Traffic Records Coordinating Committee
Meeting Agenda

Date/Time:	Tuesday, March 19, 2024 | 10:00 am – 11:30 am
In-Person:	Kimley-Horn 7900 Rancharrah Pkwy Suite 100 Reno, NV 89511
Dial-In/Online:	984-204-1608 | Click here to join online | Code: 226 173 122 639#

Agenda

1. **Welcome and Introductions**
   - Meeting Purpose — **Matt**
   - Roll Call — **Mike**
2. **Notes from Last Quarterly Meeting** — **Matt**
3. **Data Update**
   - Monthly Fatality Data — **Mike**
   - Crash Data Collection and Database Update — **Matt**
   - Crash Facts — **Mike**
4. **Enforcement Mobile (Brazos) Working Group Update** — **Matt**
5. **2024 TRCC Funded Studies**
   - UNLV AI Speech Recognition for Crash Reports — **Dr. Arteaga/Dr. Park**
   - UNLV Statistical Transparency of Policing (STOP) Data Collection — **Dr. Mavegam**
   - UNLV Study on Adjudication of Citations and Enforcement — **Dr. Nambisan**
   - UNLV Nevada Road Users Linked Database — **Noe**
6. **Action Item Review Matrix** — **Mike**
7. **Open Discussion** — **Kevin**
8. **Upcoming Meetings** — **Mike**
   - Next TRCC Meeting – June 11, 2024, 10:00 am to 11:30 am
   - Nevada Advisory Committee on Traffic Safety (NVACTS) – June 13, 2024
   - ATSIP Traffic Records Forum – August 11-14, 2024 in San Diego, CA; Call for Abstracts are due February 1, 2024 - https://www.atsip.org/trf-registration/

Attachments:

A. Monthly Fatal Crash Report

B. Action Item Review Matrix

C. Meeting Summary (December 19, 2023)

FATALITIES BY COUNTY:

TOTAL LIVES LOST YTD:

58 ↑ 32%

UP 31.82% FROM LAST YEAR

FATALITIES

PEDESTRIANS
27

UNRESTRAINED MOTORISTS
4

TOP CONTRIBUTING FACTORS:
IMPAIRMENT & SPEEDING

DATA AS OF 2/29/2024

DATE OF REPORT: 3/5/2024
DATA AS OF: 2/29/2024

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	2023 Crashes	2024 Crashes	% Change	Month	2023 Fatals	2024 Fatals	% Change
JAN	25	36	44.00%	JAN	27	39	44.44%
FEB	15	17	13.33%	FEB	17	19	11.76%
MAR	0	0	0.00%	MAR	0	0	0.00%
APR	0	0	0.00%	APR	0	0	0.00%
MAY	0	0	0.00%	MAY	0	0	0.00%
JUN	0	0	0.00%	JUN	0	0	0.00%
JUL	0	0	0.00%	JUL	0	0	0.00%
AUG	0	0	0.00%	AUG	0	0	0.00%
SEP	0	0	0.00%	SEP	0	0	0.00%
OCT	0	0	0.00%	OCT	0	0	0.00%
NOV	0	0	0.00%	NOV	0	0	0.00%
DEC	0	0	0.00%	DEC	0	0	0.00%
Reporting Period Total	**40**	**53**	**32.50%**	**Reporting Period Total**	**44**	**58**	**31.82%**
Year End Total	**352**			**Year End Total**	**390**		

KNOWN FATAL COMPARISON BETWEEN 2023 AND 2024.

COUNTY	2023 Crashes	2024 Crashes	% Change	2023 Fatalities	2024 Fatalities	% Change	2023 Occupants	2024 Occupants	% Change	2023 Unrestrained	2024 Unrestrained	% Change
CARSON	1	1	0.00%	1	1	0.00%	1	0	-100.00%	0	0	0.00%
CHURCHILL	2	0	-100.00%	2	0	-100.00%	2	0	-100.00%	0	0	0.00%
CLARK	29	42	44.83%	32	47	46.88%	16	11	-31.25%	7	3	-57.14%
DOUGLAS	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%
ELKO	0	1	100.00%	0	1	100.00%	0	1	100.00%	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	1	1	0.00%	2	1	-50.00%	2	1	-50.00%	1	0	-100.00%
LANDER	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%
LINCOLN	1	0	-100.00%	1	0	-100.00%	1	0	-100.00%	1	0	-100.00%
LYON	1	1	0.00%	1	1	0.00%	1	0	-100.00%	1	0	-100.00%
MINERAL	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%
NYE	0	1	100.00%	0	1	100.00%	0	1	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%	0	0	0.00%	0	0	0.00%	0	0	0.00%
WASHOE	4	6	50.00%	4	6	50.00%	1	2	100.00%	1	1	0.00%
WHITE PINE	1	0	-100.00%	1	0	-100.00%	1	0	-100.00%	0	0	0.00%
Reporting Period Total	**40**	**53**	**32.50%**	**44**	**58**	**31.82%**	**25**	**16**	**-36.00%**	**11**	**4**	**-63.64%**
Year End Total	**352**			**390**			**201**			**66**		

KNOWN COMPARISON OF FATALITIES BY PERSON TYPE BETWEEN 2023 AND 2024.

COUNTY	2023 Pedestrian	2024 Pedestrian	% Change	2023 Motorcyclist	2024 Motorcyclist	% Change	2023 Bicyclist	2024 Bicyclist	% Change	2023 Other (Scooter, Moped, ATV)	2024 Other (Scooter, Moped, ATV)	% Change
CARSON	0	1	100.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%
CHURCHILL	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%
CLARK	11	23	109.09%	4	10	150.00%	1	1	0.00%	0	2	200.00%
DOUGLAS	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%
ELKO	0	0	0.00%	0	0	0.00%	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	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%
LINCOLN	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%
LYON	0	1	100.00%	0	0	0.00%	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	0	0.00%	0	0	0.00%	0	0	0.00%	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%	0	0	0.00%	0	0	0.00%	0	0	0.00%
WASHOE	2	2	0.00%	0	2	200.00%	1	0	-100.00%	0	0	0.00%
WHITE PINE	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%
Reporting Period Total	**13**	**27**	**107.69%**	**4**	**12**	**200.00%**	**2**	**1**	**-50.00%**	**0**	**2**	**200.00%**
Year End Total	**109**			**86**			**12**			**4**		

THIS REPORT IS A POINT IN TIME COMPARISON
THIS DATA DOES NOT INCLUDE DATA FIELDS MARKED BY THE OFFICER AS UNKNOWN.
2023 DATA IS PRELIMINARY AND DOES NOT NECESSARILY INCLUDE FINAL REPORTS (FORM 5, CORONER, AND/OR TOXICOLOGY).
2024 DATA IS NOT FINAL UNTIL THE END OF DECEMBER 2025.
NOTE: The monthly report will be distributed by the 7th of each month.

Key: Fatalities= Total number of reported fatals (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 not 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.

Key Area: Traffic Records Coordinating Committee (TRCC)

Critical Emphasis Area: Traffic Records Coordinating Committee (TRCC)

Strategy #1: TRCC Management, Strategic Planning, and Data Use and Integration.

No.	Description	Action Step Leader	Completion (Est.)	Last Update	Status	Output Measure	Comment
1.1	Develop a comprehensive Traffic Records Inventory by consolidating the discrete systems documentation maintained by custodial agencies into a coherent whole to improve accessibility and analysis for all stakeholders and to help encourage interactions between data analysts, data users, and those whose jobs are tangential to traffic safety.	Mike Colety (Kimley-Horn)	Dec 2025	12/15/2023	Substantial Progress	Completion of a comprehensive Traffic Records Inventory database.	Reviewing and updating the data records contacts. The plan is to post the traffic records contact information on the SHSP website.
1.2	Leverage its collaborative efforts to ensure that all components of the traffic records data system (TRS) are supported by formal data quality management programs.	Mike Colety (Kimley-Horn)	Jun 2022	12/15/2023	Moderate Progress	Formal quality data management programs in place for TRS components.	Continuing to work on updating data quality processes for each element.

Strategy #2: Crash.

No.	Description	Action Step Leader	Completion (Est.)	Last Update	Status	Output Measure	Comment
2.1	Formalize the process to incorporate changes into the crash data dictionary and corresponding documents.	Kevin Tice (DPS-OTS)	Dec 2022	12/05/2023	Completed	Formal process for updating the data dictionary.	MMUCC 6th edition is expected to be released this month. work to initiate changes to the NV crash form and users manual will begin in 2024.
2.2	Improve the consistency and reliability of delivery of the crash files from law enforcement to the State to minimize processing effort, reduce the time between crash and data availability, and reduce opportunities for data quality corruption.	Matthew Williams (NDOT) Kevin Tice (DPS-OTS)	Jun 2023	12/06/2023	Completed	Consistent delivery of crash data files.	With the implementation of a new crash database at NDOT that mirrors Enforcement Mobile's database and a nightly direct transfer of data from Enforcement Mobile to NDOT, this step can be marked complete.
2.3	Implement more timely uploads to NCATS to give users closer to real-time data with which to make critical programmatic and infrastructure enhancements.	Matthew Williams (NDOT) Kevin Tice (DPS-OTS)	Jun 2023	11/15/2022	Substantial Progress	Scheduled NCATS uploads.	Some issues were noted with uploading K and A crashes in a timely manner. Will be using geolocation data from Enforcement Mobile which will make the availability of crash data more timely.
2.4	Enhance procedures for managing errors and incomplete data and formalize efforts to ensure that data from reports with validation errors are fixed and entered into the repository. This should include formal changes to the data dictionary as necessary.	Matthew Williams (NDOT) Kevin Tice (DPS-OTS)	Jun 2023	08/24/2022	Moderate Progress	Improved process for addressing data errors.	End date was updated from 6-30-2022 to 6-30-2023. Additional time is needed.
2.5	Implement a report for officers related to timeliness, accuracy, and completeness feedback. This can be useful for training, updates to manuals, and form revisions. Allow feedback from users to collectors to further enhance data quality.	Matthew Williams (NDOT) Kevin Tice (DPS-OTS)	Jun 2023	09/12/2022	Initiated	Standard report for officers that summarizes date submitted, accuracy of the data and completeness of the submittal.	Initial efforts have been made to share issues with law enforcement crash data collection.

