1.18	1	Implement "Hidden Driveway" signage as needed in the Chapter	Driveways along BIA Road 125 (from NM-53 to Chapter Boundary); Driveways along NM-53 (from Bond Street to Chapter Boundary)	NMDOT, RNDOT	Short	$9,246 each					✓
1.19	1	Add Matrix Message Signage (portable message feedback) for seasonal roadway changes (ex. inclement weather, wildlife migration)	NM- 53 (from Bond Street to Chapter Boundary); BIA Road 125 (from NM-53 to Chapter Boundary)	RNDOT, NMDOT, Ramah Navajo School Board	Short	permanent DMS: $921,920 each mobile DMS: $22,000 each			✓		✓
1.20	2	Increase street maintenance efforts to maintain proper clear zone along Chapter roadways within public right-of-way	BIA Road 125 (from NM-53 to Chapter Boundary)	Ramah Navajo Chapter, Ramah Department of Transportation, Navajo Department Of Transportation, NMDOT, Ramah Navajo School Board	Medium	$1,026,440/mile				✓	✓
1.21	1	Develop a Safe Routes to School Plan	Ramah Navajo Chapter	RNDOT, NMDOT, Ramah Navajo School Board	Short	-	✓	✓			✓
1.22	2	Conduct a School Bus Stop Roadway Safety Audit	Ramah Navajo Chapter	RNDOT	Short	-	✓	✓			✓
1.22	1	Add 'School Speed Limit' signage	BIA Road 125 (from BIA Road 122 to BIA Road 111); BIA Road 140 (from BIA Road 125 to BIA Road 184)	RNDOT, NMDOT, Ramah Navajo School Board	Short	$9,246 each	✓		✓	✓	✓
1.23	3	Add Intelligent Technology System (ITS) facilities to increase viewshed	NM- 53 (from Bond Street to Chapter Boundary); BIA Route 125 (from NM-53 to BIA Road 208); Pine Hill Market; NHA Housing; RNSB Campus; along BIA Road 122, South bound BIA Road 125 entering Mountain View, Hilltop of NM-53	RNDOT, NMDOT, Ramah Navajo School Board	Medium	$92,192 each	✓		✓	✓	✓
1.24	1	Add 'Smart Crosswalk' flashing beacon roadway signage	BIA Route 125 (from NM-53 to BIA Route 208); Intersection of BIA Route 125 /Pine Hill Market, NHA Housing; RNSB Campus; along BIA Route 122; Intersection of BIA Route 125/ Carrizozo Road; Yucca Route	RNDOT, NMDOT, Ramah Navajo School Board	Short	$55,342 each	✓		✓	✓	✓
1.25	1	Add 'Bus Stop' roadway signage	Bus Stops along BIA Route 125 (from NM-53 to Chapter Boundary); Pine Hill Market; NHA Housing; RNSB Campus; BIA Route 122; Yucca Route	RNDOT, NMDOT, Ramah Navajo School Board	Short	$9,246 each	✓		✓	✓	✓
1.26	2	Conduct a Ramah chapter feasibility study for public transportation accessibility locations	Ramah Navajo Chapter	RNDOT, Cibola County, City of Gallup, Zuni Pueblo, McKinley County	Short	-	✓		✓		✓
1.27	3	Conduct road surfacing on BIA Road 125	BIA Road 125	RNDOT	Short	$1,420,400/mile			✓		✓
1.28	3	Conduct road surfacing on BIA Road 122	BIA Road 122	RNDOT, Cibola County	Medium	$1,420,400/mile			✓		✓
1.29	1	Install informational signage to designate segment of northbound road shoulder along BIA Road 125 as a pullover "cell service area"	BIA Road 125 (from Pinehill to NM-53)	RNDOT	Short	$9,246 each			✓		✓
1.30	1	Update advance curve warning signage for enhanced visibility	BIA Road 125; NM- 53; Pine Hill Market; NHA Housing; RNSB Campus; BIA Road 122; Yucca Route	RNDOT, NMDOT	Short	$67,804/mile			✓		✓

#	Priority Tier	Action	Location/Jurisdiction	Potential Partnerships	Timeframe	Planning Level Cost	5 E's				
							Equity	Education	Engineering	Enforcement	Evaluation
1.31	1	Update 'Speed Change' signage	BIA Road 122; BIA Road 125; BIA Road 128	RNDOT, NMDOT	Short	$55,342 each			✓	✓	✓
Goal #2: Strengthen Data Collection and Analysis											
2.1	1	Conduct road safety audit to better determine roadway improvements such as guardrail, slope flattening, and/or additional clear zone	NM-53 (from Bond Street to Chapter Boundary); BIA Road 136 ; BIA Road 113; Intersection of NM-53/BIA Road 264; BIA Road 125 (from Mile Marker 7 to BIA Road 138); BIA Road 125 (from Mile Marker 8 to BIA Road 120), RN 125 / RN 122 (MV) Intersection Roadway Safety Audit; RN 125 / RN 140 Intersection Roadway Safety Audit; RN 125 / RN 122 (PH) Intersection Roadway Safety Audit 34°57'11"N/ 108°26'29"W; RN 125 / RN 122 (PH) Intersection Roadway Safety Audit 34°54'16"N/ 108°25'13"W; NM-53 / BIA 135 Intersection Roadway Safety Audit; RN 125 / RN 139 Intersection Roadway Safety Audit; NM-53 / BIA 125 Intersection Roadway Safety Audit; NM-53 / BIA 130 Intersection Roadway Safety Audit; NM-53 / BIA 137 Intersection Roadway Safety Audit;	RNDOT, NMDOT, BIA, BLM, Ramah Navajo Law Enforcement	Medium	-			✓		✓
