

# Nevada Advisory Committee on Traffic Safety

## MEETING MINUTES (FINAL)

*Tuesday, October 31, 2023, 9:30-11:30 AM*

### 1. Call to Order/Roll Call

Chair Andrew Bennett (Nevada Association of Counties) called the meeting of the Nevada Advisory Committee on Traffic Safety (NVACTS) to order at 9:32 am on Tuesday, October 31, 2023. Andrew took roll and determined a quorum was present.

#### Committee Members Present

Julia Peek, Department of Health & Human Services  
Sean Sever (Vice Chair), Department of Motor Vehicles  
Amy Davey, Department of Public Safety, Office of Traffic Safety  
Lt. Col. Martin Mleczko, Department of Public Safety, Nevada Highway Patrol  
Dr. Deborah Kuhls, Kirk Kerkorian School of Medicine at University of Nevada Las Vegas  
John Penuelas, Regional Transportation Commission of Southern Nevada  
Nick Haven, Tahoe Regional Planning Agency  
Kelly Norman, Carson Area Metropolitan Planning Organization  
Andrew Bennett (Chair), Nevada Association of Counties/Clark County  
Sondra Rosenburg, Nevada Department of Transportation  
Lacey Tisler as proxy for Jenica Keller, Nevada Department of Transportation  
David Gordon, Administrative Office of the Courts  
Dr. Shashi Nambisan, University of Nevada Las Vegas Transportation Research Center  
Jeremy Silva, as proxy for Christy McGill, Department of Education  
Sean Robinson, as proxy for Joey Paskey, Nevada League of Cities/City of Las Vegas

#### Non-Voting Members Present

Kevin Tice, Department of Public Safety, Office of Traffic Safety

#### Members Absent

Cliff Banuelos, Inter-Tribal Council of Nevada  
TBD, Nevada State Senate  
TBD, Nevada State Assembly  
James Weston, Regional Transportation Commission of Washoe County  
Jason Walker, Nevada Sheriffs and Chiefs Association/Washoe Co Sheriff's Office  
Shannon Bryant, Chair, Committee for Testing of Intoxication, Traffic Safety Resource Prosecutor, Washoe County District Attorney's Office (non-voting member)

### 2. Public Comment

No public comment.

### 3. September 14, 2023, Meeting Minutes (Action Item – Approved)

The draft September 14 Meeting Minutes were presented (attached).

Motion: To approve September 14, 2023, Meeting Minutes.

By: Sean Sever

Second: Amy Davey.

Final Meeting Minutes will be posted online.

#### 4. Crash Data and Trends (*Information/Discussion*)

Andrew Bennett introduced Anita Pepper, PIO, Department of Public Safety, Office of Traffic Safety (DPS-OTS), who will present the crash data and trends for future NVACTS meetings.

Anita presented the Monthly Fatality Report for Nevada, as of September 30, 2023. The report is preliminary, but numbers are looking to be an improvement on previous years (although previous years were the worst in history). Traffic crash data information for Nevada is provided at [www.zerofatalitiesnv.com/nevadacrashdata](http://www.zerofatalitiesnv.com/nevadacrashdata).

##### Trends – Speed Safety Cameras (Road Safety Cameras)

At the end of 2022, there were 416 people who lost their lives on Nevada's roadways. This statistic is one of the top three highest number of fatalities in Nevada since this level of data has been collected. California recently adopted speed cameras into law after three attempts. There are 205 communities around the country that have implemented safety cameras, including New York City and Chicago. California intends to use road safety cameras in school zones, where they will review the impact and may abandon if successes are not seen.

Nye County has seen an increase in 2023, including 16 fatalities, which have been primarily on US 95 between Tonopah and Beatty. The causes of these crashes have been primarily head-on and run off the road.

Amy Davey provided an update on substance involved fatalities, which is reported quarterly. Marijuana-involved crashes have risen. The "Any Marijuana" column includes polysubstance (involving marijuana) and marijuana alone (see attached).

#### 5. Vulnerable Road Users (VRU) Safety Assessment (For Possible Action)

Lacey Tisler provided an update from the feedback that was received on the VRU Safety Assessment. This assessment will be updated again in 2025. The outreach component of the 2023 VRU Assessment will occur after the document is formally submitted to the FHWA on November 15, 2023. Comments that have been received will be incorporated within the next update. See attached for final report.

Motion: To approve the Vulnerable Road Users Safety Assessment.

By: Amy Davey

Second: Dr. Kuhls.

A letter will be sent to NDOT to state the approval from NVACTS.

#### 6. Traffic Safety Policy Priority Recommendations (Information/Discussion)

There are five traffic safety policy priorities that are carrying over from 2022-2023 (see attached):

##### Road Safety Cameras in School Zones

- Interim Growth and Infrastructure Committee adopted this in the 2023 Legislative Session as a BDR. It was introduced in the Assembly but was not heard.
- Clark County School District has had almost 30 students hit in varying severities in the 2022-2023 school year so far, 11 of them at one school in the district.
- Amy Davey shared that OTS has dedicated \$100,000 in grant funds next year to pilot a project dedicated to road safety cameras in either Clark County School District or Washoe County School District.
  - The City of Las Vegas would be in support of a pilot project within a school zone.
- California passed the law similar to this in the last legislative session.

### Higher Fines in School Zones

- MUTCD includes language that if fines are higher additional signage is required, which may be a barrier for some jurisdictions.
  - Sondra Rosenberg stated that NDOT can assist with funding for safety-related measures if cost is an issue.

### Road Safety Cameras

- The committee discussed that the easiest path for a Road Safety Camera bill is to start with implementation of road safety cameras in school zones.
- Ms. Tisler reminded the committee that FHWA includes road safety cameras as a proven countermeasure that has been proven to save lives. (<https://highways.dot.gov/safety/proven-safety-countermeasures/speed-safety-cameras>)
- Legislators from the 2023 Traffic Safety Summit felt that this was "government overreach," so education and advocacy for this item in advance of next session is critical.
  - Based on personal conversations on this topic, one legislator changed their perspective and has agreed to sponsor road safety cameras in the next session.

### Primary Seat Belt Law

- The primary seat belt law is one of the high priority changes we can make in Nevada to help reduce severity.
- Consider other states who have successfully passed a primary seat belt law. (<https://www.ndsc.org/primary-seat-belt-law-aug-1/>)

### Graduated Drivers Licenses (Fact sheet was included in the binder.)

### Roadside Oral Fluid Testing

- The committee discussed this policy priority and decided to add it back to the recommendations for 2023-2024.

The seven new traffic safety policy priority recommendations include (see attached):

### Transit Riders and Other Pedestrian Safety

- Erin Breen detailed the data to support this proposed priority. When reviewing a GIS map of pedestrian-involved crashes within a close proximity of bus stop locations, there are many instances where individuals are unwilling to walk back to the intersection (crosswalk) to cross the street. The policy priority recommends when the bus stop is further than 150' from an intersection, a crosswalk should be required.
  - Consider patterns in urban and rural areas.
  - Dr. Kuhls suggested adding clarifying language to limit this to areas with high ridership.
  - Consider this to be implemented at an agency level (not legislative) to adopt processes to address concerns within their jurisdiction.
  - Dr. Shashi Nambisan shared there are about 3,200 transit stops across the RTC of Southern Nevada's transit operations area. A "far side" stop is at least 100 feet away from the edge of curb (and likely more than 150 feet from the center of the intersection). If moving forward with this recommendation, consider the maximum distance and where it is measured when requiring additional pedestrian crossings such as a midblock crosswalk.
    - RTC SNV staff is working to determine the distances from transit stop loading area to the intersection/crosswalk (John Penuelas to confirm).

- The MUTCD (published by USDOT FHWA) provides guidance on pavement markings and signage (and signals). If an entity wishes to do something different, there is a process to follow to “request for experimentation.”

#### Complete Intersections

- Lacey Tisler recommended the implementation of a complete intersection policy to all road-owners, which takes a Safe System Approach. Nevada is an intersection-focused state. This is a proposed non-legislative priority.

#### Implementation of the Speed Management Action Plan

- Lacey Tisler presented key findings from the Speed Management Action Plan, which includes understanding road environments and context-sensitive speed-based policies. This is a proposed non-legislative priority, but there is desire to coordinate and implement within the local jurisdictions.
- The Safety Management Action Plan document can be found here: <https://www.dot.nv.gov/safety/traffic-safety-engineering/highways-safety-improvement-program-hsip/speed-management-action-plan-smap>

#### Yield to Merging Public Bus

- Lacey Tisler provided a description of this proposed non-legislative policy priority on behalf of Kate Adkins (NDOT). Yielding right-of-way to transit buses is a proven countermeasure that is being implemented in other states.

#### Safe Neighborhoods

- Erin Breen presented the proposed non-legislative policy priority on Safe Neighborhoods. This policy includes two components:
  - Identifying what is defined as a residential neighborhood/area by the number of driveways.
  - Extending school zones (with the 15 mile per hour speed limit) to a meaningful reach within a neighborhood for 180 hours per year (half hour before and after school).
- These changes would allow more children to walk or bike to school rather than focusing on the parent drop-offs.
- John Penuelas shared that RTC of Southern Nevada is developing a Design Criteria Manual, these items would have value being in a manual like this as supporting documentation for funding to be allocated.

#### Yield for Pedestrians to Stop for Pedestrians

- Erin Breen provided insight on the proposed policy priority which would provide clarifying language to the current law. Currently, enforcement may occur if a driver accelerates while a pedestrian is in a crosswalk; however, the law provides doesn't clearly state that drivers are required to stop while a pedestrian is in the entire crosswalk because a yield reinforces that a driver may pass once a pedestrian crosses half the roadway.

#### Traffic Records

- Amy Davey shared that DPS intends to sponsor a BDR related to clarifying language to improve traffic records data collection specific to crash records in reporting crashes.

#### General Updates on Voting on the Traffic Safety Policy Priorities on December 14:

- Abstaining from a vote can only occur if there's a conflict of interest.

- Clarification will be incorporated with the policy priorities with policies where legislative actions will be required or if NVACTS will be endorsing the policy.
- A more defined process for input from task forces will be instilled for future proposed policy priorities.

#### 7. Citation Process Working Group Update (Information/Discussion)

David Gordon, Administrative Office of the Courts presented the findings from the Citation Process Working Group (see attached). There were eleven recommendations developed through the collaborative efforts from DMV, the courts, and law enforcement. There is not currently a centralized case management system, which considers data that is brought forward as evidence, as Brazos is more of a reporting vehicle.

David Gordon will join the Policy Priority Working Group and present these findings at a deeper level. The Citation Process Working Group has concluded their investigation and will be transitioning these efforts with the Policy Priority Working Group.

#### 8. Traffic Safety Policy Priority Working Group (For Possible Action)

Andrew Bennett requested a motion to reinstate the Traffic Safety Policy Priority Working Group.

Motion: To reinstate the Traffic Safety Policy Priority Working Group.

By: Sondra Rosenberg

Second: Dr. Shashi Nambisan.

This group will be reinstated to aid in the advancement of traffic safety policy priorities. The chair will be determined after confirmation of the bylaws regarding the requirement that the chair be an NVACTS member. The frequency will be determined once the group has met. The working group meeting agenda will be sent to all NVACTS members.

#### 9. Open Discussion

Lacey Tisler requested NVACTS join the US Department of Transportation's National Roadway Safety Strategic Call to Action, which was discussed at the AASHTO Safety Summit (<https://www.transportation.gov/nrсс/allies-in-action>). The request will be discussed at the next NVACTS meeting, for possible action.

#### 10. Next Meetings

- Thursday, December 14, 2023, 2:00-4:00 PM
- Thursday, March 14, 2:00-4:00 PM
- Thursday, June 13, 2:00-4:00 PM

The Safer Roads Task force meeting will be held in November followed by the remaining task forces in December and January. If you would like to join, contact [lindsay.saner@kimley-horn.com](mailto:lindsay.saner@kimley-horn.com).

#### 11. Public Comment

No public comment.

#### 12. Adjourn Meeting


Andrew Bennett asked for a motion to adjourn the meeting.

Motion: To adjourn the meeting

By: Sean Sever.

Second: Amy Davey.

The meeting was adjourned at 11:31 am.



Attachments

NVACTS Meeting Minutes from September 14, 2023

Statewide Monthly Fatality Report

Preliminary Substance Involved Fatalities Report

Vulnerable Road User Safety Assessment

Traffic Safety Policy Priority Recommendation Fact Sheets 2022-2023 (make sure to add Roadside Drug test bin

Proposed New Traffic Safety Policy Priorities 2023-2024

Nevada Citation Process Working Group Proposed Recommendations

# Nevada Advisory Committee on Traffic Safety

## MEETING MINUTES (DRAFT)

Thursday, September 14, 2023, 12:00-2:00PM

### 1. Call to Order/Roll Call

Chair Andrew Bennett (Nevada Association of Counties) called the meeting of the Nevada Advisory Committee on Traffic Safety (NVACTS) to order at 12:08 pm on Thursday, September 14, 2023. Mike Colety (Kimley-Horn) took roll and determined a quorum was present.

#### Committee Members Present

Lacey Tisler, Nevada Department of Transportation (proxy for Sondra Rosenberg)  
Jenica Keller, Nevada Department of Transportation  
Julia Peek, Department of Health & Human Services (Phone)  
Sean Sever (Vice Chair), Department of Motor Vehicles  
Amy Davey, Department of Public Safety, Office of Traffic Safety  
Lt. Col. Martin Mleczo, Department of Public Safety, Nevada Highway Patrol  
Dr. Shashi Nambisan, University of Nevada Las Vegas Transportation Research Center  
Dr. Deborah Kuhls, Kirk Kerkorian School of Medicine at University of Nevada Las Vegas (Phone)  
Daniel Doenges, Regional Transportation Commission of Washoe County (Phone)  
John Penuelas, Regional Transportation Commission of Southern Nevada  
Nick Haven, Tahoe Regional Planning Agency  
Kelly Norman, Carson Area Metropolitan Planning Organization  
Andrew Bennett (Chair), Nevada Association of Counties/Clark County  
Joey Paskey, Nevada League of Cities/City of Las Vegas (Phone)  
Jason Walker, Nevada Sheriffs and Chiefs Association/Washoe Co Sheriff's Office

#### Non-Voting Members Present

Shannon Bryant, Chair, Committee for Testing of Intoxication, Traffic Safety Resource Prosecutor, Washoe County District Attorney's Office  
Kevin Tice, Department of Public Safety, Office of Traffic Safety

#### Members Absent

Cliff Banuelos, Inter-Tribal Council of Nevada  
Scott Hammond, Nevada State Senate  
C.H. Miller, Nevada State Assembly  
Christy McGill, Department of Education (Phone)  
David Gordon, Administrative Office of the Courts (Phone)

### 2. Public Comment

No public comment.

### 3. June 8, 2023, Meeting Minutes (Action Item – Approved)

The draft June 8 Meeting Minutes were presented.

Motion to approve June 8, 2023, Meeting Minutes by Jenica Keller, second by Amy Davey. Passed unanimously.

#### 4. Crash Data and Trends *(Information/Discussion)*

Amy Davey, Administrator, Department of Public Safety, Office of Traffic Safety (DPS-OTS) presented the Monthly Fatality Report for Nevada, as of August 31, 2023. This is preliminary, but numbers are looking to be an improvement on previous years (although previous years were the worst in history). Traffic crash data information for Nevada is provided at [www.zerofatalitiesnv.com/nevadacrashdata](http://www.zerofatalitiesnv.com/nevadacrashdata).

There are data tools and dashboards available, such as the US DOT's Justice 40 website that goes into detail about who and where these fatalities are occurring. Links to Justice 40 and Nevada's crash data dashboards included below.

- [Justice40 at USDOT \(arcgis.com\)](https://arcgis.com/apps/webappviewer/index.html?id=00d23dc547eb4382bef9beabe07eaefd)
- [Microsoft Power BI \(Nevada Crash Data Dashboard\)](#)
- <https://ndot.maps.arcgis.com/apps/webappviewer/index.html?id=00d23dc547eb4382bef9beabe07eaefd>

In Nevada, there was a 10-year high in 2021 for pedestrian involved crashes.

Crash data and trends were shared as it relates to equity, which NDOT and OTS have programs related to this (see Equity Fact Sheet, attached).

- These trends display an overview of race/ethnicity and how individuals are represented in serious injury and fatalities. This shows that we are on-trend with the rest of the nation. Income equity analysis.
- This shows that lower incomes are disproportionately impacted.
- The touch screen monitor in the Crash Café at the Safety Summit went into depth about the relationship with equity and traffic safety as well as the census tract and the Justice 40 tool.
- These graphs compare all Nevada residents vs those with lower incomes.

Shannon Bryant asked about income equity and if this has any correlation with access to newer vehicles.

- Ms. Davey responded that lower income neighborhoods with older infrastructure and lower access to vehicles rely on walking or public transit, which is reflected in these trends.

Sean Sever noted that the comparison by person data shows a surprisingly high number of pedestrians involved in crashes in Washoe County when compared to Clark County.

- Rebecca Kapuler shared that the high numbers in Washoe County could be related to the homeless population involved in traffic crashes.
- Dr. Kuhls suggested reaching out to both the traffic and non-traffic communities with the pedestrian-involved crashes to gather information on these trends.

#### 5. 2023 Nevada Traffic Safety Summit Debrief

Amy Davey, Administrator, Department of Public Safety, Office of Traffic Safety (DPS-OTS) shared that this conference has partners owning traffic safety in a new way. There was an elevated presence from MPOs and local agencies throughout the event, which was so impactful. Great to see the community so involved.

Ms. Davey also shared that if NVACTS members are not able to attend future Safety Summits due to budget limitations within their own agency, to please contact her.

Lacey Tisler, Chief Traffic Safety Engineer, Nevada Department of Transportation (NDOT) added that traffic safety is for everyone and the dialogue flows so well with the people that have been here this week.

Jenica Keller, Assistant Director of Operations, NDOT suggested a smaller version of the Traffic Safety Summit in eastern Nevada for those that are not able to travel to Reno or Las Vegas.

- Ms. Tisler noted that she is coordinating with the Nevada Traffic Incident Management (TIM) Coalition and Parsons for a pilot event in Elko (potentially in May 2024) for a similar event.



Kelly Norman (CAMPO) noted that keynote speaker Tara Goddard had a great message on how we think about traffic safety, and that the young driver panel was so impactful, with how they shared what they want to see on the road.

Chair Bennett added this event had a very thoughtful agenda and Palace Station did a great job hosting the event (compared to previous years).

Other suggestions/improvements for future Nevada Traffic Safety Summits:

- Ms. Davey would have liked more time with elected officials on the legislative/policy panel.
- Ms. Norman would like to see judges and car manufacturers included.
- Consider hosting a smaller scale Traffic Safety Summit beyond the annual event for a deeper dive into a specific area or topic.
- Erin Breen (UNLV) suggested that the general sessions on the final day (hearing from Traffic Safety Partners, Legislative Panel) be moved to the beginning of the Summit schedule.
- Ms. Davey added the consideration of more city and county officials for the legislative/policy panel.
- Mr. Bennett would like to see a networking social (or other opportunities for introductions and conversation) on the first day/night of the conference to allow for discussion with more people who are in attendance.
- Consider different colored name tags for engineers, planners, law enforcement, etc.
- Ms. Kapuler (NDOT) asked if there were opportunities to have more interactive capabilities within the event app to correspond with presenters and panelists.
- Dr. Nambisan added that he would like more options to provide feedback on the individual speakers/presentations as well as the sessions.
- Vice Chair Sean Sever attended the bike ride around Las Vegas and shared that riding with police escorts was amazing!
- Naveen Veeramisti (Atkins) inquired about additional opportunities to involve more students.
- Chair Bennett requested a planning meeting to discuss these considerations.

## **6. Traffic Records Coordinating Committee (TRCC)**

Kevin Tice, Office of Traffic Safety, and Chair of the TRCC shared the TRCC Strategic Plan (attached) and brought forward for discussion that historically, the Nevada Executive Committee on Traffic Safety (NECTS), which was dissolved with the approval of NVACTS, serves as the Traffic Records Executive Committee (TREC), overseeing the TRCC. This is also referenced in the NVACTS Bylaws (attached).

The TRCC Committee meets quarterly, and the goals are to work with those in the community to plan effectively with crash, vehicle, driver, roadway driver systems, etc. and integrating these by working with complex projects and collaborate to share data.

TRCC Charter language needs to be updated to reference NVACTS as the TREC, as it currently states NECTS.

Committee to revisit NVACTS Bylaws with any revisions as they relate to TREC.

**Note:** Before moving on to the next agenda item, Chair Bennett shared that there will be a change in NVACTS Bylaws regarding agenda items for action. The item will first be introduced at one meeting and then acted/voted on at the following meeting.

## 7. Vulnerable Road Users Assessment (Information/Discussion)

Ms. Tisler introduced Shara Thiesen from the Nevada Department of Transportation's Traffic Safety Engineering Division who presented the Vulnerable Road Users (VRU) Assessment (attached). Ms. Thiesen noted that approximately 30% of the 396 preliminary fatal crashes in 2022 involved VRUs.

Juan Balbuena (FHWA) noted that the VRU Assessment is due 11/15, which requires NVACTS approval and signature by the governor. The VRU Assessment will be amended into the Nevada Strategic Highway Safety Plan (SHSP) and will be incorporated into future updates of the 5-year SHSP moving forward.

This is a requirement under the Bipartisan Infrastructure Law (BIL) for each state. Highlights from the presentation include:

- VRUs include pedestrians, bicyclists, those in wheelchairs, etc. and are defined as someone who has an elevated risk in traffic scenarios.
- This also included an equity analysis (\$35k and below)
- Data has shown that many VRU involved crashes includes those who are near bus stops.
- There is no correlation with the time of day from these crashes.
- The preliminary report also shows that there is also no correlation with drugs or alcohol impairment The OTS has better available data which may impact these findings.
- Most VRU involved crashes are not involved in their neighborhoods, rather, the places they frequent the most.
- What can be done? Communities can invest in better infrastructure, raise awareness, implement strategies, and monitor the effectiveness with the implemented strategies.

Ms. Davey asked if this analysis includes any contributions from impairment to the crash. To which she clarified, if the VRUs are impaired vs the driver being impaired. Ms. Thiesen noted that although impairment data is limited with the analysis, it is a contributing factor and will be considered.

- The data is much more limited on crashes that do not involve fatalities.
  - Dr. Kuhls requested for consideration to include hospital data for the missing links in non-fatalities.
- Dr. Kuhls added that many cyclists in Japan use the sidewalk as opposed to the road.

Please reach out to Shara Thiesen ([sthiesen@dot.nv.gov](mailto:sthiesen@dot.nv.gov)) for any questions, comments, or concerns with what has been shared today with the Vulnerable Road Users Assessment.

There will be a special session prior to the next NVACTS meeting to vote on the Vulnerable Road Users Assessment.

## 8. Traffic Safety Policy Priorities

The Traffic Safety Policy Priority Working Group held weekly meetings throughout the 2023 Nevada Legislative Session. Following the Legislative Session, Key Area Task Forces were asked to provide one-page summaries to request new traffic safety policy priorities.

Four of the five traffic safety policy priorities accepted by NVACTS in 2022 will move forward, along with those requested by the Key Area Task Forces for action at the special session NVACTS meeting.

Previous policy priorities (2022) include (see attached):

- Road safety cameras
- Higher fines in school zones
  - Road safety cameras in school zones
- Primary seatbelt laws

- Graduated driver's license additions

New proposed policy priorities from Key Area Task Forces (see attached):

- Safety at Transit Stops
- Complete Intersections
- Implementation of the Speed Management Action Plan
- Yield to Merging Public Bus
- Safe Neighborhoods
- Yield to Pedestrians to Stop for Pedestrians

2022 Policy Priorities, new recommendations from task forces and any additional policy priorities submitted by NVACTS members (see attached template) will be discussed at the next NVACTS meeting. Please submit to Lindsay Saner ([lindsay.saner@kimley-horn.com](mailto:lindsay.saner@kimley-horn.com)) by October 15.

As a committee, further discussion is needed regarding policies for agency adoption versus bill drafts to put forward for future legislation.

#### **9. Citation Process Working Group** *(Information/Discussion)*

Julia Peek provided an update from the most recent Citation Process Working Group Meeting (see attached). The group is looking into citation data related to media articles. David Gordon and those on the committee from the judicial branch were included in the discussion. The executive branch agencies are working on better ways of data sharing.

The final report with recommendations from the Citation Process Working Group will be included in the annual report. David Gordon will present findings/recommendations at the next NVACTS meeting.

#### **10. NVACTS Chair and Vice Chair Terms**

NVACTS Members, including Chair Andrew Bennett and Vice Chair Sean Sever, serve two-year terms. According to the NVACTS Bylaws, each member agency representative must be reappointed into their position as the two-year term ends.

Along with the expectations for all committee members, the roles of chair and vice chair were elevated to a higher level of coordination, planning, and coordination to state process and requirements with the establishment of NVACTS as a statutory committee in 2021. The level of expectation rises, as well as the work of the chair and vice chair (see attached NVACTS Bylaws).

We are accepting nominations for chair and vice chair. Please send nominations to Lindsay Saner ([lindsay.saner@kimley-horn.com](mailto:lindsay.saner@kimley-horn.com)). Nominations will be discussed at the next meeting (special session).

#### **11. Open Discussion**

Mr. Bennett shared that cannabis consumption lounges open within a month, where the Clark County Office of Traffic Safety will be tracking the impacts as it relates to traffic safety.

Dan Doenges is leaving RTC Washoe at the end of the month and will no longer be involved with this group. A new representative from the RTC has not been appointed.

Ms. Keller inquired if quarterly meetings provide enough points of connection for this group to meet. Mr. Bennett added that we can discuss the frequency of these meetings at the next NVACTS meeting.

## 12. Next Meeting Date

Next Meetings:

- Thursday, October 26, time TBD (Special session)
  - VRU Assessment
  - Chair/Vice Chair Nominations
  - Traffic Safety Policy Priorities
  - Revisions to NVACTS Bylaws
    - Member term limits
    - Leadership roles defined (Chair and Vice Chair)
    - Revise definition of TREC
- Thursday, December 14, 2:00-4:00 PM
- Thursday, March 14, 2:00-4:00 PM
- Thursday, June 13, 2:00-4:00 PM

The Safer Roads Task force meeting will be held in October followed by the remaining task forces in November and December. If you would like to join, contact [lindsay.saner@kimley-horn.com](mailto:lindsay.saner@kimley-horn.com).

## 13. Public Comment

No public comment.

## 14. Adjourn Meeting

Motion to adjourn the meeting by Mr. Sever. Second by Ms. Keller. Motion passed unanimously. The meeting was adjourned at 1:57 pm.

Respectfully submitted,  
Mike Colety, Kimley-Horn  
SHSP Facilitator

## Attachments

NVACTS Meeting Minutes from June 8, 2023  
Statewide Monthly Fatality Report  
Nevada Traffic Safety Equity Fact Sheet  
TRCC Strategic Plan  
NVACTS Bylaws  
Vulnerable Road Users Assessment  
Traffic Safety Policy Priorities and Template  
Citation Process Working Group Meeting Summary

DATE OF REPORT: 10/3/2023  
 DATA AS OF: 9/30/2023

TO: PUBLIC SAFETY, DIRECTOR NDOT, HIGHWAY SAFETY COORDINATOR, NDOT TRAFFIC ENGINEERING, FHWA, LAW ENFORCEMENT AGENCIES  
 FROM: THE OFFICE OF TRAFFIC SAFETY, STATE FATAL DATA  
 PREPARED BY: ADAM ANDERSON, FARS ANALYST  
 SUBJECT: FATALITIES BY COUNTY, PERSON TYPE, DAY, MONTH, YEAR AND PERCENT CHANGE.

Month	2022 Crashes	2023 Crashes	% Change	Month	2022 Fataals	2023 Fataals	% Change
JAN	20	25	25.00%	JAN	31	27	-12.90%
FEB	23	15	-34.78%	FEB	24	17	-29.17%
MAR	38	26	-31.58%	MAR	40	26	-35.00%
APR	31	37	19.35%	APR	32	40	25.00%
MAY	36	30	-16.67%	MAY	38	33	-13.16%
JUN	40	32	-20.00%	JUN	40	35	-12.50%
JUL	30	33	10.00%	JUL	31	41	32.26%
AUG	30	33	10.00%	AUG	33	36	9.09%
SEP	32	30	-6.25%	SEP	33	32	-3.03%
OCT			0.00%	OCT			0.00%
NOV			0.00%	NOV			0.00%
DEC			0.00%	DEC			0.00%
Reporting Period Total	280	261	-6.79%	Reporting Period Total	302	287	-4.97%
Year End Total	383			Year End Total	416		

KNOWN FATAL COMPARISON BETWEEN 2022 AND 2023.

COUNTY	2022 Crashes	2023 Crashes	% Change	2022 Fatalities	2023 Fatalities	% Change	2022 Occupants	2023 Occupants	% Change	2022 Unrestrained	2023 Unrestrained	% Change
CARSON	6	5	-16.67%	6	6	0.00%	4	3	-25.00%	4	0	-100.00%
CHURCHILL	10	7	-30.00%	10	7	-30.00%	5	5	0.00%	3	1	-66.67%
CLARK	169	174	2.96%	186	187	0.54%	80	84	5.00%	26	32	23.08%
DOUGLAS	5	2	-60.00%	5	2	-60.00%	4	2	-50.00%	2	0	-100.00%
ELKO	9	4	-55.56%	11	4	-63.64%	9	3	-66.67%	6	2	-66.67%
ESMERALDA	0	2	200.00%	0	2	200.00%	0	2	200.00%	0	0	0.00%
EUREKA	4	0	-100.00%	4	0	-100.00%	4	0	-100.00%	2	0	-100.00%
HUMBOLDT	5	3	-40.00%	5	4	-20.00%	5	3	-40.00%	1	2	100.00%
LANDER	3	1	-66.67%	5	1	-80.00%	5	1	-80.00%	4	1	-75.00%
LINCOLN	4	3	-25.00%	4	3	-25.00%	2	3	50.00%	2	1	-50.00%
LYON	6	5	-16.67%	6	5	-16.67%	3	3	0.00%	2	2	0.00%
MINERAL	2	2	0.00%	2	3	50.00%	2	3	50.00%	0	0	0.00%
NYE	7	15	114.29%	8	24	200.00%	6	22	266.67%	4	4	0.00%
PERSHING	5	0	-100.00%	5	0	-100.00%	5	0	-100.00%	2	0	-100.00%
STOREY	2	0	-100.00%	2	0	-100.00%	0	0	0.00%	0	0	0.00%
WASHOE	42	36	-14.29%	42	37	-11.90%	25	14	-44.00%	7	4	-42.86%
WHITE PINE	1	2	100.00%	1	2	100.00%	0	2	200.00%	0	1	100.00%
Reporting Period Total	280	261	-6.79%	302	287	-4.97%	159	150	-5.66%	65	50	-23.08%
Year End Total	383			416			219			86		

KNOWN COMPARISON OF FATALITIES BY PERSON TYPE BETWEEN 2022 AND 2023.

COUNTY	2022 Pedestrian	2023 Pedestrian	% Change	2022 Motorcyclist	2023 Motorcyclist	% Change	2022 Bicyclist	2023 Bicyclist	% Change	2022 Other Scooter, Moped, ATV	2023 Other Scooter, Moped, ATV	% Change
CARSON	1	2	100.00%	1	1	0.00%	0	0	0.00%	0	0	0.00%
CHURCHILL	1	0	-100.00%	4	2	-50.00%	0	0	0.00%	0	0	0.00%
CLARK	51	55	7.84%	42	39	-7.14%	10	5	-50.00%	3	4	33.33%
DOUGLAS	0	0	0.00%	1	0	-100.00%	0	0	0.00%	0	0	0.00%
ELKO	0	1	100.00%	2	0	-100.00%	0	0	0.00%	0	0	0.00%
ESMERALDA	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%
EUREKA	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%
HUMBOLDT	0	0	0.00%	0	1	100.00%	0	0	0.00%	0	0	0.00%
LANDER	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%
LINCOLN	0	0	0.00%	2	0	-100.00%	0	0	0.00%	0	0	0.00%
LYON	0	1	100.00%	3	1	-66.67%	0	0	0.00%	0	0	0.00%
MINERAL	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%
NYE	0	1	100.00%	1	1	0.00%	1	0	-100.00%	0	0	0.00%
PERSHING	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%
STOREY	0	0	0.00%	2	0	-100.00%	0	0	0.00%	0	0	0.00%
WASHOE	7	13	85.71%	10	6	-40.00%	0	4	400.00%	0	0	0.00%
WHITE PINE	0	0	0.00%	1	0	-100.00%	0	0	0.00%	0	0	0.00%
Reporting Period Total	60	73	21.67%	69	51	-26.09%	11	9	-18.18%	3	4	33.33%
Year End Total	91			86			15			5		

THIS REPORT IS A POINT IN TIME COMPARISON

THIS DATA DOES NOT INCLUDE DATA FIELDS MARKED BY THE OFFICER AS UNKNOWN.

2022 DATA IS PRELIMINARY AND DOES NOT NECESSARILY INCLUDE FINAL REPORTS (FORM 5, CORONER, AND/OR TOXICOLOGY).

2023 DATA IS NOT FINAL UNTIL THE END OF DECEMBER 2024.

NOTE: The monthly report will be distributed by the 7th of each month.

- Key:
- Fatalities= Total number of reported fatalities (vehicle occupants, pedestrian, motorcyclist, bicyclist, and other).
  - Vehicle Occupants = Driver and occupant fatalities in a motor vehicle.
  - Vehicle Unrestrained = Driver and occupant fatalities in a motor vehicle unrestrained.
  - Pedestrian = Any person on foot, on a personal conveyance, or in a building.
  - Motorcyclist= A person riding any motor vehicle that has a seat or saddle for the use of its operator and is designed to travel on more than three wheels in contact with the ground.
  - Bicyclist= A person on an other road vehicle that can be propelled by pedaling (bicycle, tricycle, unicycle, pedalcar, electric bike).
  - Other = A person on a scooter, moped, ATV, or other motorized vehicle not captured above on a roadway.

DATE OF REPORT: 10/4/22  
 REPORTING PERIOD: January 1-June 30, 2022-2023

TO: PUBLIC SAFETY, DIRECTOR NDOT, HIGHWAY SAFETY COORDINATOR, NDOT TRAFFIC ENGINEERING, FHWA, LAW ENFORCEMENT AGENCIES

FROM: THE OFFICE OF TRAFFIC SAFETY, STATE FATAL DATA  
 PREPARED BY: ADAM ANDERSON, FATAL ANALYST

SUBJECT: SUBSTANCE INVOLVED FATALITIES BY COUNTY, MONTH, YEAR AND PERCENT CHANGE.

**Key:** Alcohol= Alcohol involved only  
 Marijuana= Marijuana involved only  
 Other Drug= Other single drug involved not including marijuana  
 Poly-Substance= Any combination of involved drug(s) and/or alcohol

**Important:** Alcohol data reflects .08 or greater BACs.  
 Marijuana, Other Drug, and Poly-Substance data reflects any amount of reported substance.  
 Any Marijuana is a subset of Poly-Substance  
 The data reflects the presence of substances (per NRS 484c.080) for the driver, pedestrian, motorcyclist, bike, and/or other (scooter, moped, atv) that were involved in the fatal crash; however, not necessarily the fatality.

COUNTY	2022 Crashes	2023 Crashes	% Change	2022 Fatalities	2023 Fatalities	% Change	2022 Alcohol	2023 Alcohol	% Change	2022 Marijuana	2023 Marijuana	% Change	2022 Other Drug	2023 Other Drug	% Change	2022 Poly-Substance	2023 Poly-Substance	% Change	2022 Any Marijuana	2023 Any Marijuana	% Change
CARSON	2	1	-50.00%	2	1	-50.00%	1	1	0.00%	1	0	-100.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%
CHURCHILL	5	2	-60.00%	5	2	-60.00%	3	1	-66.67%	2	0	-100.00%	0	1	100.00%	0	0	0.00%	0	0	0.00%
CLARK	70	67	-4.29%	85	73	-14.12%	16	13	-18.75%	9	6	-33.33%	4	4	0.00%	48	49	2.08%	24	31	29.17%
DOUGLAS	4	0	-100.00%	4	0	-100.00%	3	0	-100.00%	0	0	0.00%	0	0	0.00%	1	0	-100.00%	0	0	0.00%
ELKO	2	1	-50.00%	2	1	-50.00%	0	1	100.00%	0	0	0.00%	0	0	0.00%	2	0	-100.00%	1	0	-100.00%
ESMERALDA	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%
EUREKA	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%
HUMBOLDT	1	0	-100.00%	1	0	-100.00%	1	0	-100.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%
LANDER	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%
LINCOLN	0	1	100.00%	0	1	100.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	1	100.00%	0	1	100.00%
LYON	2	3	50.00%	2	3	50.00%	1	2	100.00%	0	0	0.00%	0	0	0.00%	1	1	0.00%	0	1	100.00%
MINERAL	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%
NYE	3	5	66.67%	3	7	133.33%	0	1	100.00%	1	2	100.00%	0	0	0.00%	2	2	0.00%	0	1	100.00%
PERSHING	1	0	-100.00%	1	0	-100.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%	1	0	-100.00%	1	0	-100.00%
STOREY	1	0	-100.00%	1	0	-100.00%	1	0	-100.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%
WASHOE	21	6	-71.43%	21	6	-71.43%	6	2	-66.67%	3	0	-100.00%	2	0	-100.00%	10	4	-60.00%	7	2	-71.43%
WHITE PINE	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%
TOTAL FOR REPORTING PERIOD	112	86	-23.21%	127	94	-25.98%	32	21	-34.38%	16	8	-50.00%	6	5	-16.67%	65	57	-12.31%	33	36	9.09%

THIS DATA DOES NOT INCLUDE FIELDS MARKED BY THE OFFICER AS UNKNOWN.  
 DATA IS PRELIMINARY AND DOES NOT NECESSARILY INCLUDE FINAL REPORTS, AS SUCH, DATA IS SUBJECT TO CHANGE.  
 2022 DATA WILL BE FINAL AT THE END OF DECEMBER 2023, AND 2023 DATA WILL BE FINAL AT THE END OF 2024.

	2022 Total Crashes	2022 Total Fatalities	2023 Total Crashes	2023 Total Fatalities
	188	205	165	178
% Substance Involved	59.57%	61.95%	52.12%	52.81%



# Nevada Department of Transportation

Vulnerable Road User Safety Assessment

November 15, 2023

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## List of Acronyms

BIL	Bipartisan Infrastructure Law
GIS	Geographic Information System
HSIP	Highway Safety Improvement Program
IIJA	Infrastructure Investment and Jobs Act
IR	Interstate Road
MPO	Metropolitan Planning Organizations
NDOT	Nevada Department of Transportation
OTS	Office of Traffic Safety
RTC	Regional Transportation Commission
RTPO	Regional Transportation Planning Organization
VRU	Vulnerable Road User

# Project Background

The Nevada Department of Transportation (NDOT) Traffic Safety Engineering Division has developed the Vulnerable Road User (VRU) Safety Assessment as described in 23 U.S.C. 148(1), as amended by the Infrastructure Investment and Jobs Act (IIJA)(Pub. L. 117-58, also known as the “Bipartisan Infrastructure Law” (BIL)). Traffic Safety Engineering has developed this VRU Safety Assessment as part of the Highway Safety Improvement Program (HSIP) in accordance with 23 U.S.C. (1).

A VRU is someone who faces an elevated risk of injury or harm in traffic scenarios due to the absence of protective features typically found in motor vehicles. VRUs encompass pedestrians, cyclists, and individuals using wheelchairs, among others. Below you will find NDOTs VRU Safety Assessment plan along with an approach to meeting each requirement and addressing their specific needs.

## Overview of VRU Safety Performance

- Present historical trends for VRU fatalities and serious injuries over the past five years.
- Disaggregate trends by user type (pedestrian, pedal cyclist, wheelchair, etc.).
- Compare VRU safety performance to overall crash data performance.
- Describe progress towards meeting safety performance targets for nonmotorized users.

## Summary of Quantitative Analysis

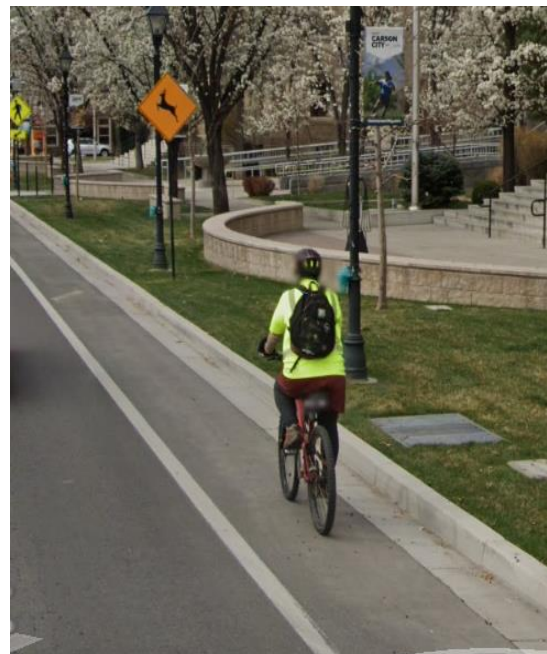
- The most current five years of VRU-involved crash data (2016 - 2020) was used to identify high-risk areas throughout Nevada.
- The data was cross-referenced with census data for an equity analysis to highlight community areas where poverty and racial disparities are present.
- The VRU pedestrian primary residence zip code was analyzed to determine specific areas where there is a higher population of affected persons.
- A list of high-risk areas for VRUs were identified based on Michelin data which is based on five major events: harsh braking, harsh acceleration, phone handling, near miss, and suspected collision.

## Summary of Consultation

- NDOT Traffic Safety Engineering will engage rural communities during the County Consultation process in high-risk areas. Nevada Metropolitan Organizations (MPOs) collaborated with NDOT to share information with communities. Regional Transportation Commission (RTC) provided transit stop data for Clark and Washoe counties, shown in VRU maps (Appendix A and B). NDOT Provided a summary of the outcomes (i.e., safety concerns and potential solutions) at the consultation for each high-risk area.

## Program of Projects or Strategies

- NDOT Identified the program of projects and strategies to reduce the safety risks for VRUs in the high-risk areas. These strategies and/or countermeasures were disseminated to all districts, counties, and MPOs.



Bicyclist in Carson City: ©Google Maps Image/ google.com/maps

## Safe System Approach

- The Safe System Approach detailed in the National Roadway Safety Strategy by the United States Department of Transportation was integral to the NDOT VRU Safety Assessment.

## Overview

The VRU Safety Assessment is a positive step towards improving safety for VRUs in Nevada. The assessment outlines several strategies NDOT and all traffic safety entities throughout the state will work on together to implement. These strategies are important as they address the root causes of crashes involving VRUs. By investing in infrastructure, educating drivers, and enacting laws and ordinances, NDOT and stakeholders can make Nevada's roads safer for everyone.



*Vulnerable road users: © New York State DMV / dm.v.ny.gov*

From 2016-2020 fatal VRU crashes accounted for 6.11% of VRU crashes throughout Nevada. Non-serious injury crashes were the most prevalent VRU crash type in Nevada, accounting for over a third of all VRU crashes at 37.94%. Claim/possible injury crashes were the second most common type of VRU crash at 34.98%, followed by serious injury crashes at 12.73%, property damage-only crashes were the fourth most common at 7.18%, and 1.07% were unknown injury crashes. VRU involved fatal crashes account for the growing share of fatalities on Nevada's roadways.