Strategy #3: Vehicle/Driver.

No.	Description	Action Step Leader	Completion (Est.)	Last Update	Status	Output Measure	Comment
3.1	Increase active representation on TRCC and providing vehicle data system quality management reports, which could potentially result in obtaining priority consideration for federal traffic records grant funding to enhance the vehicle data system.	Kevin Tice (DPS-OTS)	Jun 2023	03/02/2023	Moderate Progress	Representative on TRCC roster for Vehicle Data. Regular reporting on vehicle system quality management.	TRCC involvement an engagement has increased. TR Project Managers regularly participate and present updates on ongoing projects. NV DMV now attends TRCC,.
3.2	Attain the driver and vehicles system data from the DMV and link to the crash system NCATS.	Kevin Tice (DPS-OTS)	Jun 2023	12/05/2023	Initiated	Vehicle and driver data linked from DMV to NCATS.	NCATS has been eliminated. NDOT obtains direct data transfer from Enforcement Mobile daily. Reinitiating discussions with NDMV to access driver and vehicle data to link with traffic records.
3.2	Obtain the required authorizations or attain a non-proprietary version of the driver system documents and narratives to assist with future assessments and system evaluations.	Kevin Tice (DPS-OTS)	Jun 2023	08/24/2022	Initiated	Obtained driver system documents and narratives.	End date was updated from 6-30-2022 to 6-30-2023. Additional time needed to complete this item.

Strategy #4: Roadway.

No.	Description	Action Step Leader	Completion (Est.)	Last Update	Status	Output Measure	Comment
4.1	Coordinate with all the entities using and providing roadway data, including entities in the TRCC / NECTS.	Mike Colety (Kimley-Horn)	Dec 2025	03/07/2023	Moderate Progress	Regular coordination with agencies.	Coordination will take place to gather what existing roadway data is available to share.
4.2	Set access standards for all State users.	Casey Smith (NDOT)	Jun 2022	12/06/2023	Substantial Progress	Set of standards implemented.	Again to broad of a definition, moving target.
4.3	Use roadway database information already available (e.g., for timeliness calculations).	Kevin Tice (DPS-OTS)	Dec 2025	03/02/2023	Moderate Progress	Regular usage of information available in the roadway database.	The roadway database is accessed when necessary to supplement other data.
4.4	Organizing the roadway history for archiving in conjunction with the vendor.	Casey Smith (NDOT)	Dec 2025	03/02/2023	Completed	Archival system in place for the roadway database.	Completed, archival process in place.
4.5	Develop a database or enterprise system that combines roadway and traffic crash data elements.	Matthew Williams (NDOT) Casey Smith (NDOT)	Dec 2025	12/06/2023	Completed	Completed database with combined roadway and traffic crash data elements.	Completed
4.5	Develop a formal quality control program.	Matthew Williams (NDOT) Casey Smith (NDOT)	Dec 2022	12/06/2023	Completed	Quality control procedures in place for traffic crash records.	The output measure is QC procedures in place for traffic crash records. Should be moved to Matt, and i believe they have QC procedures already in place.

Strategy #5: Citation/Adjudication.

No.	Description	Action Step Leader	Completion (Est.)	Last Update	Status	Output Measure	Comment
5.1	Explore the development of a complete set of performance measures related to the quality of citation systems data	Kevin Tice (DPS-OTS)	Dec 2025	12/05/2023	○ Initiated	Summary of research on performance measures and best practices for citation systems' data quality.	The citation adjudication is ongoing entering second year of project.

Strategy #6: EMS/Injury Surveillance.

No.	Description	Action Step Leader	Completion (Est.)	Last Update	Status	Output Measure	Comment
6.1	Share information and data management reports with TRCC on a regular basis.	Kevin Tice (DPS-OTS)	Jun 2022	12/07/2022	○ Moderate Progress	Add agenda item to TRCC quarterly meetings to provide summary of the data management reports.	Updates are now being provided by UNLV SOM on data analysis.
6.2	Build on the success of the integration of the State crash file and the statewide Nevada trauma registry data and integrate all components of the injury surveillance system.	Kevin Tice (DPS-OTS)	Dec 2025	12/07/2022	○ Moderate Progress	Full integration of all data components.	Changed to another database manager. New database manager, Bill Porter, is new to the team and is very experienced in database management. Will be loaded on a faster server. Bill will be leading data cleaning and a data tool for access. Will work on data governance plan for sharing with other researchers.
6.3	Develop the core injury surveillance data into an important resource to define, evaluate, and support highway safety programs and projects through enhanced coordination with the State s health agencies.	Kevin Tice (DPS-OTS)	Dec 2025	12/07/2022	○ Moderate Progress	Increased coordination with state health agencies. Injury surveillance data utilized as a performance measure to support data-driven traffic safety programs and projects.	Improved coordination with NEMSIS. Laura received one preliminary training session but did wanted additional training and needs feedback. Currently get trauma directly from hospitals. Pete has state department of health grant with some related efforts. Laura to provide documentation of data sources and needs.

Traffic Records Coordinating Committee
Meeting Summary

Date/Time: Tuesday, December 19, 2023 | 10:00 am – 11:30 am

Attendance

- Adam Anderson, OTS
- Noehealani Bareng- Antolin, UNLV
- Matthew Cambron, OTS
- Cristian Arteaga Sanchez, UNLV
- Delora Early, DMV
- Graham Dollarhide, RTC Washoe
- Mohammad Farhan, RTC Southern Nevada
- Pat Gallagher, TIM Coalition (Parsons)
- Lia Grimaldi, City of Las Vegas
- Todd Hartline, OTS
- Kevin Honea, NHP
- Hans Jessup, Nevada Supreme Court
- Carrie Krupp, OTS
- Amanda Manzo, DMV
- Meg Matta, OTS
- Rachel Marchetti, Nevada Trauma Registry
- Bertille Mavegam, UNLV
- Justin McDonald, OTS
- Johnean J. Morrison
- Karl Nieberlein, Tyler Technologies
- Nick Nordyke, OTS
- William Porter, UNLV
- Capt. John Riley, Fallon Police Department
- Sean Robinson, City of Las Vegas
- Casey Smith, NDOT
- Shara Thiesen, NDOT
- Kevin Tice, OTS
- Lacey Tisler, NDOT
- Trevor Whitley, UNR
- Matt Williams, NDOT
- Xuan Wang, RTC Washoe
- Brenda Witt, DMV
- Timber Wood, NDOT
- Elmer Acevedo-Garcia, Kimley-Horn
- Mike Colety, Kimley-Horn
- David Giacomin, Kimley- Horn
- Anabel Hernandez, Kimley-Horn

Discussion Topics

Notes from Last Quarterly Meeting — Kevin

- The notes from the September 19, 2023, quarterly meeting were reviewed. There were no questions or comments from attendees.

1. Data Update — Mike

- There have been 293 fatal crashes through October 31, 2023. While this number is less than last year during the same period, it is still high.
- Preliminary fatal crash numbers show an additional 32 crashes occurred during November for a total of 325 crashes through the end of November.
- NDOT is working with Arcadis to improve the presentation of the crash data by creating a separate view to query the data within the NDOT crash database.

- NDOT is exploring the possibility of incorporating Fatality Analysis Reporting System (FARS) data into the crash database to streamline data updates. The team's vision is to have the latest five years of FARs crash data included in the NDOT database. NDOT currently obtains crash data from the Nevada Citation and Accident Tracking System (NCATS) Form 5. Having FARS data feed into the NDOT database would improve accuracy and decrease the amount of manual data inputs.

2. Enforcement Mobile (Brazos) Working Group Update **Kevin/Matt M.**

- Tyler Technologies will be renewing their contract in the new year.
- A function is under development that would allow law enforcement to look at multiple pieces of data at once. This function has been tested by some agencies.
- New federal funding is being allocated to improve the traffic record system. This funding will allow for updates to be made more often and for stakeholders to be involved in the process.
- Law enforcement has concerns about functionality issues arising as a result of implementing Assembly Bill (AB) 116 (2023), and SB 236 (2021) requirements. Tyler Technologies has updated its customer service portal and IT ticketing system to help with the implementation.