2.2	2	Provide updated technology systems for Ramah Navajo Law Enforcement staff to capture crash reporting	Ramah Navajo Chapter	RNDOT, Ramah Navajo Law Enforcement	Short	-	✓			✓	✓
2.3	1	Add additional training programs for law enforcement to maintain and improve consistent and complete crash reporting	Ramah Navajo Chapter	RNDOT, Ramah Navajo Law Enforcement	Short	-	✓	✓		✓	✓
Goal #3: Increase Public Education and Awareness Campaigns											
3.1	1	Develop a restorative plan for first-time DWI offenders that implements evidence-based methodoligies to reduce rates of second offences	Ramah Navajo Chapter	RNDOT, BIA, Ramah Navajo Law Enforcement, Navajo Department of Health, Cibola County, McKinley County	Medium	-		✓		✓	✓
3.2	1	Implement high-visibility seat belt enforcement and media campaigns	Ramah Navajo Chapter	RNDOT, NMDOT, Ramah Navajo Law Enforcement	Short	-		✓		✓	
3.3	1	Continue Vision Zero Task force consisting of multidisciplinary groups and agencies for continued oversight	Ramah Navajo Chapter	RNDOT, NMDOT, Ramah Navajo Law Enforcement, Navajo Department of Health, Cibola County, McKinley County	Short	-	✓	✓			✓
3.4	1	Create a "Safe People" Community Ambassador opportunity within the Vision Zero Task Force to allow for additional community participation	Ramah Navajo Chapter	RNDOT, NMDOT, Ramah Navajo Law Enforcement, Navajo Department of Health, Cibola County, McKinley County	Short	-	✓	✓		✓	✓
3.5	1	Provide educational safety courses for young drivers	Ramah Navajo Chapter	RNDOT, Ramah Navajo Law Enforcement, NMDOT, Navajo Department of Transportation, Ramah Navajo School Board (RNSB)	Short	-	✓	✓		✓	✓
3.6	1	Launch local campaign efforts to educate drivers about wildlife hazards and the importance of staying alert	Ramah Navajo Chapter	RNDOT, Ramah Navajo Law Enforcement, NMDOT, Navajo Department of Transportation, Ramah Navajo School Board (RNSB), Cibola County, Pine Hill Schools, El Morro National Monument	Short	-		✓			✓
3.7	1	Create a taskforce in coordination with Navajo groups comprised of landowners, local farmers, ranchers, school districts, and community leaders to aid in wildlife management and mitigation	Ramah Navajo Chapter	RNDOT, Ramah Navajo Law Enforcement, NMDOT, Ramah Navajo School Board (RNSB), Cibola County, Pine Hill Schools, BLM	Short	-	✓	✓			✓
3.8	1	Run awareness programs and drivers education campaigns to educate drivers about drunk driving hazards on rural roads and promote safe driving practices	Ramah Navajo Chapter	RNDOT, Ramah Navajo Law Enforcement, NMDOT, Ramah Navajo School Board (RNSB), Cibola County, McKinley County	Long	-		✓			✓
3.9	1	Partner with Native Public Media to promote roadway safety, training, and educational resources	Ramah Navajo Chapter	RNDOT, Ramah Navajo Law Enforcement, Native Public Media	Long	-		✓			

#	Priority Tier	Action	Location/Jurisdiction	Potential Partnerships	Timeframe	Planning Level Cost	5 E's				
							Equity	Education	Engineering	Enforcement	Evaluation
Goal #4: Increase State & Regional Partnerships and Collaborations											
4.1	1	Amend local laws to establish nighttime driving limits for GDL holders (young drivers under the age of 18)	NM-5 (from Bond Street to Chapter Boundary); BIA 125 (from NM-53 to Chapter Boundary)	NMDOT, RNDOT, BIA	Medium	-				✓	✓
4.3	3	Increase public private partnerships to assist with improvement to open source street level mapping information	Ramah Navajo Chapter	RNDOT, NMDOT, Navajo Public Media, Ramah Navajo School Board (RNSB), Navajo Housing Authority	Medium			✓			✓