The analysis found most VRU crashes occur near bus stops, fast food restaurants, grocery stores, health clinics, parks, and schools. The zip code data utilized from the U.S. Census Bureau determined VRUs are not necessarily involved in crashes in their own neighborhoods, rather neighborhoods they are traveling to in the community to use amenities.

The data also indicated VRUs are struck the last in July and the most in October. It can be assumed due to most of the crashes occurring in Clark County that the heat index makes people less active outdoors in July versus in October.

The most common time for VRUs to be struck by vehicles is between 1:00 PM and 6:00 PM. The least common times are between 10:00 PM and 4:00 AM. From 1:00 PM through 6:00 PM, people are more likely to be outside walking, biking, or using other forms of transportation. The increased exposure of VRUs means they are more likely to be seen by drivers, but it also indicates they are more likely to be involved in a collision. In contrast, there are fewer VRU's and vehicles on the road between 10:00 PM and 4:00 AM.

The number of VRU fatalities in Nevada has been on an upward trend in recent years. In the years 2016 through 2020, there were a total of 391 VRU fatalities. Preliminary data shows in the first nine months of 2023, there have been 73 VRU fatalities. This is a concerning trend, and it is important to take steps to reduce the number of VRU fatalities on Nevada roadways.

# Prioritizing VRU Safety in All Investments and Projects

The VRU crash data revealed there are high-risk areas in some Nevada counties, with Clark County having the most. There is a strong correlation between VRU-involved crashes and bus stop locations in both Clark and Washoe counties. In rural Nevada, the connection between VRUs and rural roads is not as strong. Most VRU crashes happen in town centers and main traffic routes.



*Transit Stop in Clark County: @Google Maps Image/ google.com/maps*

NDOT is working with traffic safety partners to improve the decision-making process by prioritizing allocation of funds for projects that will enhance VRU safety throughout the state. NDOT is also working with these organizations to develop a program of projects or strategies to reduce risks to VRUs in areas identified as high-risk. These projects or strategies could include:

- **Sidewalks:** provide a safe place for VRUs to walk, to reduce the number of crashes involving VRUs and vehicles.
- **Bike lanes:** provide a safe place for cyclists to ride, to reduce the number of crashes involving cyclists and vehicles.
- **Traffic calming measures:** such as speed bumps and narrower lanes, to reduce the speed of traffic and make it safer for all VRUs.
- **Bus stop safety:** Installing raised bus stops, traffic calming, and high visibility crossings, making it easier for VRUs to cross the street in front of bus stop locations.

In addition to these physical improvements, NDOT is collaboratively engaging with various stakeholders to institute continuous education and enforcement initiatives aimed at heightening awareness regarding the risks encountered by VRUs and fostering a greater sense of responsibility among drivers. These initiatives may encompass:

- **Prioritizing funding for VRU safety:** VRUs are more vulnerable to injury or death in crashes compared to motorists, so it is imperative to prioritize funding for projects that make roads safer for them.
- **Launching public awareness campaigns:** to educate drivers and VRUs about the importance of safety and how to avoid crashes.
- **Supporting Enforcement:** Law enforcement can help to deter dangerous driving behaviors by enacting and enforcing traffic laws.
- **Comprehensive approach to VRU safety:** there is no single solution to the problem of VRU safety. NDOT will take a comprehensive approach, which includes a variety of projects and strategies.
- **Ongoing NDOT monitoring:** to track the effectiveness of these projects or strategies to ensure they are making a positive impact on safety. This will be done by collecting data on crash rates and other metrics.

# Equity

Following a thorough examination of all 17 Nevada counties, the study concentrated on areas



Equity Image: @ctps.org/equity

with annual incomes around or below \$35,000. Despite not meeting the criteria, some counties were included in our report due to their high crash rates and/or frequency in areas with a high concentration of amenities utilized by VRUs. NDOT VRU crash data confirmed there is a correlation between VRU crashes and high-poverty neighborhoods in most counties, but not all. Pedestrian fatalities occur 184% more in households with an average household income less than \$50,000, based on the Making Nevada Safer Fact Sheet in (*Appendix L*).

Equity data (average income and racial disparity) from the U.S. Census Bureau was gathered and overlaid (a process of combining two or more layers of spatial data to create a new layer that contains the attributes and features of both layers) to highlight the neighborhoods. The data was then cross-referenced with NDOT VRU crash data to display on maps (*Appendix A-L*). The study revealed a correlation between the two data sets, which showed VRUs who live in high-poverty neighborhoods often use public transportation as their main mode of transportation.

Our assessment found people in areas with low incomes are at a greater risk of being injured or killed in a traffic crash. This is because these individuals live in areas with poor infrastructure for pedestrians and cyclists, and they are more likely to walk or bike long distances to reach essential services. For example, a person living in a low-income area may have to walk several miles to get to a grocery store or a healthcare facility. These areas often have high traffic volumes and speeding drivers, which further increases the risk of a crash.

Driver age is an important factor to consider when assessing VRU crashes. The most common driver age group involved in VRU crashes is 25-64 years old, which represents the largest number of drivers in the United States. Drivers in this age group are more likely to engage in risky driving behaviors, such as speeding, distracted driving, and tailgating. They are also more likely to be fatigued, as they are more likely to be employed in jobs that require long hours.

## Assessment

NDOT is committed to improving the safety of all road users and reducing the safety risks for VRUs in high-risk areas. Maps included in the appendix, represent the statistical analyses for the crashes in each area within each individual county which helped identify the following:

- **Identifying high-risk areas:** using a variety of data sources to identify areas where VRUs are more likely to be involved in crashes. This data includes crash reports, traffic counts, and land use information. Once high-risk areas have been identified, NDOT conducts a more detailed analysis of crash data to identify the factors that contribute to crashes involving VRUs.



Bike Lane in Reno, NV: ©Google Maps Image/  
google.com/maps

- **Consulting with stakeholders:** including VRUs, law enforcement, and transportation engineers to identify potential solutions to improve safety for VRUs. This consultation helps to ensure the solutions are feasible and effective.
- **Investing in infrastructure:** designed to protect VRUs, such as sidewalks, bike lanes, and crosswalks. These features can help to reduce the risk of crashes by providing a safe place for VRUs to travel.
- **Educating drivers:** about the dangers of driving with VRUs present. This education can help drivers to be more aware of VRUs and to take extra precautions when driving near them.
- **Collaborating with MPOs and local government agencies:** to implement safety improvements for VRUs. This collaboration can help to ensure safety improvements are coordinated and effective.
- **Enacting laws and ordinances for drivers:** making it safer for VRUs to travel. These laws and ordinances can help to reduce the number of crashes involving VRUs.

NDOT is committed to working with all stakeholders to make Nevada's roads safer for all users. By taking the steps outlined in this assessment, it will be possible to reduce crashes involving VRUs.

## Consultation with Local Governments, MPOs, and Regional Transportation Planning Organizations

The ability to share and receive information and data from different organizations provides a multifaceted insight. These organizations, along with NDOT, have staff with expertise in transportation planning, engineering, and traffic safety. This expertise was invaluable in identifying high-risk areas and implementing solutions for VRUs. Giving others the ongoing chance to share their community knowledge can be used to ensure VRU assessments are relevant to the needs of the people they are designed to protect.



RTC Bus station Reno, NV: ©Bob Conrad/ www.thisisreno.com

Bus stops or near bus stop areas were the most common location for VRU injuries and fatalities in Nevada. This is mainly due to distracted drivers, increased traffic in these areas, accessibility to a crosswalk in a reasonable distance to the stop, and poor visibility. RTC provided NDOT with data on transit stop locations throughout Clark and Washoe counties, which are displayed on the VRU maps (*Appendix A and B*). NDOT has invited RTC to meetings and will work with the commission to address concerns about

safety for VRUs at or around RTC facilities. By collaborating, NDOT and RTC can work to address and improve safety concerns at bus stops.

NDOT collaborated with MPOs to disseminate data, participate in county commission meetings for rural outreach, and interacted and collected information from VRUs who regularly navigate these high-risk areas in their daily lives.

# Program of Projects or Strategies

Listed below are some of the programs and strategies planned to be incorporated to reduce the risks for VRUs in high-risk areas.

## Engineering improvements

- **Installing:** sidewalks, bike lanes, and traffic calming measures. Sidewalks and bike lanes provide a dedicated space for VRUs to travel.
- **Traffic calming measures:** can help to slow down traffic and make it safer for VRUs to cross the street.

## Innovative Solutions

- **Protected bike lanes:** are separated from traffic by a physical barrier, such as a curb or a barrier made of plastic or metal bollards. This helps to protect cyclists from traffic and make them more visible to other road users.
- **Low speed zones:** are areas where the speed limit is reduced to 20 mph or less. This helps to slow down traffic and make it safer for VRUs to cross the street or walk along the side of the road.
- **Shared space:** a type of road design that eliminates traditional traffic controls, such as stop signs and traffic lights. This forces drivers and VRUs to share the road and be more aware of each other.



Share the Road Sign Clark County: © Dan Burden / pedbikeimages.org

## Traffic Safety Management

- **Raising awareness:** raise awareness of the dangers faced by VRUs.
- **Education:** programs can teach VRUS about the importance of following the rules of the road and being aware of their surroundings.

It is important to note, there is no single solution that will work in every case. The best approach will vary depending on the specific circumstances of each high-risk area. However, implementing a combination of engineering improvements, innovative solutions, and traffic safety management, NDOT and stakeholders can make roads safer for VRUs and reduce the number of crashes involving them.

In addition to the above, there are other alternatives that can be done to improve safety for all road users:

- **Gear:** encourage VRUs to wear bright clothing and use reflective gear. This will make them more visible to drivers.
- **Be aware:** of your surroundings when driving, walking, or biking. Pay attention to traffic and be prepared to move out of the way.
- **Traffic Regulations:** Drivers respecting designated speed limits, coming to a complete halt at stop signs, and actively yielding the right-of-way to both VRUs and vehicles. Pedestrians and bicyclists should adhere to crosswalk signals, use designated paths, and prioritize their safety while navigating roadways.
- **Patience:** Stay calm whether waiting to cross the street or for a pedestrian to pass in front of your vehicle. Emphasize safety over speed.

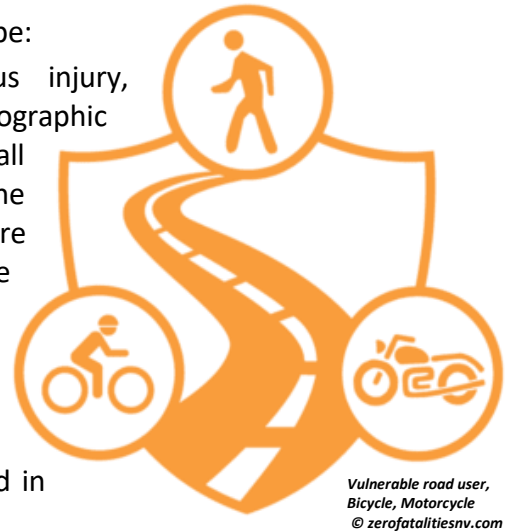
# Data Driven Process

A comprehensive analysis of VRU crash data from 2016 through 2020 was used to identify high-risk areas throughout Nevada. This crash data is based on events that generated a law enforcement response and is unlikely to be a complete data set. In addition, this data was overlaid with U.S. Census data to conduct an equity analysis, highlighting communities where poverty and racial disparities are present.

The VRU Safety Assessment separated crashes by severity type:

fatal, suspected serious injury, suspected non-serious injury, claimed/possible injury, and property damage only. Using geographic information systems (GIS), these crashes were joined to all statewide routes to produce accurate locations where the crashes occurred. Each county's hospital, emergency clinic, fire station, law enforcement, and bus stop locations if available were added to the maps to determine what facilities were present in each area selected.

Zip code data where the VRU resided, not where the crash occurred, was analyzed to determine if there were zip codes where there was a higher incidence of VRUs being involved in crashes.



The data was further analyzed and displayed in graphs showing demographics in multiple categories, such as time of day, age of driver and more. Maps and statistical analyses for the crashes in each area within each individual county were produced. A list of the high-risk areas to VRUs was identified based on the data and demographics information.

Michelin's "Near Miss/Vulnerable Road Users" service will also be utilized. This service employs a machine learning model to identify, locate, and assess potential near misses for VRUs. Historical and contextual data are used to identify VRU crash patterns and risky areas. This data is based on five major events: harsh braking, harsh acceleration, phone handling, near miss, and suspected collision. This information will use driving behavioral data to determine where and when road safety issues may occur. NDOT will use this data to help focus on areas of concern and improve road safety for VRUs.

## Identification of High-Risk Areas

The following are the outcomes of the consultation for each high-risk area:

- High traffic volume
- Poor roadway conditions
- Lack of sidewalks and bike lanes
- Speeding drivers
- Distracted drivers
- Lack/Inadequate facilities.

The assessment focused on 10 out of 17 counties in Nevada. The seven excluded counties experienced a combined 16 crashes with 3 fatalities between 2016 and 2020. These exclusions were due to low crash rates, rare VRU incidents, or remote rural locations. The data will represent more injuries than crashes; this is because multiple VRUs can be injured in a single crash event.

***These statistics are based on VRU data only. These crashes only include crashes which involved VRUs.***



# Clark County

Figure 1 Clark County VRU Crashes by Year

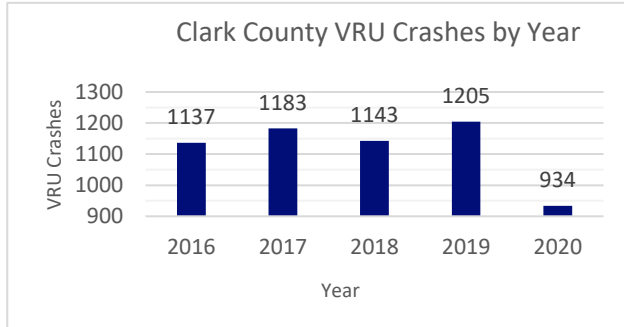
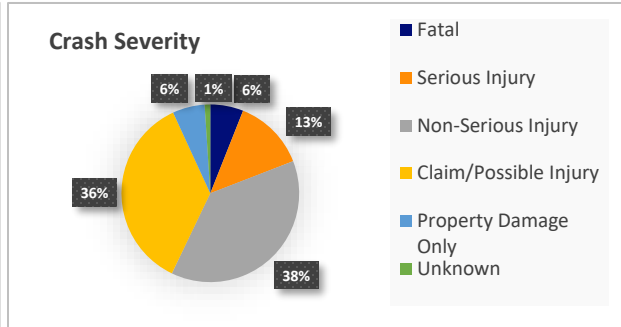


Figure 2 Clark County VRU Crash Severity



Clark County, Nevada has the highest number of VRU crashes in the state. In a five-year assessment from 2016 through 2020, there were 5,602 VRU crashes in Clark County, for an average of 1,120 crashes per year. The percentage of crashes varied slightly by year, with 2019 having the highest percentage of 22% and 2020 having the lowest percentage of 17%.

The top 5 zip codes involving VRUs in Clark County crashes are listed in the table below.

Zip code	Pedestrian Injuries (2016-2020)	Location Description
<b>89101</b>	<b>432</b>	Location: Las Vegas – Clark County Covers downtown Las Vegas, the Arts District, and residential areas.
<b>89121</b>	<b>275</b>	Residential neighborhoods near Flamingo Road and Eastern Avenue.
<b>89119</b>	<b>273</b>	Around McCarran International Airport, includes residential housing, hotels, and enterprises.
<b>89030</b>	<b>273</b>	Northern Part of Clark County, Nevada Mix of residential zones and community amenities
<b>89108</b>	<b>229</b>	Northwest of downtown Las Vegas, Nevada Residential neighborhoods, apartment complexes, and local businesses.

Table 1 Top zip codes involving VRUs in Clark County

In Clark County, most crashes are not fatal or serious. However, even non-serious crashes can result in injuries. The most common severity type of VRU-involved crashes in Clark County was non-serious injury, accounting for 38% of all crashes. Fatal crashes were one of the least common, accounting for 6% of all crashes. Claim/possible injury was the second most severe with 36%, followed by serious injury at 13%, property damage only at 6%, and the remaining crashes are unknown injury at 1%.

In Clark County, the most significant factor to VRU crashes was attributed to "apparently normal" driver behavior, constituting a substantial 68% of incidents. Those cases involved drivers who exhibited no evident impairment or distraction from a substantial portion. Other contributing factors in descending order include cases categorized as unknown at 22%, other improper driving at 3%, hit-and-run incidents at 2%, inattention/distraction at 2%, and driving under the influence at 2%. Drug involvement comprised 1% of incidents.

The most common age group for VRU crash drivers for Clark County was 25 - 64 years old, accounting for 55% of all crashes, while drivers 65 and older accounted for 12% of all crashes. Drivers from the age of 16-54 was at 11% and 22% of drivers age was unknown.

# Washoe County

Figure 3 Washoe County VRU Crashes by Year

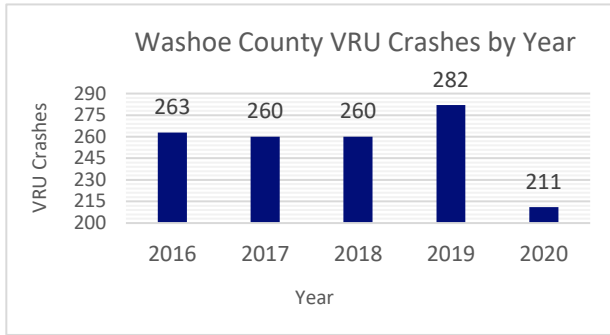
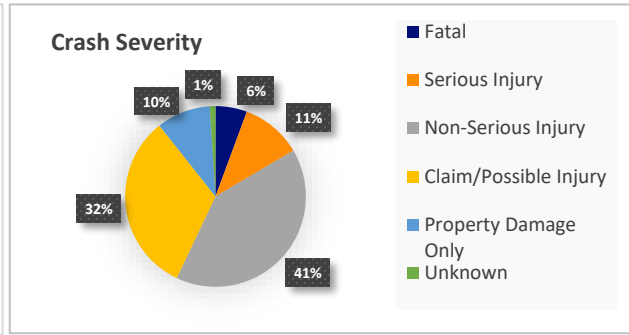


Figure 4 Washoe County VRU Crash Severity



In Washoe County, Nevada, there were 1,276 VRU crashes between 2016 through 2020. The number of VRU crashes in Washoe County has remained relatively stable over the past five years, with an average of 255 crashes per year. However, the percentage of crashes by year has varied, with 2019 having the highest percentage of 22% and 2020 having the lowest percentage of 17%.

The top 5 zip codes involving VRUs in Washoe County crashes are listed in the table below.

Zip code	Pedestrian Injuries (2016-2020)	Location Description
<b>89502</b>	<b>225</b>	Location: Reno – Washoe County Encompasses various neighborhoods and commercial zones.
<b>89431</b>	<b>155</b>	Located within the city of Sparks, Nevada Covers different neighborhoods and commercial areas.
<b>89512</b>	<b>115</b>	Located within the city of Reno, Nevada Includes neighborhoods and commercial districts.
<b>89503</b>	<b>74</b>	Located within the city of Reno, Nevada Encompasses neighborhoods and commercial districts
<b>89434</b>	<b>64</b>	Located East of Sparks Encompasses the towns of Lockwood, McCarren, and Patrick along Interstate Road (IR) 80.

Table 2 Top zip codes involving VRUs in Washoe County

The severity of VRU crashes in Washoe County varied widely, of which 6% of VRU crashes resulted in the death of the VRU, 11% of VRU crashes resulted in serious injuries, 41% of VRU crashes resulted in non-serious injuries, 32% of VRU crashes resulted in claimed/possible injuries, 10% of VRU crashes resulted in property damage only, and 1% of VRU crashes were of unknown severity.

The data underscores the prominence of "apparently normal" behavior as the leading factor in Washoe County incidents at 66%. Instances of unknown factors accounted for 24%, reflecting the complexities involved. Minor percentages involved other improper driving at 3% and obstructed views at 2%. Driver fatigue or impairment, as well as cases involving drivers under the influence, each contributed 2%. Drug involvement was minimal at 1%. Additionally, rare hit-and-run incidents made up 0.2%.

Many of the drivers involved in VRU crashes in Washoe County were between the ages of 25 and 64 at 52%, while drivers 65 and older accounted for 13%. Drivers from the age of 16-54 was at 13% and 22% of drivers age was unknown.

# Carson City

Figure 5 Carson City VRU Crashes by Year

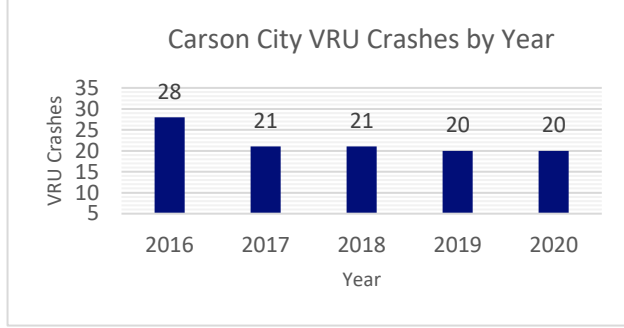
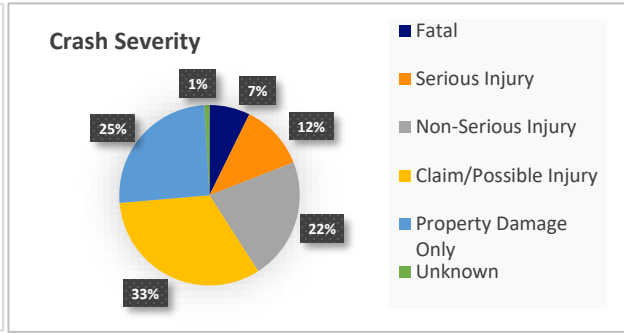


Figure 6 Carson City VRU Crash Severity



In Carson City, Nevada shows there were 110 VRU crashes in 2016-2020. A breakdown of this data showed 25% of crashes occurred in 2016, 19% of crashes occurred in 2017, 19% of crashes occurred in 2018, 18% of crashes occurred in 2019, and 18% crashes occurred in 2020.

Top 2 zip codes involving VRUs in Carson City crashes are listed in the table below.

Zip code	Pedestrian Injuries (2016-2020)	Location Description
<b>89701</b>	<b>82</b>	Location: Carson City Majority of city limits of Carson City, Nevada South of US 50 and East of US 395.
<b>89706</b>	<b>35</b>	Located in Carson City, Nevada Located North of US 50 and East of I-580.

Table 3 Top zip codes involving VRUs in Carson City

The severity of the 110 crashes are as follows: 7% were fatal, 12% resulted in serious injury, 22% resulted in non-serious injury, 33% resulted in a claimed/possible injury, 25% resulted in property damage only, and 1 % of the crashes were unknown.

In Carson City, “apparently normal” behavior emerged as the predominant contributor, representing a significant 76% of incidents. Unknown factors constituted 11% of incidents. Inattention or distraction played a role in 4% of crashes, whereas instances of driver fatigue or impairment were encountered in 2% of cases. Both drivers who had been drinking and other improper driving behaviors contributed 3% each. Drug involvement was minimal at 1%, as well as cases involving obstructed views.

The most common age group for drivers involved in VRU crashes in Carson City was 25 - 64 years old at 55%, followed by the 65 – 80-year-old age group at 18%. The 16 - 24 age group had 12%, 80+ years old had 6%. There was 1% of drivers who were below the age of 16, and the remaining 8% of drivers involved in crashes had an unknown age.

# Douglas County

Figure 7 Douglas County VRU Crash Severity

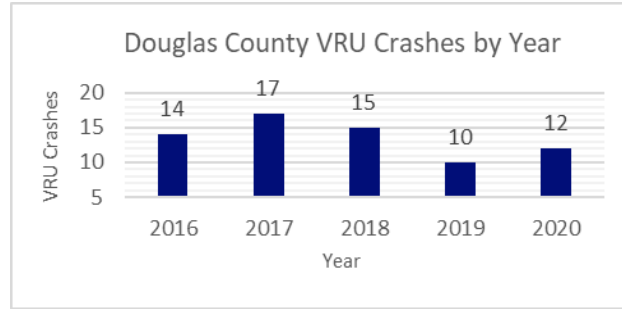
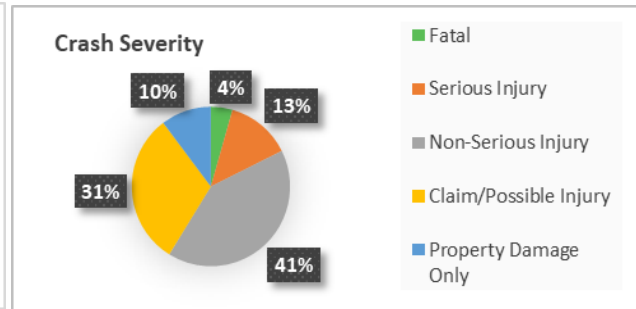


Figure 8 Douglas County VRU Crashes by Year



While Douglas County, Nevada did not have a census tract that met our criteria equity-wise, we included a census tract which offered VRUs access to grocery stores, schools, and places to eat. In Douglas County there were 68 vehicle crashes in 2016 through 2020. Twenty-one percent (21%) occurred in 2016, 25% occurred in 2017, 22% occurred in 2018, 15% occurred in 2019, and 18% occurred in 2020.

Top 2 zip codes involving VRU crashes in Douglas County are listed in the table below.

Zip code	Pedestrian Injuries (2016-2020)	Location Description
<b>89410</b>	<b>22</b>	Location: Gardnerville and Topaz – Douglas County Area from the town of Topaz to Gardnerville.
<b>89423</b>	<b>11</b>	Location Minden, Indian hills, Genoa, and Johnson Lane Situated along US 95, from Pinenut Road North to Zerolene Road

Table 4 Top zip codes involving VRUs in Douglas County

The severity of these 68 crashes are as follows: 4% of the crashes were fatal, 13% of crashes resulted in serious injury, 41% of crashes resulted in non-serious injury, 31% resulted in a claimed/possible injury, and 10% resulted in property damage-only.

Douglas County driver behaviors provided valuable insights into road safety patterns. The most prominent contributing factor was “apparently normal” behavior, accounting for a substantial 70% of incidents. Cases involving unknown factors were steady at 19%. Minimal percentages were observed in drug involvement and cases where drivers had been drinking, both at 3%. Other improper driving behaviors and instances of inattention/distraction each contributed 3% to the data. Illness and cases categorized as unknown each accounted for 1%.

The most common age group for drivers involved in crashes in Douglas County was 25 - 64 years old at 53%, followed by the 65 – 80-year-old age group at 15%. The 16 - 24 age group had 9%, 80+ age group had 6%, and the remaining 17% of drivers involved in crashes had their age unknown.

# Elko County

Figure 9 Elko County VRU Crashes by Year

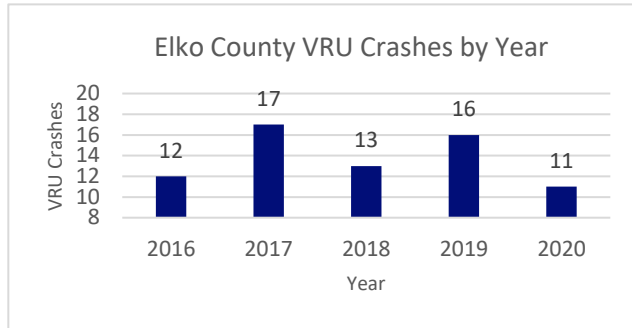
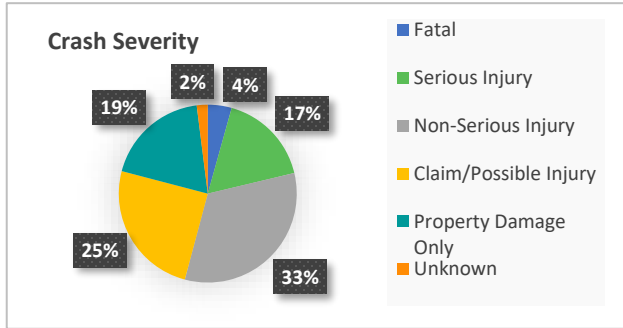


Figure 10 Elko County VRU Crash Severity



Elko County, Nevada experienced 69 VRU crashes between 2016 through 2020, averaging 13.8 crashes per year. The year with the highest frequency of VRU crashes was 2017, with 25% of the crashes occurring, while 2020 had the least number of crashes with 16%.

The zip code involving VRU crashes in Elko County is listed in the table below.

Zip code	Pedestrian Injuries (2016-2020)	Location Description
<b>89801</b>	<b>52</b>	Location: Elko, Wild Horse, Osino, Elburz, and Coin – Elko County Area is North of I-80 up to Wild Horse.

Table 5 Top zip code involving VRUs in Elko County

Of those 69 VRU crashes that occurred in Elko County, Nevada between 2016 through 2020, 4% of crashes resulted in a fatal injury to the VRU. Seventeen percent (17%) of these crashes resulted in serious injuries, 33% were non-serious injuries, 25% were claim/possible injuries, and 19% resulted in property damage only. Two percent (2%) of the crashes had an unknown severity.

Driver factors in Elko County show the predominant contributing factor was “apparently normal” behavior, accounting for 59% of incidents. Instances of unknown factors contributed 28%, reflecting complexities in certain cases. Minor percentages were observed in obstructed views 4%, other improper driving behaviors 4%, cases where drivers had been drinking 3%, and cases categorized as inattention or distraction 2%. This data, compiled from the analysis of 69 incidents, offers insights into the driving factors that influence road incidents within Elko County.

Amongst the drivers involved, 43% of the crashes being attributed to drivers aged 25 to 64. Additionally, an analysis of VRU-related collisions within the county reveals that drivers aged 16 to 24 were responsible for 22% of such crashes, while those falling within the 65 to 80 age brackets accounted for 7%. Remarkably, drivers aged 80 and above contributed to 3% of these incidents. It's worth noting that the category of the driver remained unknown in 25% of the reported crashes.

Elko County encompasses extensive rural landscapes characterized by roads of differing infrastructure standards. This diversity underscores the necessity of addressing VRU safety across a range of settings. Elko is a county that has both well-developed regions and areas with less advanced road infrastructure as well.

# Nye County

Figure 11 Nye County VRU Crashes by Year

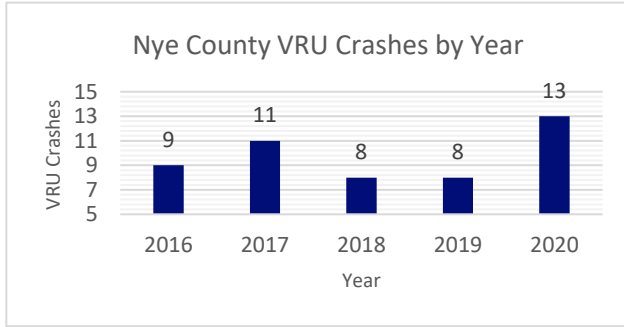
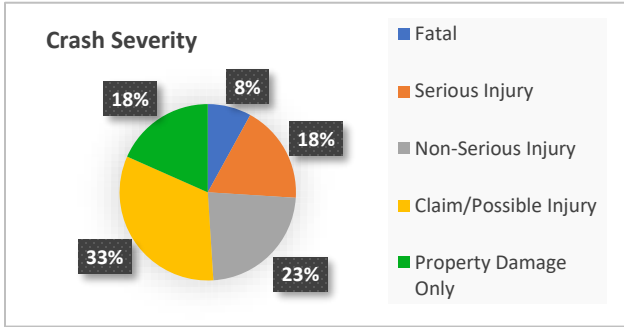


Figure 12 Nye County VRU Crash Severity



The data suggests the frequency of VRU crashes in Nye County, Nevada varied from year to year. There were 49 total VRU-involved crashes between 2016 through 2020. Eighteen percent (18%) occurred in 2016, 22% occurred in 2017, 16% occurred in 2018 and 2019, and 27% occurred in 2020. There were fewer VRU crashes in 2018 and 2019 than in other years. However, there was a significant increase in the number of VRU crashes in 2020.

The top 2 zip codes involving VRU crashes in Nye County are listed in the table below.

Zip code	Pedestrian Injuries (2016-2020)	Location Description
<b>89048</b>	<b>34</b>	Location: Pahrump – Nye County Extending from the Nevada-California border to the northeastern vicinity of SR 160 and encompassing Crystal, Nevada.
<b>89060</b>	<b>15</b>	Location: Pahrump – Nye County Covers the area along SR 160 and surrounding areas East and West up to US 95 in Pahrump.

Table 6 Top zip codes involving VRUs in Nye County

The percentage of crash severity in Nye County was consistent across most areas. Eight percent (8%) of crashes were fatal, 18% resulted in serious injury, 23% resulted in non-serious injury, 33% resulted in a claim or possible injury, and 18% resulted in property damage only. The likelihood of being involved in a fatal crash in Nye County was relatively low. However, even crashes that do not result in fatalities can still cause serious injuries.

Driver factors in Nye County show the most prominent contributing factor was "apparently normal" behavior, constituting a significant 72% of incidents. Instances of unknown factors follow at 20%. Minor percentages were observed in cases of inattention/distraction (4%), drug involvement (2%), and other improper driving behaviors (2%). This data, derived from the examination of 49 incidents, sheds light on the driving factors influencing road incidents within Nye County.

Of the 49 drivers involved in VRU crashes in Nye County from 2016-2020, 14% were between the ages of 16 and 24, 41% were between the ages of 25 and 64, 23% were between the ages of 65 and 80, 4% were over the age of 80, and 18% had an unknown age listed.

# Humboldt County

Figure 13 Humboldt County VRU Crashes by Year

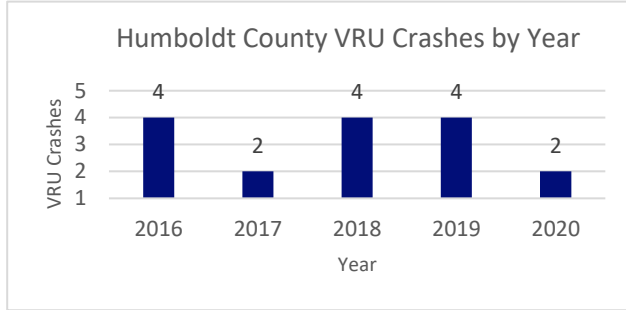
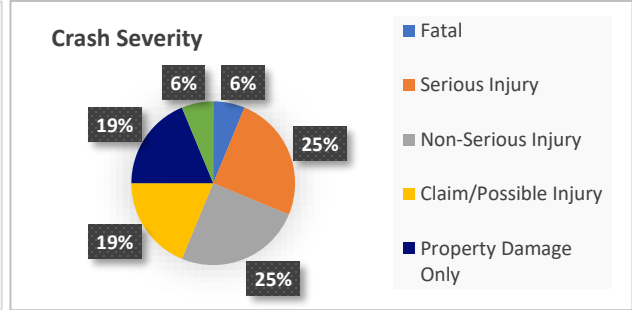


Figure 14 Humboldt County VRU Crash Severity



In Humboldt County, Nevada, 16 vehicle crashes occurred from 2016 through 2020. The numbers from the data vary with 25% occurring in 2016, 13% occurring in 2017, 25% occurring in 2018 and 2019, and 13% occurring in 2020.

The 2 zip codes involving VRU crashes in Humboldt County are listed in the table below.

Zip code	Pedestrian Injuries (2016-2020)	Location Description
<b>89445</b>	<b>13</b>	Location: Winnemucca – Humboldt County Covers various neighborhoods and areas within Winnemucca and the immediate vicinity.
<b>89414</b>	<b>1</b>	Location: Golconda, Red House, Nevada – Humboldt County Covers Golconda along IR 80 and Northeast to Kelly Creek Mountain.

Table 7 Top zip codes involving VRUs in Humboldt County

The severity of these 16 crashes was as follows: 6% of the crashes were fatal, 25% resulted in serious injury, 25% resulted in non-serious injury, 19% resulted in a claimed/possible injury, 19% resulted in property damage only, and 6% had an unknown severity.

Humboldt County revealed a significant pattern, with "apparently normal" behavior having been the most prevalent factor contributing to incidents, accounting for a substantial 62% of cases. Following closely, drivers who had consumed alcohol contributed to 13% of these incidents, highlighting the imperative of tackling alcohol-related concerns. Cases involving obstructed views amounted to 13%. Hit and run incidents, along with unknown contributing factors, each constituted 6% of the reported cases, further shedding light on noteworthy aspects within the area.

The most common age group for drivers involved in crashes in Humboldt County was 25 – 64 years old at 56%. The 16 – 24-year-old age group accounted for 13% of drivers involved in crashes, and the 65 –80-year-old age group accounted for 6%. The remaining 25% of drivers involved in crashes had an unknown age listed.

# Churchill County

Figure 15 Churchill County VRU Crashes by Year

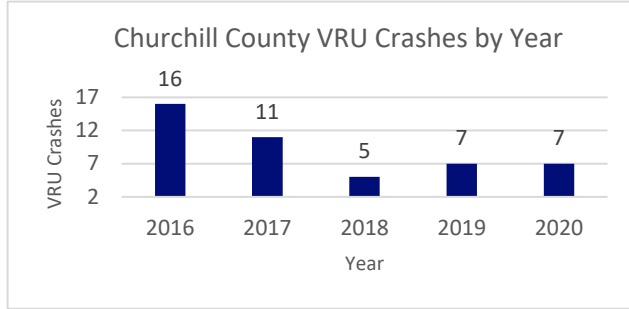
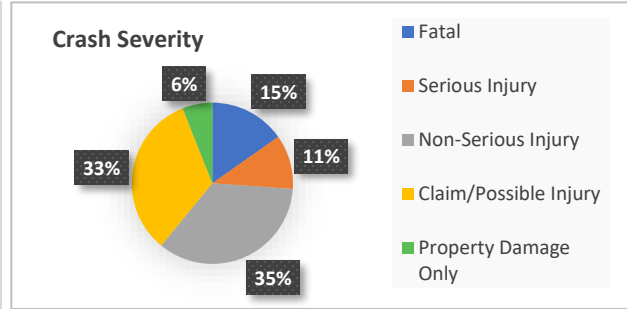


Figure 16 Churchill County VRU Crash Severity



A total of 46 vehicle crashes occurred in Churchill County, Nevada from 2016 through 2020. The number of crashes each year was relatively consistent, with 35% occurring in 2016, 24% occurring in 2017, 11% occurring in 2018, 15% occurring in 2019, and 15% occurring in 2020.

The 2 zip codes involving VRU crashes in Churchill County are listed in the table below.

Zip code	Pedestrian Injuries (2016-2020)	Location Description
<b>89406</b>	<b>47</b>	Location: Fallon – Churchill County Covers most neighborhoods and areas within Fallon, Dixie Valley, Stillwater, Eastgate, Middlegate
<b>89408</b>	<b>6</b>	Location: Fernley – Churchill County Covers Fernley along US 50 from Wadsworth to Hazen and Northeast on IR 80 for approximately 17 miles.

Table 8 Top zip codes involving VRUs in Churchill County

The severity of these 46 crashes are as follows: 15% of VRU crashes were fatal, 11% resulted in serious injury, 35% resulted in non-serious injury, 33% resulted in a claimed/possible injury, and 6% resulted in property damage only.

In Churchill County driver factors the most prominent contributing factor was "apparently normal" behavior, accounting for a significant 65% of incidents. Instances of unknown factors follow at 29%, revealing the complexity inherent in certain cases. Minor percentages were noted in cases of drug involvement, instances where drivers had been drinking, and instances of inattention/distraction, each comprising 2% of incidents.

The predominant age group among drivers involved in crashes was individuals aged 25 to 64 years, at 48%. Following, was the 16 to 24-year-old age group and the 65 to 80-year-old age group, each accounting for 11% of the reported cases. Drivers aged 80 and above constituted 4% of the total crashes, while the age category of the remaining 26% of drivers involved in crashes remained unknown.



# Lyon County

Figure 17 Lyon County VRU Crashes by Year

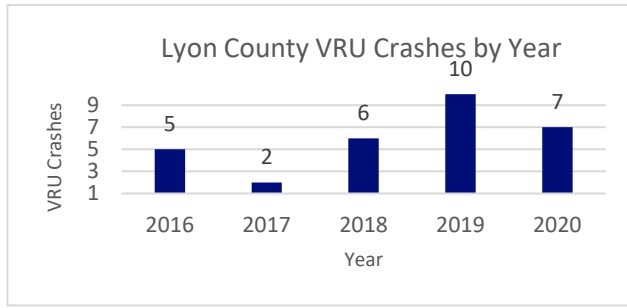
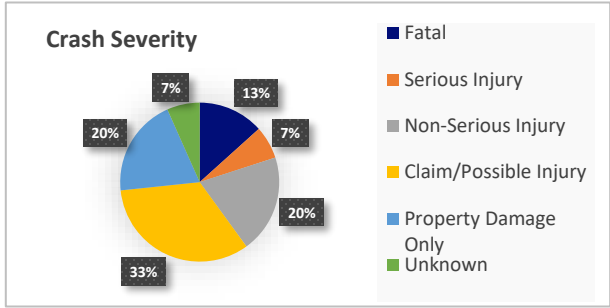


Figure 18 Lyon County VRU Crash Severity



In Lyon County, Nevada, there were 30 vehicle crashes from 2016 through 2020. A total of 17% of crashes occurred in 2016, 7% in 2017, 20% in 2018, 33% in 2019, and 23% in 2020.

The zip code involving VRU crashes in Lyon County is listed in the table below.

Zip code	Pedestrian Injuries (2016-2020)	Location Description
<b>89408</b>	<b>19</b>	Location: Fernley – Northern Lyon County Covers Fernley along US 50 from Wadsworth to Hazen and Northeast on IR 80 for approximately 17 miles.

Table 9 Top zip code involving VRUs in Lyon County

The severity of these 30 crashes was as follows: 13% of crashes were fatal, 7% resulted in serious injury, 20% resulted in non-serious injury, 33% resulted in a claimed/possible injury, 20% resulted in property damage only, and 7% had an unknown result of severity.

Within Lyon County, the most noteworthy contributing factor was identified as "apparently normal" behavior, constituting a substantial 53% of reported incidents. Following this, crashes that had an unknown factor trailed at 23%, while incidents attributed to falling asleep, fainting, or fatigue collectively accounted for a marginal 3% of crashes. Drivers who had consumed alcohol, had obstructed views, or engaged in other forms of improper driving conduct *each* represented 7% of the recorded incidents.

The most common age group for drivers involved in crashes in Lyon County was 25 – 64 years old at 63%. The 65–80-year-old age group accounted for 14% of drivers involved in crashes, the 16 – 24-year-old age group accounted for 3%, and the remaining 20% of drivers involved in crashes had an unknown age.

# White Pine County

Figure 19 White Pine County VRU Crashes by Year

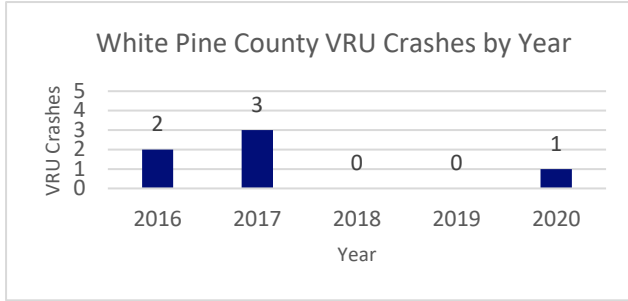
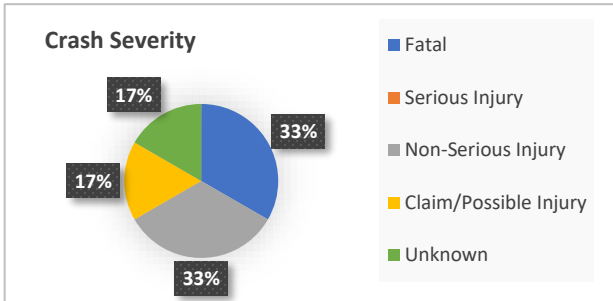


Figure 20 White Pine County VRU Crash Severity



There was a total of 6 vehicle crashes in White Pine County, Nevada from 2016 through 2020. The number of crashes each year was not evenly distributed, with 33% occurring in 2016, 50% occurring in 2017, there were 0 crashes in 2018 or 2019, and 17% of crashes in 2020.