3. 2024 TRCC Funded Studies

UNLV Artificial Intelligence (AI) Speech Recognition for Crash Reports **Dr. Arteaga/Dr. Park**

- Phase I (Promoted Input) was completed and the team is now working on Phase II (Narrated Inputs). Phase II is using smart technology to establish a narrative speech structure using AI to minimize the time and effort it takes law enforcement to complete crash reports.
- The UNLV team will use Massachusetts crash data, using AI, to extract narratives that mention crash events involving flashing yellow arrow crashes. Nevada data cannot be used at this time due to privacy restrictions.

UNLV Statistical Transparency of Policing (STOP) Data Collection **Dr. Mavegam**

- The goal of this study is to implement statistical transparency of policy programs in NV (SB 236) which requires all law enforcement agencies to develop a standardized method for reporting traffic stop information. Five objectives are being worked on as part of the new fiscal year, these objectives include:
  - Objective 1 – Conduct descriptive statistical analysis of preliminary traffic stop data and provide a draft report to OTS for review.
  - Objective 2 – Conduct a comprehensive statistical analysis of 2022 and 2023 traffic stop data.
  - Objective 3 – Update comprehensive report outline generated in FY23, based on descriptive and comprehensive traffic stop data analyses.
  - Objective 4 – Update interactive dashboard with available traffic stop data.
  - Objective 5 – Update the beta version of the website created in FY23.

UNLV Study on Adjudication of Citations and Enforcement **Dr. Nambisan**

- No update provided for this study.

UNLV Nevada Road Users Linked Database **Noe**

- Recent activities as part of the Nevada Road Users Linked Database study include the distribution of information through the Traffic Research and Education Newsletter (TREND), various social media posts, and attending community events (World Remembrance Day and Safe Santa 2023).
- Hospital discharge data has been incorporated into a PowerBI dashboard, the dashboard will be included on the Traffic Safety Research Group website.

4. Action Item Review Matrix **Mike**

- The action item matrix was reviewed. Strategy 2.2 to improve the consistency and reliability of crash data delivery from law enforcement files to NDOT has been completed. Uploads to the data are now conducted on a daily basis.

5. Open Discussion **Kevin**

- Recommendations for how to improve TRCC should be directed to Kevin Tice (ktice@dps.state.nv.us) or Matthew Williams (mwilliams@dot.nv.us).

6. Upcoming Meetings **Mike**

- Next TRCC Interim Meeting – Tuesday, January 30, 2024, 10:00 am to 11:00 am
- Next TRCC Meeting – Tuesday, March 12, 2024, 10:00 am to 11:30 am 3:00 pm
- ATSIP Traffic Records Forum – August 11-14, 2024 in San Diego, CA; Call for Abstracts are due February 1, 2024 - https://www.atsip.org/trf-registration/

Attachments:

A. Monthly Fatal Crash Report

B. Action Item Review Matrix

C. Meeting Summary (September 19, 2023)

D. 2024 TRCC Funded Study Presentations

DATE OF REPORT: 11/6/2023
DATA AS OF: 10/31/2023

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 Fatals	2023 Fatals	% 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	32	6.67%	JUL	31	41	32.26%
AUG	30	33	10.00%	AUG	33	36	9.09%
SEP	32	32	0.00%	SEP	33	34	3.03%
OCT	40	31	-22.50%	OCT	43	36	-16.28%
NOV			0.00%	NOV			0.00%
DEC			0.00%	DEC			0.00%
Reporting Period Total	**320**	**293**	**-8.44%**	**Reporting Period Total**	**345**	**325**	**-5.80%**
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	7	5	-28.57%	7	6	-14.29%	4	3	-25.00%	4	0	-100.00%
CHURCHILL	11	9	-18.18%	11	11	0.00%	6	8	33.33%	3	1	-66.67%
CLARK	196	194	-1.02%	214	207	-3.27%	93	89	-4.30%	33	34	3.03%
DOUGLAS	5	2	-60.00%	5	2	-60.00%	4	2	-50.00%	2	0	-100.00%
ELKO	9	5	-44.44%	11	5	-54.55%	9	4	-55.56%	6	3	-50.00%
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	6	3	-50.00%	8	4	-50.00%	8	3	-62.50%	1	2	100.00%
LANDER	3	1	-66.67%	5	1	-80.00%	5	1	-80.00%	4	1	-75.00%
LINCOLN	5	3	-40.00%	5	3	-40.00%	3	3	0.00%	2	1	-50.00%
LYON	7	6	-14.29%	7	7	0.00%	3	5	66.67%	2	3	50.00%
MINERAL	2	2	0.00%	2	3	50.00%	2	3	50.00%	0	0	0.00%
NYE	11	16	45.45%	12	28	133.33%	9	26	188.89%	6	4	-33.33%
PERSHING	5	1	-80.00%	5	1	-80.00%	5	1	-80.00%	2	0	-100.00%
STOREY	2	0	-100.00%	2	0	-100.00%	0	0	0.00%	0	0	0.00%
WASHOE	46	42	-8.70%	46	43	-6.52%	27	16	-40.74%	9	6	-33.33%
WHITE PINE	1	2	100.00%	1	2	100.00%	0	2	200.00%	0	1	100.00%
Reporting Period Total	**320**	**293**	**-8.44%**	**345**	**325**	**-5.80%**	**182**	**168**	**-7.69%**	**76**	**56**	**-26.32%**
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	2	2	0.00%	1	1	0.00%	0	0	0.00%	0	0	0.00%
CHURCHILL	1	1	0.00%	4	2	-50.00%	0	0	0.00%	0	0	0.00%
CLARK	55	62	12.73%	53	45	-15.09%	10	7	-30.00%	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	1	1	0.00%	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%	2	1	-50.00%	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	9	16	77.78%	10	7	-30.00%	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	**68**	**84**	**23.53%**	**81**	**58**	**-28.40%**	**11**	**11**	**0.00%**	**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 fatals (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 not 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.

FATALITIES BY COUNTY:

TOTAL LIVES LOST YTD:

325 ↓ 6%

DOWN 5.80% FROM LAST YEAR

FATALITIES

PEDESTRIANS
84

UNRESTRAINED MOTORISTS
56

TOP CONTRIBUTING FACTORS:
IMPAIRMENT & SPEEDING

DATA AS OF 10/31/2023

Key Area: Traffic Records Coordinating Committee (TRCC)

Critical Emphasis Area: Traffic Records Coordinating Committee (TRCC)

Strategy #1: TRCC Management, Strategic Planning, and Data Use and Integration.

No.	Description	Action Step Leader	Completion (Est.)	Last Update	Status	Output Measure	Comment
1.1	Develop a comprehensive Traffic Records Inventory by consolidating the discrete systems documentation maintained by custodial agencies into a coherent whole to improve accessibility and analysis for all stakeholders and to help encourage interactions between data analysts, data users, and those whose jobs are tangential to traffic safety.	Mike Colety (Kimley-Horn)	Dec 2025	12/15/2023	Substantial Progress	Completion of a comprehensive Traffic Records Inventory database.	Reviewing and updating the data records contacts. The plan is to post the traffic records contact information on the SHSP website.
1.2	Leverage its collaborative efforts to ensure that all components of the traffic records data system (TRS) are supported by formal data quality management programs.	Mike Colety (Kimley-Horn)	Jun 2022	12/15/2023	Moderate Progress	Formal quality data management programs in place for TRS components.	Continuing to work on updating data quality processes for each element.

Strategy #2: Crash.

No.	Description	Action Step Leader	Completion (Est.)	Last Update	Status	Output Measure	Comment
2.1	Formalize the process to incorporate changes into the crash data dictionary and corresponding documents.	Kevin Tice (DPS-OTS)	Dec 2022	12/05/2023	Completed	Formal process for updating the data dictionary.	MMUCC 6th edition is expected to be released this month. work to initiate changes to the NV crash form and users manual will begin in 2024.
2.2	Improve the consistency and reliability of delivery of the crash files from law enforcement to the State to minimize processing effort, reduce the time between crash and data availability, and reduce opportunities for data quality corruption.	Matthew Williams (NDOT) Kevin Tice (DPS-OTS)	Jun 2023	12/06/2023	Completed	Consistent delivery of crash data files.	With the implementation of a new crash database at NDOT that mirrors Enforcement Mobile's database and a nightly direct transfer of data from Enforcement Mobile to NDOT, this step can be marked complete.
2.3	Implement more timely uploads to NCATS to give users closer to real-time data with which to make critical programmatic and infrastructure enhancements.	Matthew Williams (NDOT) Kevin Tice (DPS-OTS)	Jun 2023	11/15/2022	Substantial Progress	Scheduled NCATS uploads.	Some issues were noted with uploading K and A crashes in a timely manner. Will be using geolocation data from Enforcement Mobile which will make the availability of crash data more timely.
2.4	Enhance procedures for managing errors and incomplete data and formalize efforts to ensure that data from reports with validation errors are fixed and entered into the repository. This should include formal changes to the data dictionary as necessary.	Matthew Williams (NDOT) Kevin Tice (DPS-OTS)	Jun 2023	08/24/2022	Moderate Progress	Improved process for addressing data errors.	End date was updated from 6-30-2022 to 6-30-2023. Additional time is needed.
2.5	Implement a report for officers related to timeliness, accuracy, and completeness feedback. This can be useful for training, updates to manuals, and form revisions. Allow feedback from users to collectors to further enhance data quality.	Matthew Williams (NDOT) Kevin Tice (DPS-OTS)	Jun 2023	09/12/2022	Initiated	Standard report for officers that summarizes date submitted, accuracy of the data and completeness of the submittal.	Initial efforts have been made to share issues with law enforcement crash data collection.