4.4	2	Increase enforcement measures, such as sobriety checkpoints, to address high rate of impaired drivers	NM-53 (from BIA 125 to Forest Road 157)	RNDOT, NMDOT, Ramah Navajo Law Enforcement, McKinley County, Cibola County, Navajo Department of Health	Short	-				✓	
4.5	3	Develop a Ramah Chapter comprehensive wildlife management plan in coordination with Navajo Nation, New Mexico, and federal agencies	Ramah Navajo Chapter	RNDOT, NMDOT, BIA, BLM, Navajo Nation Department of Game and Wildlife	Medium	-		✓			
4.6	2	Conduct a wildlife-vehicle collisions (WVCs) hot spot study to develop targeted mitigation efforts as WVCs comprise 36% of all crashes in the Chapter between 2018-2022	Ramah Navajo Chapter; NM-53 (from Bond Street to Chapter Boundary)	RNDOT, NMDOT, BIA, BLM, Navajo Nation Department of Game and Wildlife	Medium	-			✓	✓	✓
Goal #5: Prioritize Wildlife Management											
5.1	2	Identify locations for wildlife crossing structures and/or wildlife corridors. This can include overpasses, wildlife fencing, underpasses, or ecological bridges	Ramah Navajo Chapter; El Morro National Monument	RNDOT, NMDOT, Navajo Department Of Transportation, BIA, BLM, Navajo Nation Department of Game and Wildlife, Navajo Nation Department of Fish and Wildlife (NNDFW)	Medium	sign: $9,246 each warning system: $597,640 each fencing: $1,744,680/mile underpass crossing: $3,333,920 each overpass crossing: $5,847,760 each			✓		✓
5.2	1	Run awareness programs and drivers education campaigns to educate drivers about wildlife hazards on rural roads and promote safe driving practices	Ramah Navajo Chapter	RNDOT, Ramah Navajo Law Enforcement, NMDOT, Ramah Navajo School Board (RNSB), Cibola County, McKinley County	Medium	-	✓	✓			✓
5.3	1	Engage local businesses for sponsorships or partnerships in promoting wildlife safety efforts	Ramah Navajo Chapter	RNDOT, NMDOT, BIA, BLM, Navajo Nation Department of Game and Wildlife, Navajo Nation Department of Fish and Wildlife (NNDFW)	Medium	-		✓			✓
5.4	1	Use seasonal signage that is specific to times of high wildlife activity, such as during migration periods or calving seasons	NM-53 (from Bond Street to Chapter Boundary); BIA Road 125 (from NM-53 to Chapter Boundary)	RNDOT, NMDOT, BIA, BLM, Navajo Nation Department of Game and Wildlife, Navajo Nation Department of Fish and Wildlife (NNDFW)	Short	permanent DMS: $921,920 each mobile DMS: $22,000 each			✓		✓
5.5	2	Coordinate with NMDOT and New Mexico statewide current roadway performance measures	Ramah Navajo Chapter	RNDOT, NMDOT	Long	-	✓	✓		✓	✓
5.6	2	Develop a *Vulnerable Road User Safety Analysis Assessment* to examine crashes to address traffic safety patterns	Ramah Navajo Chapter	RNDOT, NMDOT, BLM, Navajo Nation Department of Game and Wildlife, Navajo Nation Department of Fish and Wildlife (NNDFW)	Short	-	✓	✓	✓		✓
5.7	3	Consider a *Biological Resource Land-Use Clearance Study* update for focal point locations to construct chapter wide wildlife vehicle collision (WVC) mitigation measures	Ramah Navajo Chapter	RNDOT, NMDOT, BIA, BLM, Navajo Nation Department of Game and Wildlife, Navajo Nation Department of Fish and Wildlife (NNDFW)	Short	-		✓			✓

05 CONCLUSION

While full investment and commitment to these countermeasures will require factors such as time and funding, in the short term, the Ramah Navajo Chapter may begin to seek additional funding to begin design and construction on identified Tier 1 priority projects. The Vision Zero Task Force will be responsible for meeting a minimum of twice a year to oversee the implementation of the recommended countermeasures, as well as continuing to identify funding sources that will assist in the completion of projects in Tier 2 and Tier 3. Success of this Plan relies on the continued commitment to Vision Zero, an ongoing priority for the community.