The zip code involving VRU crashes in White Pine County is listed in the table below.

Zip code	Pedestrian Injuries (2016-2020)	Location Description
<b>89301</b>	<b>4</b>	Location: Ely, McGill, Cherry Creek, Schellbourne – White Pine County Located within the city of Ely and North, along US 93.

Table 10 Top zip code involving VRUs in White Pine County

The severity of these 6 crashes was as follows: 33% of the crashes were fatal, 33% resulted in non-serious injury, 17% resulted in a claimed/possible injury, and 17% had an unknown result of severity. There were no crashes which resulted in serious injury or property damage in White Pine County.

Within White Pine County, the predominant contributing factor was identified as "apparently normal" behavior, encompassing a substantial 62% of incidents. Following closely, instances involving drivers who had consumed alcohol accounted for 13%, thereby underscoring the significance of tackling alcohol-related issues. Furthermore, incidents attributed to obstructed views shared the same percentage, amounting to 13% of the total. Cases categorized as hit and run contributed 6% to the overall tally. Additionally, a further 6% of incidents were classified under the category of unknown factors.

The most common age group for drivers involved in crashes in White Pine County was 25 –64 years old at 67%. The 16 – 24-year-old age group accounted for 16% of drivers involved in crashes, and the remaining 17% of drivers involved in crashes had an unknown age.

# Conclusion

The assessment of VRU crashes in Nevada found Washoe and Clark counties were two of the most high-risk areas for VRU users. Clark County had 4.4 times as many VRU crashes as Washoe County, but the overall severity of VRU crashes was higher in Washoe County. The most common age group for VRU crash drivers in both Washoe County and Clark County was 25-64 years old. Washoe and Clark counties are disproportionately affected by VRU crashes compared to the rest of Nevada. NDOT will collaborate with Clark and Washoe to gather their ideas for countermeasures, programs, projects, and strategies.

Bus transit stop map locations were only readily available for Clark and Washoe counties. The maps attached in the appendix demonstrate a significant correlation between bus stop locations and VRU crashes in these two counties. In Clark County 60% of VRU crashes occur within 250ft. of a bus stop. In Washoe County, a notable 35% of crashes manifest within the same 250 feet radius of a bus stop. It's worth highlighting that certain bus stops lack essential safety features like crosswalks, raised crossings, and other necessary infrastructure to ensure the safe passage of VRUs to their bus stop destinations. This underscores the urgent need for prioritizing bus stop safety improvements within these two counties.

In the remaining 5 counties that fit the determined equity criteria, Carson City had the most VRU crashes, followed by Nye County, Churchill County, Humboldt County, and White Pine County. Although these counties had a lower amount of VRU crashes, this could be due to their rural location. The most common age group for VRU crash drivers in the above-mentioned counties was 25-64 years old.

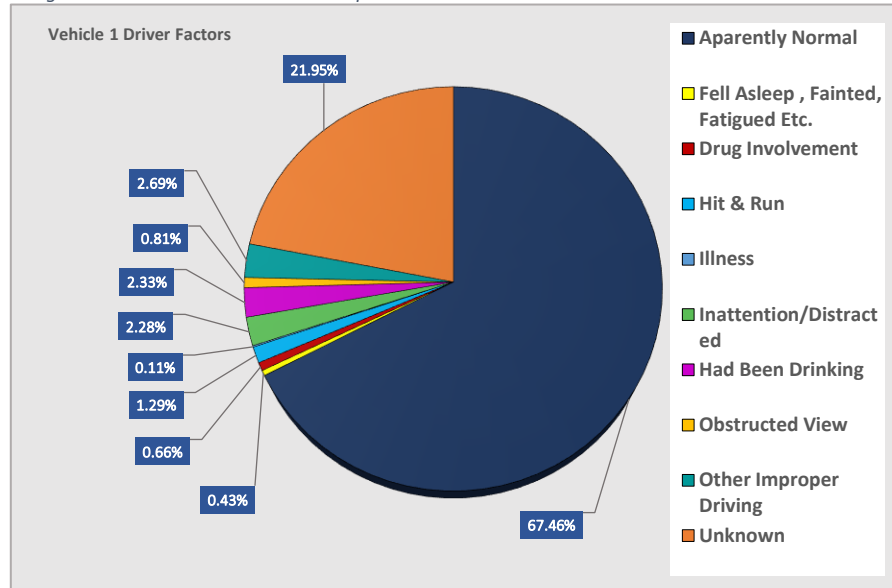
Although Elko, Lyon, and Douglas counties were not initially included in the equity assessment, they were later added because VRUs frequently access amenities in those counties. This suggests VRU crashes can happen in any community, regardless of its demographics.

The assessment also found 50% or more of crashes occurred during the daytime in six counties: Clark, Washoe, Carson, Elko, Churchill, and Douglas. Humboldt and White Pine counties had 44%, Nye County 39%, while and Lyon had 37% of their crashes occurring in the daytime. This is concerning considering a majority of VRUs prefer to travel in the daytime when there is better visibility, access to appointments, grocery stores, and other destinations. While the findings of this study suggest it is almost safer for VRUs to travel at night, it is not practical for most. Nighttime travel for VRUs is a counter-intuitive finding, but it suggests that VRU safety education should emphasize the importance of being aware of the risks of driving around VRUs during the day and nighttime.

After analyzing the Making Nevada Safer Factsheet in *Appendix L*, the VRU safety assessment underscores substantial disparities in pedestrian fatality rates by race/ethnicity relative to Nevada's total population. Among all VRU pedestrians in Nevada, it is observed that black pedestrians exhibit a substantial 71% higher pedestrian fatality rate than the total population and white pedestrians demonstrate 7% higher fatality rate. Asian pedestrians maintain a lower fatality rate of 18% less, and Hispanic pedestrians present a diminished fatality rate at 27% less. Similarly, American Indian/Alaskan Native pedestrians exhibit an even lower rate of 40% less. The imperative to rectify these disparities is underscored as an essential measure in advancing road safety and fostering equitable outcomes, especially within high-risk, low-income areas throughout Nevada.

Figure 21 Vehicle 1 Driver Factors Graph

Alcohol and drug impairment is commonly believed by others to be a significant factor in many vehicle crashes. However, this was not confirmed in the data available for this assessment. In 67.47% of these crashes the driver was listed as “apparently normal”. The next highest factor at 21.95% is “unknown”. This could indicate the status of the driver was never confirmed



before the report was submitted. “Had been drinking” came in at 2.33%, and drug involvement was on a relatively lower side at .66%.

***Impairment data is based on preliminary findings. Further information is required from the Office of Traffic Safety (OTS) to address the existing data gaps within the NDOT crash database.***

Functional Classification System, or F System is a framework used to categorize and classify roads and highways based on their primary functions and roles within the overall transportation network. Below, you'll find VRU crash percentages for each F class, accompanied by a brief description.

- **Local (31.44%):** The highest percentage is attributed to local roads, indicating that a substantial portion of VRU crashes occurs in residential neighborhoods and local commercial areas. These crashes often involve interactions between pedestrians, cyclists, and local vehicle traffic.
- **Minor Arterial (30.75%):** VRU crashes on minor arterial roads which involve pedestrians, often occur at intersections or mid-block crossings.
- **Minor Collector (17.90%):** VRU crashes on minor collector roads may involve interactions between residents and local traffic. These crashes could occur at residential intersections, near schools, or in shopping areas, emphasizing the importance of community-level safety initiatives.
- **Principal Arterial: Other (17.36%):** This category includes a wide range of road types. VRU crashes here may occur at intersections, crosswalks, and along major urban and suburban roads.
- **Interstate (1.70%):** While the Interstate category only accounts for a relatively small percentage of the total road network, it's important to note that VRU crashes on these high-speed, limited-access roads can be particularly severe. These incidents often involve pedestrians or cyclists at on-ramps or off-ramps.
- **Principal Arterial: Other Freeways/Expressways (0.40%):** VRU crashes on these types of roads may occur at interchanges, pedestrian crossings, or service roads adjacent to the freeways. Though the percentage is low, the high-speed nature of these roads can make VRU crashes particularly dangerous.
- **Major Collector (0.37%):** Although the percentage is low, VRU crashes on major collector roads can still be significant, as these roads often connect neighborhoods and commercial areas.

In summary, these percentages provided valuable insight into the primary locations where VRU crashes were most prevalent within the road network. This data served as a critical resource for identifying the specific roads with the highest incidence of VRU crashes, pinpointing areas where infrastructure assessments and improvements are needed.

As part of this assessment, NDOT will:

- Meet regularly with the other agencies to discuss progress on VRU safety initiatives. This will allow NDOT to stay up to date on the latest developments in VRU safety and to collaborate with the other agencies on developing and implementing effective safety measures.
- Share information and resources on VRU safety with the other agencies. This will help to ensure all agencies involved in the assessment have access to the latest information and resources on VRU safety. This can be done through a variety of means, such as sharing data, research reports, and best practices.
- Work with the other agencies to promote VRU safety education and awareness to the public. This will help to raise awareness of the dangers faced by VRUs and encourage drivers and VRUs to take steps to stay safe on the road. This can be done through a variety of means, such as public awareness campaigns, educational materials, and training programs.
- Initiate collaboration with high-risk counties to facilitate and hold meetings, distribute pertinent information regarding high-risk areas within their communities, and provide a summary of outcomes after each meeting.
- Utilize data to identify areas of concern for aggressive driving behavior, hard stops, and acceleration locations to focus on areas of concern for VRUs going forward.
- Hold meetings with Rural County Tour meetings, which are meetings throughout the state in different counties that address specific pressing issues, such as traffic safety.
- Work closer with RTC and other organizations to re-think or re-design bus stop locations to make them safer for VRUs. This could involve installing flashing lights or signs to warn drivers of bus stops or creating designated crossing areas for VRUs.

In conclusion, Nevada has witnessed VRU crashes occur annually across all its counties between 2016 and 2020. Notably, Mineral County recorded zero crashes during this period, yet it remains a vital part of our analysis, reflecting our commitment to ensuring equitable access to transportation modes for every county. This approach underscores the significance of addressing systemic factors that affect VRU safety, extending beyond individual communities. It emphasizes the need for comprehensive statewide initiatives.

Through collaborative efforts, NDOT is dedicated to enhancing safety on our roads. From the bustling streets of Clark County to the remote landscapes of Esmeralda County, NDOT is tirelessly working to reduce both the frequency and severity of crashes by implementing various safety enhancements. Our collective goal is to make our roads safer for all users, fostering a safer and more accessible transportation environment throughout the state.

# References

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NDOT Traffic Safety Engineering. 2016-2020 Crash Data. Retrieved from Personal Communication

## **ACS Median Household Income Variables – Boundaries layer**

Esri, (2023, April 11) Nevada Median Household Income feature.

Retrieved from <https://esri.maps.arcgis.com/home/item.html?id=45ede6d6ff7e4cbbbffa60d34227e462>

## **ACS Race and Hispanic Origin Variables– Boundaries layer**

Esri,(2023, April 11) ACS Race and Hispanic Origin Variables

Retrieved from

<https://esri.maps.arcgis.com/home/item.html?id=23ab8028f1784de4b0810104cd5d1c8f>

## **RTC Clark County & Washoe County Bus stop data**

Weston, J. (2023, April 18). RTC Bus stop Data. Personal communication.

## **Making Nevada Safer Equity Fact Sheet**

American Community Survey (ACS). <https://www.census.gov/programs-surveys/acs>

National Highway Traffic Safety Administration. (2023). Fatality Analysis Reporting System (FARS). U.S. Department of Transportation. <https://www.nhtsa.gov/research-data/fatality-analysis-reporting-system-fars>

## **PICTURES**

### **Bicycle Picture on Cover of Assessment**

Marceno, C. (2021, November 14). From the Desk of Sheriff Carmine Marceno: Deepening Concerns for Cyclists. Estero Today.

Retrieved from <https://www.esterotoday.com/from-the-desk-of-sheriff-carmine-marceno-deepening-concerns-for-cyclists/>

### **Walking and Wheelchair Picture on Cover of Assessment**

Ruth, C. (PIO, NDOT). (2023, June 27). Personal communication.

### **Person riding bike on Page 3**

Google Maps. (2023). Google Maps. Retrieved from <https://www.google.com/maps/>

### **Person pushing person in wheelchair Page 4**

New York State Department of Motor Vehicles. (2023, February 15). Vulnerable road user and Bicyclist Safety Awareness. Retrieved from <https://dmv.ny.gov/more-info/vulnerable-road-user-and-bicyclist-safety-awareness>

**Bus Stop in Las Vegas, Nevada with person Page 5**

Google Maps. (2023). Google Maps. Retrieved from <https://www.google.com/maps/>

**Equity Image Page 6**

Image: Boston Region Metropolitan Planning Organization (MPO), 2023.

Retrieved from <https://www.ctps.org/equity>

Accessed on June 30, 2023.

**Road in Reno, Nevada Image Page 6**

Google Maps. (2023). Google Maps. Retrieved from <https://www.google.com/maps/>

**Downtown Reno bus station Image Page 7**

Image: Bob Conrad / This Is Reno, July 11, 2021. Retrieved from <https://thisisreno.com/2022/09/rtc-route-changes-to-begin-saturday/>

Accessed on July 11, 2023.

**Share Road Sign Image Page 8**

Image: Dan Burden/ PedBikeImages.org, 2021.

Retrieved from <https://www.pedbikeimages.org/details.php?picid=1162>

Accessed on July 11, 2023.

**VRU, Bicycle, Motorcycle Image Page 9**

Image: Share the Road Sign, Zero Fatalities Nevada.

Retrieved from <https://zerofatalitiesnv.com/vulnerable-road-users/>

Accessed on July 07, 2023.

**APPENDIX A**

**Clark County VRU Census Tract Maps**

**(23 areas)**



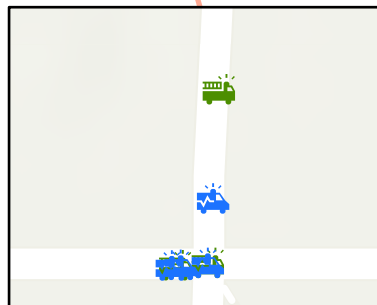
# Vulnerable Road User Safety Assessment Clark County 2016-2020 Crash Data Years (Area 1 of 23)

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Secondary Race: Hispanic or Latino  
Median Household Income: \$24,923

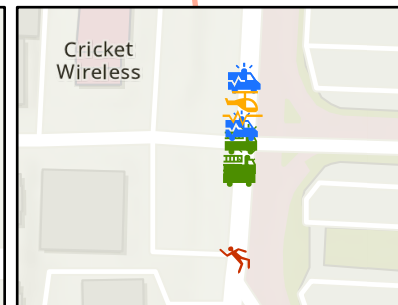


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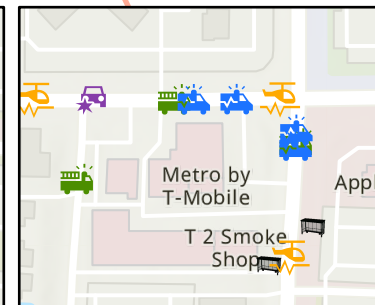
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- Serious Injury Crashes
- Non Serious Injury Crashes
- Claimed/Possible Injury Crashes
- Property Damage Only Crashes
- Bus Stops
- Emergency Clinic
- Hospitals
- Fire Stations
- Law Enforcement
- Tract Boundary



**E Twain Ave & Cambridge St**



**Dumont Blvd & S Maryland Pkwy**

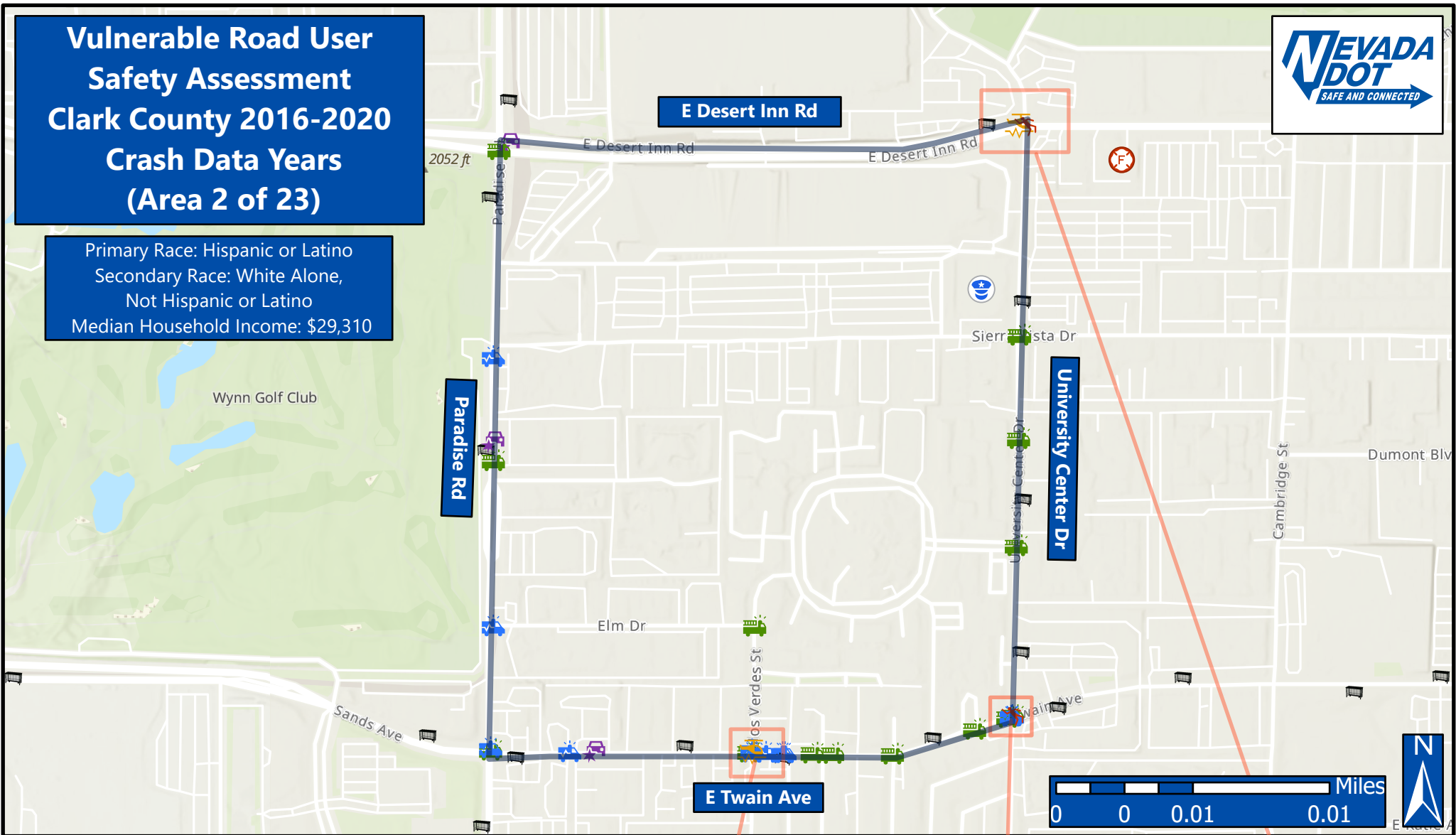


**E Desert Inn Rd & S Maryland Pkwy**

# Vulnerable Road User Safety Assessment Clark County 2016-2020 Crash Data Years (Area 2 of 23)

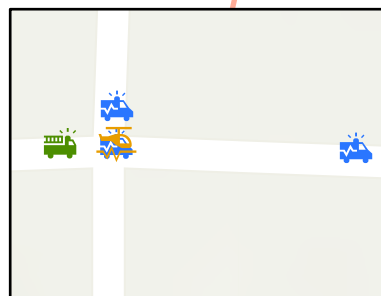


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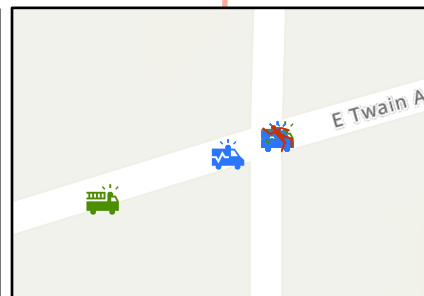


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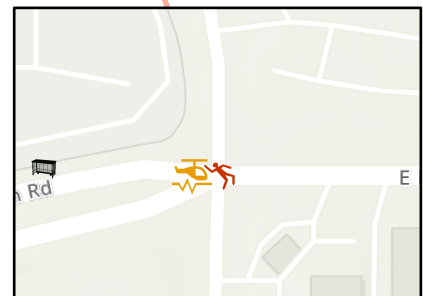
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- Non Serious Injury Crashes
- Claimed/Possible Injury Crashes
- Property Damage Only Crashes
- Bus Stops
- Emergency Clinic
- Hospitals
- Fire Stations
- Law Enforcement
- Tract Boundary



E Twain Ave & Palos Verdes St



University Center Dr & E Twain Ave



E Desert Inn Rd & University Center Dr

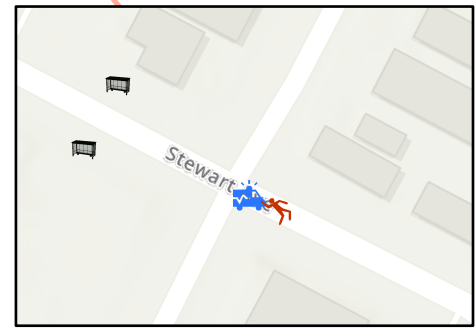
**Vulnerable Road User  
Safety Assessment  
Clark County 2016-2020  
Crash Data Years  
(Area 3 of 23)**

Primary Race: Hispanic or Latino  
Secondary Race: White Alone,  
Not Hispanic of Latino  
Median Household Income: \$20,679

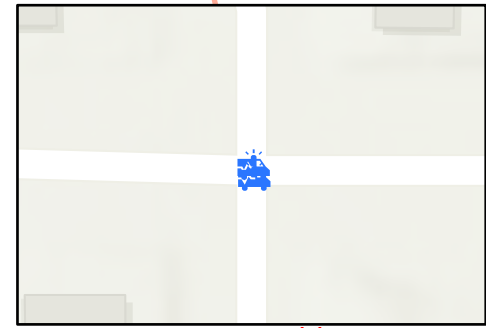


**Legend**

- Fatal Crashes
- Serious Injury Crashes
- Non Serious Injury Crashes
- Claimed/Possible Injury Crashes
- Property Damage Only Crashes
- Bus Stops
- Emergency Clinic
- Hospitals
- Fire Stations
- Law Enforcement
- Tract Boundary



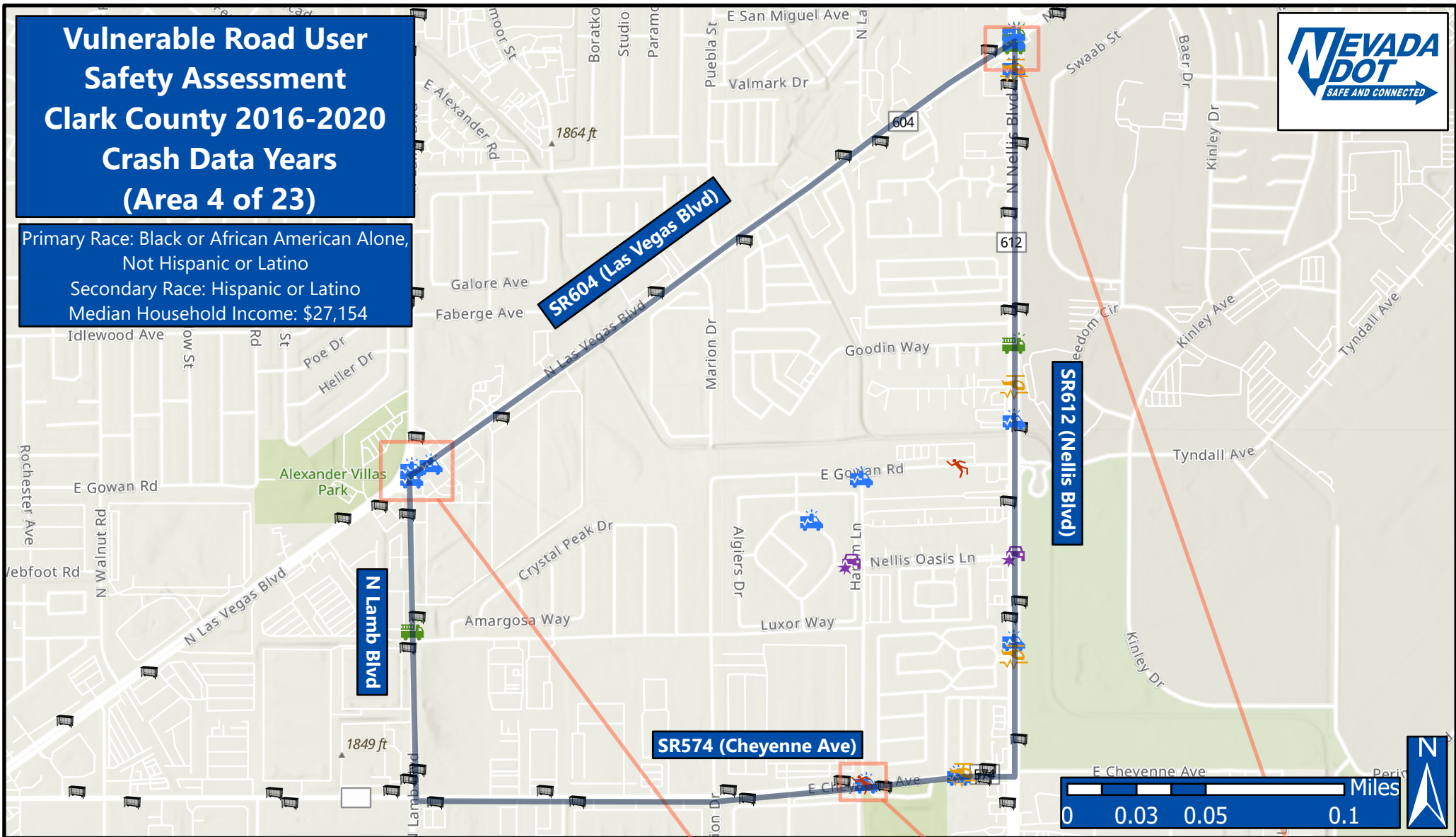
**N 10th St & Stewart Ave**



**E Bonanza Rd & N Bruce St**

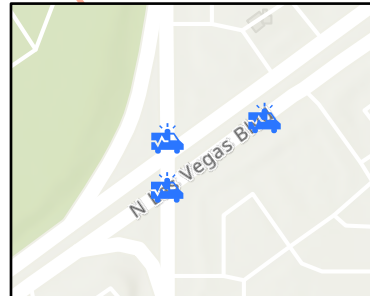
# Vulnerable Road User Safety Assessment Clark County 2016-2020 Crash Data Years (Area 4 of 23)

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Secondary Race: Hispanic or Latino  
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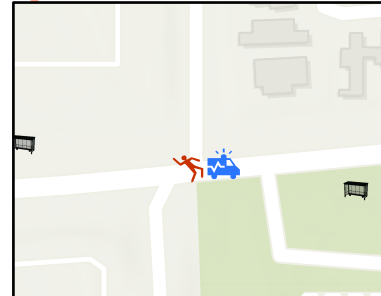


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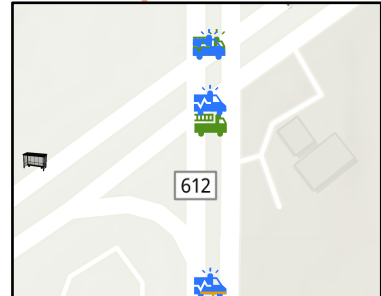
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- Non Serious Injury Crashes
- Claimed/Possible Injury Crashes
- Property Damage Only Crashes
- Bus Stops
- Emergency Clinic
- Hospitals
- Fire Stations
- Law Enforcement
- Tract Boundary



N Las Vegas Blvd & N Lamb Blvd



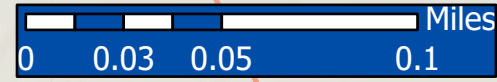
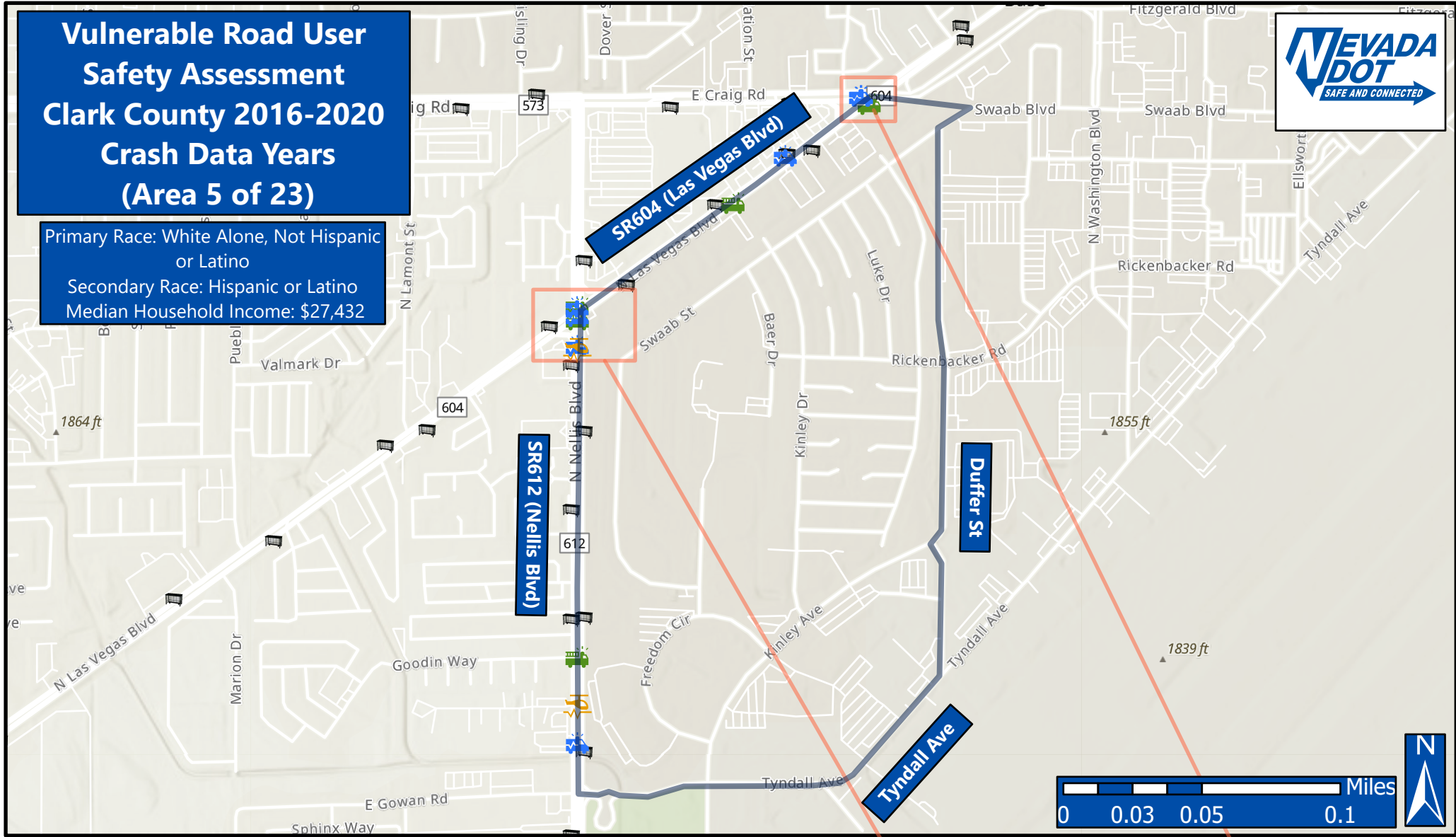
SR574 (Cheyenne Ave) & N Lamont St



SR604 (Las Vegas Blvd) & SR612 (Nellis Blvd)

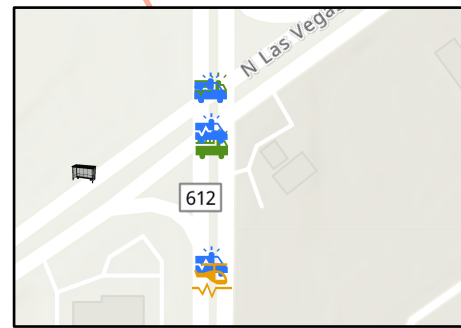
# Vulnerable Road User Safety Assessment Clark County 2016-2020 Crash Data Years (Area 5 of 23)

Primary Race: White Alone, Not Hispanic or Latino  
Secondary Race: Hispanic or Latino  
Median Household Income: \$27,432

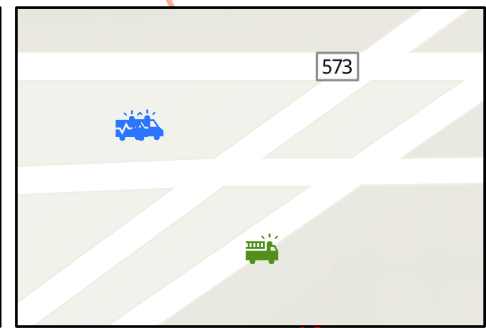


## Legend

- Fatal Crashes
- Serious Injury Crashes
- Non Serious Injury Crashes
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- Property Damage Only Crashes
- Bus Stops
- Emergency Clinic
- Hospitals
- Fire Stations
- Law Enforcement
- Tract Boundary



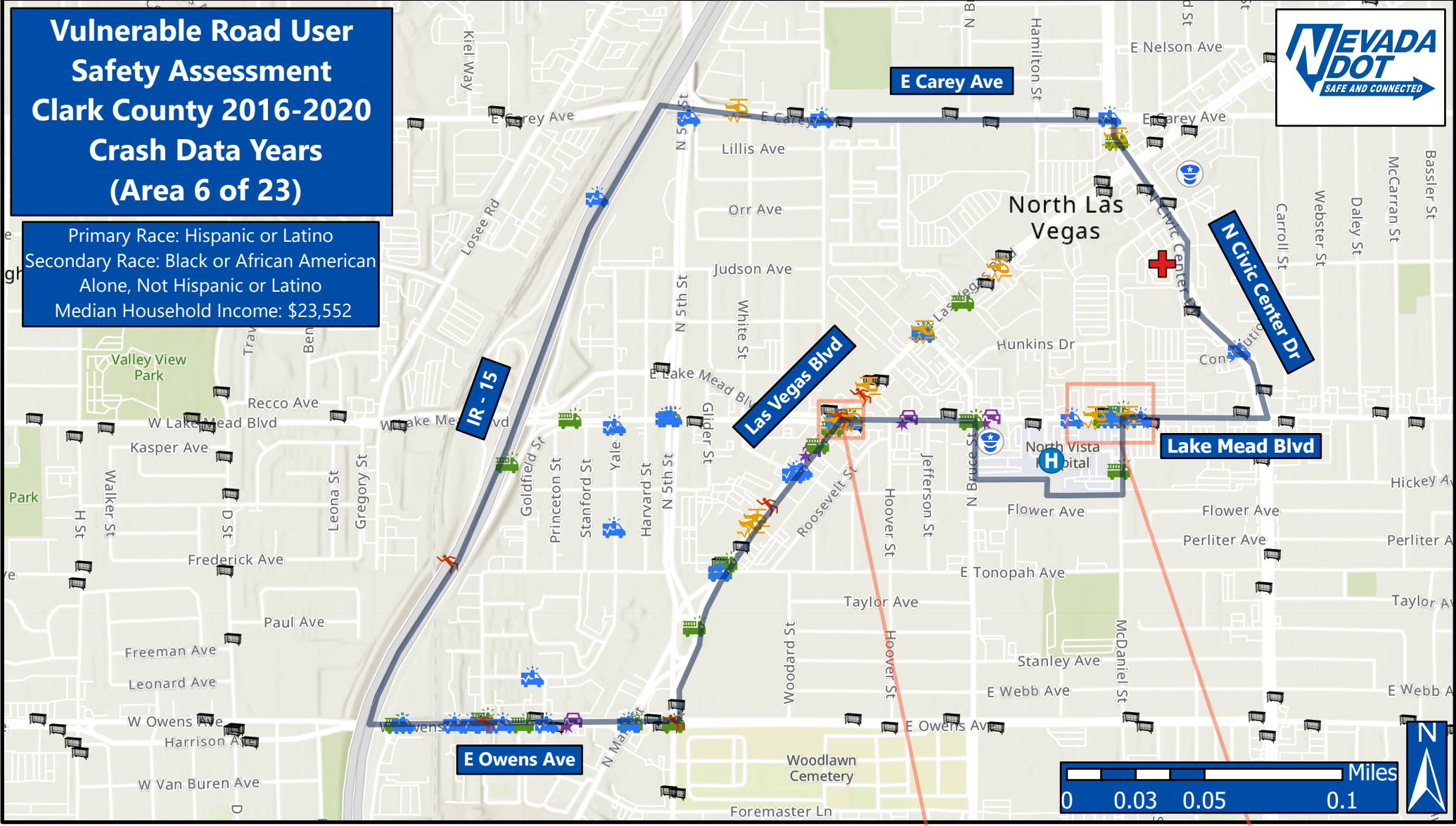
SR604 (Las Vegas Blvd) & SR612 (Nellis Blvd)



SR604 (Las Vegas Blvd) & Fitzgerald Blvd

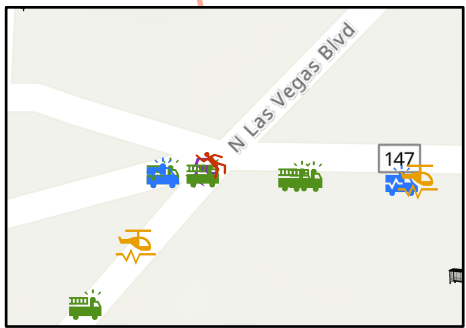
# Vulnerable Road User Safety Assessment Clark County 2016-2020 Crash Data Years (Area 6 of 23)

Primary Race: Hispanic or Latino  
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Median Household Income: \$23,552

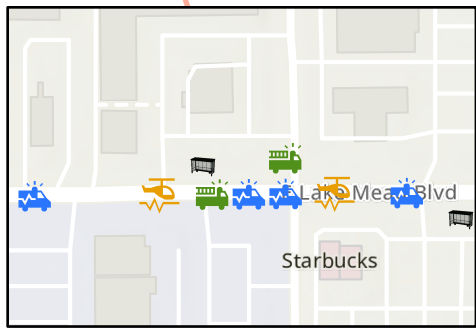


## Legend

- Fatal Crashes
- Serious Injury Crashes
- Non Serious Injury Crashes
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- Property Damage Only Crashes
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- Emergency Clinic
- Hospitals
- Fire Stations
- Law Enforcement
- Tract Boundary



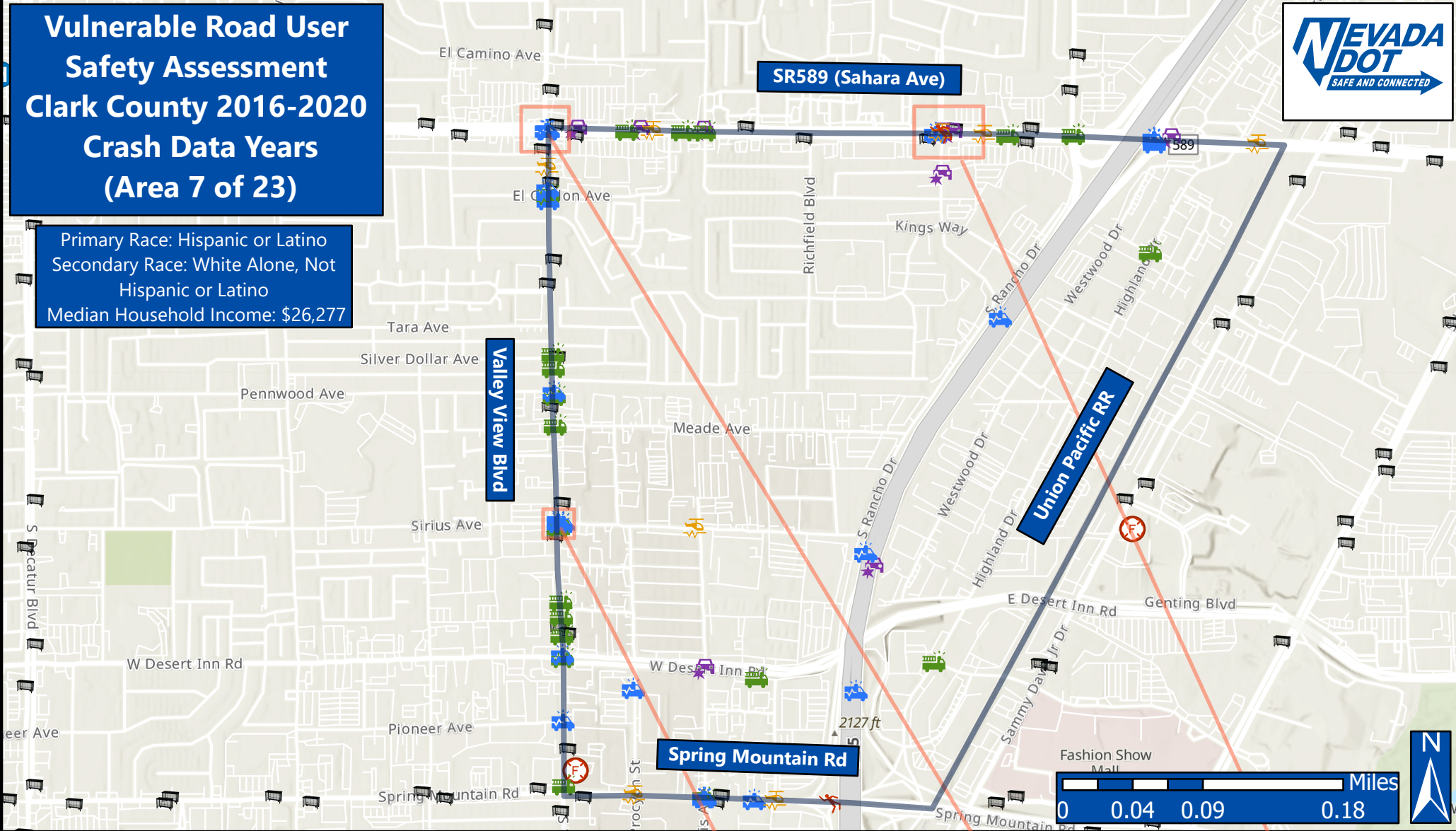
Las Vegas Blvd & Lake Mead Blvd



Lake Mead Blvd & McDaniel St

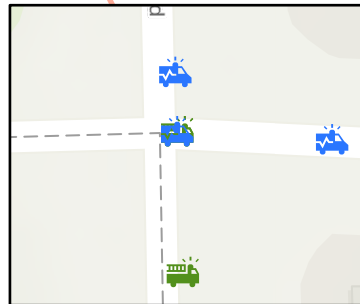
# Vulnerable Road User Safety Assessment Clark County 2016-2020 Crash Data Years (Area 7 of 23)