Strategy #3: Vehicle/Driver.

No.	Description	Action Step Leader	Completion (Est.)	Last Update	Status	Output Measure	Comment
3.1	Increase active representation on TRCC and providing vehicle data system quality management reports, which could potentially result in obtaining priority consideration for federal traffic records grant funding to enhance the vehicle data system.	Kevin Tice (DPS-OTS)	Jun 2023	03/02/2023	Moderate Progress	Representative on TRCC roster for Vehicle Data. Regular reporting on vehicle system quality management.	TRCC involvement an engagement has increased. TR Project Managers regularly participate and present updates on ongoing projects. NV DMV now attends TRCC,.
3.2	Attain the driver and vehicles system data from the DMV and link to the crash system NCATS.	Kevin Tice (DPS-OTS)	Jun 2023	12/05/2023	Initiated	Vehicle and driver data linked from DMV to NCATS.	NCATS has been eliminated. NDOT obtains direct data transfer from Enforcement Mobile daily. Reinitiating discussions with NDMV to access driver and vehicle data to link with traffic records.
3.2	Obtain the required authorizations or attain a non-proprietary version of the driver system documents and narratives to assist with future assessments and system evaluations.	Kevin Tice (DPS-OTS)	Jun 2023	08/24/2022	Initiated	Obtained driver system documents and narratives.	End date was updated from 6-30-2022 to 6-30-2023. Additional time needed to complete this item.

Strategy #4: Roadway.

No.	Description	Action Step Leader	Completion (Est.)	Last Update	Status	Output Measure	Comment
4.1	Coordinate with all the entities using and providing roadway data, including entities in the TRCC / NECTS.	Mike Colety (Kimley-Horn)	Dec 2025	03/07/2023	Moderate Progress	Regular coordination with agencies.	Coordination will take place to gather what existing roadway data is available to share.
4.2	Set access standards for all State users.	Casey Smith (NDOT)	Jun 2022	12/06/2023	Substantial Progress	Set of standards implemented.	Again to broad of a definition, moving target.
4.3	Use roadway database information already available (e.g., for timeliness calculations).	Kevin Tice (DPS-OTS)	Dec 2025	03/02/2023	Moderate Progress	Regular usage of information available in the roadway database.	The roadway database is accessed when necessary to supplement other data.
4.4	Organizing the roadway history for archiving in conjunction with the vendor.	Casey Smith (NDOT)	Dec 2025	03/02/2023	Completed	Archival system in place for the roadway database.	Completed, archival process in place.
4.5	Develop a database or enterprise system that combines roadway and traffic crash data elements.	Matthew Williams (NDOT) Casey Smith (NDOT)	Dec 2025	12/06/2023	Completed	Completed database with combined roadway and traffic crash data elements.	Completed
4.5	Develop a formal quality control program.	Matthew Williams (NDOT) Casey Smith (NDOT)	Dec 2022	12/06/2023	Completed	Quality control procedures in place for traffic crash records.	The output measure is QC procedures in place for traffic crash records. Should be moved to Matt, and i believe they have QC procedures already in place.

Strategy #5: Citation/Adjudication.

No.	Description	Action Step Leader	Completion (Est.)	Last Update	Status	Output Measure	Comment
5.1	Explore the development of a complete set of performance measures related to the quality of citation systems data	Kevin Tice (DPS-OTS)	Dec 2025	12/05/2023	○ Initiated	Summary of research on performance measures and best practices for citation systems' data quality.	The citation adjudication is ongoing entering second year of project.

Strategy #6: EMS/Injury Surveillance.

No.	Description	Action Step Leader	Completion (Est.)	Last Update	Status	Output Measure	Comment
6.1	Share information and data management reports with TRCC on a regular basis.	Kevin Tice (DPS-OTS)	Jun 2022	12/07/2022	○ Moderate Progress	Add agenda item to TRCC quarterly meetings to provide summary of the data management reports.	Updates are now being provided by UNLV SOM on data analysis.
6.2	Build on the success of the integration of the State crash file and the statewide Nevada trauma registry data and integrate all components of the injury surveillance system.	Kevin Tice (DPS-OTS)	Dec 2025	12/07/2022	○ Moderate Progress	Full integration of all data components.	Changed to another database manager. New database manager, Bill Porter, is new to the team and is very experienced in database management. Will be loaded on a faster server. Bill will be leading data cleaning and a data tool for access. Will work on data governance plan for sharing with other researchers.
6.3	Develop the core injury surveillance data into an important resource to define, evaluate, and support highway safety programs and projects through enhanced coordination with the State s health agencies.	Kevin Tice (DPS-OTS)	Dec 2025	12/07/2022	○ Moderate Progress	Increased coordination with state health agencies. Injury surveillance data utilized as a performance measure to support data-driven traffic safety programs and projects.	Improved coordination with NEMSIS. Laura received one preliminary training session but did wanted additional training and needs feedback. Currently get trauma directly from hospitals. Pete has state department of health grant with some related efforts. Laura to provide documentation of data sources and needs.

Traffic Records Coordinating Committee
Meeting Summary

Date/Time: Tuesday, September 19, 2023

Chair: Kevin Tice, Office of Traffic Safety

Vice Chair: Matt Williams, NDOT Traffic Safety

Facilitator: David Giacomin, Kimley-Horn

Attendees

- Adam Anderson
- Alex Tang, Kimley-Horn
- Bertille Mavegam, UNLV
- Brenda Witt, DMV
- Capt John Riley
- Carrie Krupp, OTS
- Cristian Arteaga Sanchez, UNLV
- David Giacomin, Kimley-Horn
- Debroah Khuls
- Jay Park, UNLV
- Julia Peek
- Justin McDonald, OTS
- Karl Nieberlein, Tyler Technologies
- Kevin Honea, NHP
- Kevin Tice, OTS
- Lia Grimaldi
- Matt Williams, NDOT Traffic Safety
- Noehealani Bareng-Antolin, UNLV
- Pat Gallagher
- Sean Robinson
- Shashi Nambisan, UNLV TRC
- Sushma Koneti
- Tiffany Kurnat
- William Porter, UNLV

Topics

- Welcome and Introductions
- Notes from Last Quarterly Meeting
  - Kevin Tice summarized the discussion from the previous meeting and gave a recap on the Safety Summit.
- Data Update
  - David Giacomin provided an overview of monthly fatality data as of August 31st. Over all the fatalities are tracking below 2022 numbers through the year for August, although 2022 fatality numbers were high.
- Enforcement Mobile (Brazos) Working Group Update
  - Tiffany Kurnat presented issues that resulted from AB-116 changes.
- NVACTS Update
  - Kevin Tice provided an overview of the last meeting. A Vulnerable Road User Safety Assessment is required by the FHWA by November 15. NVACTS to complete an annual

report by the end of the year. The committee is accepting nominations for the positions for chair and vice chair.

- 2023 TRCC Funded Studies
  - Dr. Arteaga gave a presentation and update regarding the AI Speech Recognition Narrative Interpretation for Crash Reports on the progress for June 2023 – August 2023. The major tasks are to establish a narrative structure for the speech recognition assistance and to increase the efficiently in computation of the semantic search engine in the upcoming phase 2.
  - Bertille Mavegam presented on UNLV STOP and provided an update on the most recent 6-month time period. The goal is to implement statistical transparency of policy programs in NV (SB 236) which requires all law enforcement agencies to develop a standardized method for reporting traffic stop information.
  - Shashi Nambisan from UNLV gave a progress update regarding the Enforcement, Citations, and Adjudication Data Study. The study objectives are to review approaches adopted by legislative, regulatory, and voluntary agencies, compile information on effective strategies to integrate datasets, and specify how to apply strategies in the Nevada context.
  - Noehealani Bareng-Antolin presented on UNLV Nevada Road Users Linked Database which links a variety of data to input data from different sources into a single database.
- Action Item Review Matrix
  - David Giacomin presented that the action item status is up to date within the Action Item Review Matrix that was included withing the meeting materials. There were no questions or updates.
- Open Discussion
  - No further discussion at the meeting.

Actions

- Send any articles or topics for the Spring Newsletter to lindsay.saner@kimley-horn.com.