Primary Race: Hispanic or Latino  
Secondary Race: White Alone, Not Hispanic or Latino  
Median Household Income: \$26,277

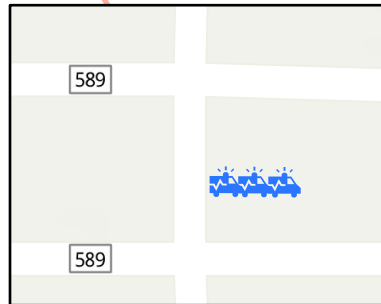


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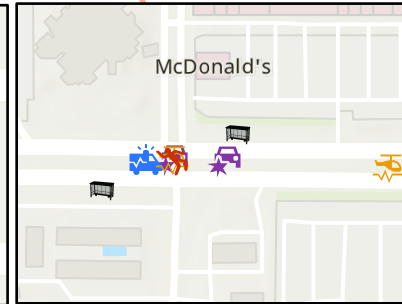
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- Non Serious Injury Crashes
- Claimed/Possible Injury Crashes
- Property Damage Only Crashes
- Bus Stops
- Emergency Clinic
- Hospitals
- Fire Stations
- Law Enforcement
- Tract Boundary



Sirius Ave & Valley View Blvd



SR589 (Sahara Ave) & Valley View Blvd

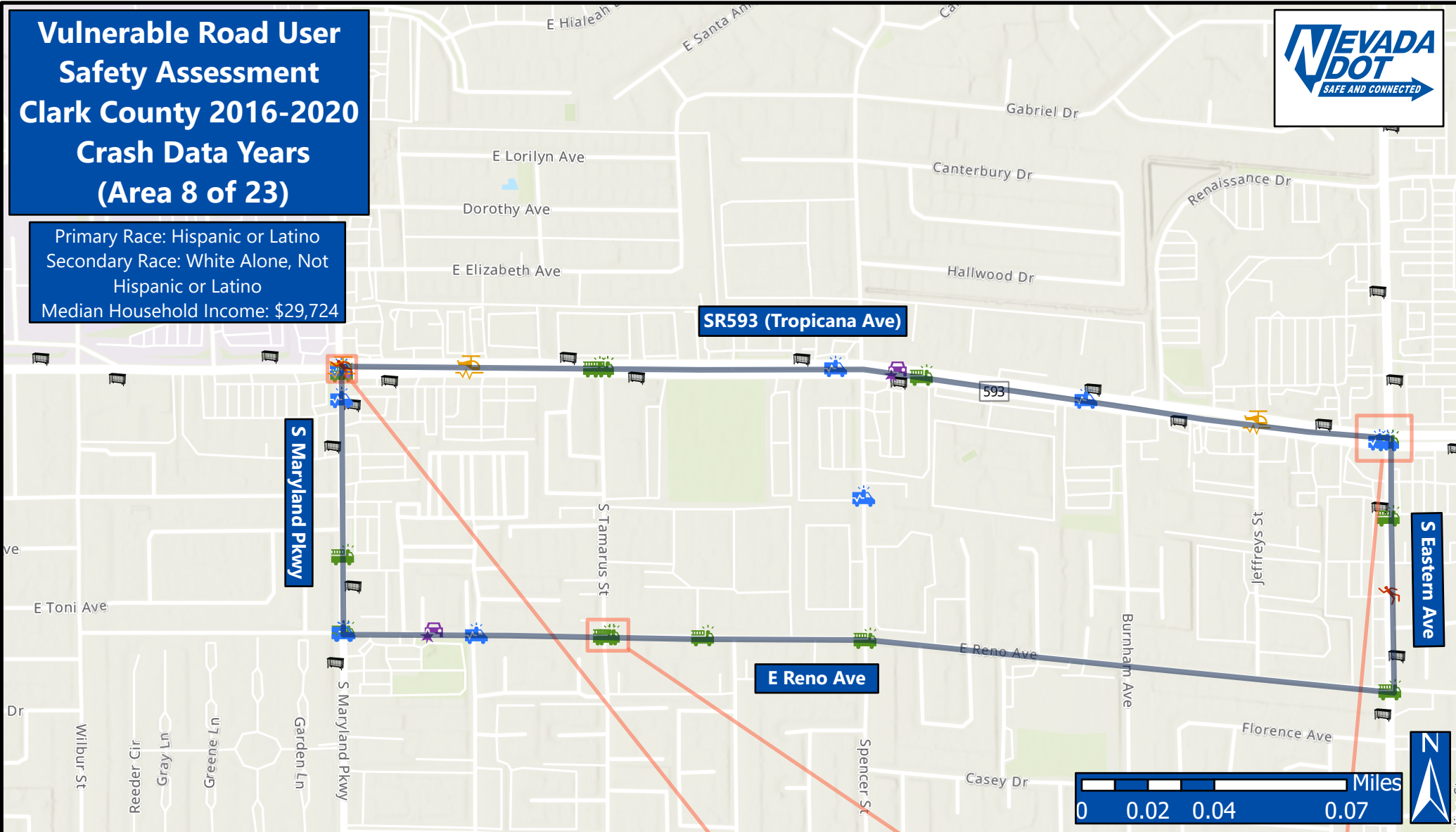


SR589 (Sahara Ave) & Teddy Dr

# Vulnerable Road User Safety Assessment Clark County 2016-2020 Crash Data Years (Area 8 of 23)

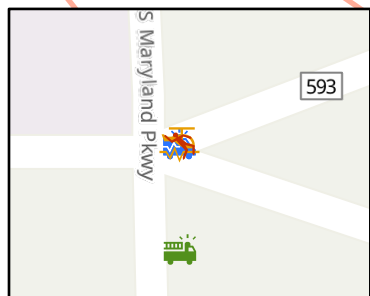


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Secondary Race: White Alone, Not Hispanic or Latino  
Median Household Income: \$29,724

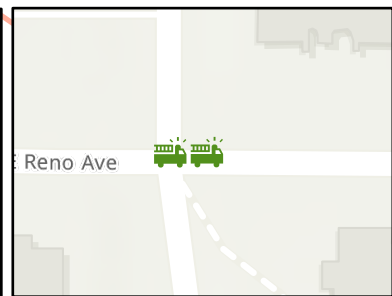


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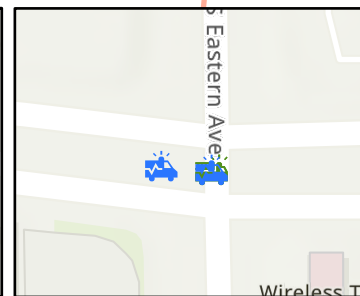
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- Non Serious Injury Crashes
- Claimed/Possible Injury Crashes
- Property Damage Only Crashes
- Bus Stops
- Emergency Clinic
- Hospitals
- Fire Stations
- Law Enforcement
- Tract Boundary



SR 593 (Tropicana Ave) & S Maryland Pkwy



S Tamarus St & E Reno Ave

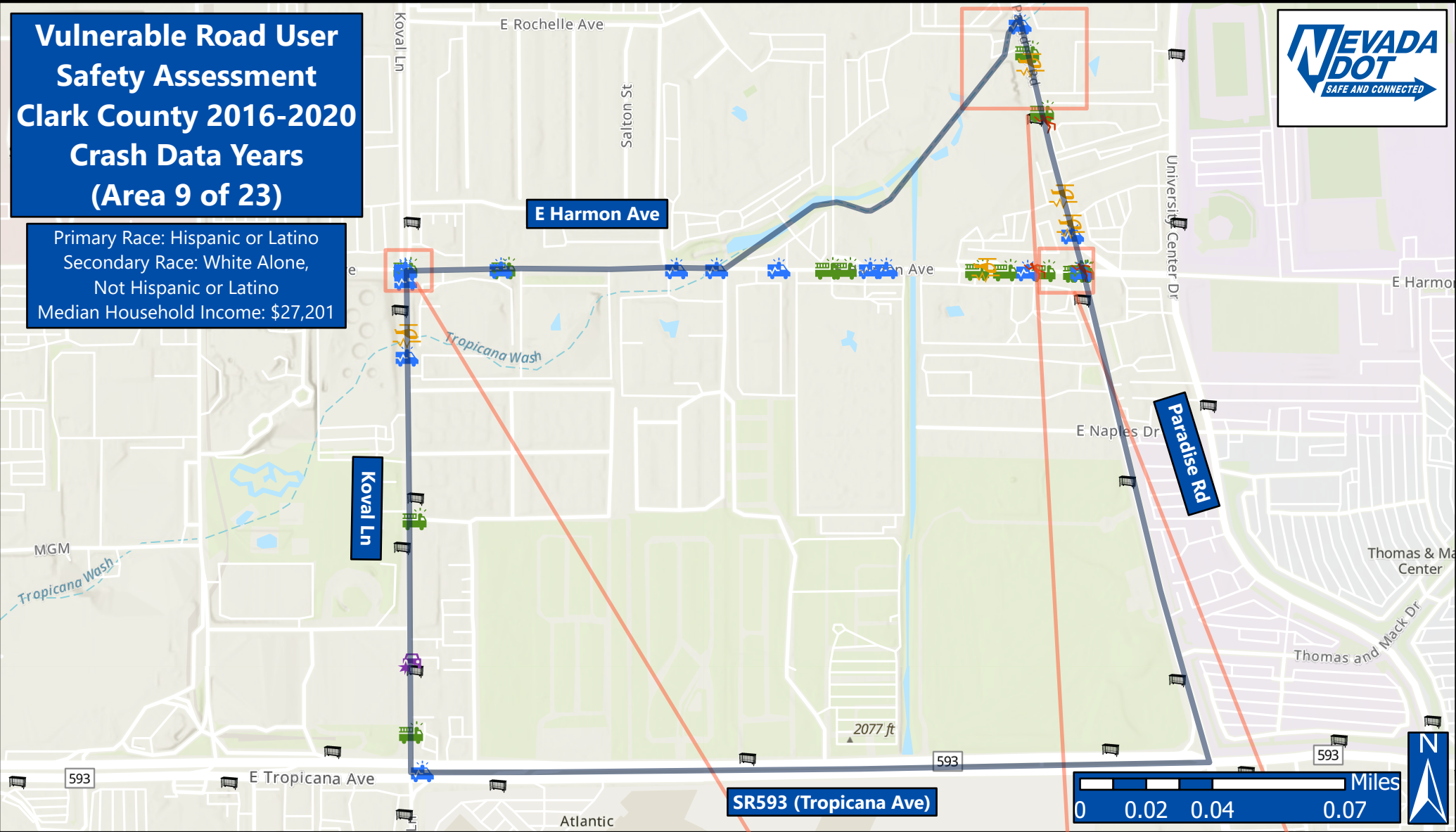


SR593 (Tropicana Ave) & S Eastern Ave



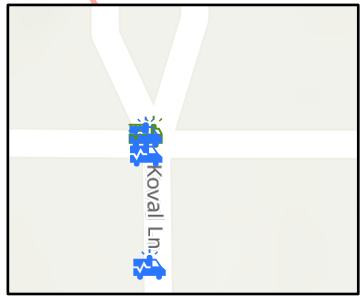
# Vulnerable Road User Safety Assessment Clark County 2016-2020 Crash Data Years (Area 9 of 23)

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 Secondary Race: White Alone,  
 Not Hispanic or Latino  
 Median Household Income: \$27,201



## Legend

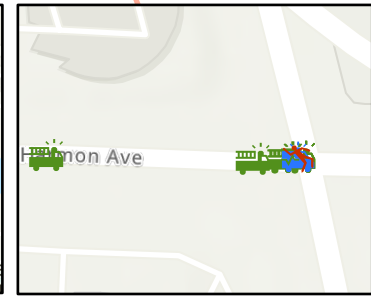
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- Non Serious Injury Crashes
- Claimed/Possible Injury Crashes
- Property Damage Only Crashes
- Bus Stops
- Emergency Clinic
- Hospitals
- Fire Stations
- Law Enforcement
- Tract Boundary



Koval Ln & E Harmon Ave



Paradise Rd

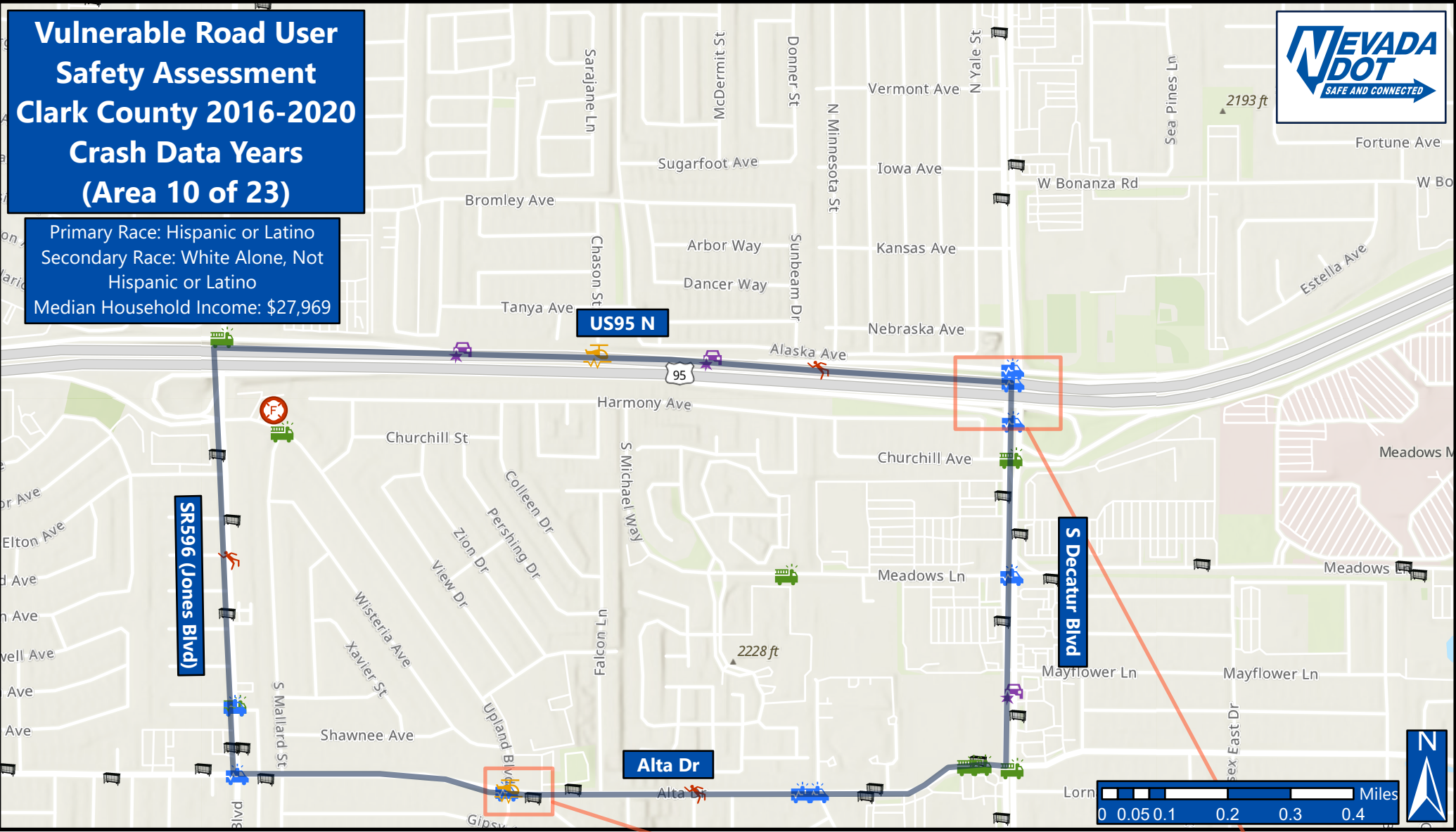


E Harmon Ave & Paradise Rd

# Vulnerable Road User Safety Assessment Clark County 2016-2020 Crash Data Years (Area 10 of 23)

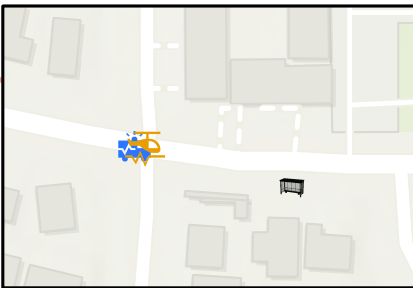


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Median Household Income: \$27,969

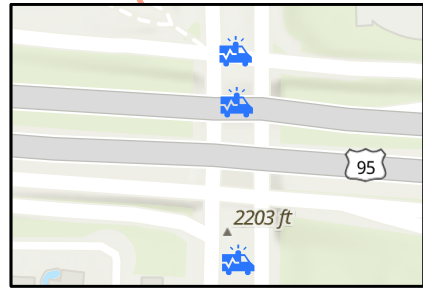


## Legend

- Fatal Crashes
- Serious Injury Crashes
- Non Serious Injury Crashes
- Claimed/Possible Injury Crashes
- Property Damage Only Crashes
- Bus Stops
- Emergency Clinics
- Hospitals
- Fire Stations
- Law Enforcement
- Tract Boundary



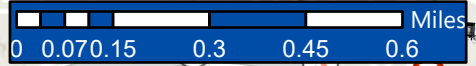
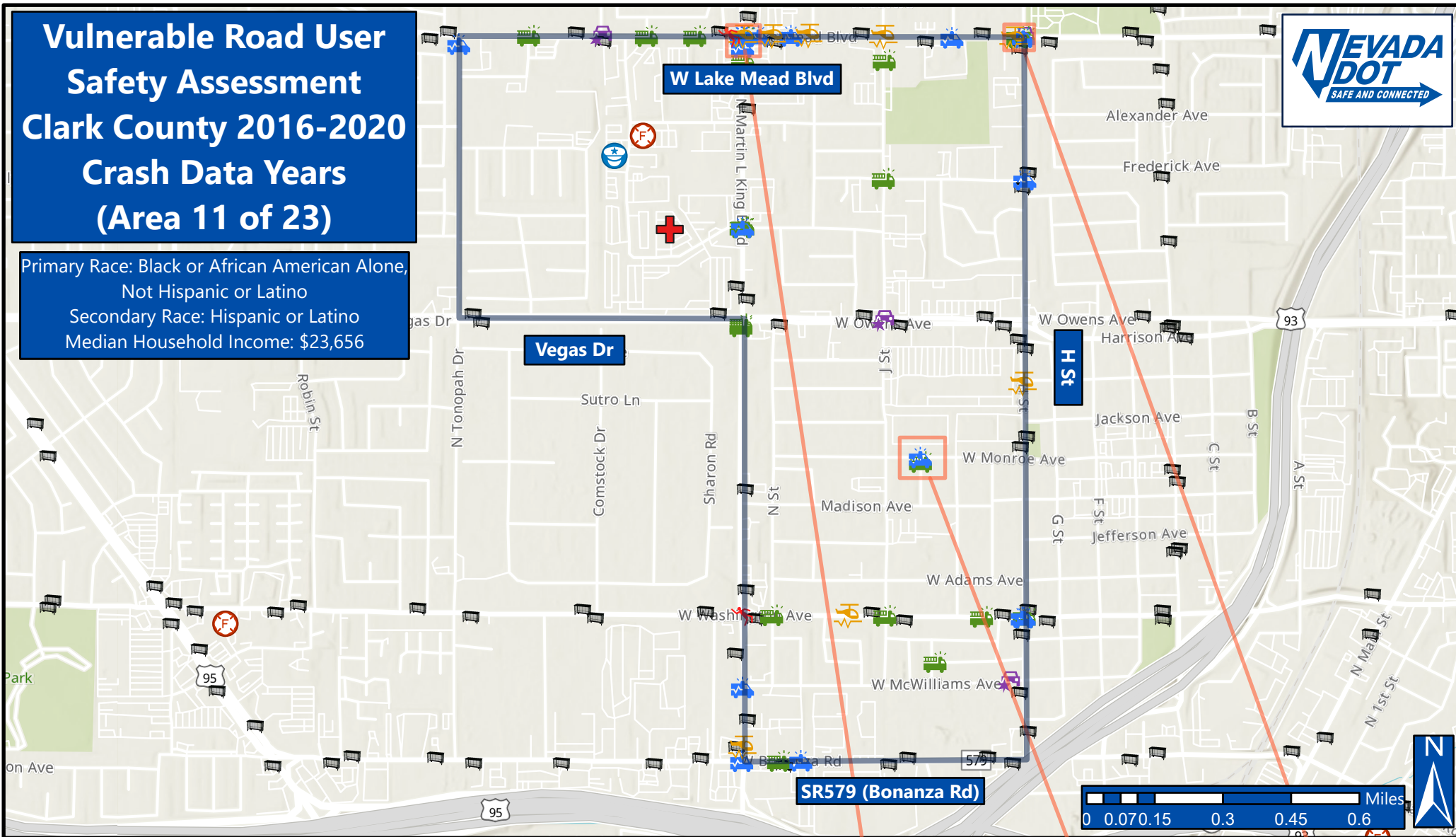
Alta Dr. & Upland Blvd



US 95 N & Decatur Blvd

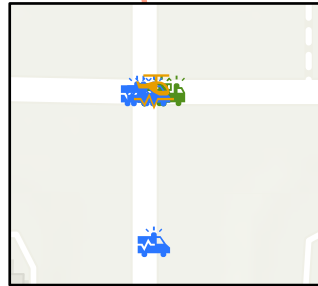
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Median Household Income: \$23,656

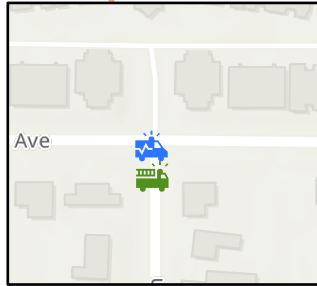


## Legend

- Fatal Crashes
- Serious Injury Crashes
- Non Serious Injury Crashes
- Claimed/Possible Injury Crashes
- Property Damage Only Crashes
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- Emergency Clinics
- Hospitals
- Fire Stations
- Law Enforcement
- Tract Boundary



W Lake Mead Blvd & N MLK Blvd



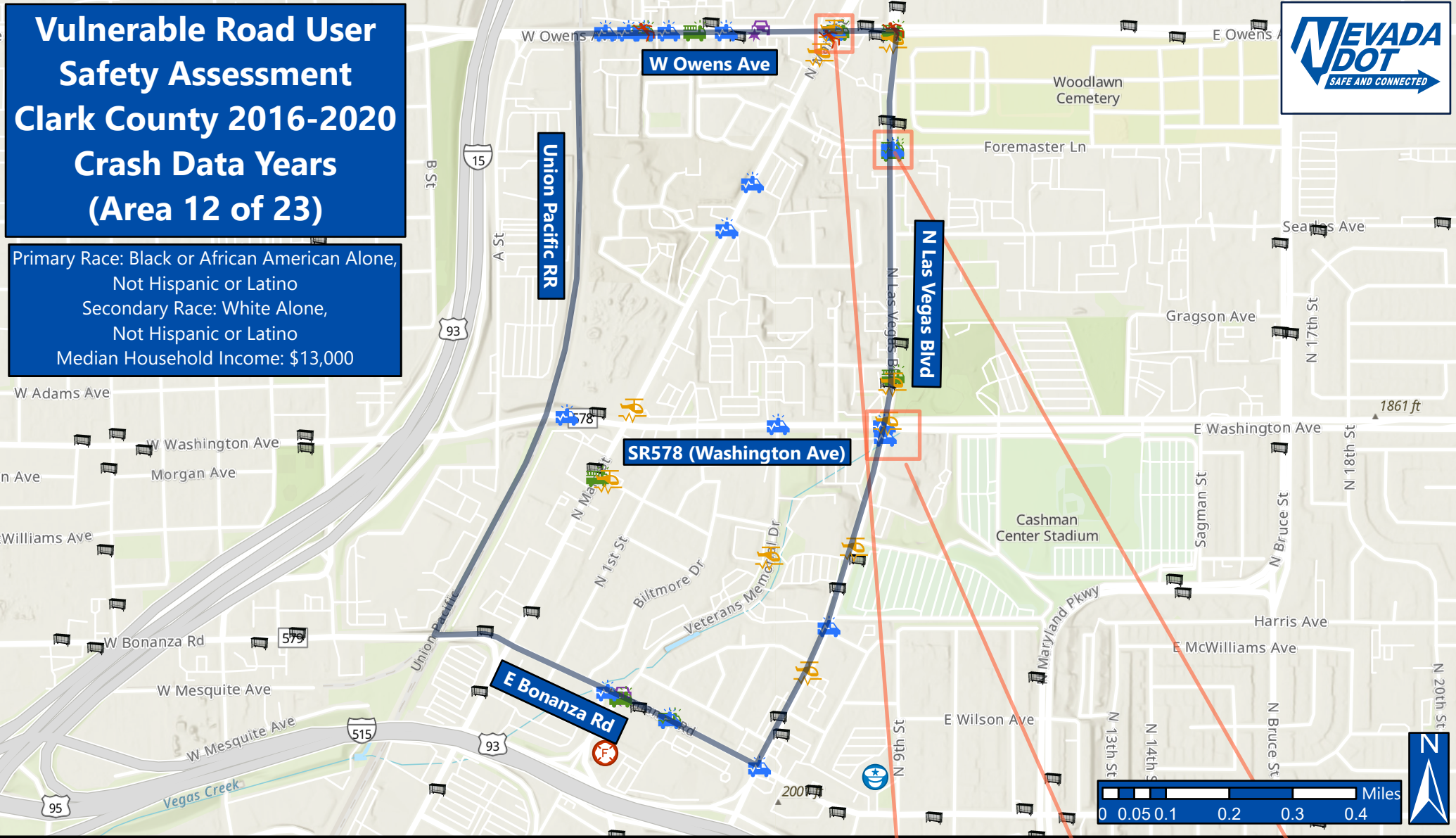
W Monroe Ave & Ivy Ln



W Lake Mead Blvd & Revere St

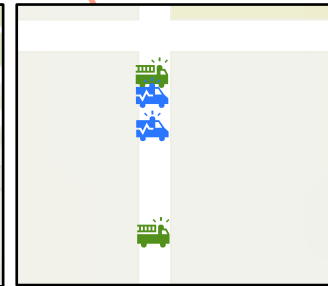
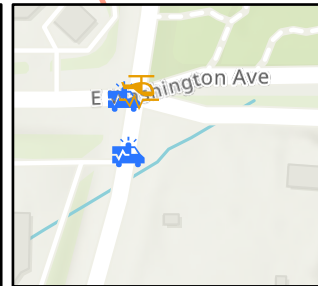
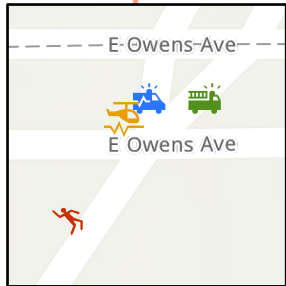
# Vulnerable Road User Safety Assessment Clark County 2016-2020 Crash Data Years (Area 12 of 23)

Primary Race: Black or African American Alone,  
Not Hispanic or Latino  
Secondary Race: White Alone,  
Not Hispanic or Latino  
Median Household Income: \$13,000



## Legend

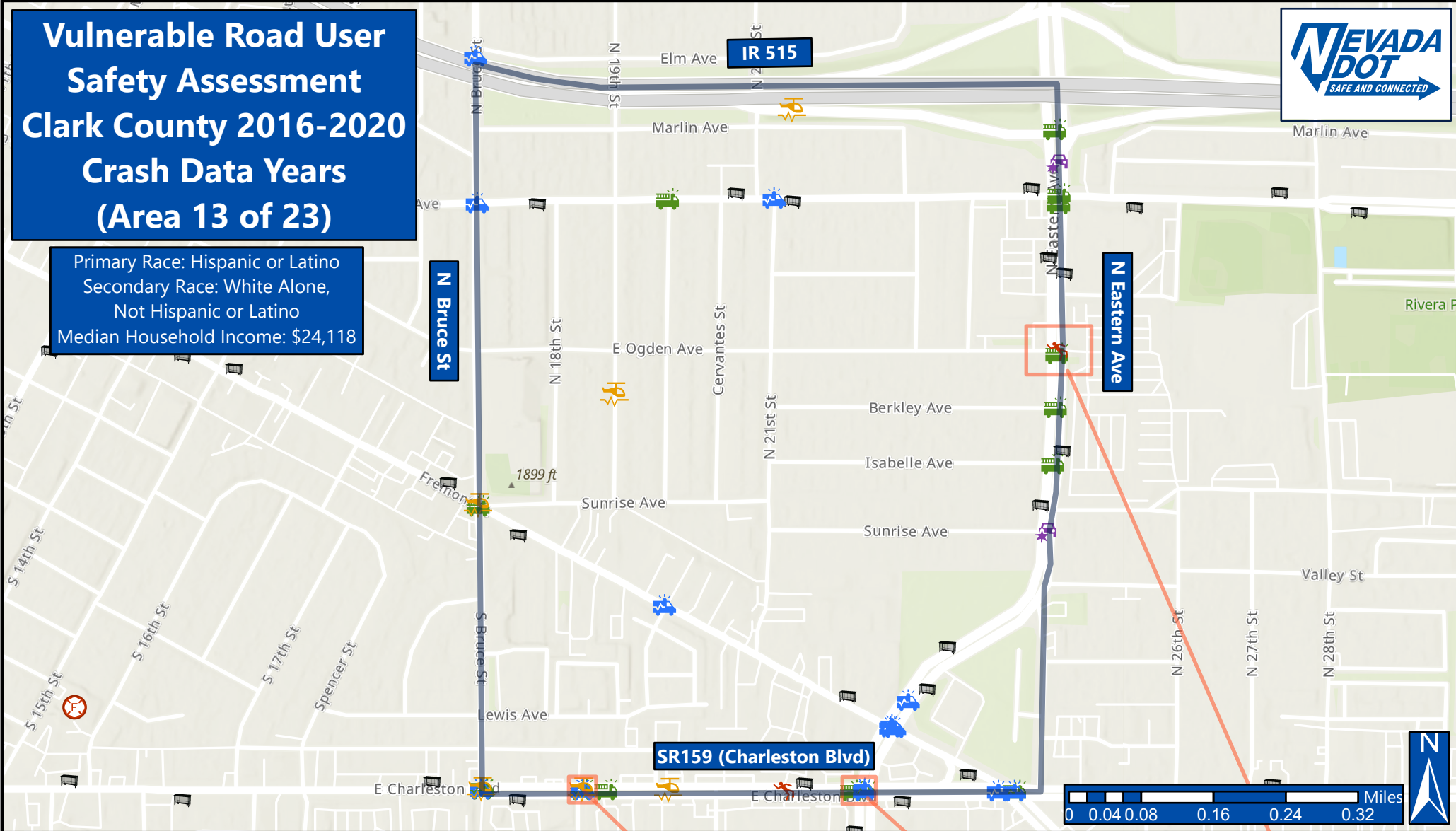
- Fatal Crashes
- Serious Injury Crashes
- Non Serious Injury Crashes
- Claimed/Possible Injury Crashes
- Property Damage Only Crashes
- Bus Stops
- Emergency Clinics
- Hospitals
- Fire Stations
- Law Enforcement
- Tract Boundary



# Vulnerable Road User Safety Assessment Clark County 2016-2020 Crash Data Years (Area 13 of 23)

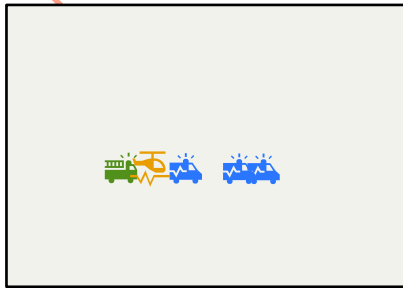


Primary Race: Hispanic or Latino  
Secondary Race: White Alone,  
Not Hispanic or Latino  
Median Household Income: \$24,118

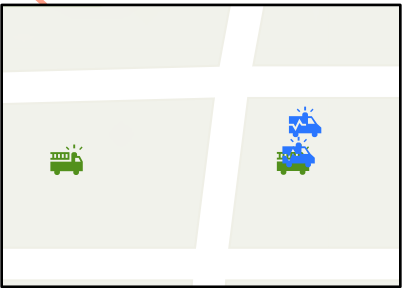


## Legend

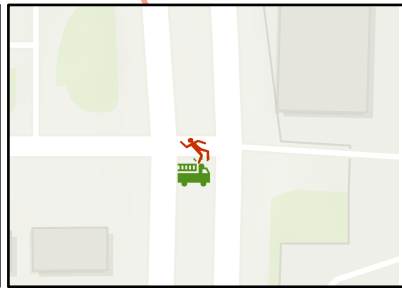
- Fatal Crashes
- Serious Injury Crashes
- Non Serious Injury Crashes
- Claimed/Possible Injury Crashes
- Property Damage Only Crashes
- Bus Stops
- Emergency Clinics
- Hospitals
- Fire Stations
- Law Enforcement
- Tract boundary



SR159 (Charleston Blvd)  
& Burnham Ave



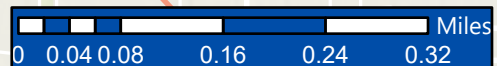
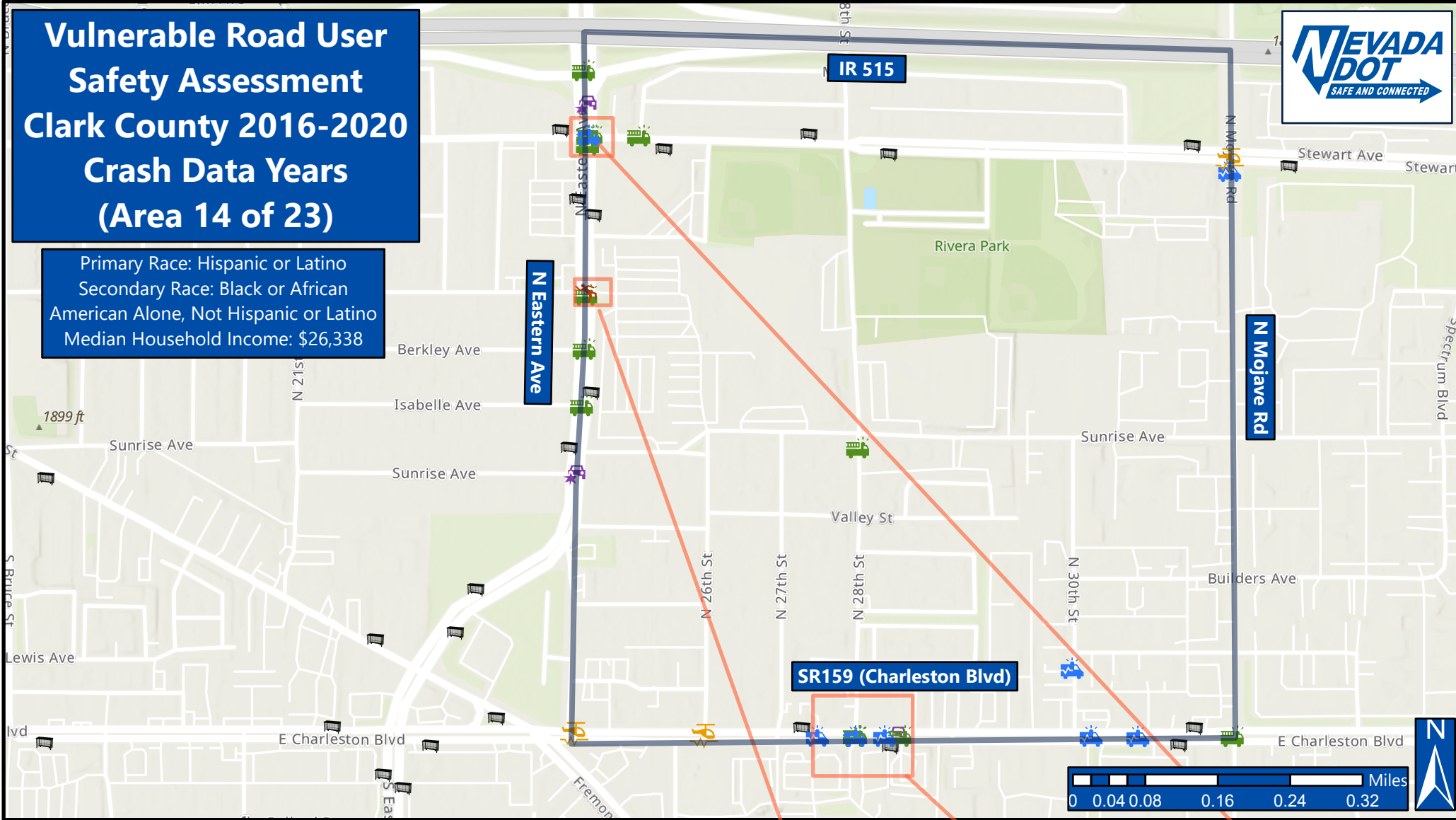
SR159 (Charleston Blvd)  
& Eastern Ave



Eastern Ave &  
Ogden Ave

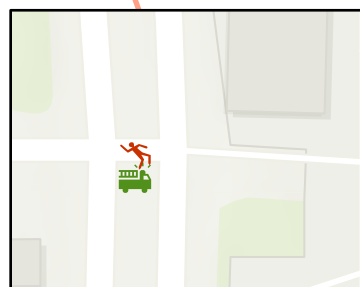
# Vulnerable Road User Safety Assessment Clark County 2016-2020 Crash Data Years (Area 14 of 23)

Primary Race: Hispanic or Latino  
Secondary Race: Black or African American Alone, Not Hispanic or Latino  
Median Household Income: \$26,338

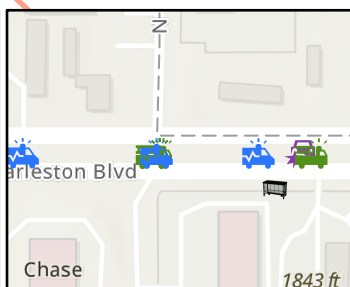


## Legend

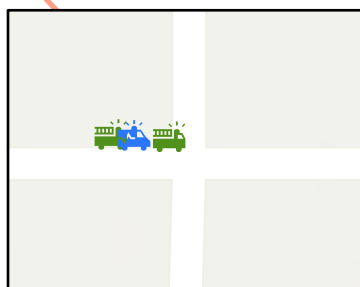
- Fatal Crashes
- Serious Injury Crashes
- Non Serious Injury Crashes
- Claimed/Possible Injury Crashes
- Property Damage Only Crashes
- Bus Stops
- Emergency Clinics
- Hospitals
- Fire Stations
- Law Enforcement
- Tract Boundary



Eastern Ave & E Ogden Ave



SR159 (Charleston Blvd) & 28th St

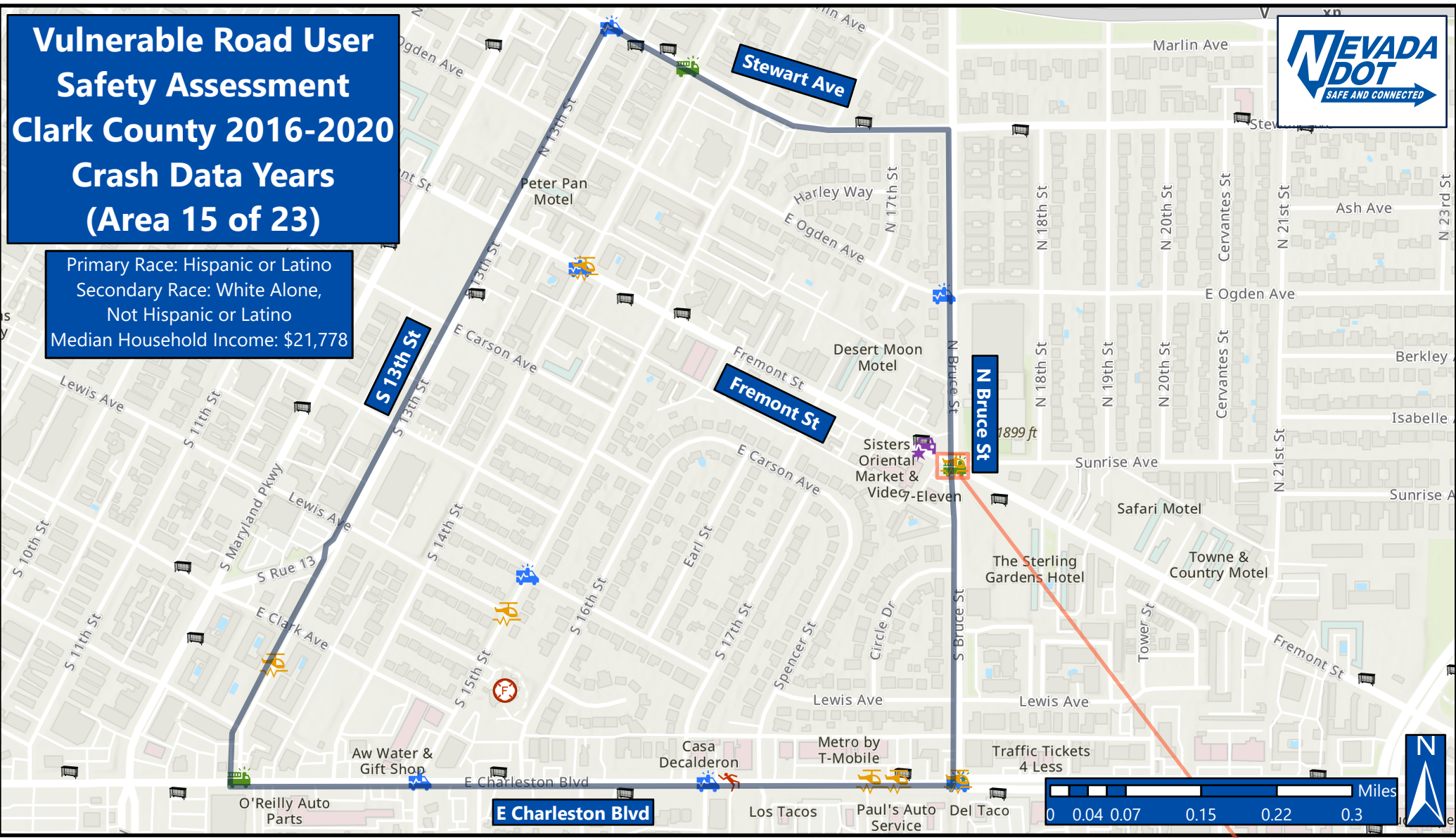


Stewart Ave & N Eastern Ave

# Vulnerable Road User Safety Assessment Clark County 2016-2020 Crash Data Years (Area 15 of 23)



Primary Race: Hispanic or Latino  
Secondary Race: White Alone,  
Not Hispanic or Latino  
Median Household Income: \$21,778



## Legend

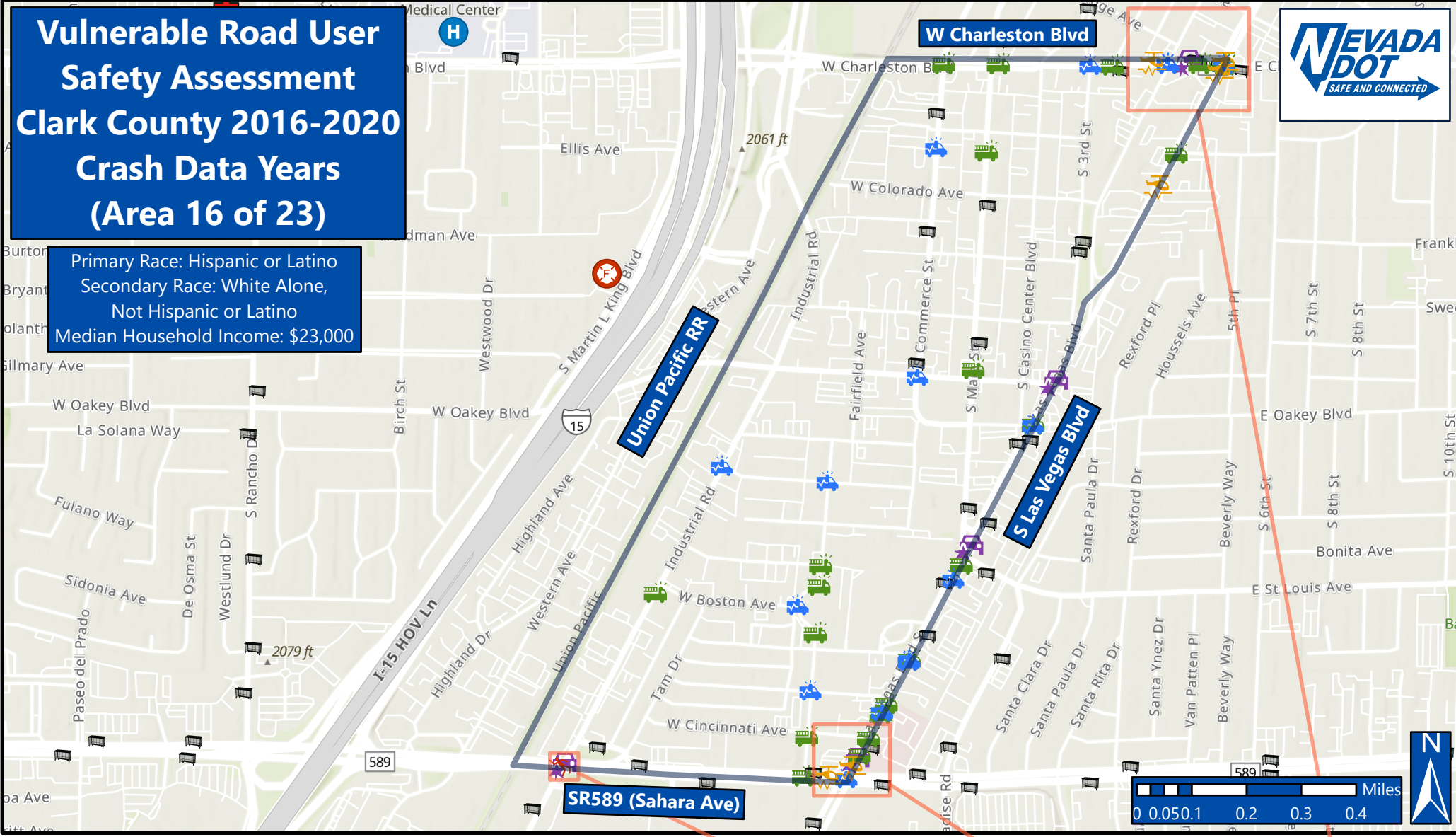
- Fatal Crashes
- Serious Injury Crashes
- Non Serious Injury Crashes
- Claimed/Possible Injury Crashes
- Property Damage Only Crashes
- Bus Stops
- Emergency Clinics
- Hospitals
- Fire Stations
- Law Enforcement
- Tract Boundary



S Bruce St &  
Fremont St

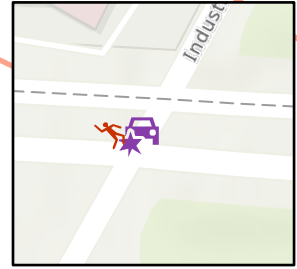
# Vulnerable Road User Safety Assessment Clark County 2016-2020 Crash Data Years (Area 16 of 23)

Primary Race: Hispanic or Latino  
 Secondary Race: White Alone,  
 Not Hispanic or Latino  
 Median Household Income: \$23,000

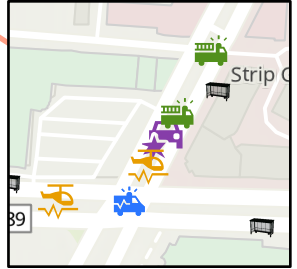


## Legend

- Fatal Crashes
- Serious Injury Crashes
- Non Serious Injury Crashes
- Claimed/Possible Injury Crashes
- Property Damage Only Crashes
- Bus Stops
- Emergency Clinics
- Hospitals
- Fire Stations
- Law Enforcement
- Tract Boundary



SR589 (Sahara Ave) & Industrial Rd



SR 589 (Sahara Ave) & S Las Vegas Blvd



W Charleston Blvd & S 4th St



# Vulnerable Road User Safety Assessment Clark County 2016-2020 Crash Data Years (Area 17 of 23)



Primary Race: White Alone,  
Not Hispanic or Latino  
Secondary Race: Hispanic or Latino  
Median Household Income: \$27,181

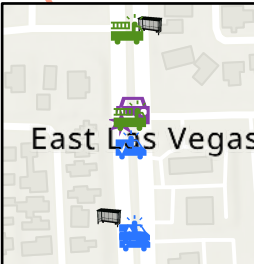


## Legend

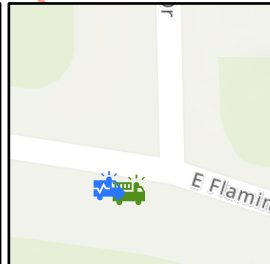
- Fatal Crashes
- Serious Injury Crashes
- Non Serious Injury Crashes
- Claimed/Possible Injury Crashes
- Property Damage Only Crashes
- Bus Stops
- Emergency Clinics
- Hospitals
- Fire Stations
- Law Enforcement
- Tract Boundary



**SR612 (Nellis Blvd)  
& E Flamingo Rd**



**SR612 (Nellis Blvd)  
& Twain Ave**

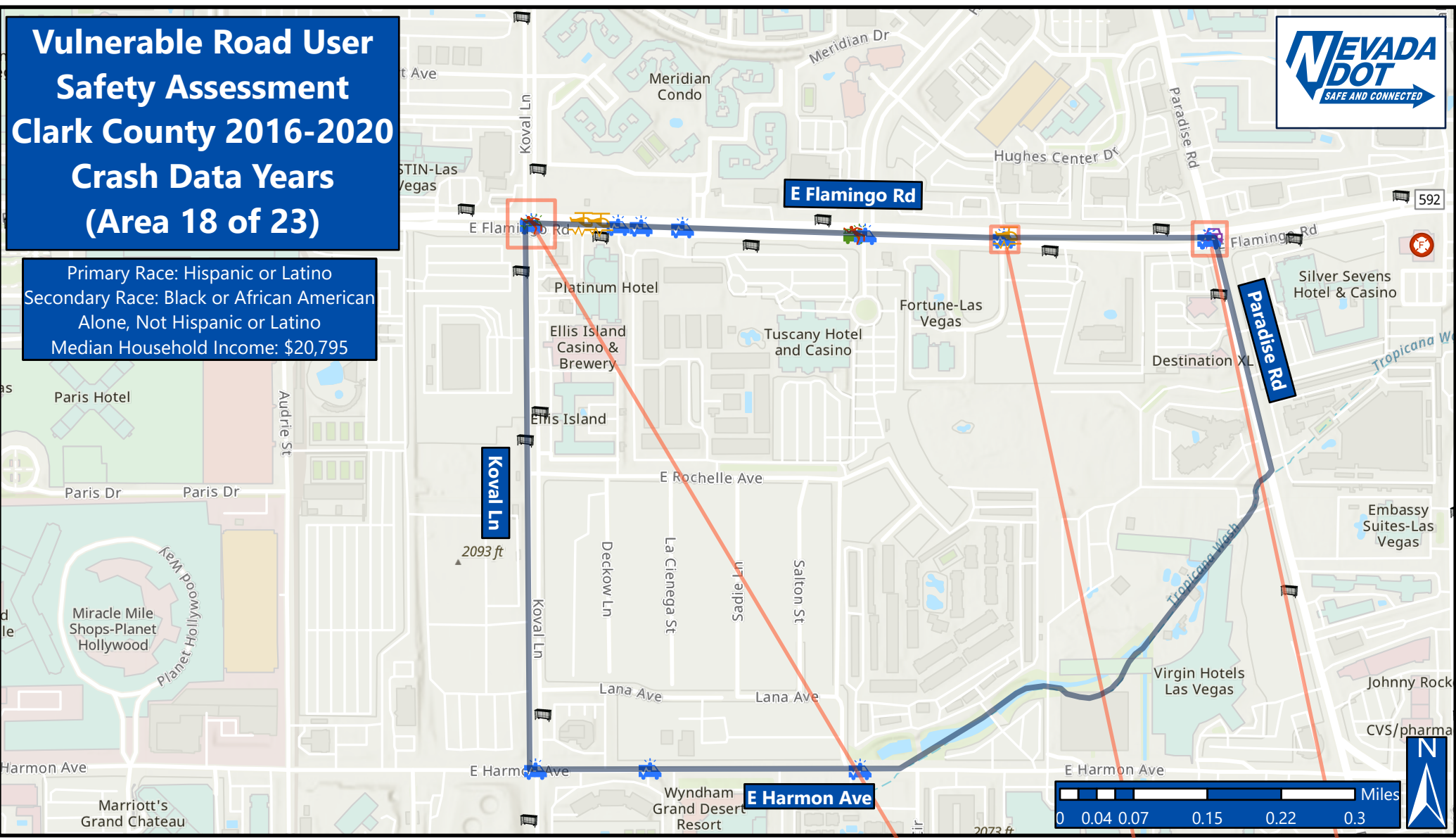


**E Flamingo Rd &  
W Cabana Dr**

# Vulnerable Road User Safety Assessment Clark County 2016-2020 Crash Data Years (Area 18 of 23)

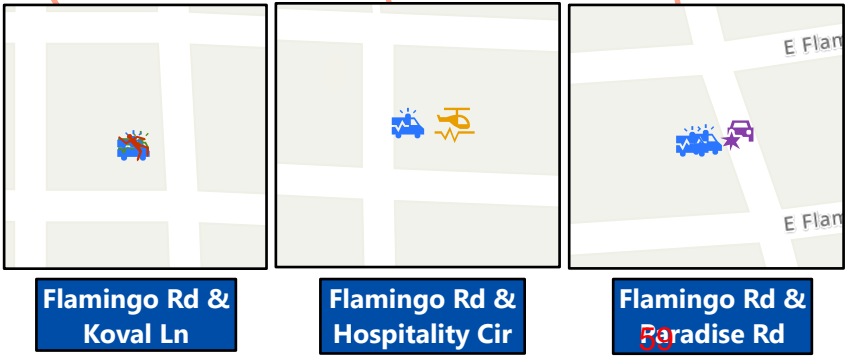


Primary Race: Hispanic or Latino  
Secondary Race: Black or African American  
Alone, Not Hispanic or Latino  
Median Household Income: \$20,795



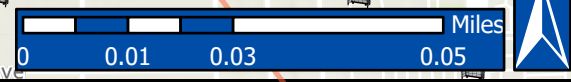
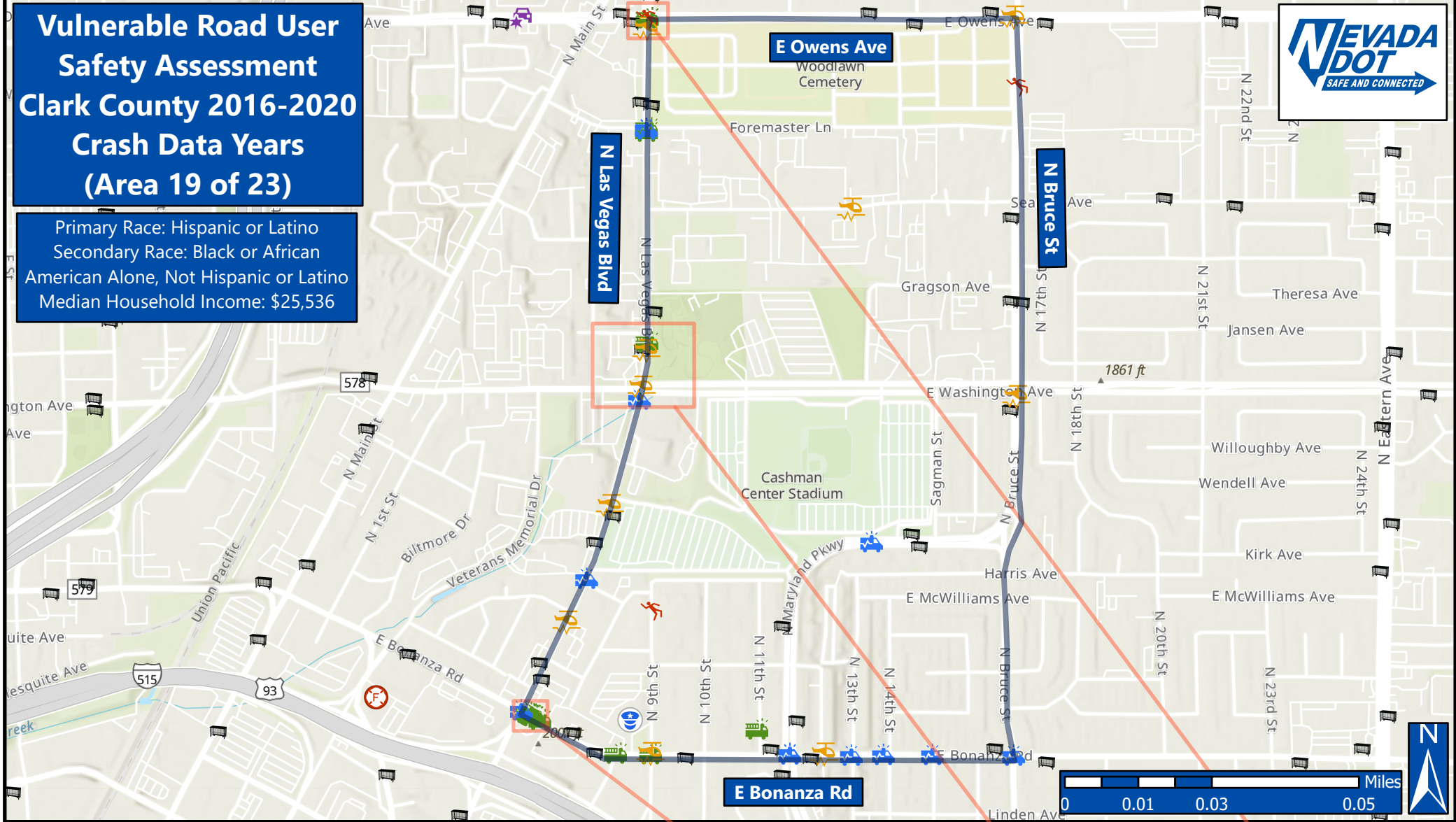
## Legend

- Fatal Crashes
- Serious Injury Crashes
- Non Serious Injury Crashes
- Claimed/Possible Injury Crashes
- Property Damage Only Crashes
- Bus Stops
- Emergency Clinics
- Hospitals
- Fire Stations
- Law Enforcement
- Tract Boundary



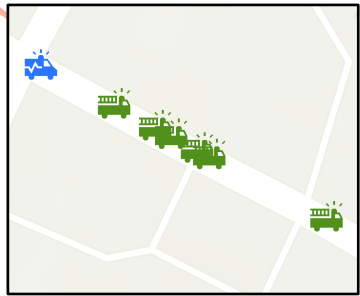
# Vulnerable Road User Safety Assessment Clark County 2016-2020 Crash Data Years (Area 19 of 23)

Primary Race: Hispanic or Latino  
 Secondary Race: Black or African American Alone, Not Hispanic or Latino  
 Median Household Income: \$25,536

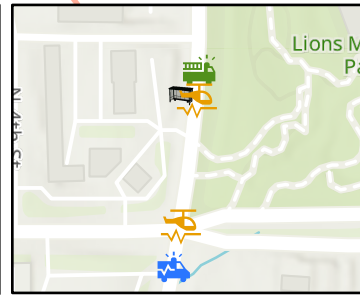


## Legend

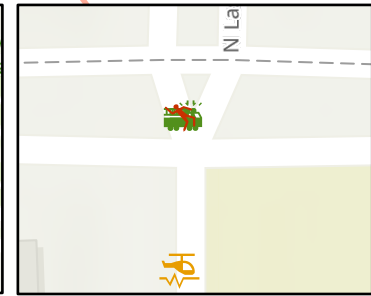
- Fatal Crashes
- Serious Injury Crashes
- Non Serious Injury Crashes
- Claimed/Possible Injury Crashes
- Property Damage Only Crashes
- Bus Stops
- Emergency Clinic
- Hospitals
- Fire Stations
- Law Enforcement
- Tract Boundary



N Las Vegas Blvd & E Bonanza Rd



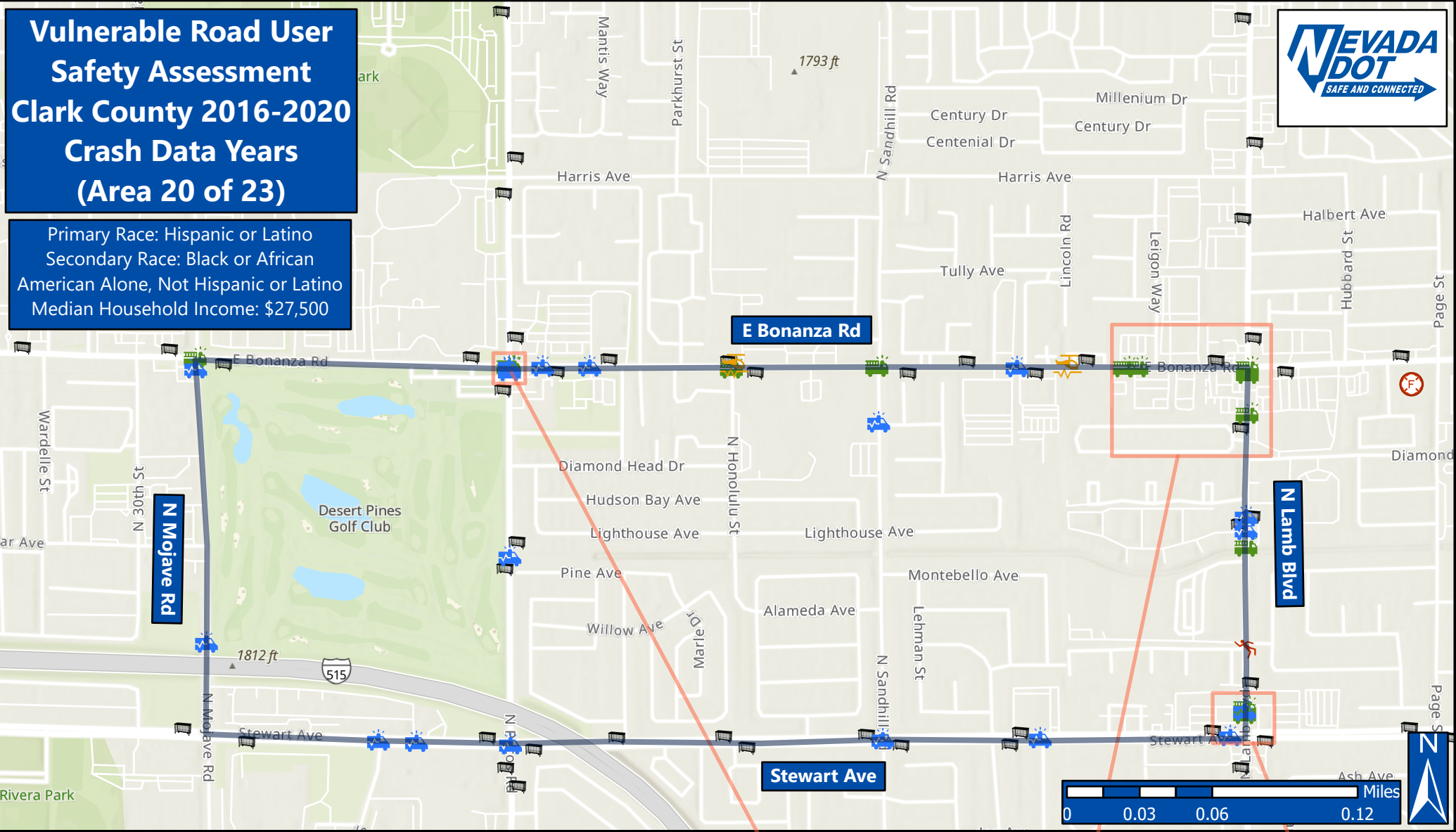
N Las Vegas Blvd



E Owens Ave & N Las Vegas Blvd

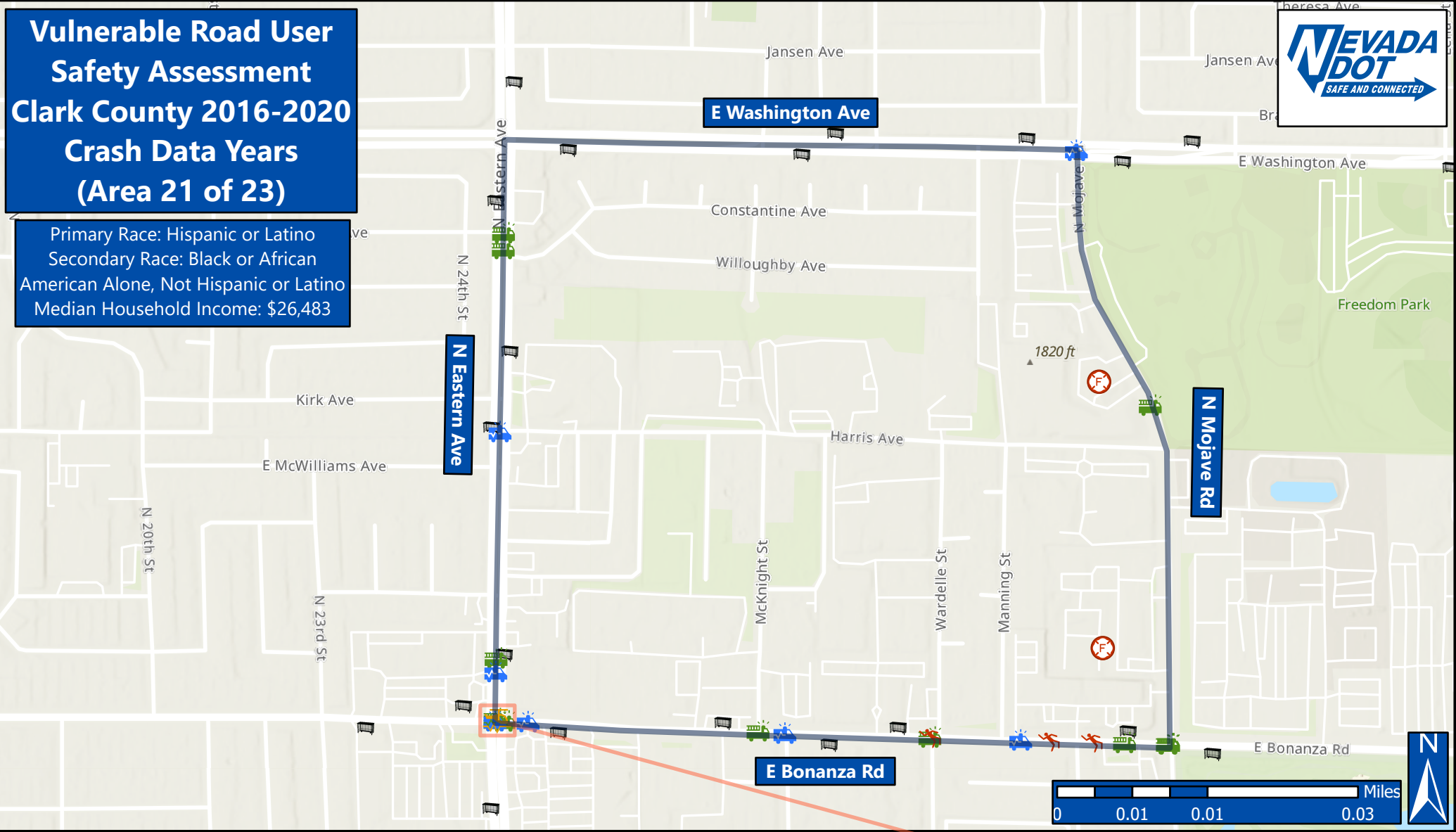
# Vulnerable Road User Safety Assessment Clark County 2016-2020 Crash Data Years (Area 20 of 23)

Primary Race: Hispanic or Latino  
Secondary Race: Black or African American Alone, Not Hispanic or Latino  
Median Household Income: \$27,500



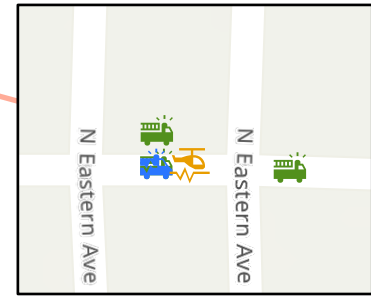
# Vulnerable Road User Safety Assessment Clark County 2016-2020 Crash Data Years (Area 21 of 23)

Primary Race: Hispanic or Latino  
 Secondary Race: Black or African  
 American Alone, Not Hispanic or Latino  
 Median Household Income: \$26,483



## Legend

- |                                 |                  |
|---------------------------------|------------------|
| Fatal Crashes                   | Bus Stops        |
| Serious Injury Crashes          | Emergency Clinic |
| Non Serious Injury Crashes      | Hospitals        |
| Claimed/Possible Injury Crashes | Fire Stations    |
| Property Damage Only Crashes    | Law Enforcement  |
|                                 | Tract Boundary   |

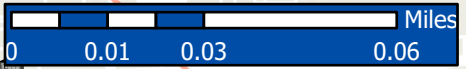
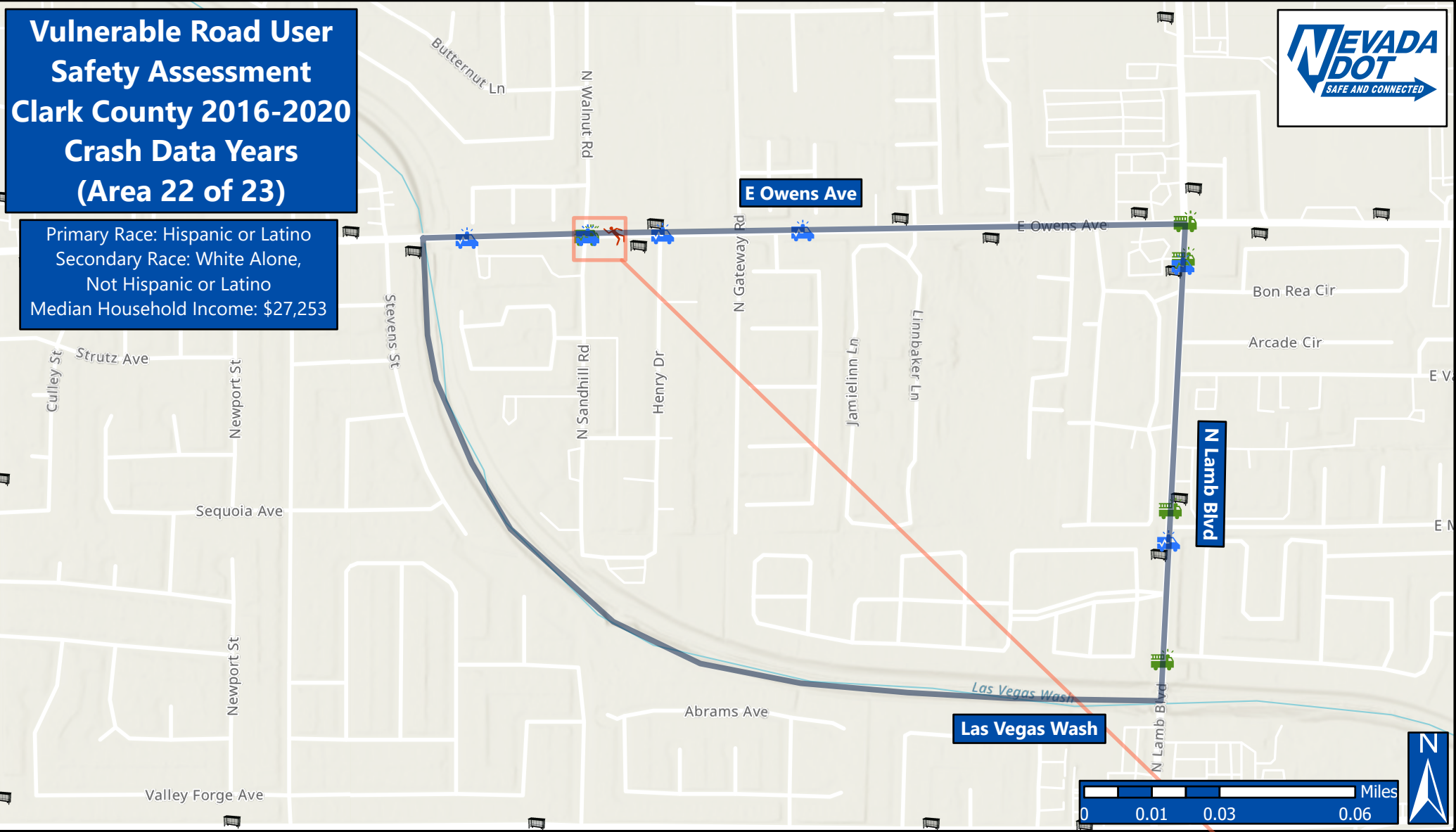


**E Bonanza Rd &  
N Eastern Ave**

# Vulnerable Road User Safety Assessment Clark County 2016-2020 Crash Data Years (Area 22 of 23)

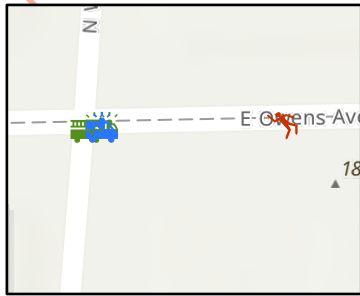


Primary Race: Hispanic or Latino  
 Secondary Race: White Alone,  
 Not Hispanic or Latino  
 Median Household Income: \$27,253



## Legend

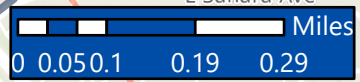
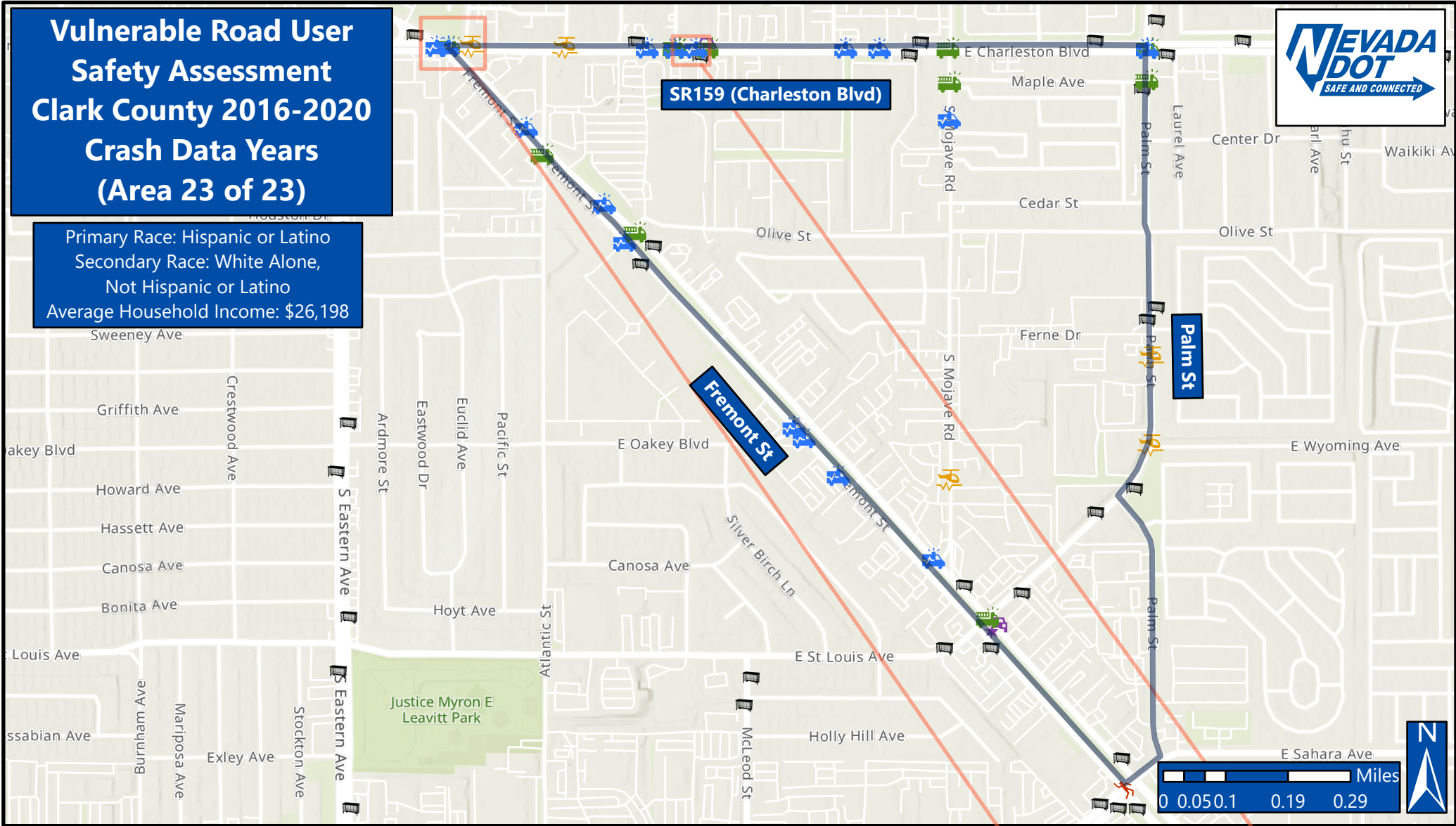
- Fatal Crashes
- Serious Injury Crashes
- Non Serious Injury Crashes
- Claimed/Possible Injury Crashes
- Property Damage Only Crashes
- Bus Stops
- Emergency Clinic
- Hospitals
- Fire Stations
- Law Enforcement
- Tract Boundary



**E Owens Ave &  
N Walnut Rd**

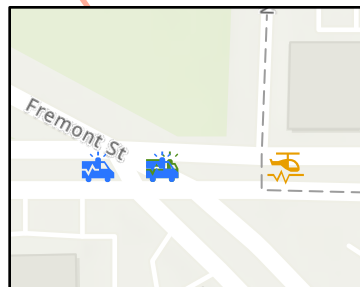
# Vulnerable Road User Safety Assessment Clark County 2016-2020 Crash Data Years (Area 23 of 23)

Primary Race: Hispanic or Latino  
Secondary Race: White Alone,  
Not Hispanic or Latino  
Average Household Income: \$26,198

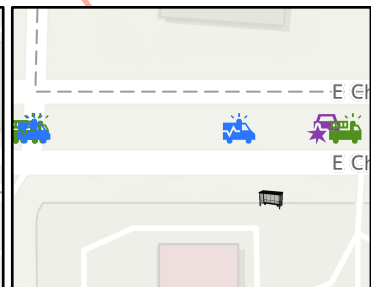


## Legend

- |                                 |                  |
|---------------------------------|------------------|
| Fatal Crashes                   | Bus Stops        |
| Serious Injury Crashes          | Emergency Clinic |
| Non Serious Injury Crashes      | Hospitals        |
| Claimed/Possible Injury Crashes | Fire Stations    |
| Property Damage Only Crashes    | Law Enforcement  |
|                                 | Tract Boundary   |



SR159 (Charleston Blvd) & Fremont St



SR159 (Charleston Blvd) & N 28th St

**APPENDIX B**

**Washoe County VRU Census Tract Maps**

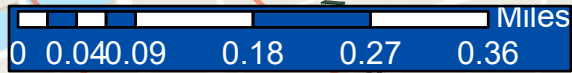
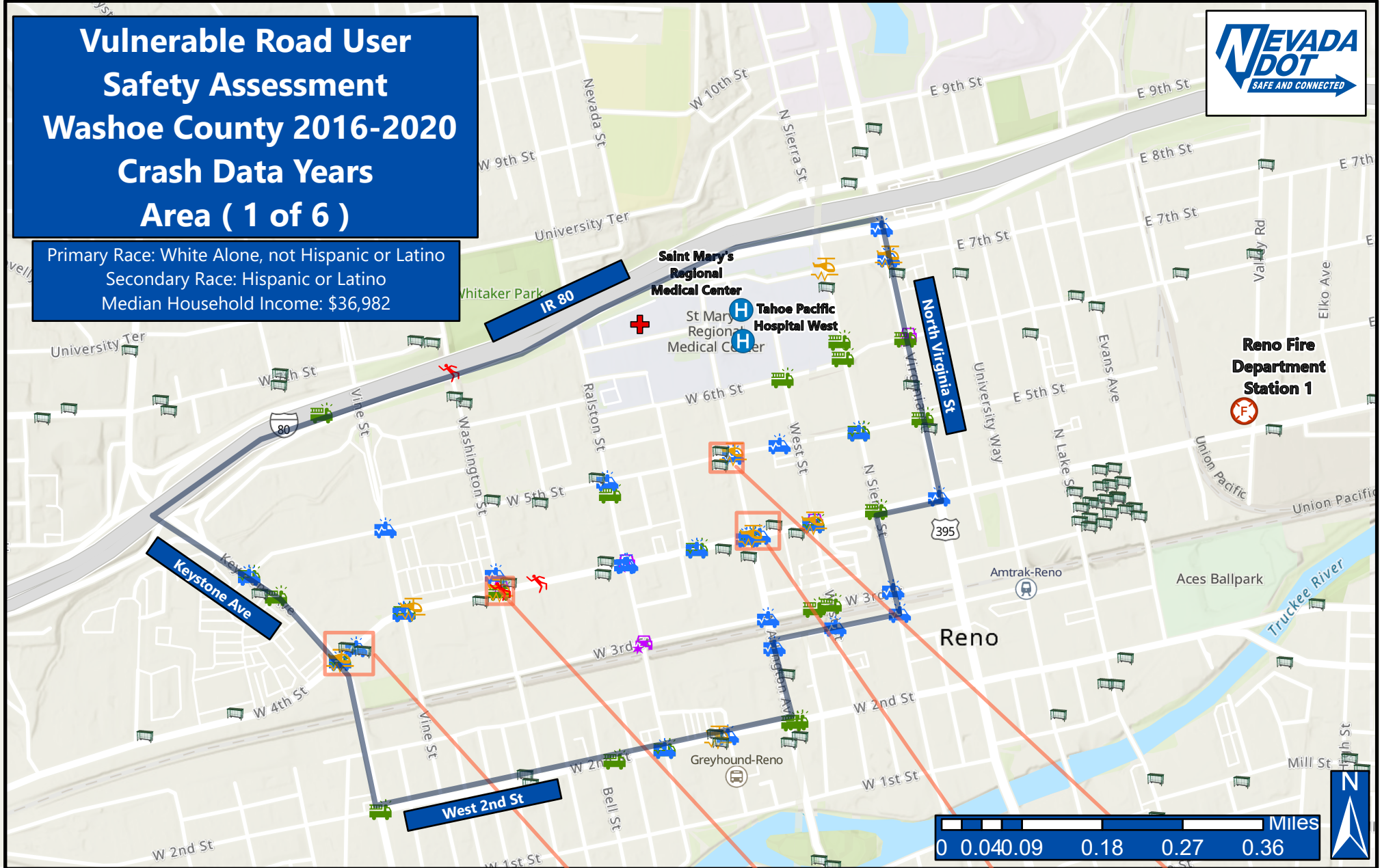
**(6 areas)**



# Vulnerable Road User Safety Assessment Washoe County 2016-2020 Crash Data Years Area ( 1 of 6 )

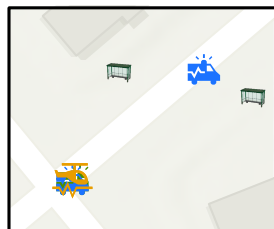


Primary Race: White Alone, not Hispanic or Latino  
Secondary Race: Hispanic or Latino  
Median Household Income: \$36,982

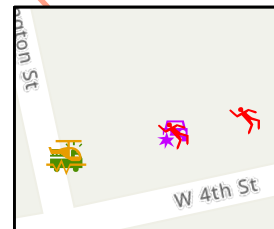


## Legend

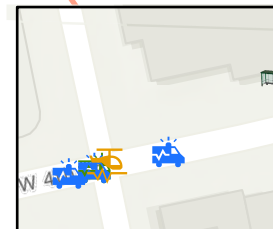
- Fatal Crashes
- Serious Injury Crashes
- Non-Serious Injury Crashes
- Claimed/Possible Injury Crashes
- Property Damage Only Crashes
- Bus Stops
- Hospital
- Fire Station
- Nevada Health Centers
- Tract Boundary



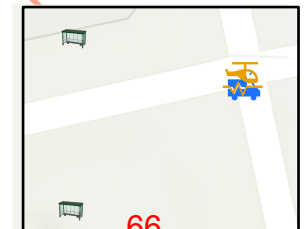
W 4th St & Keystone Ave



4th St & Washington St



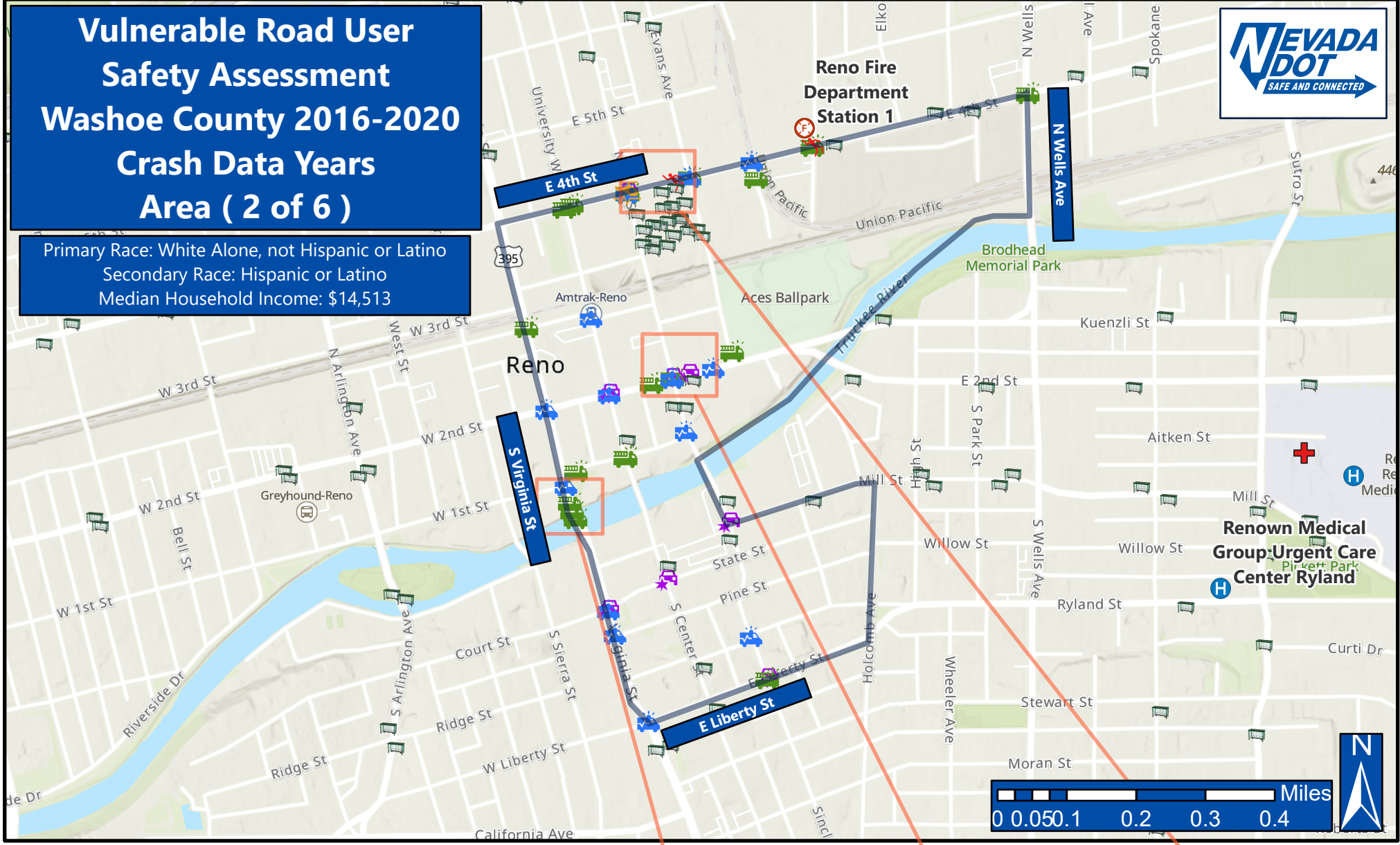
4th St & N. Arlington Ave



5th St. & N. Arlington Ave

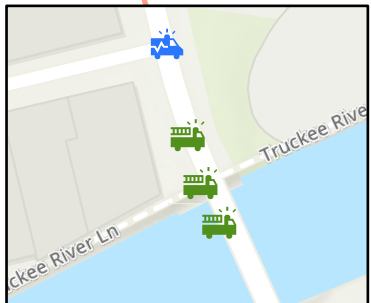
# Vulnerable Road User Safety Assessment Washoe County 2016-2020 Crash Data Years Area ( 2 of 6 )