Attachments

- Action Item Matrix

Next Meetings

- Next TRCC Meeting – Tuesday, December 19th, 2023, 10:00 AM – 11:25 AM

Links

Nevada Crash Data Dashboard: Microsoft Power BI

UNLV | HOWARD R. HUGHES COLLEGE OF ENGINEERING

TS-2024-UNLV-00013

UNLV - Smart Technology Implementation for Traffic Records Data Quality Improvements

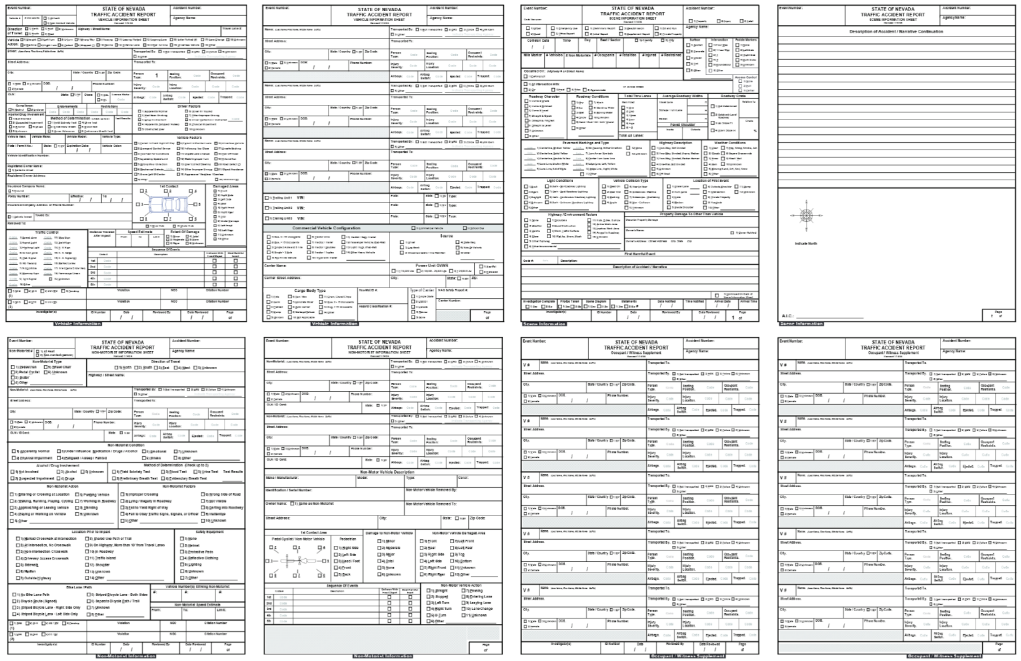
PHASE II

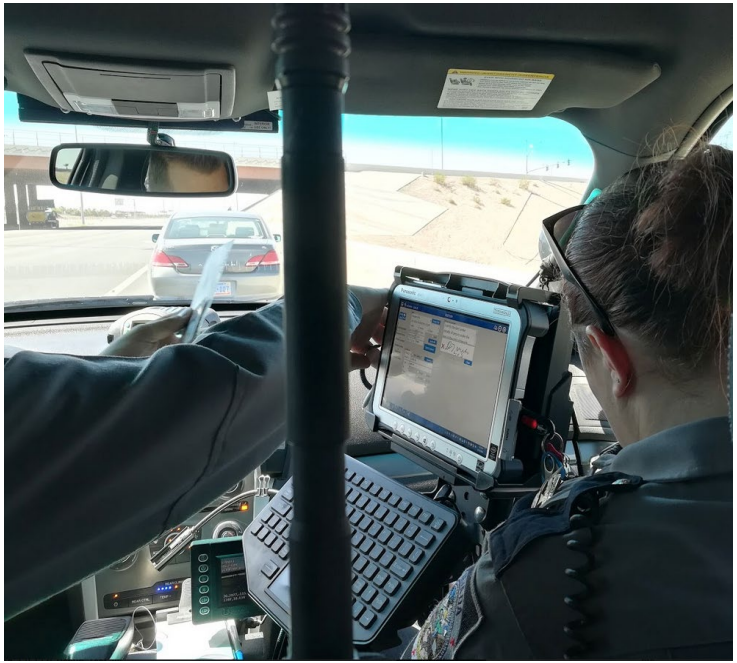
Progress Report: Oct 2023 - Nov 2023

Prepared and Presented by

Jay Park, Shashi Nambisan, Cristian Arteaga and two undergraduates

Current practice—Challenges and Problems





Phases

Phase 1

Prompted inputs

Collision type: ●Head-on ✓ **Rear-end** ● Angle …

Roadway Conditions: ● Dry ● Icy ● Wet …

Surface: ● Asphalt ● Concrete ● Gravel …

Phase 2

Narrated inputs

Rear-end (1) fatal (2) crash located at Flamingo Road (3), 500 feet (5) from Maryland Parkway (4) in an urban area (6). The road is a three-lane (8) arterial road (7), paved (9), straight (10), and level (11), with broken-white lane markings (12), left-side paddle markings (13), and paved shoulders (14). The crash occurred at daylight (15), with rainy weather (16), low visibility (17), and wet road (18).

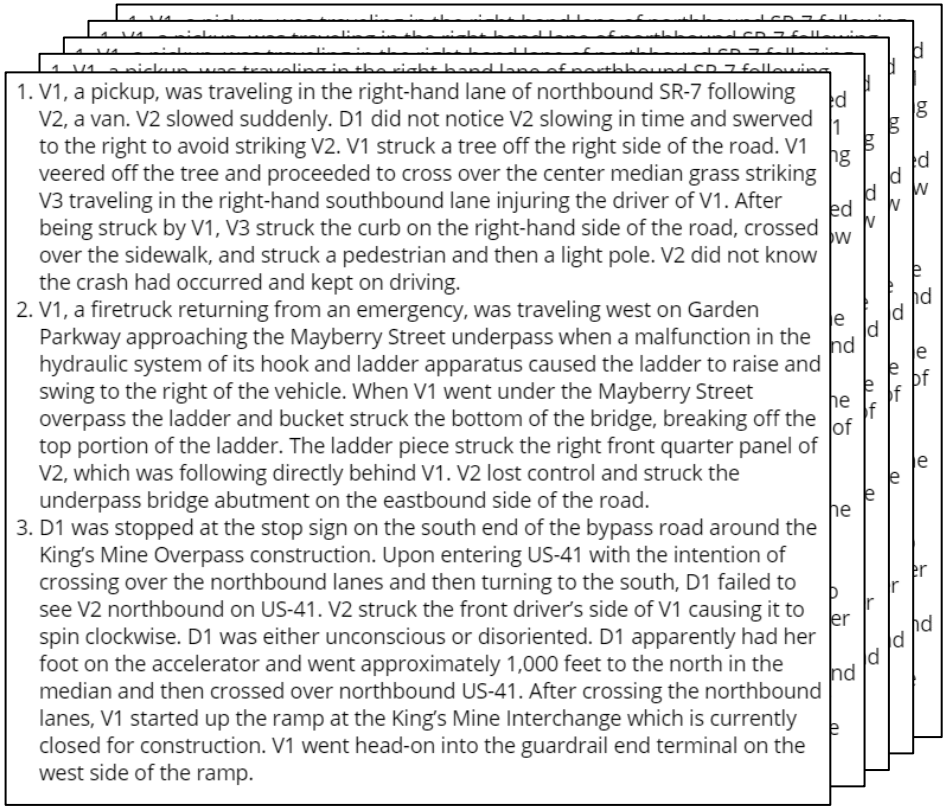
Phase 3

Expand for extra data items

Citations

Witness Statements

Semantic search for crash narratives



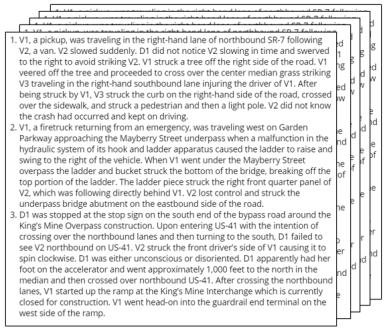
1. V1, a pickup, was traveling in the right-hand lane of northbound SR-7 following V2, a van. V2 slowed suddenly. D1 did not notice V2 slowing in time and swerved to the right to avoid striking V2. V1 struck a tree off the right side of the road. V1 veered off the tree and proceeded to cross over the center median grass striking V3 traveling in the right-hand southbound lane injuring the driver of V1. After being struck by V1, V3 struck the curb on the right-hand side of the road, crossed over the sidewalk, and struck a pedestrian and then a light pole. V2 did not know the crash had occurred and kept on driving.
2. V1, a firetruck returning from an emergency, was traveling west on Garden Parkway approaching the Mayberry Street underpass when a malfunction in the hydraulic system of its hook and ladder apparatus caused the ladder to raise and swing to the right of the vehicle. When V1 went under the Mayberry Street overpass the ladder and bucket struck the bottom of the bridge, breaking off the top portion of the ladder. The ladder piece struck the right front quarter panel of V2, which was following directly behind V1. V2 lost control and struck the underpass bridge abutment on the eastbound side of the road.
3. D1 was stopped at the stop sign on the south end of the bypass road around the King's Mine Overpass construction. Upon entering US-41 with the intention of crossing over the northbound lanes and then turning to the south, D1 failed to see V2 northbound on US-41. V2 struck the front driver's side of V1 causing it to spin clockwise. D1 was either unconscious or disoriented. D1 apparently had her foot on the accelerator and went approximately 1,000 feet to the north in the median and then crossed over northbound US-41. After crossing the northbound lanes, V1 started up the ramp at the King's Mine Interchange which is currently closed for construction. V1 went head-on into the guardrail end terminal on the west side of the ramp.