Primary Race: White Alone, not Hispanic or Latino  
Secondary Race: Hispanic or Latino  
Median Household Income: \$14,513



## Legend

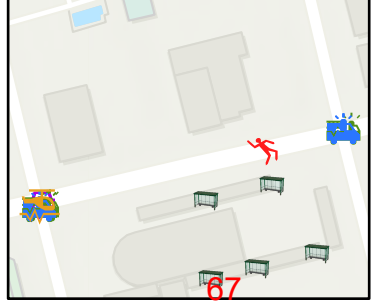
- Fatal Crashes
- Serious Injury Crashes
- Non-Serious Injury Crashes
- Claimed/Possible Injury Crashes
- Property Damage Only Crashes
- Bus Stops
- Nevada Health Centers
- Hospitals
- Fire Stations
- Tract Boundary



W 1st St & S Virginia St



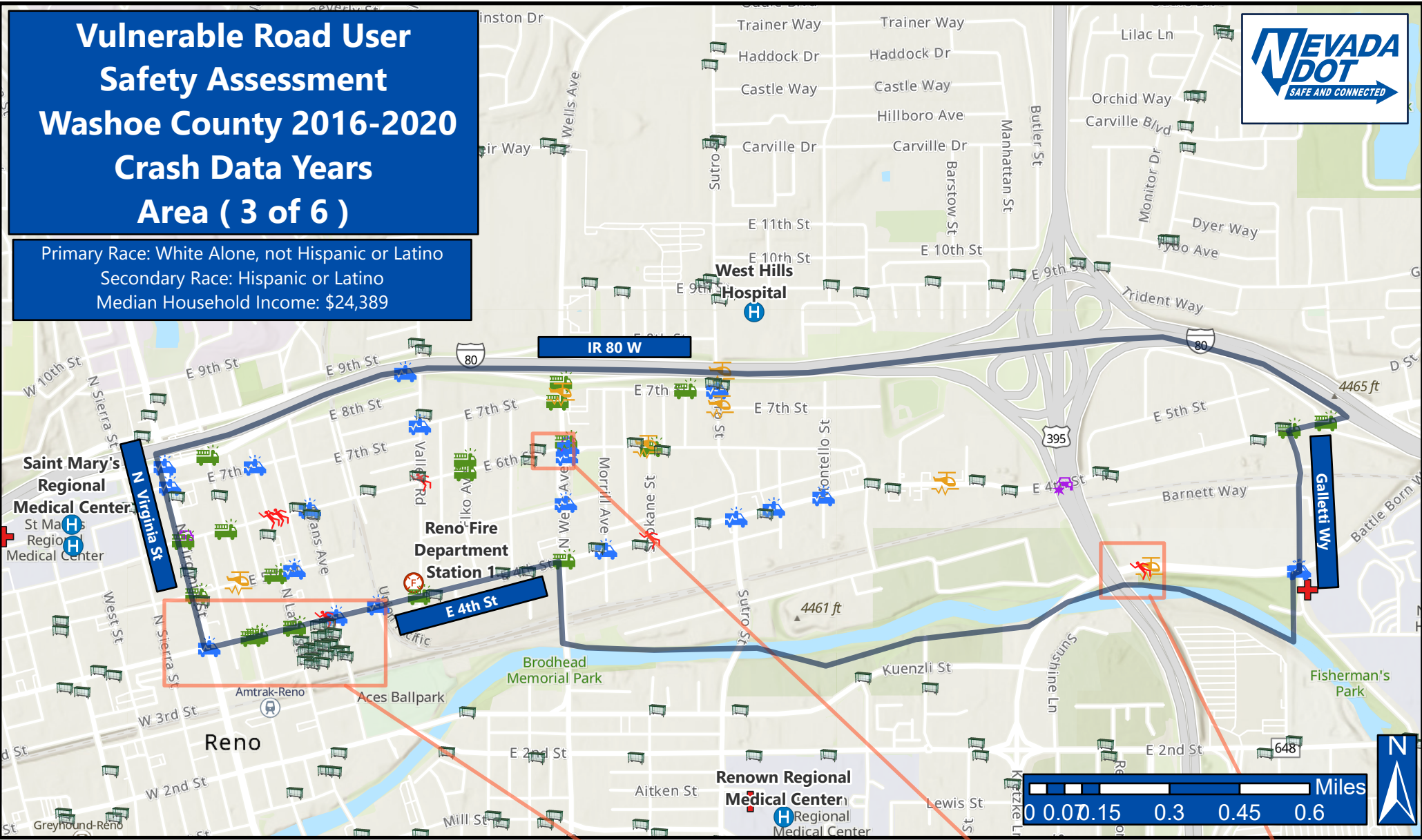
N Lake St & W 2nd St



E 4th St

# Vulnerable Road User Safety Assessment Washoe County 2016-2020 Crash Data Years Area ( 3 of 6 )

Primary Race: White Alone, not Hispanic or Latino  
Secondary Race: Hispanic or Latino  
Median Household Income: \$24,389

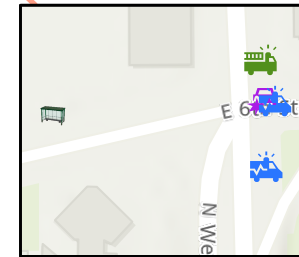


## Legend

- Fatal Crashes
- Serious Injury Crashes
- Non-Serious Injury Crashes
- Claimed Possible Injury Crashes
- Property Damage Only Crashes
- Bus Stops
- Nevada Health Centers
- Hospitals
- Fire Stations
- Tract Boundary



E 4th St



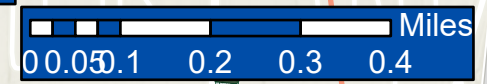
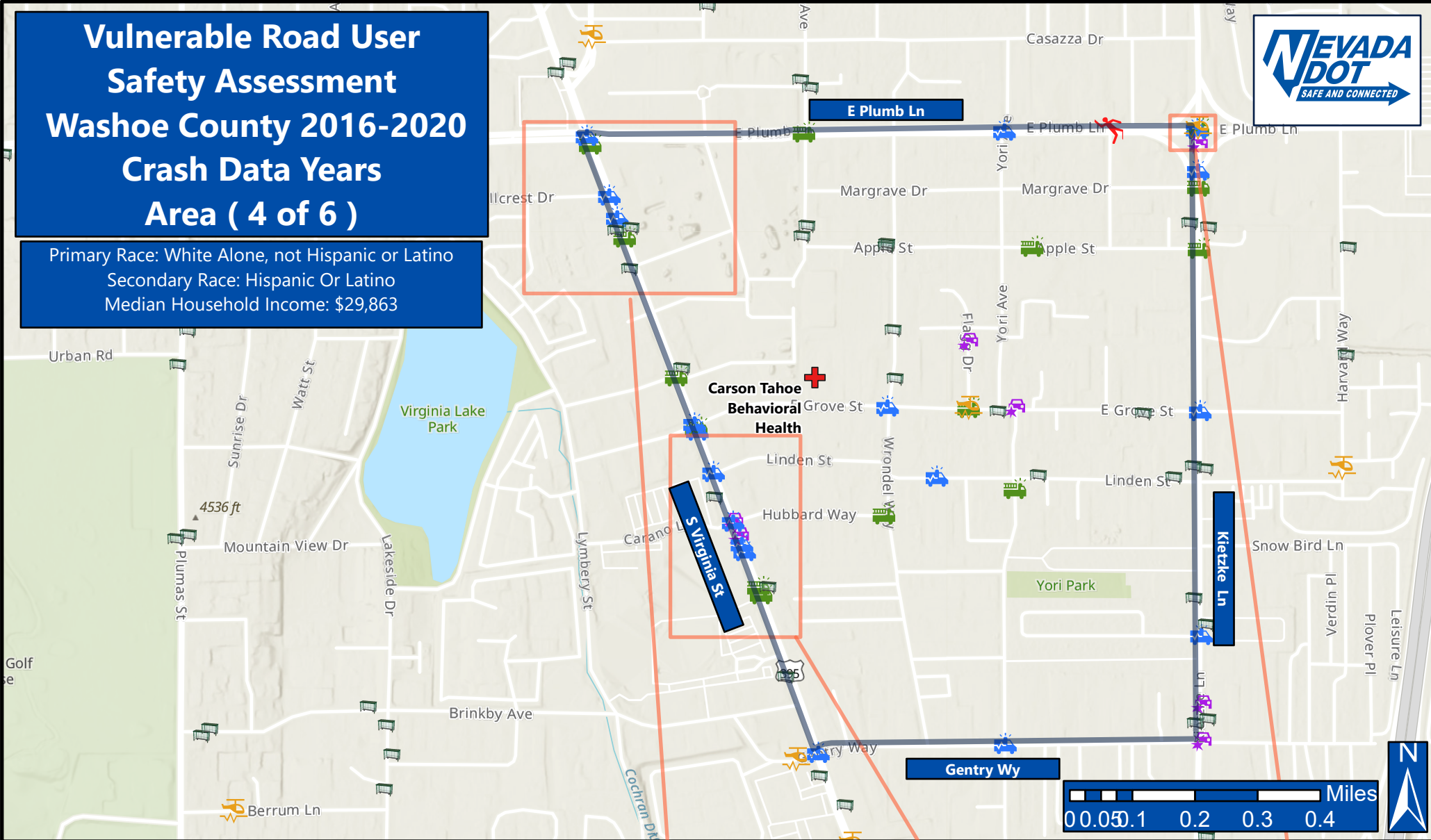
N Wells Ave & E 6th St



N Kietzke Ln

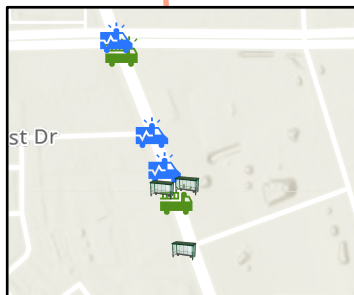
# Vulnerable Road User Safety Assessment Washoe County 2016-2020 Crash Data Years Area ( 4 of 6 )

Primary Race: White Alone, not Hispanic or Latino  
Secondary Race: Hispanic Or Latino  
Median Household Income: \$29,863

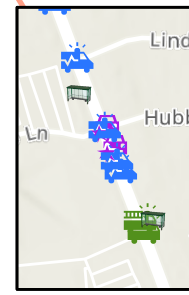


## Legend

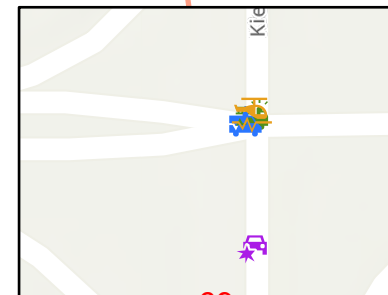
- Fatal Crash
- Serious Injury Crashes
- Non Serious Injury Crashes
- Claimed Possible Injury Crashes
- Property Damage Only Crashes
- Bus Stops
- Nevada Health Centers
- Hospitals
- Fire Stations
- Tract Boundary



S Virginia St



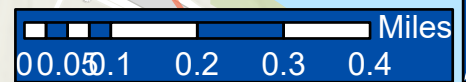
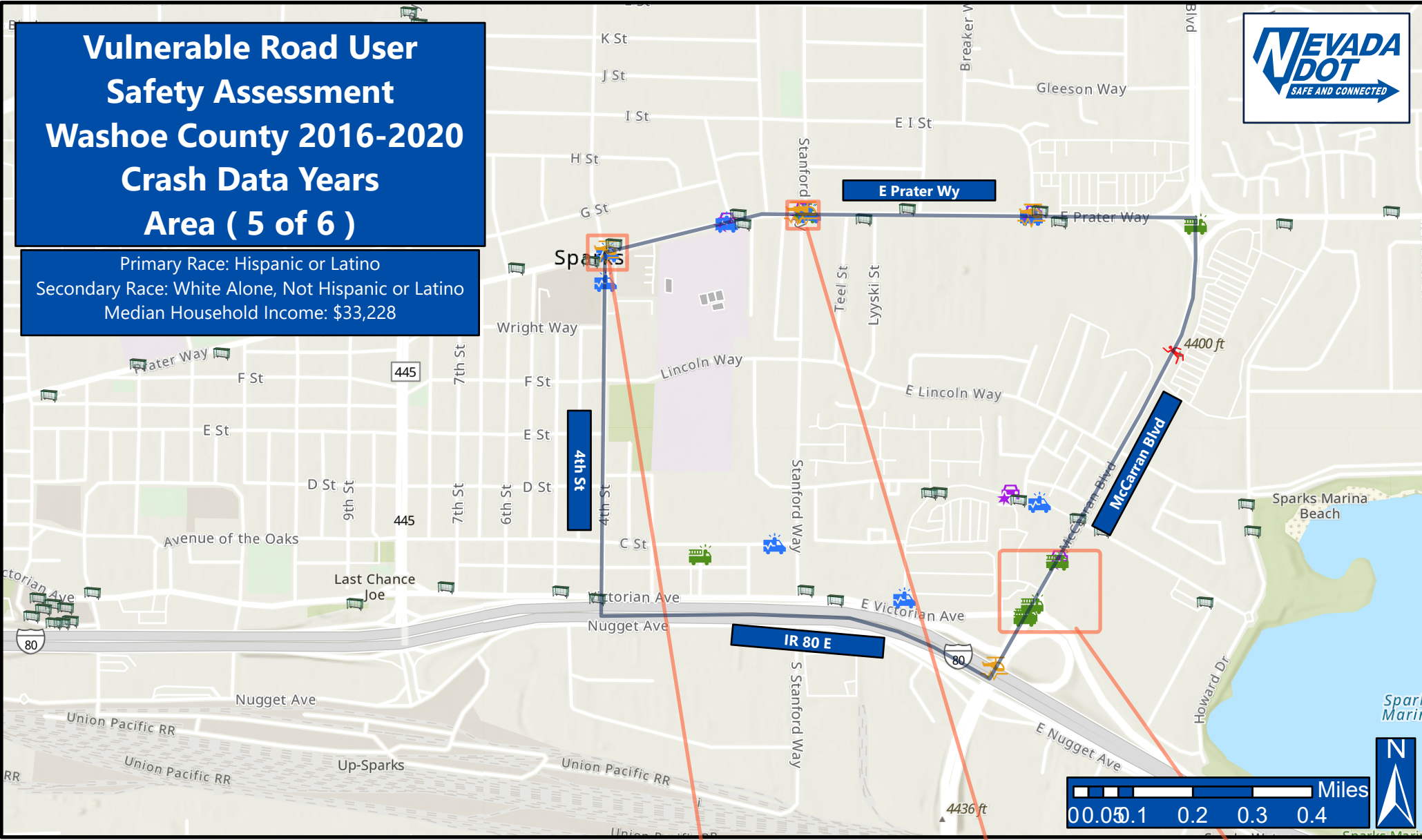
S Virginia St & Hubbard Wy



Plumb Ln & Kietzke Ln

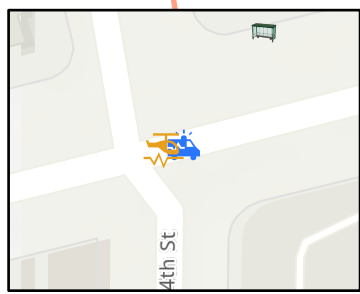
# Vulnerable Road User Safety Assessment Washoe County 2016-2020 Crash Data Years Area ( 5 of 6 )

Primary Race: Hispanic or Latino  
Secondary Race: White Alone, Not Hispanic or Latino  
Median Household Income: \$33,228

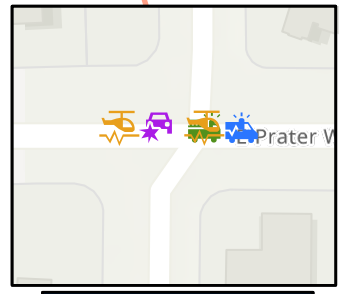


## Legend

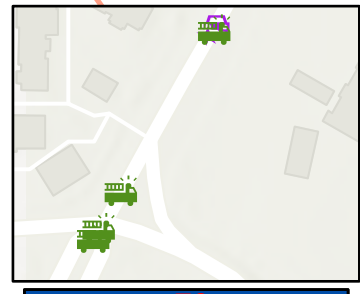
- Fatal Crashes
- Serious Injury Crashes
- Non Serious Injury Crashes
- Claim Possible Injury Crashes
- Property Damage Only Crashes
- Bus Stops
- Nevada Health Centers
- Hospitals
- Fire Stations
- Tract Boundary



**Prater Wy & 4th St**



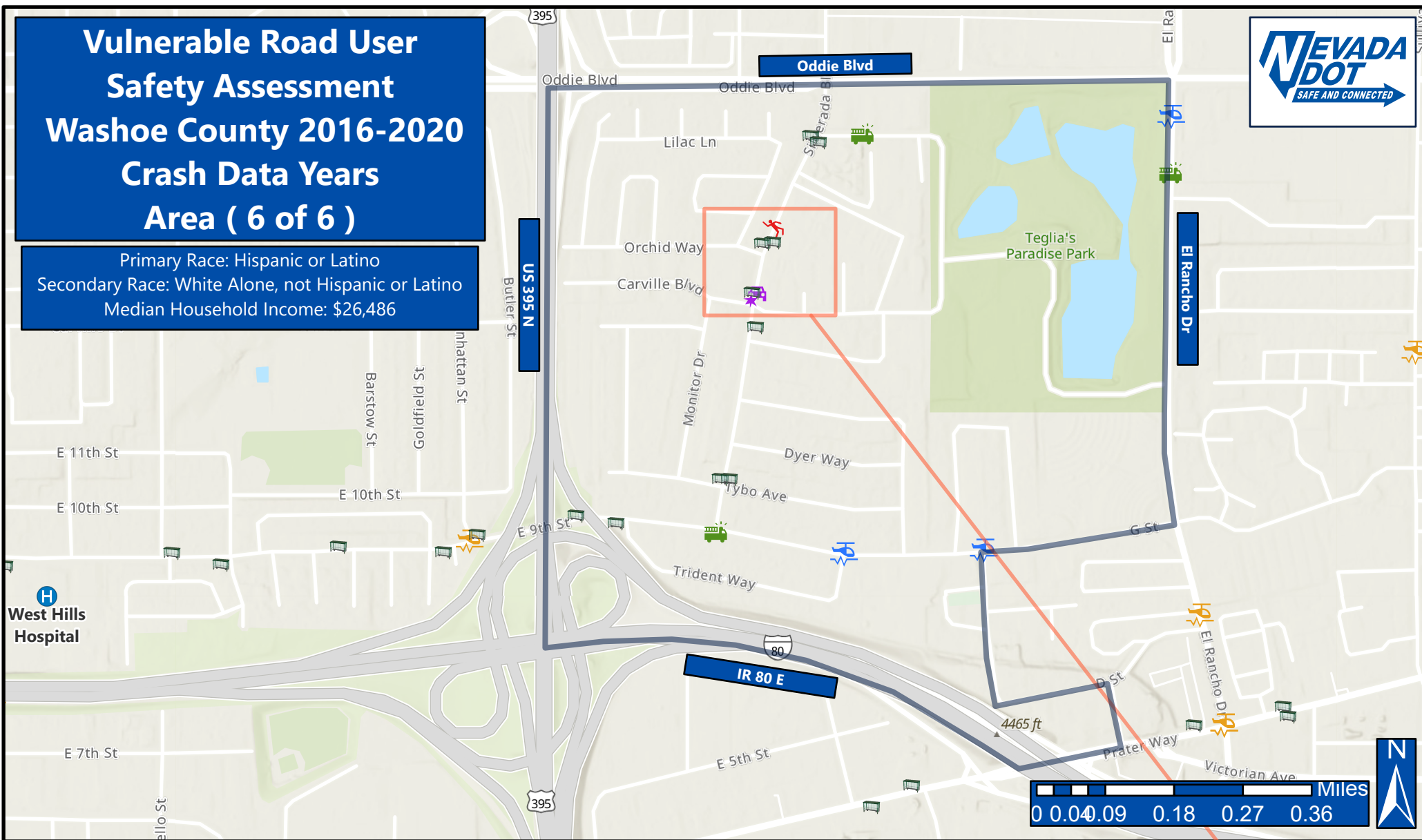
**E Prater Wy & Stanford Wy**



**E Victorian Ave & N McCarran**

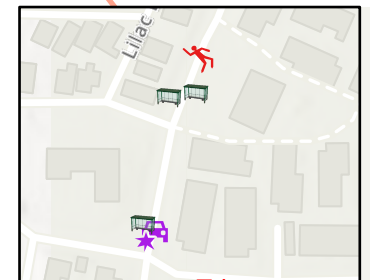
# Vulnerable Road User Safety Assessment Washoe County 2016-2020 Crash Data Years Area ( 6 of 6 )

Primary Race: Hispanic or Latino  
Secondary Race: White Alone, not Hispanic or Latino  
Median Household Income: \$26,486



## Legend

- |                               |                       |
|-------------------------------|-----------------------|
| Fatal Crashes                 | Bus Stops             |
| Serious Injury Crashes        | Nevada Health Centers |
| Non Serious Injury Crashes    | Hospitals             |
| Claim Possible Injury Crashes | Fire Stations         |
| Property Damage Only Crashes  | Tract Boundary        |



Silverada Blvd

**APPENDIX C**

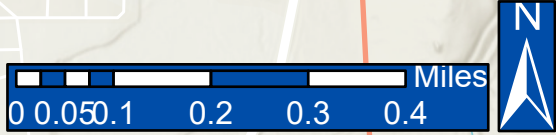
**Carson City VRU Census Tract Map**

**(2 areas)**



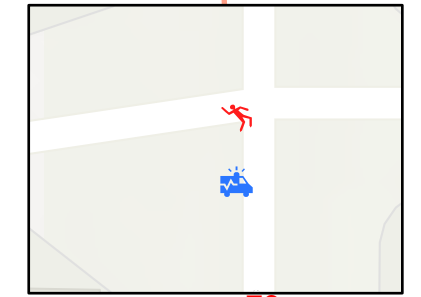
# Vulnerable Road User Safety Assessment Carson City 2016-2020 Crash Data Years (Area 1 of 2)

Race: Hispanic or Latino  
Secondary Race: White Alone, not Hispanic or Latino  
Median Household Income: \$46,457



## Legend

- Fatal Injury
- Serious Injury Crashes
- Non-Serious Injury Crashes
- Claim Possible Injury Crashes
- Property Damage Only Crashes
- Hospitals
- Fire Stations
- Nevada Health Centers
- Tract Boundary

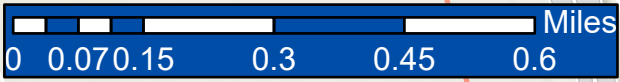
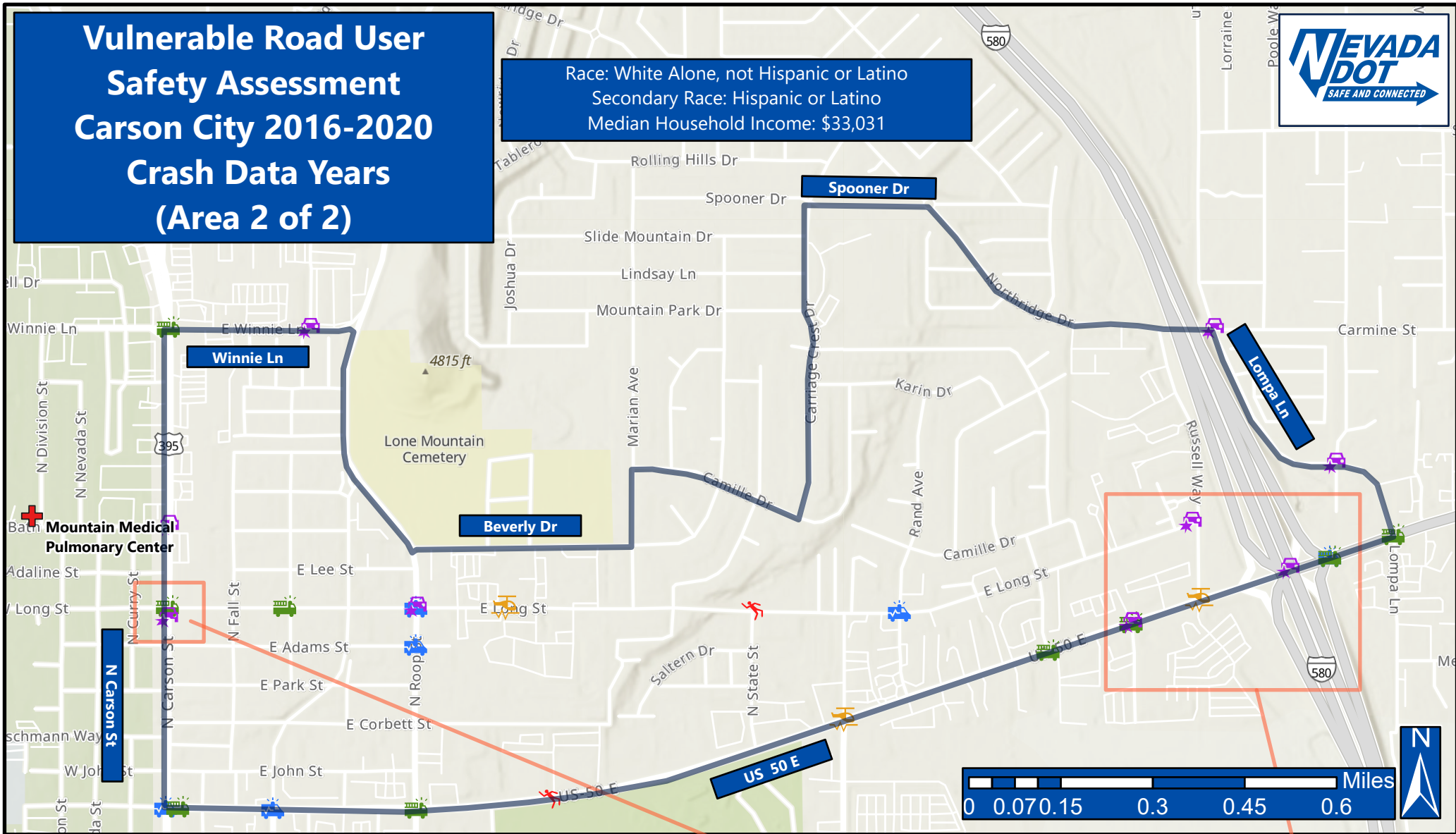


**Gordan St & Fairview Dr**



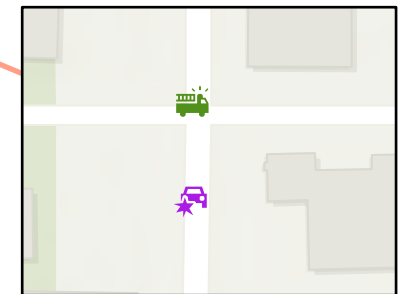
# Vulnerable Road User Safety Assessment Carson City 2016-2020 Crash Data Years (Area 2 of 2)

Race: White Alone, not Hispanic or Latino  
Secondary Race: Hispanic or Latino  
Median Household Income: \$33,031

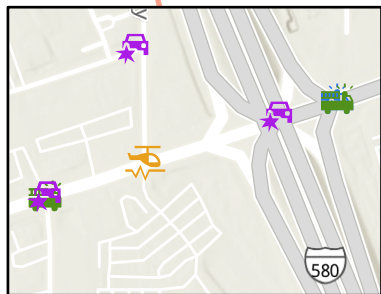


## Legend

- Fatal Crashes
- Serious Injury Crashes
- Non Serious Injury Crashes
- Claim Possible Injury Crashes
- Property Damage Only Crashes
- Hospitals
- Fire Stations
- Nevada Health Centers
- Tract Boundary



N Carson St & E Long St



US 50 E

**APPENDIX D**

**Douglas County VRU Census Tract Map**

**(1 area)**

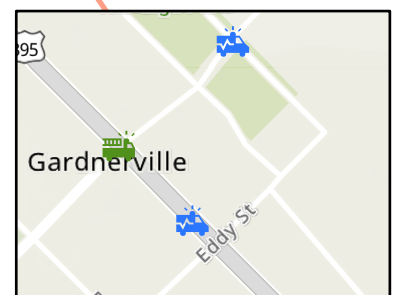
# Vulnerable Road User Safety Assessment Douglas County 2016-2020 Crash Data Years

Primary Race: White Alone Not Hispanic or Latino  
Secondary Race: Hispanic or Latino  
Median Household Income: \$62,143



## Legend

- Fatal Injury
- Serious Injury Crashes
- Non-Serious Injury Crashes
- Claim Possible Injury Crashes
- Property Damage Only Crashes
- Hospitals
- Fire Stations
- Nevada Health Centers
- Tract Boundary



N US95 & Gilman Ave

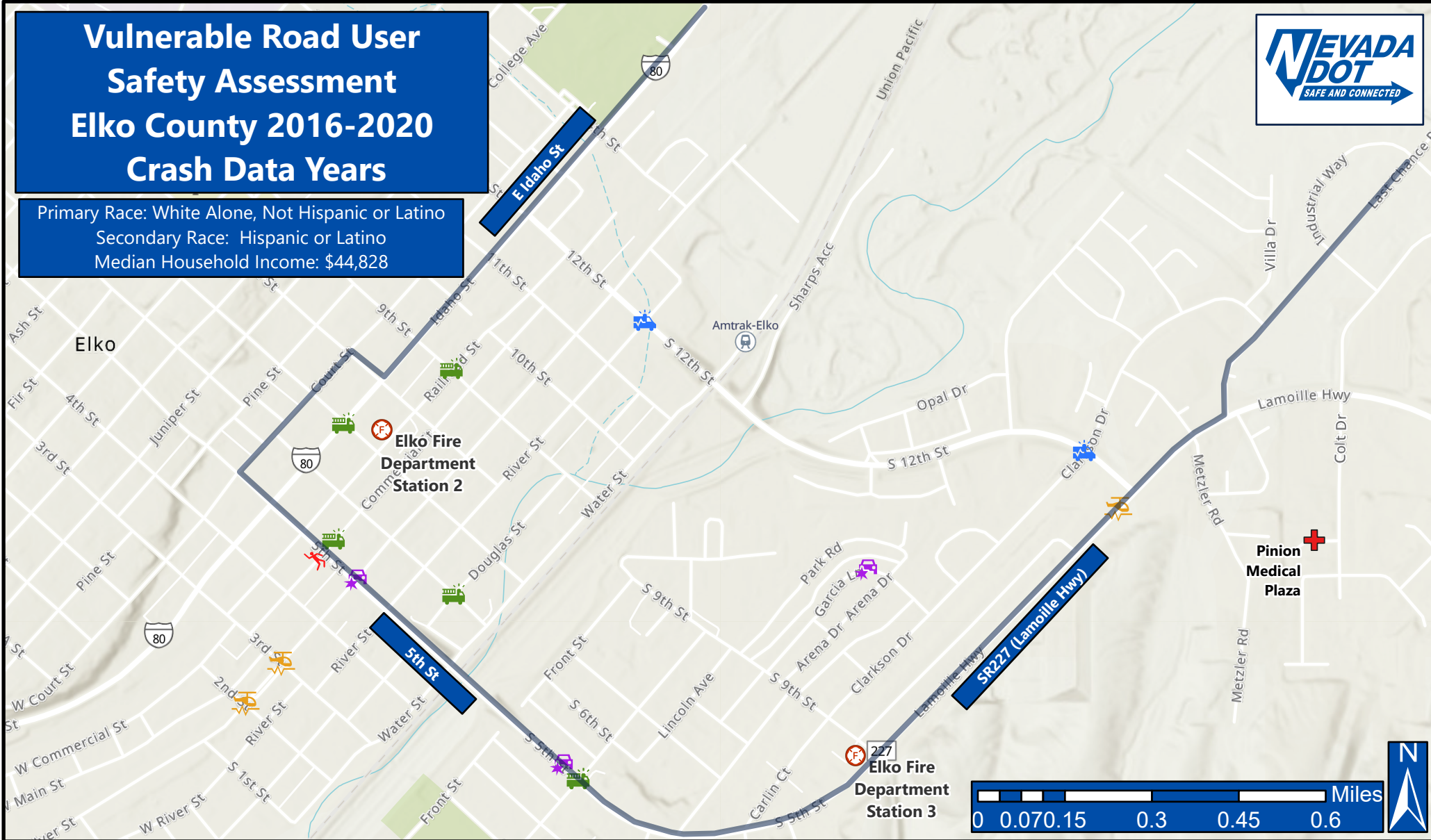
**APPENDIX E**

**Elko County VRU Census Tract Map**

**(1 area)**

# Vulnerable Road User Safety Assessment Elko County 2016-2020 Crash Data Years

Primary Race: White Alone, Not Hispanic or Latino  
Secondary Race: Hispanic or Latino  
Median Household Income: \$44,828



## Legend

- Fatal Injury
- Serious Injury Crashes
- NonSerious Injury Crashes
- Claimed Possible Injury Crashes
- Property Damage Only Crashes
- Nevada Health Centers
- Hospitals
- Fire Stations
- Tract Boundary

**APPENDIX F**

**Nye County VRU Census Tract Maps**

**(2 areas)**

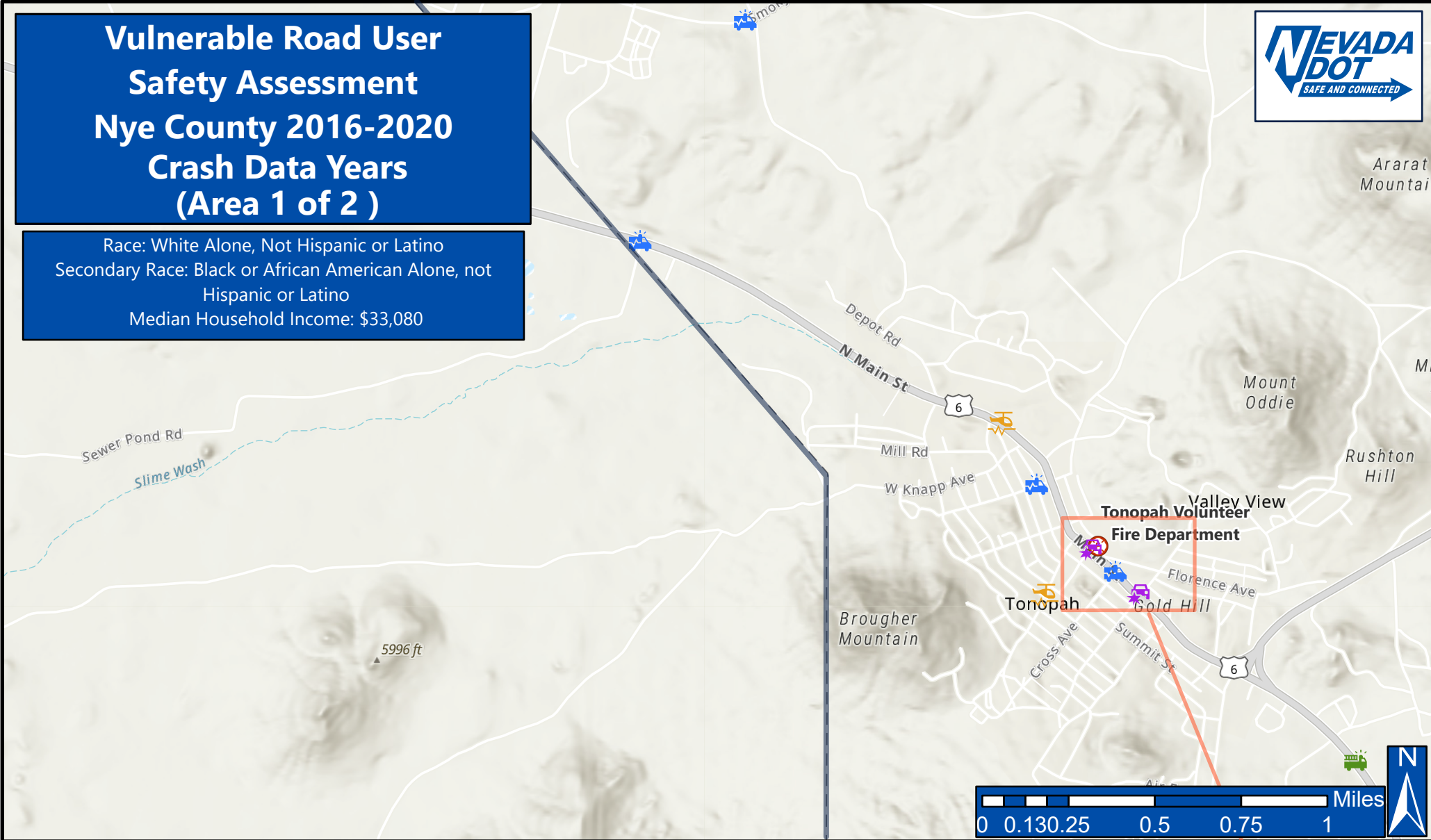


# Vulnerable Road User Safety Assessment

## Nye County 2016-2020

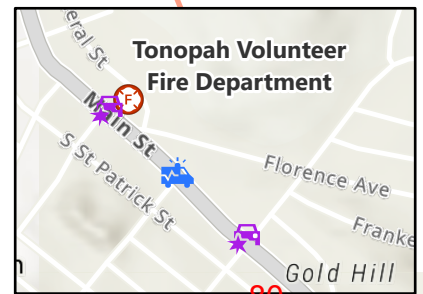
### Crash Data Years (Area 1 of 2)

Race: White Alone, Not Hispanic or Latino  
 Secondary Race: Black or African American Alone, not Hispanic or Latino  
 Median Household Income: \$33,080



### Legend

- Fatal Injury
- Serious Injury Crashes
- Non Serious Injury Crashes
- Claimed Possible Injury Crashes
- Property Damage Only Crashes
- Nevada Health Centers
- Hospitals
- Fire Stations
- Tract Boundary



**Main St & Florence Ave**

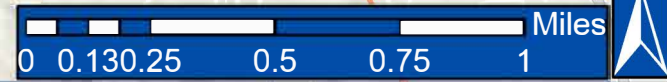
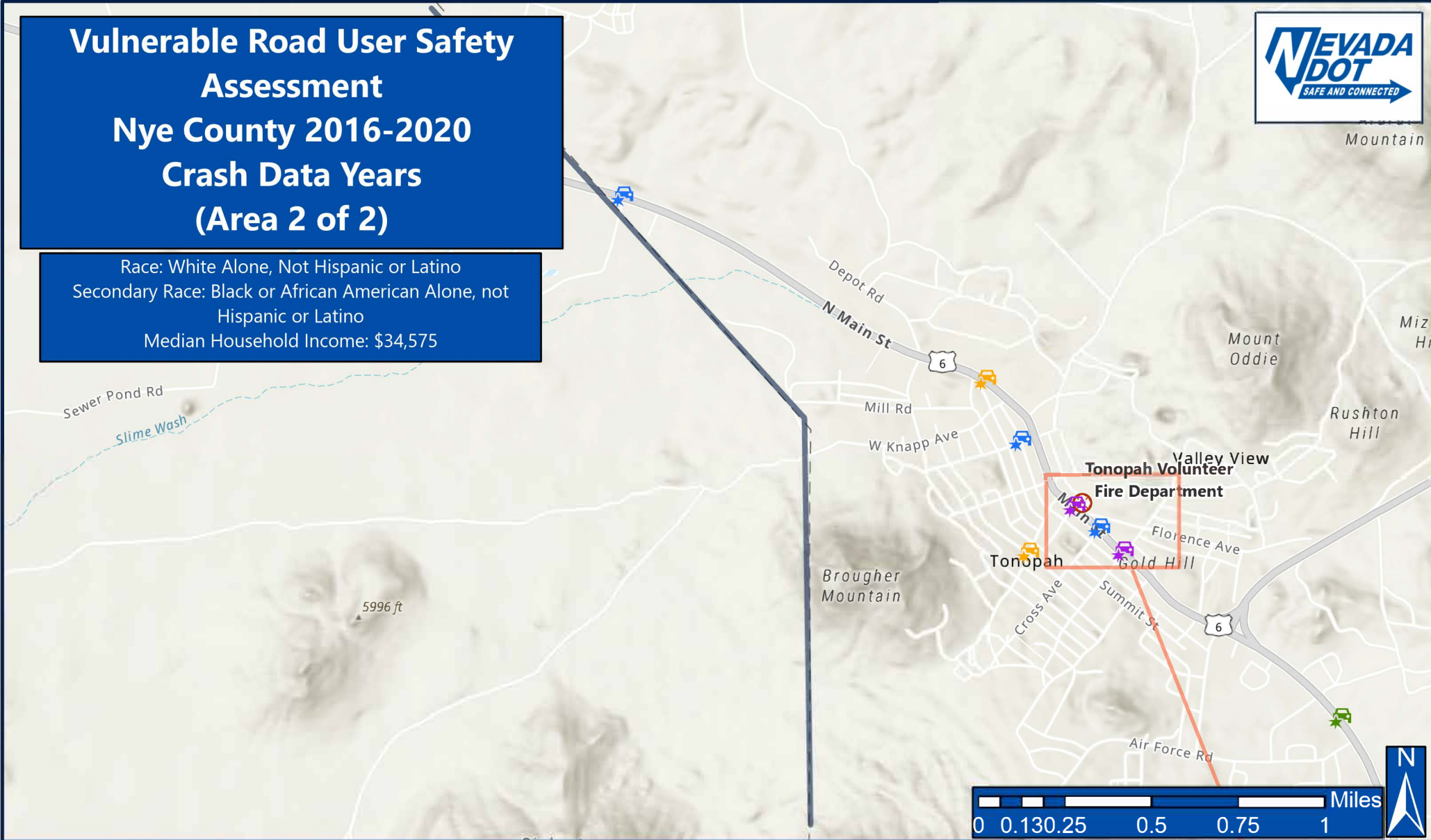
# Vulnerable Road User Safety Assessment

## Nye County 2016-2020

### Crash Data Years

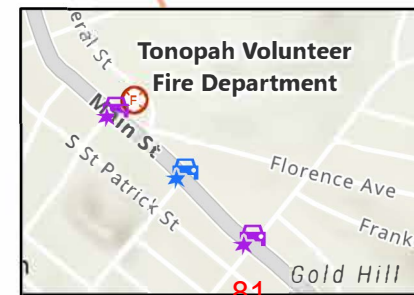
#### (Area 2 of 2)

Race: White Alone, Not Hispanic or Latino  
 Secondary Race: Black or African American Alone, not Hispanic or Latino  
 Median Household Income: \$34,575



### Legend

- Nevada Health Centers
- Non Serious Injury
- Hospitals
- Claimed Possible Injury
- Fire Stations
- Property Damage Only
- Serious Injury
- Boundary Line of Zone



Main St. & Florence Ave.