- Crash narratives contain **<u>useful information</u>**, so we often read narratives to extract information.
- Reading narratives is highly ineffective and unreliable

Semantic search for crash narratives

Query:
"Pedestrian involved in the collision"

Narratives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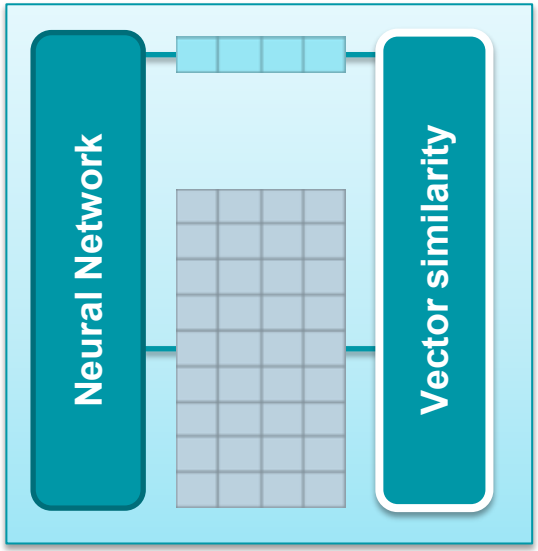
Semantic Similarity



Ranking

1. The pedestrian who was hit was transported to …
2. V2 was unable to see the pedestrian and collided after…
3. V1 struck the kid that was walking on the crosswalk and continued …
4. V2 crossed the center line, veered into the sidewalk and struck a pedestrian ...
5. V2 veered into the median, overcorrected, and hit a pedestrian ...

Phases

Phase 1

Prototype semantic search application.

Phase 2

Scale up prototype for large databases.

Phase 3

Investigate hardware/software for deployment.

Progress

Oct/2023 - Nov/2023

Kick-off Meeting

Speech Recognition

- Establish a narrative structure.
- Create a dataset of spoken narratives.
- Develop approach for crash factor extraction from narratives.

Semantic Search

- Find equilibrium in retrieval accuracy and efficiency.
- Investigate search strategies that minimize computational demands.

SR-assisted collection of crash reports

Devised narrative structure for **Scene**.

Fatal (143) hit and run (147) crash in an urban (144) area. Head on (195) collision with motor vehicle in transport (202). The crash occurred on a E Tropicana Avenue (163) in a parking lot (164), near the T (161) intersection with Topaz Street (165). The road is Two-way not divided (192) with two (169) thru lanes, and four (170) total lanes. The average roadway widths are seven feet (171) travel lane, ten feet (172) turn lane, and five feet (173) median. The paved shoulders are three feet (174) inside and five feet (175) outside. Right side (162) paddle markers, paint (179) centerline broken yellow and line solid white (184) and raised markings (185). Relatively level roadway (176) with partial (166) access control on straight & level (167) dry (168) asphalt (160) surface and Debris (197). The crash occurred in clear (193) weather, and daylight (194). Office report (145) in preliminary (146) state.

Crash general characteristics:
- Crash Severity (143)
- Scene Participants (147)
- Scene Location (144)

Collision details:
- Vehicle Collision Type (195)
- Location of First Event (196)
- First Harmful Event (202)

Collision location description:
- Occurred On: (Highway # or Street Name) (163)
- Parking Lot (164)
- Intersection (161)
- Occurred On (165)

Roadway Characteristics:
- Highway Description (192)
- Total Thru Lanes (169)
- Total All Lanes (170)
- Travel Lane (Ft) (171)
- Storage / Turn Lane (Ft) (172)
- Median (173)
- Inside Paved Shoulder (174)
- Outside Paved Shoulder (175)
- Paddle Markers (162)
- Pavement Markings and Type (179 to 191)

Roadway conditions:
- Roadway Conditions (168)
- Surface (160)
- Highway / Environment Factors (197)
- Roadway Character (167)

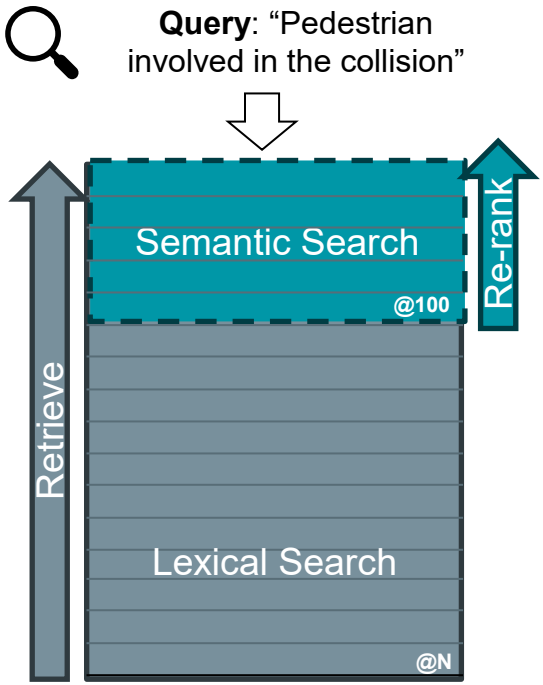
Weather and light conditions:
- Weather Conditions (193)
- Light Conditions (194)

Report information:
- Event Type (145)
- Event Report Progress (146)

28 fields

Semantic search for crash narratives

- Implemented first version of **Retrieve & Re-rank**



Metric	Pure Semantic Search	Retrieve & Re-Rank @100	Difference
Accuracy	81%	50%	**31% less accurate**
Time	3.7 min	20 sec	**90% faster**
Time Complexity	Linear	Constant	**Scales to large DB**

Thank you!

KIRK KERKORIAN SCHOOL OF MEDICINE | UNLV

STATISTICAL TRANSPARENCY OF POLICING (STOP) NEVADA DATA COLLECTION PROJECT

Project Manager: Bertille Mavegam Tango, MD, PhD

PI: Deborah A. Kuhls, MD FACS FCCM FRCST (Hon)

Co-PI: Courtney Coughenour, PhD

Co-PI: Max Gakh, JD, MPH

GRANT FUNDING

This research is funded by the Nevada Office of Traffic Safety

Grants #TS-2023-UNLV-00010 and #TS-2024-UNLV-00056

Nevada Department of
Public Safety
Office of Traffic Safety

PROJECT GOALS

Develop and implement a statistical transparency of policing (STOP) program in the State of Nevada that aligns with Nevada -SB236 (passed in 2021) regarding traffic-related stops.

NEVADA SENATE BILL NO. 236 (SB 236)

- Nevada Department of Public Safety (DPS) to:
  - Develop a standardized method to record traffic stop information (officer-perceived race, ethnicity, age, and sex; information about the stop; and any police actions taken)
  - Certain officers to record this information for certain stops
  - Contract with a third party to analyze traffic stop data for “identifying patterns or practices of profiling.”

STOP PROJECT ACTIVITIES AND UPDATES - FY23

Conduct qualitative research with Law Enforcement involved in traffic stops across Nevada

- Finalized report from 3 focus groups, submitted to OTS with end of year report

STOP PROJECT ACTIVITIES AND UPDATES - FY24

Objective 1: Conduct descriptive statistical analysis of preliminary traffic stop data collected in NV in calendar year 2022, and generate a data summarization in compliance with SB236

- Generated a draft of the descriptive report
- Submitted the draft to OTS for feedback

STOP PROJECT ACTIVITIES AND UPDATES - FY24

Objective 2: Conduct a comprehensive statistical analysis of traffic stop data collected in NV in 2022 and 2023

- Receive monthly traffic stop data from OTS
- Examine data for integrity and quality

Objective 3: Update the comprehensive report outline generated in FY23, based on descriptive and comprehensive traffic stop data analyses.

STOP PROJECT ACTIVITIES AND UPDATES - FY24

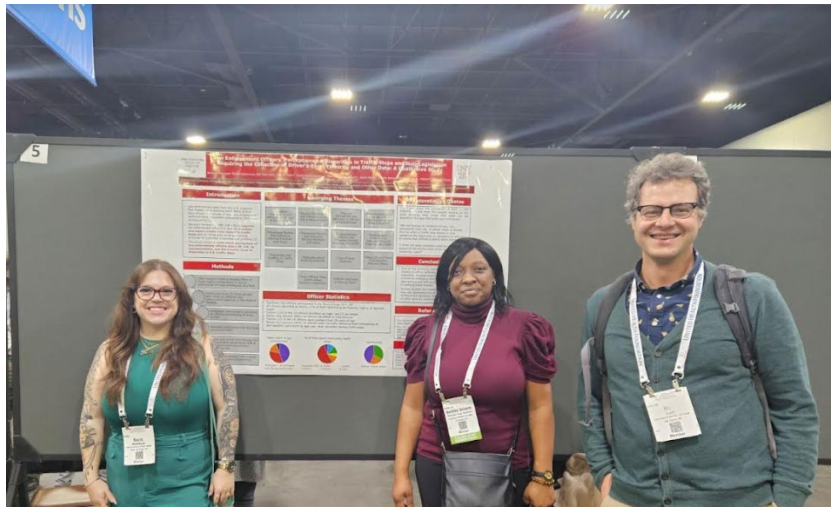
Objective 4: Update the interactive dashboard outline created in FY23 based on available traffic stop data.

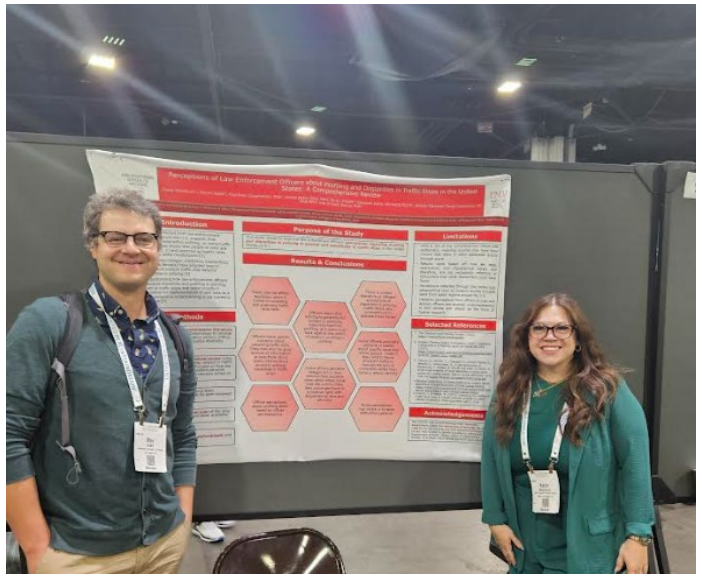
- Pending descriptive and comprehensive analysis

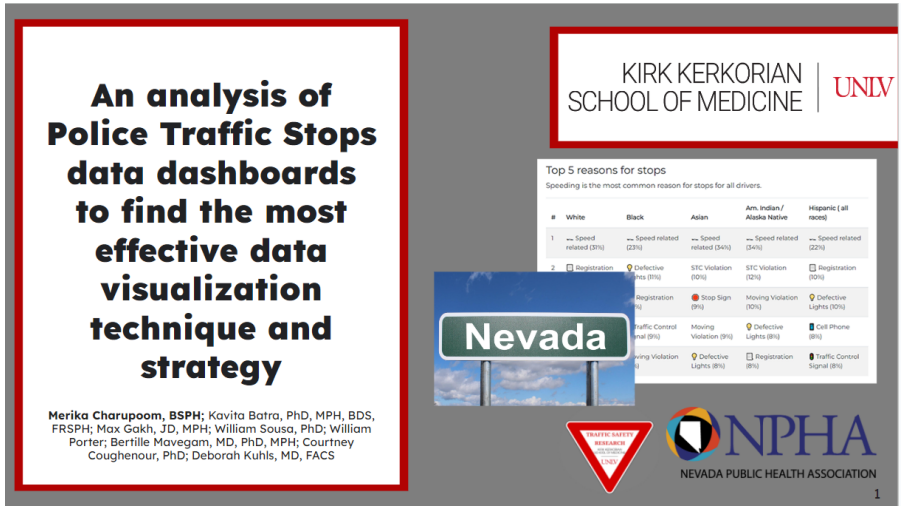
Objective 5: Update the beta version of the website created in FY23.

- Ongoing review and update of the website

DISSEMINATION







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OUR TEAM

We are a multidisciplinary team from UNLV:

- Kirk Kerkorian School of Medicine
- School of Public Health
- College of Engineering
- Transportation Research Center
- Department of Criminal Justice

THANK YOU

BERTILLE.MAVEGAMTANGO@UNLV.EDU

NEVADA ROAD USERS LINKED DATABASE
PROGRAM UPDATES FFY24
October-December 2023

Project Director: Noehealani Antolin, MPH
Principal Investigator: Deborah A. Kuhls, M.D., F.A.C.S., FCCM, FRCST (Hon)
Traffic Records Coordinating Committee Meeting
Date: December 19th, 2023

GRANT FUNDING

Our research is funded by a grant from the Nevada Office of Traffic Safety: # TS-2024-UNLV-00004

OUR GOALS

- **Variety** of **traffic** related datasets
  - **Link** a variety of data sources from distinct datasets together to:
    - Determine contributing **circumstances** of crashes in Nevada
    - Determine human, medical **consequences** of crashes
    - Inform the total **impact of crashes** and potential **interventions** to **prevent** crashes
  - **Analyze** these linked data to understand
    - **Risk** and **protective** factors
    - **Behavioral** and **environmental** factors
    - **Equity**
    - Inform **legislative** initiatives

DATA SOURCES

- Data sets that we have received:
  - Standalone Nevada **crash** data- NDOT [with identifiers]
  - Standalone **individual trauma centers** data from four Nevada trauma centers [with identifiers]
  - De-identified database that links **crash and trauma center** data
  - De-identified statewide **hospital** data including injury codes (ICD-9/10 codes)
  - Nevada **statewide trauma** data [new- with identifiers]
  - **Non-adjudicated citations**; receive ongoing citation data
  - **DUI and substance** use data from several sources [state lab, metro, henderson]
  - Interest in other data sets including DMV, EMS, Judicial, Other

FFY24 PRESS RELEASE

KIRK KERKORIAN SCHOOL OF MEDICINE | UNLV

Grant Renewal Allows Researchers to Continue Studying Traumatic Injuries Caused by Vehicular Crashes in Nevada

Las Vegas – December 4, 2023 – The Kirk Kerkorian School of Medicine at UNLV Department of Surgery has been awarded a $571,279 grant from the Nevada Department of Public Safety, Office of Traffic Safety, to continue its work towards understanding and preventing traffic-related injuries and fatalities in Nevada. Traffic-related injuries and deaths remain an increasing public health challenge.

Dr. Deborah Kuhls and a team of researchers at UNLV's Kirk Kerkorian School of Medicine have been analyzing crash, injury and non-adjudicated citation data for over a decade to inform prevention and policy initiatives. Through the years, it's become apparent that many of the so-called traffic "accidents" are not "accidents" at all, since a high percentage are the result of known risk-taking behavior.

"The number and severity of crash injuries I see in the trauma ward is astounding and it saddens me because so much of it can be prevented," says Dr. Kuhls, who in addition to being a researcher, is chief of trauma surgery at University Medical Center. "We need to change the public mindset when it comes to vehicle collisions, and maybe it begins by changing the language."

Findings from traffic studies are published in quarterly TREND newsletters. The information provides a deeper understanding of risk-taking behaviors and can help shape traffic safety policy recommendations and injury prevention efforts. You can sign up to receive them here: https://bit.ly/3L1HF2L

Areas recently highlighted include:

Speeding: The latest available data shows that 53% of traffic citations in Nevada were speed-related, of which 2.3% (17,579) were associated with a crash. In Nevada, there has been a notable rise in citations related to speeds of 100 miles per hour or more, reflecting an almost 50% increase in just two years. In 2021 alone, speeding was associated with nearly 29% (12,330) of deaths in the United States.

Aggressive & Reckless Driving: In 2022, Nevadans ranked 6th for the highest number of confrontational drivers. From 2018-2021, 1.4 million citations were issued by Nevada law enforcement agencies, of which 38,172 were related to aggressive driving, careless driving, reckless driving, and failure to exercise due care. Of these citations, 70.5% were associated with a motor vehicle crash.

If you would like to speak to Dr. Deborah Kuhls, the study's principal investigator, please contact Manager of Media Relations Paul Joncich - paul.joncich@unlv.edu (916) 207-8498

Located in a newly completed, state-of-the-art Medical Education Building in the Las Vegas Medical District, the Kirk Kerkorian School of Medicine at UNLV is fully accredited and currently has 246 medical students, 150 faculty physicians, and more than 300 medical residents and fellows. With its group practice, UNLV Health, providing care to more than 10,000 patients per month, we're transforming healthcare in Southern Nevada.

Media Interviews

- Telemundo
- FOX News Reno
- KNPR Radio
- Review Journal
- LV Sun
- Channel 3

STATE-WIDE NEVADA TRAUMA DATA

- **Nevada Trauma Registry** collects data from **all** licensed acute care hospitals and trauma centers in Nevada.
  - ICD-10 codes
  - Data points (not limited to)
    - Injury mechanism
    - Place of injury
    - Length of hospital stay
    - Diagnosis(es)
    - Payer source

Codes

- V00-V09 Pedestrian injured in transport acciden
- V10-V19 Pedal cycle rider injured in transport accident
- V20-V29 Motorcycle rider injured in transport accident
- V30-V39 Occupant of three-wheeled motor vehicle injured in transport accident
- V40-V49 Car occupant injured in transport accident
- V50-V59 Occupant of pick-up truck or van injured in transport accident
- V60-V69 Occupant of heavy transport vehicle injured in transport accident
- V70-V79 Bus occupant injured in transport accident
- V80-V89 Other land transport accidents
- V90-V94 Water transport accidents
- V95-V97 Air and space transport accidents