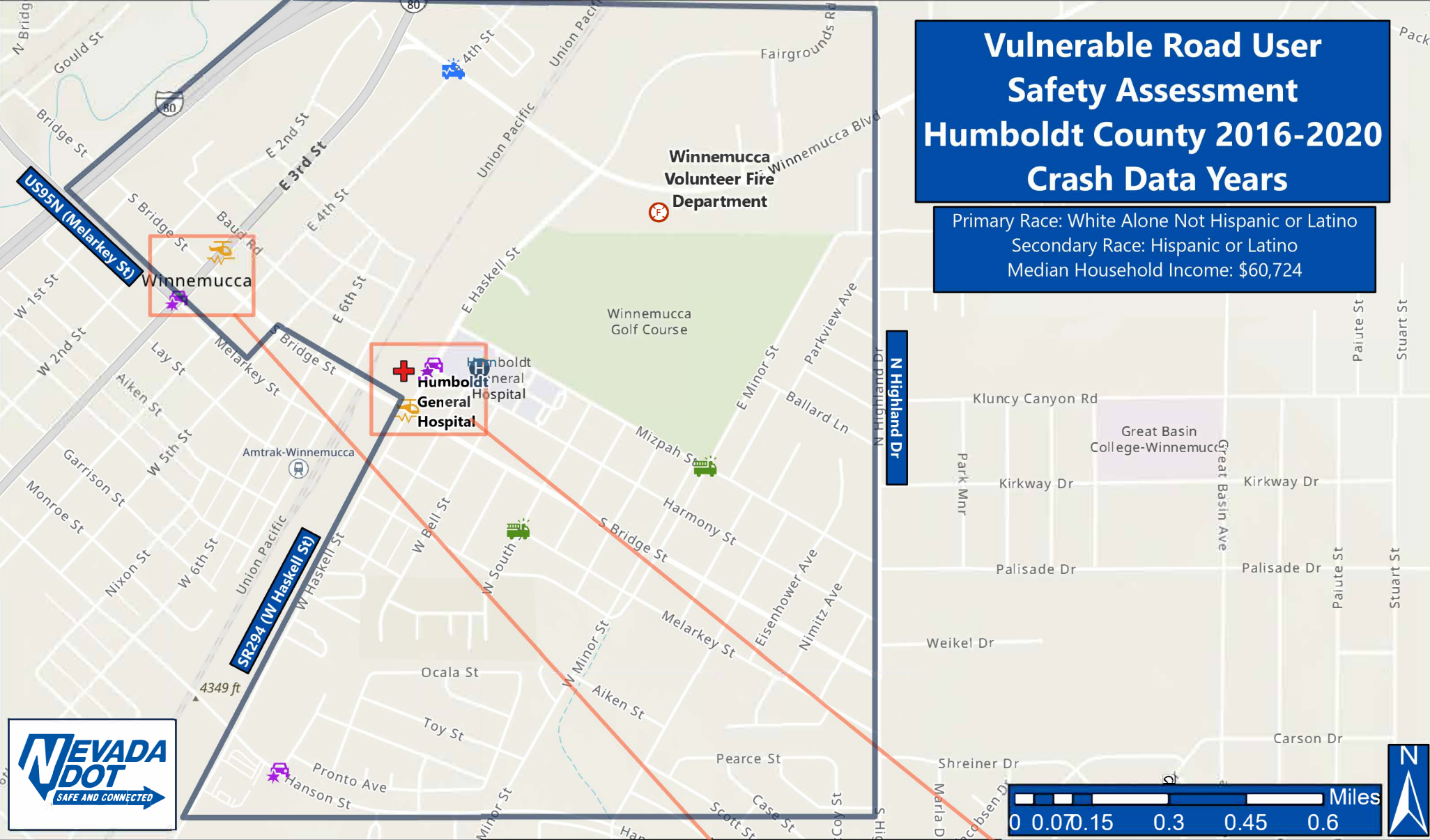
**APPENDIX G**

**Humboldt County VRU Census Tract Map**

**(1 area)**

# Vulnerable Road User Safety Assessment Humboldt County 2016-2020 Crash Data Years

Primary Race: White Alone Not Hispanic or Latino  
Secondary Race: Hispanic or Latino  
Median Household Income: \$60,724

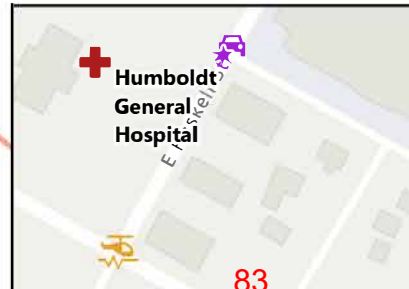


## Legend

- Fatal Injury
- Serious Injury Crashes
- Non Serious Injury Crashes
- Claim Possible Injury Crashes
- Property Damage Only
- Hospitals
- Fire Stations
- Nevada Health Centers
- Tract Boundary



**3rd St**



**E Haskell St**

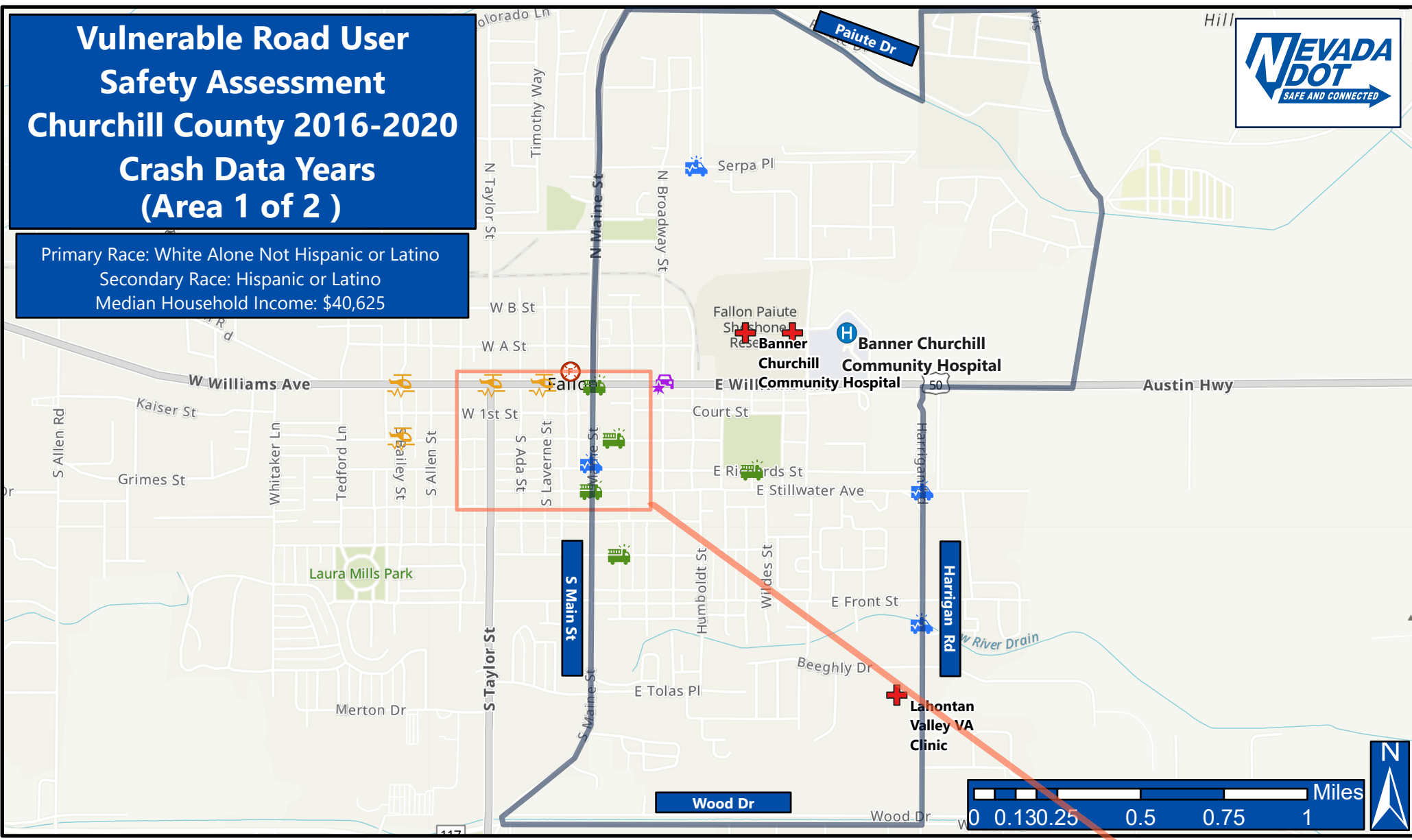
**APPENDIX H**

**Churchill County VRU Census Tract Maps**

**(2 areas)**

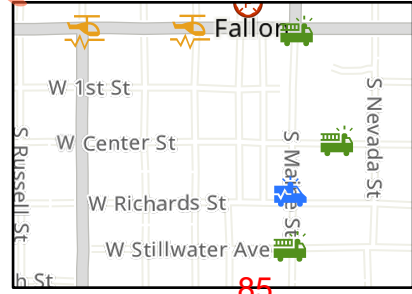
# Vulnerable Road User Safety Assessment Churchill County 2016-2020 Crash Data Years (Area 1 of 2)

Primary Race: White Alone Not Hispanic or Latino  
Secondary Race: Hispanic or Latino  
Median Household Income: \$40,625



## Legend

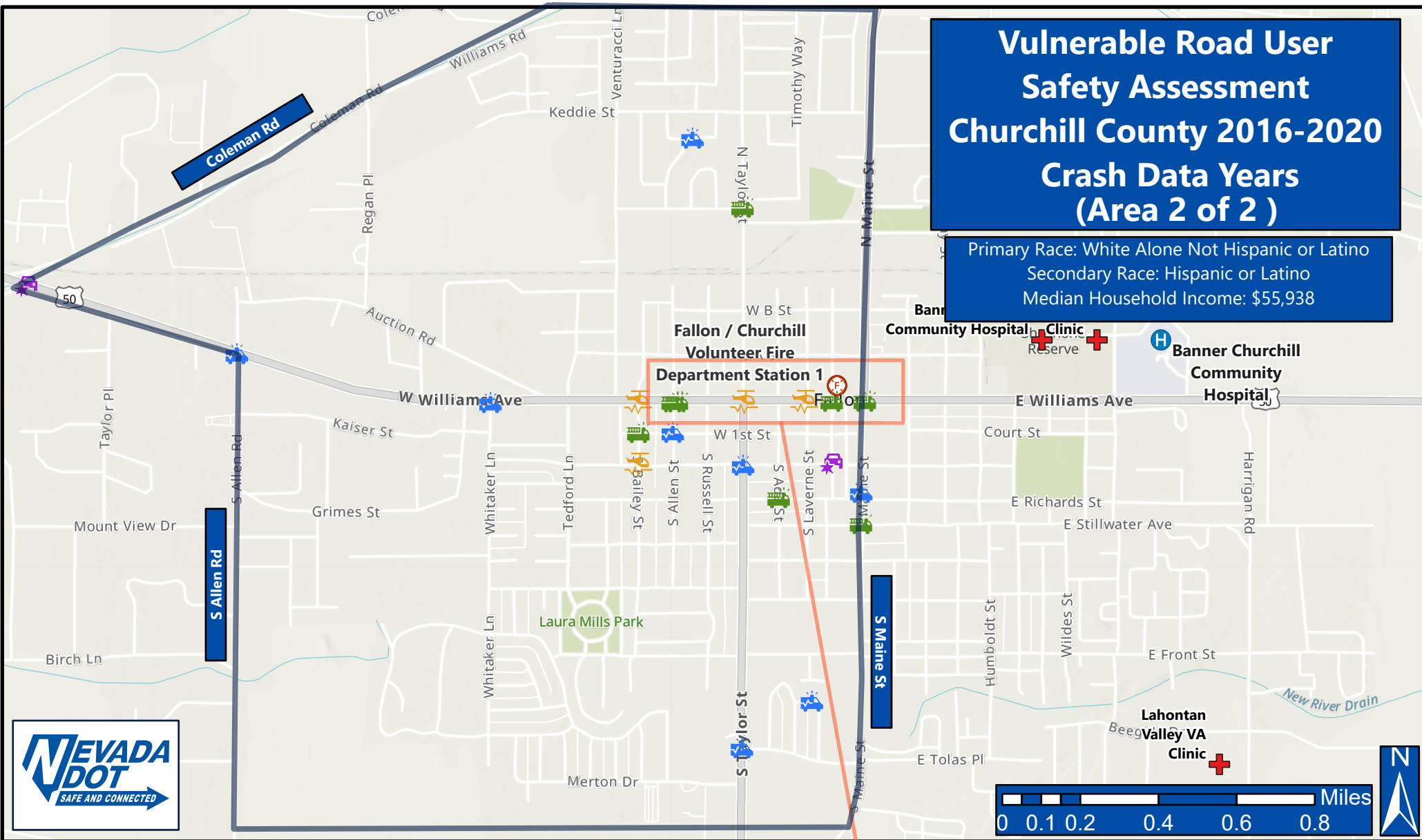
- Fatal Injury
- Serious Injury Crashes
- Non Serious Injury Crashes
- Claim Possible Injury Crashes
- Property Damage Only Crashes
- Hospitals
- Fire Stations
- Nevada Health Centers
- Tract Boundary



3rd St

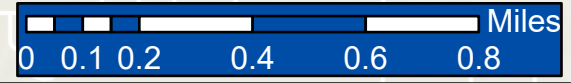
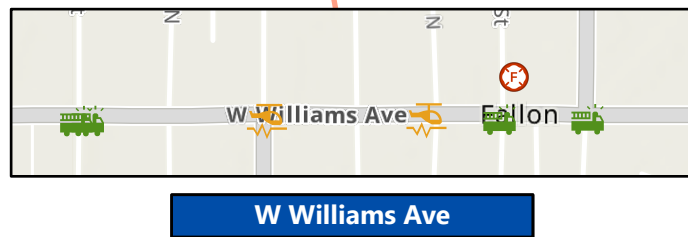
# Vulnerable Road User Safety Assessment Churchill County 2016-2020 Crash Data Years (Area 2 of 2)

Primary Race: White Alone Not Hispanic or Latino  
Secondary Race: Hispanic or Latino  
Median Household Income: \$55,938



## Legend

- Fatal Injury
- Serious Injury Crashes
- Non-Serious Injury Crashes
- Claim Possible Injury Crashes
- Property Damage Only Crashes
- Hospitals
- Fire Stations
- Nevada Health Centers
- Tract Boundary



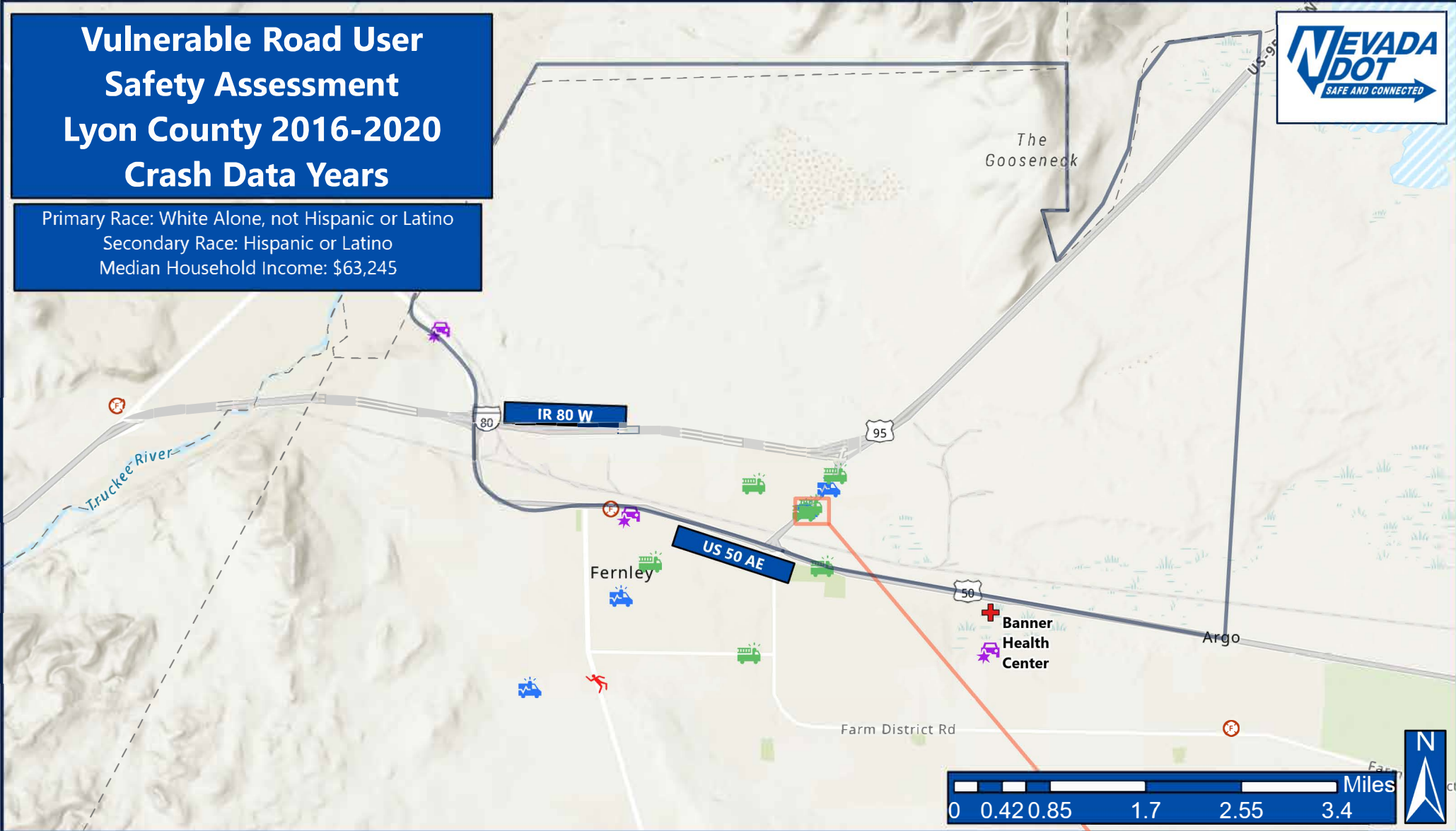
**APPENDIX I**

**Lyon County VRU Census Tract Maps**

**(1 area)**

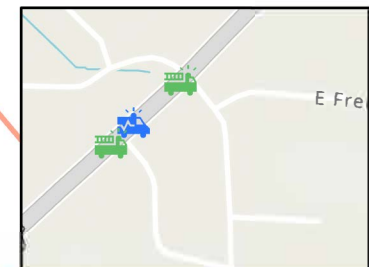
# Vulnerable Road User Safety Assessment Lyon County 2016-2020 Crash Data Years

Primary Race: White Alone, not Hispanic or Latino  
 Secondary Race: Hispanic or Latino  
 Median Household Income: \$63,245



## Legend

- |  |                                 |  |                       |
|--|---------------------------------|--|-----------------------|
|  | Fatal Injury                    |  | Bus Stop Location     |
|  | Serious Injury Crashes          |  | Hospitals             |
|  | Non Serious Injury Crashes      |  | Fire Stations         |
|  | Claimed Possible Injury Crashes |  | Nevada Health Centers |
|  | Property Damage Only            |  | Tract Boundary        |



US95 AN 888 Fremont St

**APPENDIX J**

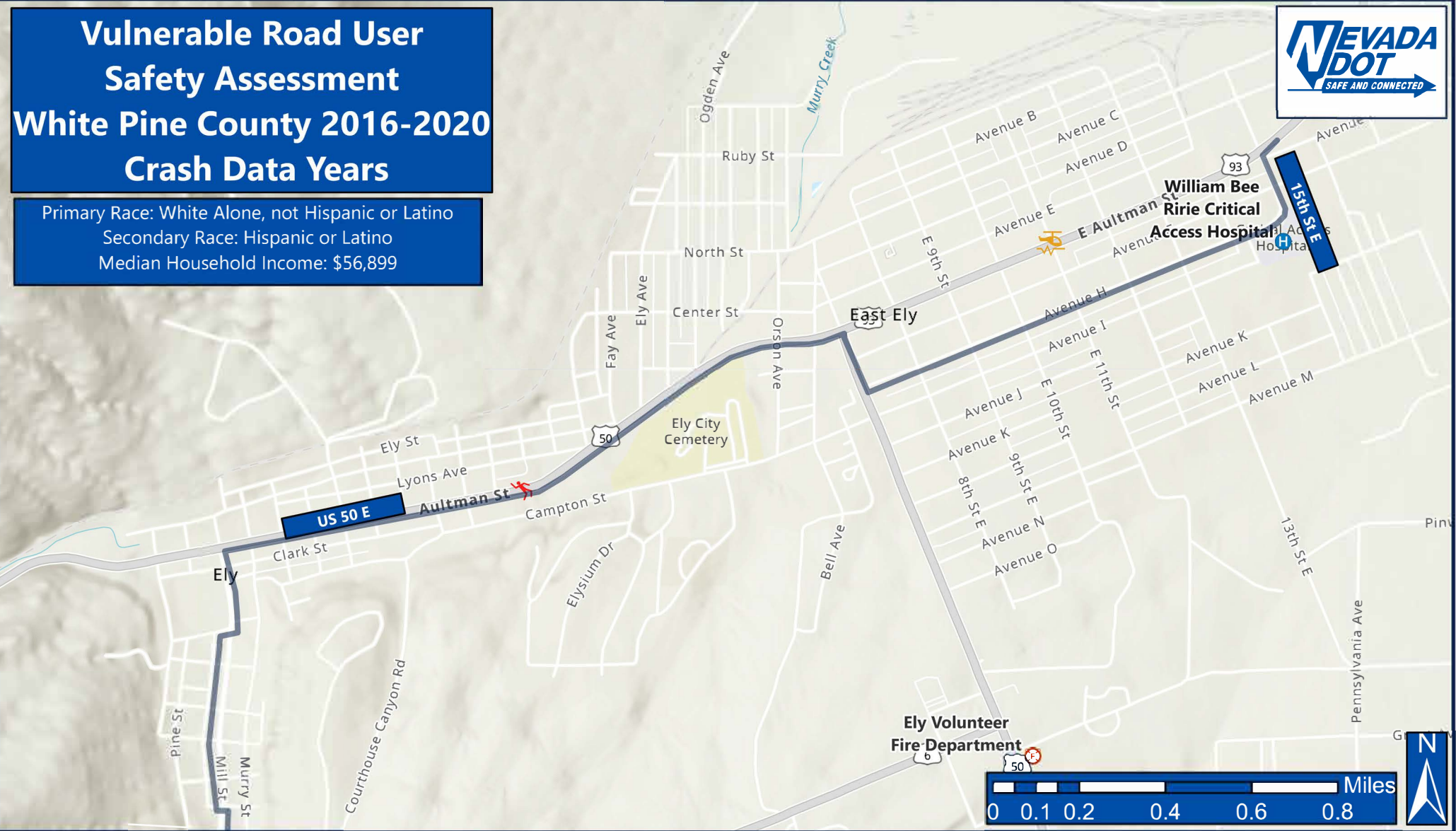
**White Pine County VRU Census Tract Maps**

**(1 area)**



# Vulnerable Road User Safety Assessment White Pine County 2016-2020 Crash Data Years

Primary Race: White Alone, not Hispanic or Latino  
 Secondary Race: Hispanic or Latino  
 Median Household Income: \$56,899



## Legend

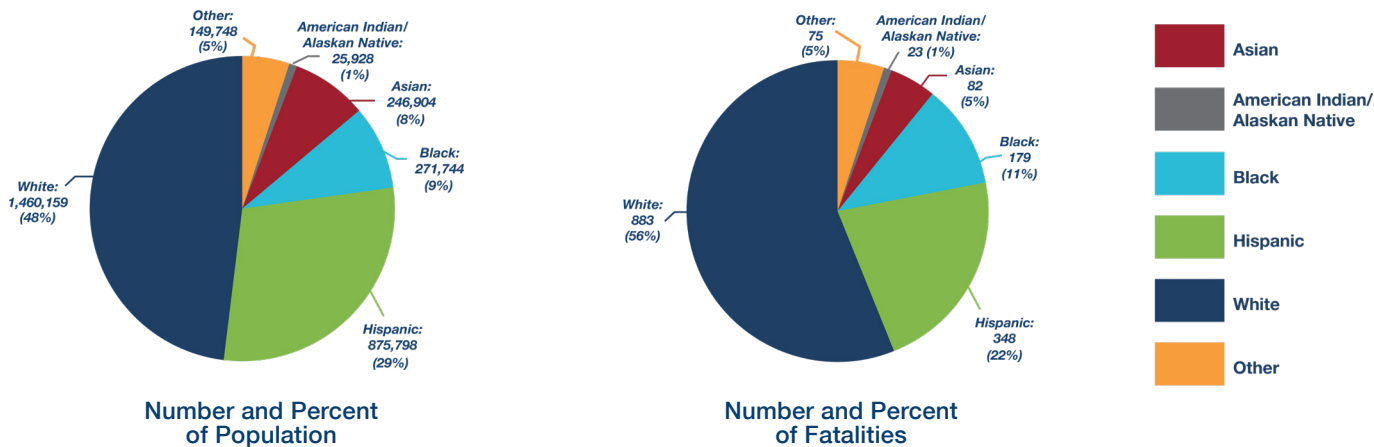
- Fatal Injury
- Serious Injury Crashes
- Non Serious Injury Crashes
- Claim/ Possible Injury Crashes
- Property Damage Only Crashes
- Hospitals
- Fire Stations
- Nevada Health Centers
- Tract Boundary

# APPENDIX K

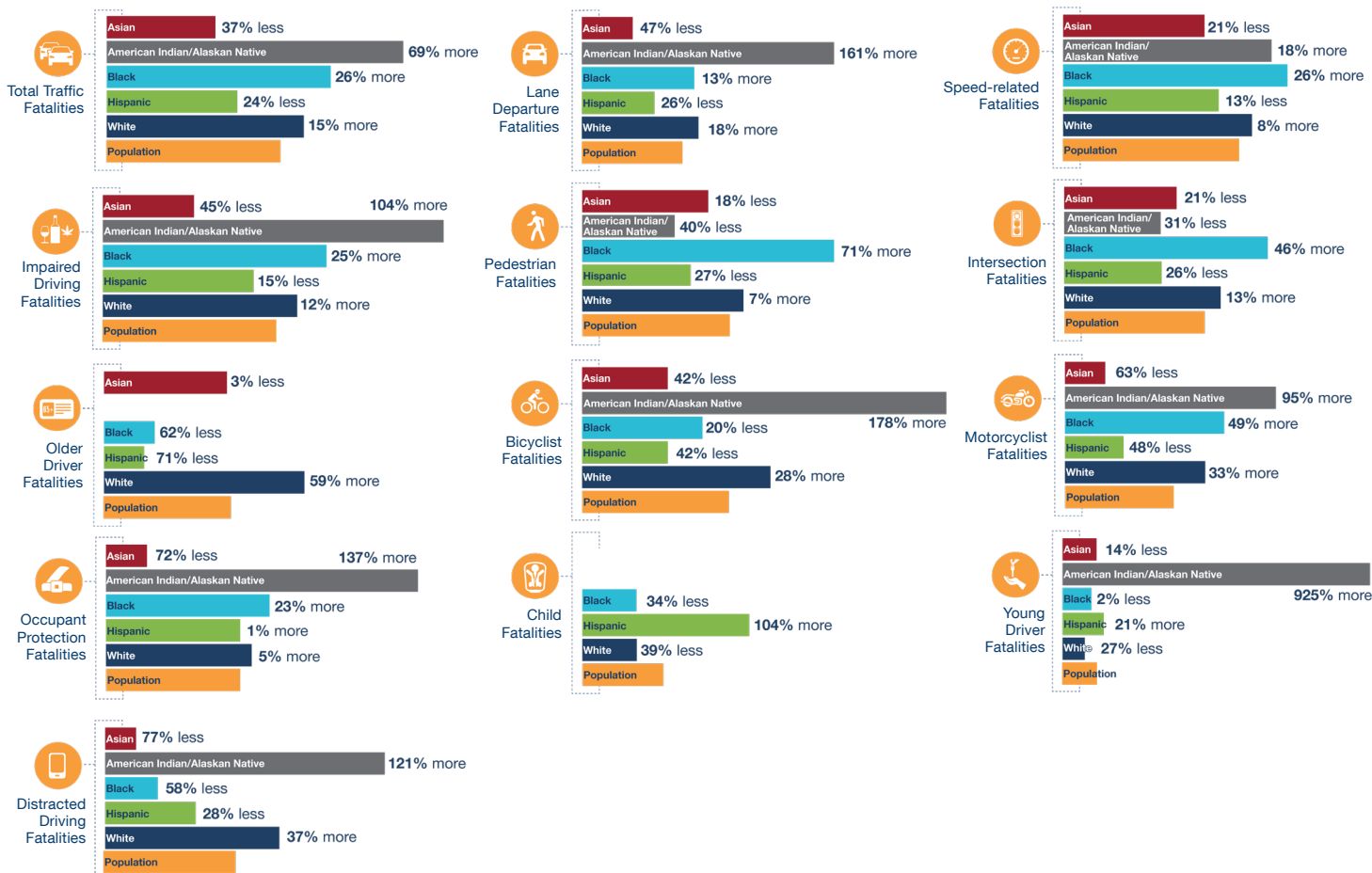
## Nevada Equity Fact Sheet

# Racial Equity in Traffic Fatalities in Nevada

## Distribution of Nevada Traffic Fatalities by Race/Ethnicity



## Fatality Rate by Race/Ethnicity Compared to Total Population (Comparison of Fatality Rate by Population)

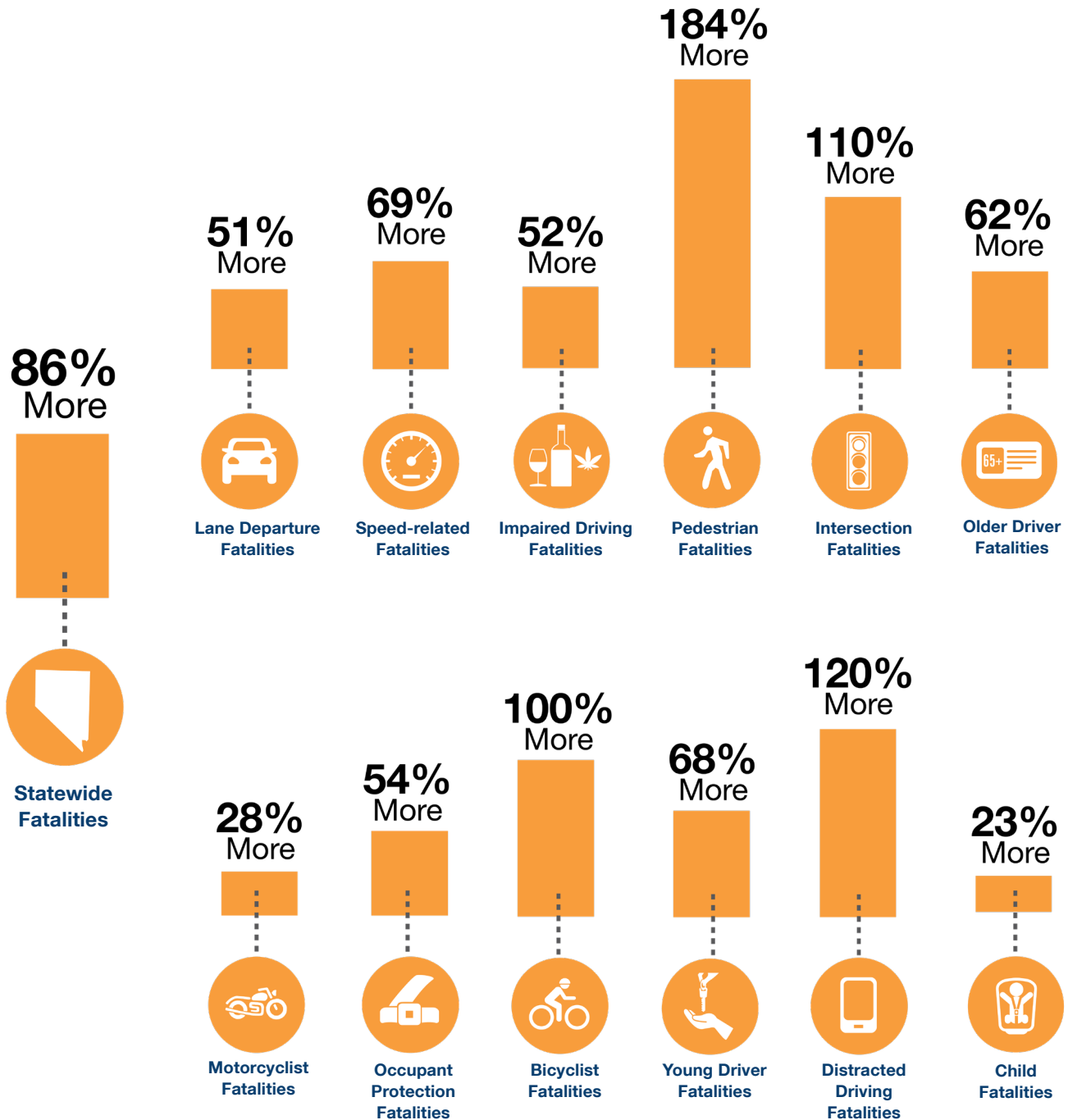


Data Source: US Census Bureau ACS and FARS (2016-2020)

1. The race/ethnic groups presented above summarizes groups that could be consistently compared across the different data sets.

# Income Equity in Traffic Fatalities in Nevada

Increased Rate of Fatalities for Census Block Groups with Household Income Less than \$50,000 Compared to Income Greater than \$50,000



**Data Source:** American Community Survey (ACS) collected by U.S. Census Bureau, FARS

1. Income data is available for the Census Block Groups where a traffic fatality occurs and not the individual (i.e. this data represents the income information of the Census Block Groups where the crash occurs and not the income of the crash victim.)

2. The ACS 5-Year Estimates for 2020 were used to determine per-capita fatality rates.



### Current Situation:

#### Our children are endangered.

- » More than 340 school-age children were injured—over 30 seriously and four fatally—within a quartermile of Clark County School District campuses during hours immediately before and after school between 2015 and 2019.<sup>4</sup>
- » In one day, there were estimated to be over 3,500 school bus passing violations in Nevada.<sup>10</sup>
- » Between 2011 and 2020, nationally 218 school-age children (ages 18 and younger) died in school transportation-related crashes; 44 were occupants of school transportation vehicles, 83 were occupants of other vehicles, 85 were pedestrians, five were bicyclists and one was an “other” nonoccupant.<sup>3</sup>

### Recommended Solution:

#### Road Safety Cameras (RSCs) have been proven to save children’s lives.

- » Federal Highway Administration Proven Safety Countermeasure:
  - » Reduced crashes on urban principal arterials by 54% and injury crashes by 47%<sup>1</sup>
  - » Reduced speeding in school zones up to 63% during school hours<sup>1</sup>
- » Reflects that National Highway Traffic Safety Administration (NHTSA) has determined that they are effective at the highest level
- » For roadways with RSCs between 2015 and 2019, the likelihood of a driver exceeding the speed limit by more than 10 mph decreased by 59%

### Concerns



#### Is the objective to generate revenue?

No. The primary purpose of RSCs is to improve traffic safety by reducing unsafe driving at intersections and on highways. Effective legislation limits systems to address traffic safety rather than act as a revenue generator.



#### Do RSCs violate motorists’ privacy?

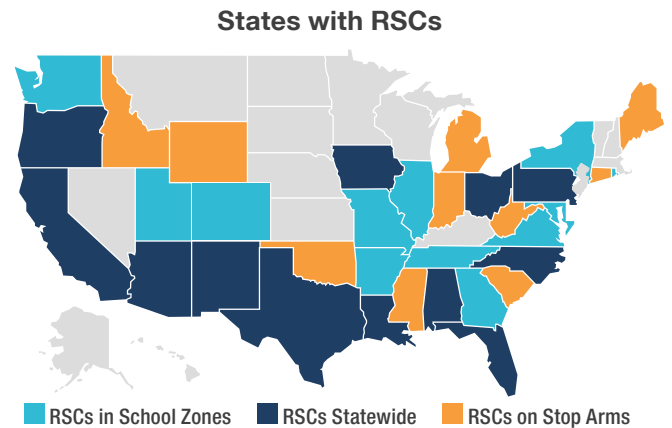
No. Driving is a regulated activity on public roads. By obtaining a license, a motorist agrees to abide by certain rules, such as to obey traffic control devices.

### RSCs in School Zones Nationwide

According to Insurance Institute for Highway Safety (IIHS) and National Conference of State Legislatures (NCSL) research, at least 12 states—Arkansas, Colorado, Georgia, Illinois, Maryland, Missouri, New York, Rhode Island, Tennessee, Utah, Virginia and Washington—conduct school zone automated speed enforcement. In Georgia and Rhode Island, school zones are the only locations where automated speed enforcement is allowed in the state.<sup>6</sup>

### References and Additional Resources

1. **FWHA Proven Safety Countermeasure – RSCs**  
<https://highways.dot.gov/safety/proven-safety-countermeasures/speed-safety-cameras>
2. **Maryland County RSC Study**  
<https://www.iihs.org/news/detail/speed-cameras-reduce-injury-crashes-in-maryland-county-iihs-study-shows>
3. **NHTSA School Transportation-Related Crashes**  
<https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813327>
4. **Clark County Pedestrian Crashes Near Schools**  
<https://www.reviewjournal.com/investigations/unreliable-pedestrian-crashtracking-near-schools-leaves-parents-officials-in-the-dark-2652525/>
5. **Safety Evaluation of Red Light Cameras. Report No. FHWA HRT-05-048**  
Council, F.; Persaud, B.; Eccles, K.; Lyon, C.; and Griffith, M. 2005. Washington, DC.
6. **Insurance Institute for Highway Safety**
7. **NHTSA Report on RSCs Effectiveness**  
<https://www.nhtsa.gov/book/countermeasures/countermeasures/21-automated-enforcement>
8. **National Conference of State Legislatures RSC Review**  
<https://www.ncsl.org/transportation/traffic-safety-review-state-speed-and-red-light-camera-laws-and-programs>
9. **National Conference of State Legislatures State School Bus Stop Arm Camera Laws**  
<https://www.ncsl.org/transportation/state-school-bus-stop-arm-camera-laws>
10. **Nevada Department of Education, Office for a Safe and Respectful Learning Environment**  
*Optional on-board survey with 35% of drivers reporting 1240 passing violations in one day during the 2021-2022 school year*

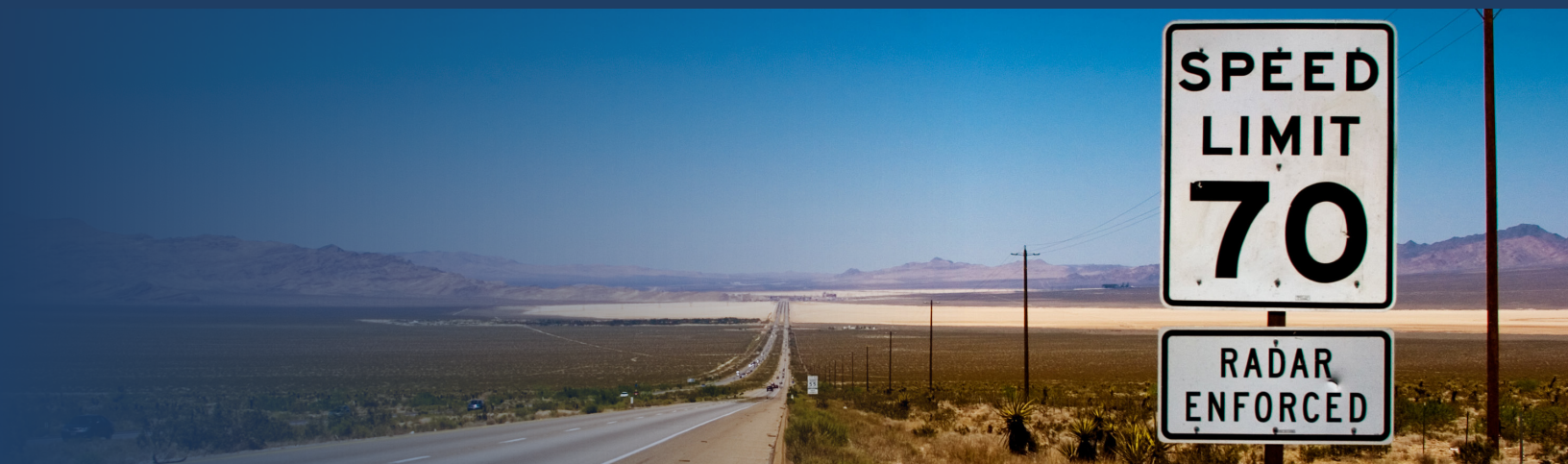


### Proposed Policy Recommendations for RSCs:

- 1 Eliminate the prohibition on use of stationary photographic, video, or digital equipment for issuance of a traffic citation in NRS 484A.600.
- 2 Add enabling language for the use of RSCs in school zones.
- 3 Add enabling language for local authorities to use RSCs on school buses to enforce stop arm violations.

### For more information contact:

Nevada Advisory Committee on Traffic Safety (NFACTS)  
<https://zerofatalitiesnv.com> | [zerofatalitiesnv@kimley-horn.com](mailto:zerofatalitiesnv@kimley-horn.com)



### Current Situation:

#### Speeding and aggressive driving are increasing and killing more people.

- » Red light running crashes are responsible for approximately 140,000 injuries and 850 fatalities each year.<sup>1</sup>
- » Speed-related crashes are responsible for approximately 9,500 fatalities each year.<sup>1</sup>
- » Over one-third of the traffic fatalities in Nevada are related to speed and/or aggressive driving.

### Recommended Solution:

#### Provide enabling language that allows any agency to choose to use Road Safety Cameras (RSCs), but does not require RSC use. RSCs have been proven to save lives.

- » Federal Highway Administration Proven Safety Countermeasure:
  - » Reduced crashes on urban principal arterials by 54% and injury crashes by 47%<sup>1</sup>
  - » Reduced speeding in school zones up to 63% during school hours<sup>1</sup>
- » Reflects that National Highway Traffic Safety Administration (NHTSA) has determined that they are effective at the highest level
- » For roadways with RSCs between 2015 and 2019, the likelihood of a driver exceeding the speed limit by more than 10 mph decreased by 59%
- » Red light cameras reduced the fatal red-light-running crash rate by 21% and the rate of all types of fatal crashes at signalized intersections by 14%<sup>6</sup>

### Concerns



#### Is the objective to generate revenue?

No. The primary purpose of RSCs is to improve traffic safety by reducing unsafe driving at intersections and on highways. Effective legislation limits systems to address traffic safety rather than act as a revenue generator.

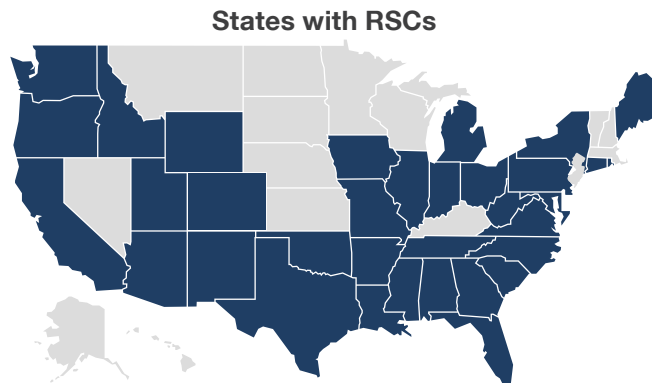


#### Do RSCs violate motorists' privacy?

No. Driving is a regulated activity on public roads. By obtaining a license, a motorist agrees to abide by certain rules, such as to obey traffic control devices.

### RSCs Nationwide

According to Insurance Institute for Highway Safety (IIHS) and National Conference of State Legislature (NCSL) research, 33 states allow the use of Road Safety Cameras in all or specific situations. Red light cameras and photo radar give law enforcement agencies the ability to enforce these traffic laws remotely. About 350 U.S. communities use red light cameras and over 150 communities in the U.S. use cameras to enforce speed laws.<sup>6</sup>



Sources: Insurance Institute for Highway Safety and the National Conference of State Legislature

### References and Additional Resources

1. **FWHA Proven Safety Countermeasure – RSCs**  
<https://highways.dot.gov/safety/proven-safety-countermeasures/speed-safety-cameras>
2. **Maryland County RSC Study**  
<https://www.iihs.org/news/detail/speed-cameras-reduce-injury-crashes-in-maryland-county-iihs-study-shows>
3. **NHTSA School Transportation-Related Crashes**  
<https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813327>
4. **Clark County Pedestrian Crashes Near Schools**  
<https://www.reviewjournal.com/investigations/unreliable-pedestrian-crash-tracking-near-schools-leaves-parents-officials-in-the-dark-2652525/>
5. **Safety Evaluation of Red Light Cameras. Report No. FHWA HRT-05-048**  
 Council, F.; Persaud, B.; Eccles, K.; Lyon, C.; and Griffith, M. 2005. Washington, DC.
6. **Insurance Institute for Highway Safety (IIHS)**  
<https://www.iihs.org/>
7. **NHTSA Report on RSCs Effectiveness**  
<https://www.nhtsa.gov/book/countermeasures/countermeasures/21-automated-enforcement>
8. **NCSL RSC Review**  
<https://www.ncsl.org/transportation/traffic-safety-review-state-speed-and-red-light-camera-laws-and-programs>
9. **NCSL State School Bus Stop Arm Camera Laws**  
<https://www.ncsl.org/transportation/state-school-bus-stop-arm-camera-laws>
10. **Nevada Department of Education, Office for a Safe and Respectful Learning Environment**  
*Optional on-board survey with 35% of drivers reporting 1240 passing violations in one day during the 2021-2022 school year*

### Proposed Policy Recommendations for RSCs:

- 1 Eliminate the prohibition on use of stationary photographic, video, or digital equipment for issuance of a traffic citation in NRS 484A.600.
- 2 Add enabling language for the use of RSCs.

### For more information contact:

Nevada Advisory Committee on Traffic Safety (NVACTS)  
<https://zerofatalitiesnv.com> | [zerofatalitiesnv@kimley-horn.com](mailto:zerofatalitiesnv@kimley-horn.com)

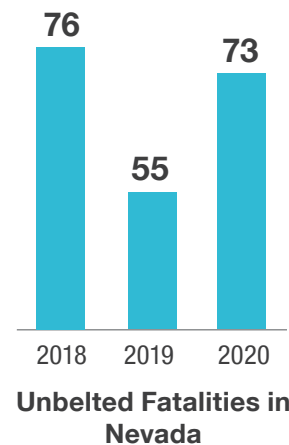




### Current Situation:

#### Nearly 50% of vehicle occupants killed in traffic fatalities in Nevada are unbelted.

- » Between 2018 and 2020, 204 of 480 (42%) vehicle occupants killed in Nevada were unbelted, plus an additional 32 (7%) were unknown.
- » Nevada's seat belt law is a secondary law, not a primary law, and violators can only be ticketed when they are pulled over for a reason other than seat belt use.
- » Nevada is one of just 15 states without a primary seat belt law.
- » Restraint use is the highest predictor of injury severity of vehicle occupants in a crash in Nevada, with those **unrestrained at 2.2 times higher risk** of a fatal or serious injury compared to those who use restraints.<sup>1</sup>
- » Hospital patients from a crash that were unrestrained have **higher injury scores, longer hospital stays** (6.3 vs. 3.0 days), **more days in the ICU** (2.5 days vs. 1 day), **more days on ventilator support** (1.35 vs. 0.43 days), and incur a median of **\$12,110 more per person in hospital charges** compared with those who were restrained.<sup>1</sup>



Source: FARS for 2016-2020, Nevada State Data for 2021

### Recommended Solution:

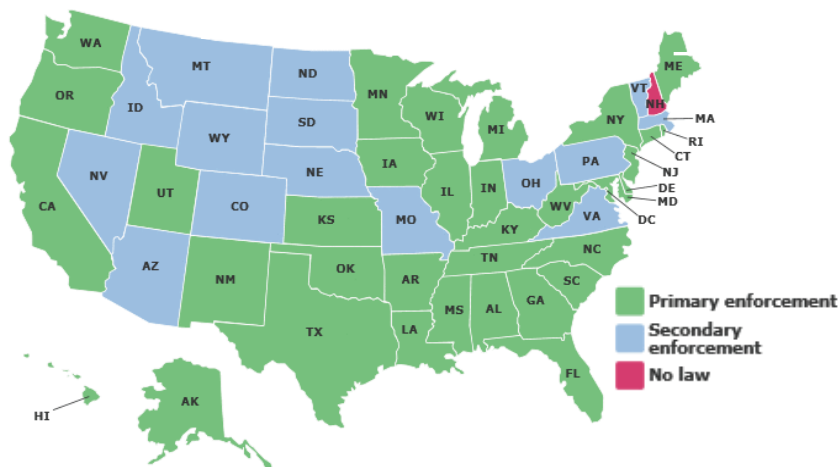
#### Change Nevada's seat belt law to a primary seat belt law.

- » Since 2011, 35 lives would have been saved had Nevada's seat belt usage been 100%.<sup>2</sup>
- » Approximately 200 lives were saved between 2016 and 2017 as a result of a new primary seat belt law in Utah.<sup>3</sup>

### Primary Seat Belt Laws Nationwide

Primary seat belt laws are being used nationally and internationally to save lives through increased seat belt usage. Primary enforcement laws are more effective than secondary enforcement laws. According to the National Highway Traffic Safety Administration (NHTSA), in 2019, 92% of front seat occupants in states with primary enforcement laws buckled up, in contrast to 86% of front seat occupants in states with secondary enforcement or no laws. Nevada is one of only 15 states with secondary seat belt laws.

It is estimated that over 220,000 of Nevadans are still not buckling up and are overrepresented in fatalities in Nevada.<sup>4</sup>



### References and Additional Resources

1. **Nevada's Traffic Research and Education Newsletter**  
<https://www.unlv.edu/medicine/newsletters>
2. **State of Nevada Office of Traffic Safety Annual Report, 2016**  
[https://www.nhtsa.gov/sites/nhtsa.gov/files/documents/nv\\_fy2016\\_annual\\_report.pdf](https://www.nhtsa.gov/sites/nhtsa.gov/files/documents/nv_fy2016_annual_report.pdf)
3. **Fatality Analysis Reporting System (FARS) 2016-2019 Final, FARS 2020 ARF, Preliminary State Data (2021)**  
<https://www.nhtsa.gov/research-data/fatality-analysis-reporting-system-fars>
4. **Utah Department of Public Safety (DPS)**  
<https://publicsafety.utah.gov/>

### Proposed Policy Recommendations for a Primary Seat Belt Law:

- 1 Change the Nevada law by eliminating existing language that limits the issuance of a seat belt citation. This would make Nevada a primary seat belt law state.
- 2 Change Nevada law by eliminating existing language that limits the issuance of a citation, but with a sunset date to allow for data collection and analysis to evaluate the effectiveness of the law (similar to Utah).
- 3 Increase the minimum fine for non-compliance with Nevada's existing seat belt law. This could be enacted in conjunction with the other options or separately.

### For more information contact:

Nevada Advisory Committee on Traffic Safety (NVACTS)  
<https://zerofatalitiesnv.com> | [zerofatalitiesnv@kimley-horn.com](mailto:zerofatalitiesnv@kimley-horn.com)

# MAKING NEVADA SAFER

## HIGHER FINES IN SCHOOL ZONES

Nevada Advisory Committee on Traffic Safety  
Policy Priority



### *Current Situation:*

#### **Speeding and aggressive driving are increasing and endangering our kids.**

- » Speed-related crashes are responsible for approximately 9,500 fatalities each year.<sup>1</sup>
- » Over one-third of the traffic fatalities in Nevada are related to speed and/or aggressive driving.
- » Nevada currently has school zone laws related to speed, but higher fines for speeding in school zones is not specified.

### *Recommended Solution:*

#### **Modify legislation to increase fines for speeding in school zones.**

- » Legislating higher fines for speeding in school zones and at crossings will save lives on Nevada's roadways.
- » Specifying higher fines for speeding in school zones is expected to increase the number of speeding citations issued in school zones and the number of citations upheld in the court system.



### National Trends in School Zone Laws

There are many different ways states address speeding fines in school zones or at school crossing zones. Most states allow fines of double or more for speeding in a school zone or at a school crossing zone. For example, a standard speeding ticket in North Carolina ranges between \$10 and \$50, but a school zone speeding ticket is \$250. Similarly, a school zone speeding ticket in Virginia is \$250. However, several states who have added safety camera enforcement in school zones have lower fines for speeding. For example, the highest fine in a school zone with added safety camera enforcement in Maryland is \$40. In Washington state, the fine is about \$240, but is capped much lower if issued through a safety camera.

### References and Additional Resources

1. **FWHA Proven Safety Countermeasure – RSCs**  
<https://highways.dot.gov/safety/proven-safety-countermeasures/speed-safety-cameras>
2. **Maryland County RSC Study**  
<https://www.iihs.org/news/detail/speed-cameras-reduce-injury-crashes-in-maryland-county-iihs-study-shows>
3. **NHTSA School Transportation-Related Crashes**  
<https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813327>
4. **Clark County Pedestrian Crashes Near Schools**  
<https://www.reviewjournal.com/investigations/unreliable-pedestrian-crash-tracking-near-schools-leaves-parents-officials-in-the-dark-2652525/>
5. **NHTSA Report on RSCs Effectiveness**  
<https://www.nhtsa.gov/book/countermeasures/countermeasures/21-automated-enforcement>
6. **NCSL RSC Review**  
<https://www.ncsl.org/transportation/traffic-safety-review-state-speed-and-red-light-camera-laws-and-programs>
7. **FARS 2016-2019 Final and FARS 2020 ARF**  
<https://www.nhtsa.gov/research-data/fatality-analysis-reporting-system-fars>

### Proposed Policy Recommendations for Higher Fines in School Zones:

- 1 Change NRS 484B.363 to increase speeding fines in school zones and at school crossing zones.
- 2 Amend NRS 484B.367 to include clear designations on higher speeding fines in school zones and at school crossing zones.

### For more information contact:

Nevada Advisory Committee on Traffic Safety (NVACTS)  
<https://zerofatalitiesnv.com> | [zerofatalitiesnv@kimley-horn.com](mailto:zerofatalitiesnv@kimley-horn.com)

# MAKING NEVADA SAFER

## GRADUATED DRIVER'S LICENSE

Nevada Advisory Committee on Traffic Safety  
Policy Priority



### Current Situation:

**Too many young drivers ages 15 – 20 are dying on Nevada roads, and that number is on the rise.**

- » As shown in the figure at the lower right corner of this page, between 27 and 40 young drivers died per year in Nevada between 2017 and 2021.
- » Nevada currently has some young driver laws, but other more comprehensive requirements for graduated driver's licenses (GDLs) are not included.

### Recommended Solution:

**Revise current GDL laws to include nationally recommended components.**

- » GDL laws have been implemented nationally and internationally to protect both new and young drivers.

### What Does this Mean for Nevada?

Young drivers are inexperienced on the road and often do not realize how dangerous certain driving behaviors, like improper seat belt use, can be.

Furthermore, distracted or inattentive driving has become a national epidemic, and young drivers are at the greatest risk. Currently, 38 states ban all cell phone use for GDL drivers.<sup>1</sup> Nevada is not one of them.



*There is only 87% observed seat belt use among 16 to 24-year-olds—the lowest of any age group<sup>2</sup>*



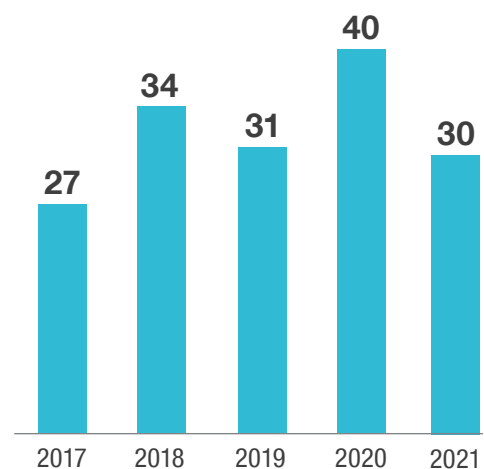
*52% of young people involved in fatal crashes were unbuckled<sup>1</sup>*



*Teens have the highest crash risk of any age group, and research confirms that distraction is often a factor<sup>1</sup>*



*Current Nevada GDL laws do not specifically ban all cell phone use for drivers less than 18 years of age<sup>1</sup>*

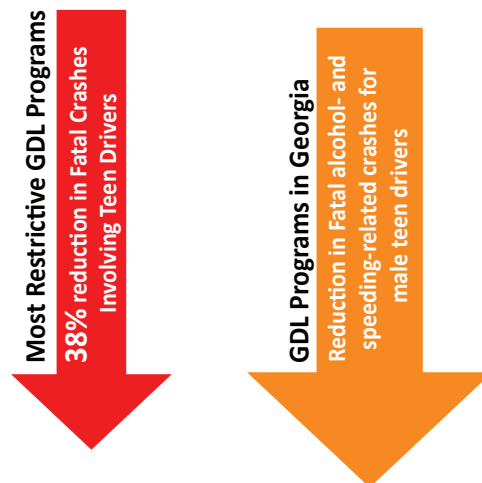


**Fatalities Among Young Drivers in Nevada**

Source: Fatality Analysis Reporting System (FARS) for 2017-2020, Nevada State Data for 2021

### Impacts of GDL Systems for New Drivers

GDL systems gradually increase the exposure of new drivers to more complex driving situations in as safe a manner as possible. New drivers are not just 16 or 17 years old, they are every age. With troubling national trends recently highlighted in the Governors Highway Safety Association (GHSA) report “Mission Not Accomplished: Teen Safe Driving, the Next Chapter,” it is clear that focus must be placed on all new drivers, not just teens. This data revealed that older teen drivers (18-20), were involved in 12% more fatal car crashes when compared to younger teen drivers (15-18). GHSA believes this upward trend is the result of teens waiting until they are 18 to get their license and bypassing GDL laws. By updating some of our laws, we can make sure that every driver who gets behind the wheel is educated and trained to avoid any behavior that could put their life at risk, including young drivers.



Source: NHTSA, 2022

### References and Additional Resources

1. **National Highway Traffic Safety Administration (NHTSA)**  
<https://www.nhtsa.gov/book/countermeasures/appendix/a6-young-drivers>
2. **Insurance Institute for Highway Safety (IIHS), 2020**  
<https://www.iihs.org/topics/seat-belts#belt-use>

### Proposed Policy Recommendations for Graduated Driver's License:

- 1 Change NRS 484B.165 to restrict all cell phone use, including hands-free devices, for drivers less than 18 years of age.
- 2 Amend NRS 484D.495 to include seat belt usage for young drivers and their passengers as a condition for continued licensure within Nevada's graduated driver licensing system.
- 3 Remove the age restriction to current GDL laws, thereby requiring all new drivers to obtain practical driving experience in a lower risk situation.

### For more information contact:

Nevada Advisory Committee on Traffic Safety (NVACTS)  
🌐 <https://zerofatalitiesnv.com> | ✉ [zerofatalitiesnv@kimley-horn.com](mailto:zerofatalitiesnv@kimley-horn.com)



### Current Situation:

#### Drug impaired driving is growing faster than alcohol impairment as a cause of fatalities.

- » Impaired Driving was a cause in over 43% of fatalities, more than 130 fatalities per year, in Nevada between 2016 and 2020.
- » Current law in Nevada requires implied consent for preliminary testing of a person's breath if operating a vehicle on a highway or premises to which the public has access, but there is no provision for use of non-evidentiary or preliminary testing of oral fluid at the roadside akin to the preliminary breath test.

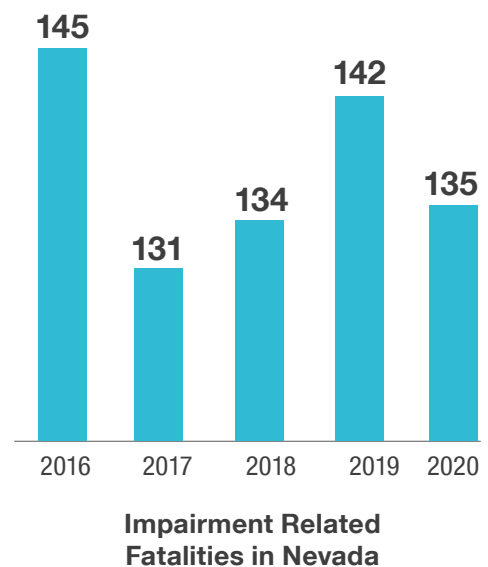
### Recommended Solution:

#### Pass enabling legislation for oral fluid testing for drug impairment testing.

- » There is no provision for use of non-evidentiary or preliminary testing of oral fluid at the roadside akin to the preliminary breath test referenced

### Pilot Programs Nationwide

Michigan State Police's oral fluid testing pilot program proved to be successful and they concluded, "Each of the six drug classes demonstrated varied percentages of accuracy when compared to the "Gold Standard," which is a blood test. Oral fluid testing does not equal the "Gold Standard" but has been found to be accurate for purposes of preliminary roadside testing."<sup>2</sup> Additionally, Alabama has an oral fluid testing program after completing their pilot program and Indiana is using a pilot oral fluid testing program for Drug Recognition Expert (DRE) use only. These testing programs are minimally-invasive and usually take less than five minutes to provide an officer with information.



Source: Fatality Analysis Reporting System (FARS) for 2017-2020, Nevada State Data for 2021

Year	Fatalities			Operators				
	Total Fatalities	Total Substance-Involved Fatalities <sup>3</sup>	Percentage of Fatalities that are Substance	Alcohol (0.08 or greater BAC)	Marijuana	Other Drug	Poly-Substance	Any Marijuana (Subset of Poly-Substance)
2017	309	176	56.96%	44	29	12	87	71
2018	329	176	53.50%	39	23	18	94	69
2019	304	166	54.61%	44	30	24	86	85
2020	333	188	56.46%	38	37	13	102	98
2021	384	224	58.33%	47	38	16	114	108

### Impacts of Roadside Oral Fluid Testing

In Michigan, roadside oral fluid testing has proven to be accurate for use in impaired driving investigations after an extensive two-part pilot program. The oral fluid test instrument provides the investigating police officer positive or negative results, within five minutes, on recent drug intake. Accuracy in the pilot program measured the percentage of all samples correctly classified by the oral fluid tests, and performs generally around 80% for common drug classes.<sup>4</sup>

### References and Additional Resources

- National Highway Traffic Safety Administration (NHTSA)**  
<https://www.nhtsa.gov/book/countermesasures/appendix/a6-young-drivers>
- Oral Fluid Roadside Analysis - Pilot Program, Michigan State Police, February 2019**  
[https://www.michigan.gov/-/media/Project/Websites/msp/reports/Oral\\_Fluid\\_Report.pdf?rev=f3f046036bc34e87b8113bced08ea484](https://www.michigan.gov/-/media/Project/Websites/msp/reports/Oral_Fluid_Report.pdf?rev=f3f046036bc34e87b8113bced08ea484)
- Fatality Analysis Reporting System (FARS) 2016-2019 Final, FARS 2020 ARF, Preliminary State Data (2021)**  
<https://www.nhtsa.gov/research-data/fatality-analysis-reporting-system-fars>
- Oral Fluid Roadside Analysis - Pilot Program Phase II, Michigan State Police, January 2021**  
[https://www.michigan.gov/-/media/Project/Websites/msp/reports/phase\\_ii\\_oral\\_fluid\\_report.pdf?rev=911dc2c7042d444eb8918395a2211915](https://www.michigan.gov/-/media/Project/Websites/msp/reports/phase_ii_oral_fluid_report.pdf?rev=911dc2c7042d444eb8918395a2211915)

### Proposed Policy Recommendations for Roadside Drug Impairment Testing:

- 1 Pass and implement oral fluid testing for statewide use in all agencies that wish to use the devices.
- 2 Pass, but limit utilization of the devices to Nevada peace officers who are DREs with current credentials certified by the International Association of the Chiefs of Police (IACP).

#### For more information contact:

Nevada Advisory Committee on Traffic Safety (NVACTS)  
<https://zerofatalitiesnv.com> | [zerofatalitiesnv@kimley-horn.com](mailto:zerofatalitiesnv@kimley-horn.com)



## Traffic Safety Policy Priority: Transit Riders and Other Pedestrian's Safety

### Description:

Bus Stop Safety for stops more than 50 yards from a signalized intersection. When a bus stop is more than 150' from an intersection, no matter the street, a mid-block crosswalk must be added to the stop. The crosswalk should follow NDOT guidelines for marked crosswalks standards, to include enhanced lighting up to and including a pedestrian signal. This will be the policy no matter if the stop is near or far side.

### Data to Support:

All data and research looked at concluded that pedestrian crashes were higher around transit stops. Not surprising, because there is increased foot traffic each time a bus stops, and at popular pick up locations where pedestrians gather to catch the bus. There are research papers that evaluate a tool developed to measure need for improvements at bus stop locations based on a danger index. I will get studies to you ASAP, but in the next week.

### Subject Matter Expert(s):

1. N/A

### Resources & Reference:

### Submitted By:

Pedestrian

Contact: Erin Breen, UNLV TRC/ Road Equity Alliance Program, scp.unlv@gmail.com

## Traffic Safety Policy Priority: Complete Intersections

### Description:

Recommend implementing a complete intersections policy. This policy will help advocate for safe intersections that are designed, built, retrofitted, and maintained to meet the need of all users in particular vulnerable road users. Many of the intersections in the transportation system today were constructed at a time when the emphasis was moving automobiles. The present and future focus is on all road users. An effective complete intersections policy will ensure cohesive action strategies that create a safe and homogenous roadway.

There are several benefits for focusing on complete intersections. First, safety stakeholders will collectively work towards prioritizing vulnerable road user safety. Nevada has triggered the vulnerable road user special rule, and this allows for a tactical use of resources that will effectively target a Strategic Highway Safety Plan priority. Second, by focusing on vulnerable road user safety it will collectively increase the safety of all road users. In Nevada intersection fatalities make up 32 percent of Nevada’s total fatalities and 93 percent of fatal intersection crashes occurred on urban roadways. Third, vulnerable road users are disproportionately represented by disadvantaged communities. By focusing on vulnerable road users, this policy will help address equity within the transportation system. The City of North Las Vegas Local Road Safety Plan found that most crashes happened in underserved communities. Fourth, there are economic benefit derived from to complete intersections leading to complete streets that ultimately result in vibrant streetscapes. Fifth, complete intersections serve as a focus point for Safe Systems approach principles:

- Death and Serious Injuries are Unacceptable
- Humans Make Mistakes
- Humans Are Vulnerable
- Responsibility is Shared
- Safety is Proactive
- Redundancy is Crucial

These benefits of focusing on complete intersections provide positive steps toward Zero Fatalities.

The cons for this approach would be changing the mindset of transportation professionals and stakeholders that are set in their ways.

The national trends for intersection crashes have been increasing since 2018.

Year	Total Intersection Fatalities	Total Signalized Intersection Fatalities	Total Unsignalized Intersection Fatalities
2018	10,148	3,347	6,801
2019	10,273	3,296	6,977
2020	10,626	3,537	7,089

**Data to Support:**

- [https://highways.dot.gov/sites/fhwa.dot.gov/files/2022-06/FHWA\\_SafeSystem\\_Brochure\\_V9\\_508\\_200717.pdf](https://highways.dot.gov/sites/fhwa.dot.gov/files/2022-06/FHWA_SafeSystem_Brochure_V9_508_200717.pdf)
- <https://highways.dot.gov/sites/fhwa.dot.gov/files/2022-06/fhwasa21008.pdf>
- <https://www.ite.org/pub/?id=C8B1C6F9-DCB5-C4F3-4332-4BBE1F58BA0D>

**Subject Matter Expert(s):**

1. Lacey Tisler, NDOT, Ltisler@dot.nv.gov
2. Dr. Perry Gross, NDOT, perry.gross@dot.nv.gov

**Resources & Reference:**

<https://highways.dot.gov/safety/intersection-safety>

<https://highways.dot.gov/safety/intersection-safety/safe-system-intersections>

**Submitted By:**

Task force or working group Intersection CEA.

Contact: Lacey Tisler, NDOT, Ltisler@dot.nv.gov

## Traffic Safety Policy Priority: Implementation of the Speed Management Action Plan

### Description:

Nationally speed violations are on the rise across all segments of the roadway network. While there are likely many factors, the reduction in work trips associated with shifts in hybrid work situations are believed to be central to the speeding trend. Nevada is experiencing these phenomena. The Nevada Department of Transportation recognized this issue and published the Speed Management Action Plan (SMAP).

Managing speed requires a Safe Systems Approach. Safer speeds, coupled with other Safe Systems objectives will rely on modifying behaviors to begin moving toward Zero Fatalities. As such, implementation of SMAP needs to continuously engage in learning from doing. The Safe Systems principles embody learning from doing and should be fundamental in this policy priority for implementing Nevada's SMAP.

All road owners should adopt a context sensitive speed setting policy to reduce fatal and serious injuries on the roadway system.

The Safety Management Action Plan document can be found here: <https://www.dot.nv.gov/safety/traffic-safety-engineering/highways-safety-improvement-program-hsip/speed-management-action-plan-smap>

### Data to Support:

The Nevada's Speed Management Action Plan web page and document located here, 638064569575470000 (nv.gov) provides abundant supporting details supporting the strategies and actions. Preliminary information is included about implementation of the plan

### Subject Matter Expert(s):

1. Lacey Tisler, NDOT, Ltisler@dot.nv.gov
2. Jordan Kaczmarek, NDOT, jkaczmarek@dot.nv.gov

### Resources & Reference:

SMAP web page Speed Management Action Plan (SMAP) | Nevada Department of Transportation (nv.gov)

FHWA Speed Management web page Speed Management | FHWA (dot.gov)

FHWA Safe Systems Approach What Is a Safe System Approach? | US Department of Transportation

PIARC Road Safety Manual The Safe System Approach | Road Safety Manual - World Road Association (PIARC)

### Submitted By:

Safe Speeds Task Force

Contact: Lacey Tisler, Ltisler@dot.nv.gov

## Traffic Safety Policy Priority: Yield to Merging Public Bus

### Description:

Yielding right of way to transit bus may help reduce the delay of transit buses re-entering traffic after loading and unloading passengers at the designated bus stops. Though it may not deter every vehicle to yield, the chance that one vehicle will yield will help reduce merging delay. The priority merge has been adopted by Washington State, Oregon, Florida, New Jersey, California, Minnesota, Montana, Colorado and Canada. The buses usually have a yield light at the back of the bus to indicate when the bus is ready to re-enter traffic (see image below). Some states have even included a fine for those that do not follow the new law.



### Data to Support:

<https://www.nctr.usf.edu/wp-content/uploads/2013/05/77939.pdf>

[https://rosap.ntl.bts.gov/view/dot/36644/dot\\_36644\\_DS1.pdf](https://rosap.ntl.bts.gov/view/dot/36644/dot_36644_DS1.pdf)

<https://digitalcommons.usf.edu/cgi/viewcontent.cgi?article=1125&context=jpt#:~:text=In%20the%20United%20States%2C%20seven,the%20backs%20of%20buses%20and>

### Subject Matter Expert(s):

1. N/A

### Resources & Reference:

- Beaverton Police Department. (2015, April 23). *Did you know that you're required to yield to a TriMet bus when it's entering the roadway with its yield sign activated.* Facebook. Retrieved June 2, 2023, from <https://www.facebook.com/BeavertonPoliceDepartment/posts/did-you-know-that-youre-required-to-yield-to-a-trimet-bus-when-its-entering-the-/1032088276813733/>
- Oregon Law: [https://oregon.public.law/statutes/ors\\_811.167](https://oregon.public.law/statutes/ors_811.167)
- <http://www.ci.missoula.mt.us/DocumentCenter/View/37584/Mountain-Line-Launches-Yield-to-the-Bus-Campaign>
- <http://www.ci.missoula.mt.us/DocumentCenter/View/1730/Yield-to-Bus-Packet?bidId=>

### Submitted By:

Design - Scoping Division

Contact: Kate Adkins, NDOT [kadkins@dot.nv.gov](mailto:kadkins@dot.nv.gov)

## Traffic Safety Policy Priority: Safe Neighborhoods

### Description:

Safe Neighborhoods: A proposal to limit how vehicles travel in neighborhoods; and more safety enhancements to encourage travel by foot and bike, especially to school. This policy/law would:

- Limit speeds in neighborhoods to 25 mph, maximum, 24/7/365, to include even collector roads on school days for an hour before and an hour after school.
- Ability to temporarily close neighborhood streets to non-residents for safety reasons, or during a covid-like situation when children needed safe places to recreate outdoors, or things like block parties.
- Sidewalks are required on both sides of the street on new construction or major rehab, no bargaining with builders to reduce their costs.
- Streetlights are required.
- Require every school budget includes \$300. For one gallon of red paint a month to keep the 20' on either side of crosswalks to be refreshed monthly.
- Neighborhood streets that promote safe speeds, i.e., 60' max ROW, improvements for bikes, scooters, mobility devices as well as minimum 8' sidewalks, 8' mobility lane, 11' travel lane and center treatment.
- School zones that extend to the limit of bussing zones away from a school campus, most two miles, so we are actively supporting children walking and biking to school and not just those who are being dropped off at the main entrance,
- Consider slower school speed limits truly "when children are present" and not the current half hour before and half-hour after school, 24/7 on true neighborhood streets and 25 mph on collector or higher streets through neighborhoods. At minimum for one hour before and after school; so many kids travel to school for free breakfast in the morning and have activities after school.
- Speed limit signs posted every half-mile.

### Data to Support:

I am happy to provide data for kids traveling to and from school, as well as pedestrian and bikes around schools, both which I have, but only a quarter mile away. With time, we can put the data together for all road use and include buffers for schools at one, two and three mile radius.

### Subject Matter Expert(s):

1. Erin Breen, UNLV/TRC; scp.unlv@gmail.com
2. Albert Jacquez, NDOT Multi-Modal Department, Ajacquez@dot.nv.gov

### Resources & Reference:

### Submitted By:

Task force or working group (Intersections, Safe Speeds, Pedestrians, etc.) Pedestrians

Contact: Erin Breen, Road Equity Alliance Program, scp.unlv@gmail.com

## Traffic Safety Policy Priority: Yield for Pedestrians to Stop for Pedestrians

### Description:

Nevada law requires a driver to yield to a pedestrian in a marked or unmarked crosswalk while the pedestrian is on their half of the road or if approaching in a manner which could be unsafe. If a driver passes through the crosswalk while the person walking is still on his half of the road, or entire road if no center divider is present, that driver will be ticketed if an officer sees them for failure to yield to a pedestrian. Our law is classified as a yield to pedestrians' law and all signage in the state for pedestrians reinforces this, as do the pavement markings. The yield to pedestrians gives drivers the idea they can proceed one the walker is no longer in their lane. Changing our law to STOP for pedestrians clarifies that you must stop.

Even saying to drivers that "In Nevada you are required to stop for pedestrians" has far more weight than "you must yield to walkers".

### Data to Support:

Currently, nine states require drivers to stop, one more than when we looked last time. As one of the worst states for pedestrian fatalities, I believe making our law stronger will equate to saving more lives.

I will submit data over the weekend.

### Subject Matter Expert(s):

1. Erin Breen, UNLV/TRC, scp.unlv@gmail.com

### Resources & Reference:

### Submitted By:

Pedestrian

Contact: Erin Breen, UNLV TRC/ Road Equity Alliance Program, scp.unlv@gmail.com



## Traffic Safety Policy Priority: Traffic Records

### Description:

The Office of Traffic Safety proposes, for consideration, the following conceptual changes to improve traffic records data collection:

- Add clarifying language to NRS 484E.110 to require crash notification within 10 days of the date of the crash (10 days after the investigation) or date of death.
- Require law enforcement agencies to report traffic incident arrest data within the central e-crash/e-citation system, i.e. DUI arrest, reckless driving arrest, etc.
- Require reporting of traffic offense adjudication data to the State.
- Add clarifying language to NRS 484C.170 to add required testing of prohibited substances in addition to alcohol.

### **NRS 484E.110 Police to report to Department of Public Safety; report not confidential; requirements for preparation of report; submission of copy of report to Department of Motor Vehicles.**

1. Every police officer who investigates a vehicle crash of which a report must be made as required in this chapter, or who otherwise prepares a written or electronic report as a result of an investigation either at the time of and at the scene of the crash or thereafter by interviewing the participants or witnesses, shall forward a written or electronic report of the crash to the Department of Public Safety within 10 days after the ~~investigation date~~ of the crash, ~~or date of death, if a fatal injury occurred due to the crash~~. The data collected by the Department of Public Safety pursuant to this subsection must be recorded in a central repository created by the Department of Public Safety, ~~maintained in collaboration with the Department of Transportation~~, to track data electronically concerning vehicle crashes on a statewide basis.

~~2. State agencies may (shall?) enter into data use agreements to share crash, citation, adjudication, medical, driver, and other relevant data for the purpose of improving traffic crash and/or other relevant traffic records systems.~~

2. The written or electronic reports required to be forwarded by police officers and the information contained therein are not privileged or confidential.

3. Every sheriff, chief of police or office of the Nevada Highway Patrol receiving any report required under NRS 484E.030 to 484E.090, inclusive, shall immediately prepare a copy thereof and file the copy with the Department of Public Safety.

4. If a police officer investigates a vehicle crash resulting in bodily injury to or the death of any person or total damage to any vehicle or item of property to an apparent extent of \$750 or more, the police officer shall prepare a written or electronic report of the investigation.

5. As soon as practicable after receiving a report pursuant to this section, the Department of Public Safety shall submit a copy of the report to the Department of Motor Vehicles.

(Added to NRS by 1969, 1485; A 1985, 1945; 1987, 685; 2013, 544; 2015, 1645)—(Substituted in revision for NRS 484.243)

### **NRS 484C.170 Analysis of blood of deceased victim of crash involving motor vehicle to determine presence and concentration of alcohol and prohibited substances.**

1. Any coroner, or other public official performing like duties, shall in all cases in which a death has occurred as a result of a crash involving a motor vehicle, whether the person killed is a driver, passenger or pedestrian, cause to be drawn from each decedent, within 8 hours of the crash, a blood sample to be analyzed for the presence and concentration of alcohol ~~and prohibited substances~~.

2. The findings of the examinations are a matter of public record and must be reported to the Department by the coroner or other public official within 30 days after the death.
3. Blood-alcohol **and substance** analyses are acceptable only if made by laboratories licensed to perform this function.

### Data to Support:



NVAdvisory\_Self-assessment\_20210424.x

NV Traffic Records assessment:

### Subject Matter Expert(s):

1. Amy Davey, NV DPS Office of Traffic Safety, [Amy.davey@dps.state.nv.us](mailto:Amy.davey@dps.state.nv.us)
2. Lacey Tisler, NDOT, [ltisler@dot.nv.gov](mailto:ltisler@dot.nv.gov)
3. Julia Peek, NV DHHS, [jpeek@health.nv.gov](mailto:jpeek@health.nv.gov)
4. Sean Sever, NV DMV, [ssever@dmv.nv.gov](mailto:ssever@dmv.nv.gov)
5. David Gordon, AOC, [dgordon@nvcourts.nv.gov](mailto:dgordon@nvcourts.nv.gov)
6. Dr. Shashi Nambisan, UNLV Transportation Research Center, [shashi@unlv.edu](mailto:shashi@unlv.edu)
7. Kevin Tice, NV DPS Office of Traffic Safety, [ktice@dps.state.nv.us](mailto:ktice@dps.state.nv.us)
8. Adam Anderson, NV DPS Office of Traffic Safety, [aanderson@dps.state.nv.us](mailto:aanderson@dps.state.nv.us)

### Resources & Reference:

NRS 484E.070 Written or electronic report of crash to Department by driver or owner; exceptions; confidentiality; use as evidence at trial. <https://www.leg.state.nv.us/nrs/nrs-484e.html>

NRS 484A.7035 Civil infraction citation: Contents; signature; service. [Effective January 1, 2023.] <https://www.leg.state.nv.us/nrs/nrs-484a.html>

NRS 484E.110 Police to report to Department of Public Safety; report not confidential; requirements for preparation of report; submission of copy of report to Department of Motor Vehicles. <https://www.leg.state.nv.us/nrs/nrs-484e.html>

Traffic Records Coordinating Committee <https://zerofatalitiesnv.com/safety-plan-what-is-the-shsp/trcc/>  
<https://www.ecfr.gov/current/title-23/chapter-III/part-1300/subpart-C/section-1300.22>  
[https://www.courtstatistics.org/\\_data/assets/pdf\\_file/0014/23900/data-governance-final.pdf](https://www.courtstatistics.org/_data/assets/pdf_file/0014/23900/data-governance-final.pdf)

### Submitted By:

Task force or working group: TRCC

Contact: Kevin Tice, NV Office of Traffic Safety, [ktice@dps.state.nv.us](mailto:ktice@dps.state.nv.us)

## SUMMARY

### CITATION STUDY WORKING GROUP

Wednesday, October 11, 2023, at 1:00 p.m.

Via Teams

#### **Working Group Members Present**

David Gordon, Chair, AOC, Nevada Supreme Court

The Honorable Stephen Bishop, White Pine County Justice Court

Amber Putz – AOC, Nevada Supreme Court

Julia Peek – Nevada Department of Health and Human Services

Amy Davey – Nevada Office of Traffic Safety

Kevin Trice - Nevada Office of Traffic Safety Records Manager

Dr. Shashi Nambisan – University of Nevada at Las Vegas

Dr. Christopher Stream – University of Nevada at Las Vegas

#### **Staff Present**

Shyle, Irigoien, AOC, Nevada Supreme Court

Rosemary Luque, AOC Nevada Supreme Court

#### **Call to Order**

Meeting called to order at 1:05 p.m.

#### **Review of Materials**

- Agenda for October 11<sup>th</sup> meeting
- Summary from July 12, 2023
- Newspaper articles provided regarding traffic safety
- Policy Recommendation Template

#### **I. Review of Proposed Recommendations**

- a. The goal of the proposed recommendations is not to provide specific direction on methods or agency/branch assignments to achieve solutions, but to identify recommendations to improve traffic citation data management and access. Eleven recommendations were reviewed and will be formatted into the provided template and forwarded to NVACTS.
- b. Ms. Peek reiterated the need for improved data sharing across agencies. She provided several examples of differences in court decisions using context to show how there are conflicting procedures within the process.
- c. Ms. Davey thanked the working group members for their work and noted that the members of the group came from unique roles in comparison to other working groups.

- d. Judge Bishop discussed a recent district court case decision involving a citation to a Commercial Driver's License (CDL) holder, illustrating the difficulties in navigating the statutory changes for police, judges, and the public. He invited anyone to his court, even if it's remotely, to get a better perspective of judges' work.
- e. Dr. Shashi Nambisan thanked the group for inviting him and Dr. Stream. They are trying to identify gaps in the current system, and they welcome insights from the group.

II. **Next Meeting - Discussion**

Mr. Gordon will ask the NVACTS committee to determine if the working group needs to continue to meet and will relay the decision to the members.

IV. **Meeting Adjourned**

This meeting was adjourned at 1:27 p.m.

Managing data associated with traffic citations requires an organized and efficient system to ensure accuracy and accessibility. Recommended practices include, but are not limited to:

#### 1. Digital Database:

- Centralized System: Use a centralized digital database to store all citation data. This can be a custom-built database, or a specialized software solution designed for law enforcement or traffic management.

- Cloud Storage: Consider using cloud storage for easy access, scalability, and data security. Cloud platforms like AWS, Azure, or Google Cloud provide reliable solutions.

#### 2. Data Entry and Validation:

- Standardized Entry: Establish standardized procedures for entering citation data. This helps maintain consistency and makes it easier to search and retrieve information.

- Validation Checks: Implement validation checks to ensure the accuracy of entered data, such as cross-referencing against existing records and verifying information against official databases.

#### 3. User Authentication and Access Control:

- Authentication: Implement secure user authentication to control access to the citation database. Only authorized personnel should have access to sensitive information.

- Access Control: Define user roles and permissions to control what data each user can view or modify. This ensures that only authorized personnel can make changes to the database.

#### 4. Integration with Other Systems:

- Integration with DMV: Integrate the citation database with relevant external systems, such as the Department of Motor Vehicles (DMV), to streamline the exchange of information and ensure data consistency.

- Court Systems Integration: Integrate with court systems to facilitate the processing of citations and legal proceedings.

## 5. Reporting and Analytics:

- Custom Reports: Develop custom reports to analyze citation data. This can help identify patterns, assess officer performance, and generate insights for decision-making.
- Real-time Dashboards: Implement real-time dashboards to provide a quick overview of key metrics and trends related to traffic citations.

## 6. Data Backups and Security:

- Regular Backups: Schedule regular backups of the citation database to prevent data loss in case of system failures or other unforeseen events.
- Data Encryption: Use encryption to protect sensitive information, especially if the database is stored on the cloud or if it involves personally identifiable information (PII).

## 7. Training and Documentation:

- User Training: Provide training for personnel responsible for data entry and management to ensure they understand the system and follow best practices.
- Documentation: Maintain comprehensive documentation outlining procedures, data entry guidelines, and troubleshooting steps.

## 8. Audit Trails:

- Audit Logging: Implement an audit trail system that logs all changes made to the citation data. This helps in tracking modifications, ensuring accountability, and investigating any discrepancies.

## 9. Regular Updates and Maintenance:

- Software Updates: Keep the database software up to date to benefit from the latest security patches, features, and improvements.
- Regular Maintenance: Conduct regular maintenance tasks, such as optimizing database performance, cleaning up obsolete records, and ensuring data integrity.

10. Legal Compliance:

- Compliance Checks: Regularly review and update the system to ensure compliance with relevant laws and regulations regarding data storage and privacy.

11. Proposed Traffic Records Coordinating Committee:

- Establish a standing subcommittee of NVACTS.
- Define membership requirements.