Nevada Department of Health and Human Services
DIVISION OF PUBLIC AND BEHAVIORAL HEALTH
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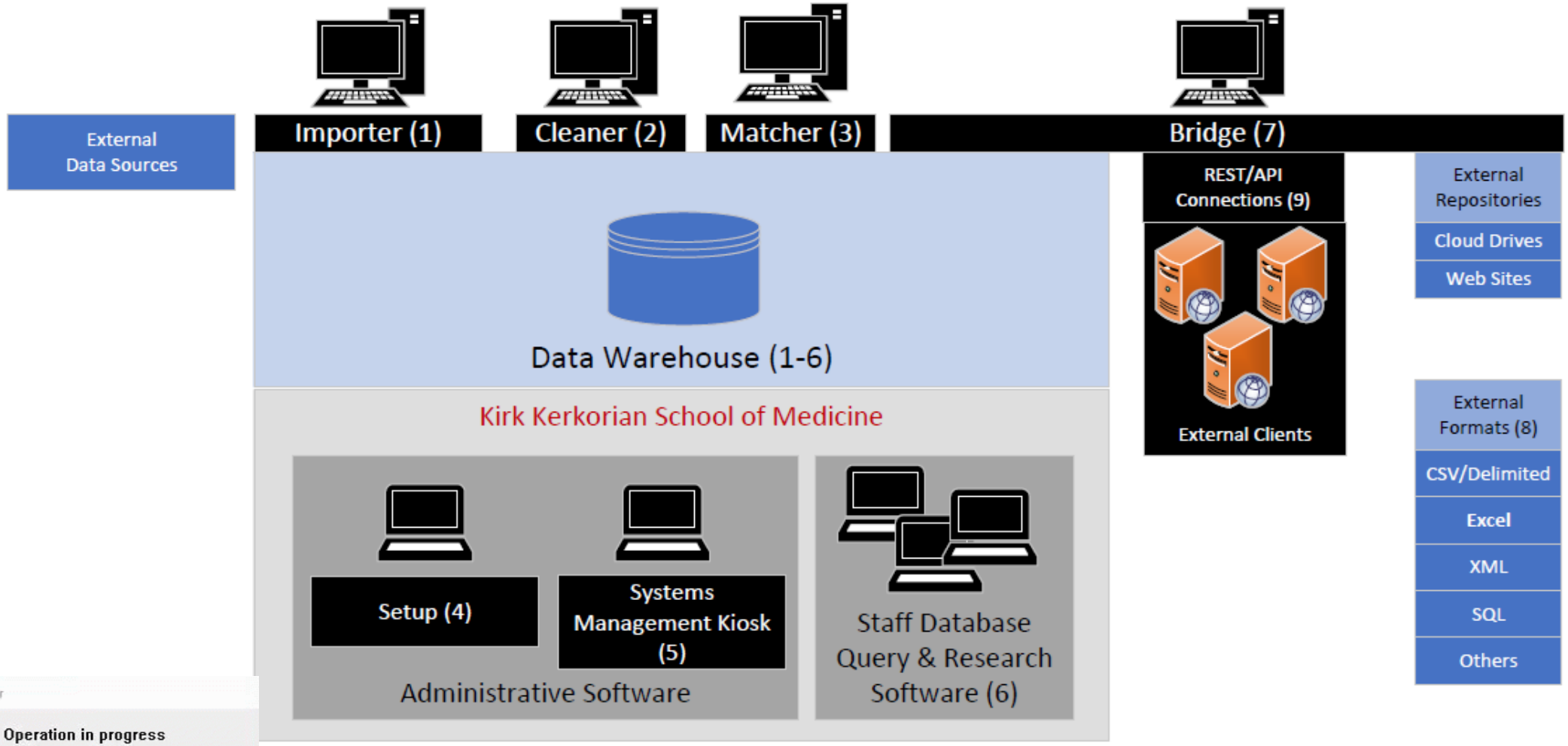
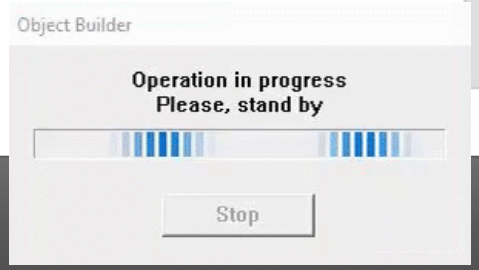
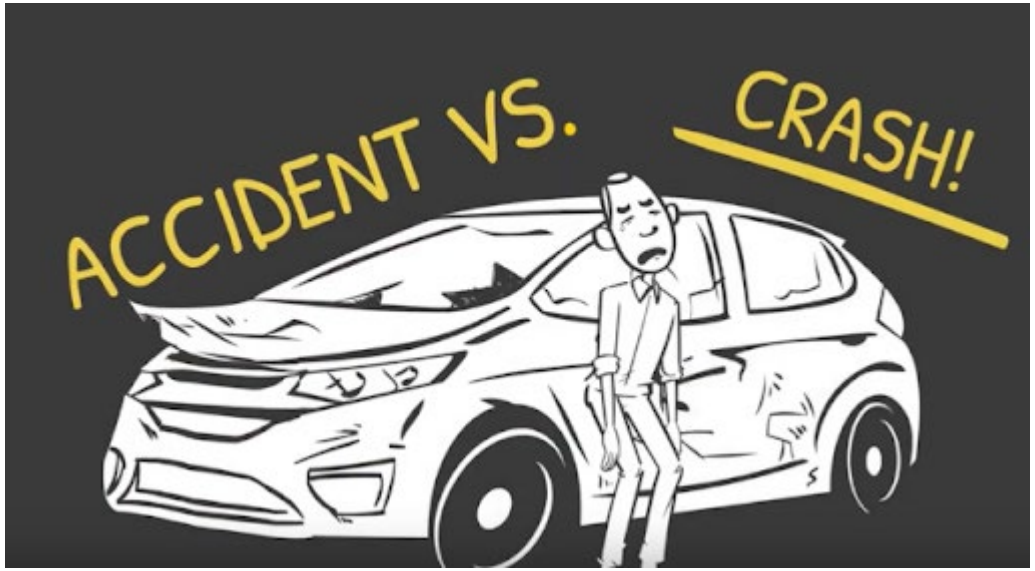
DATA SYSTEM ARCHITECTURE





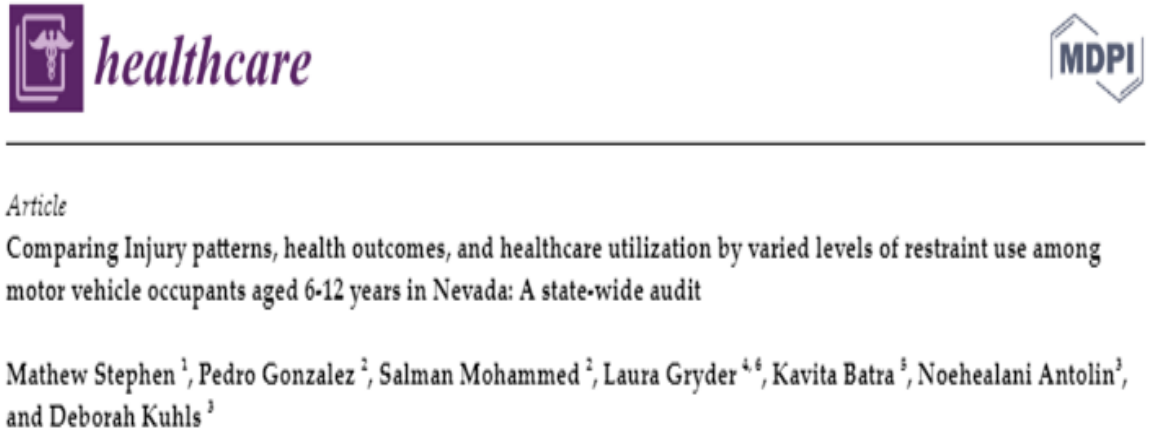
Q1 TREND Newsletter

- Working Title: **Crash vs Accidents**: Two Misunderstood Terms
- Contributing factors related to driver behavior, pedestrian behavior, vehicle mechanical failure or existing roadway elements, and true accidents are very rare.
- A review of behavioral factors associated with crashes [Non-adjudicated Citation 2018-2021]
  - Speeding
  - Distracted driving
  - Traffic control device violations
  - Child passenger safety
  - Failure to use due care
  - Aggressive, reckless, and careless driving
  - Impeding traffic



MANUSCRIPTS IN PROGRESS

1. Comparing Injury patterns, health outcomes, and healthcare utilization by varied levels of restraint use among motor vehicle occupants aged 6-12 years in Nevada: A state-wide audit
2. Non-adjudicated Speeding Citations in Nevada from 2018-2021



healthcare

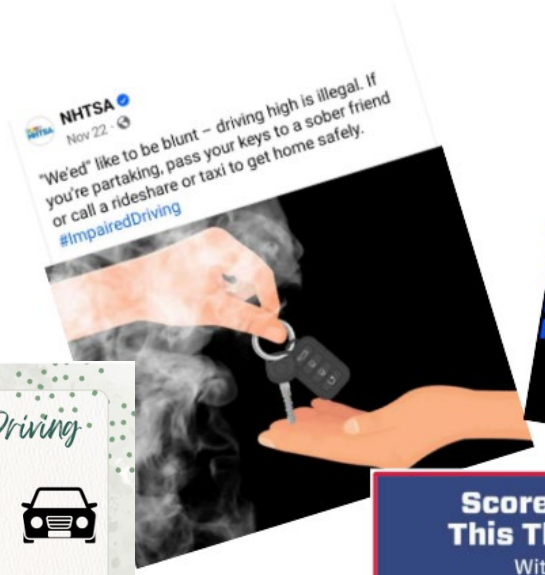
MDPI

Article

Comparing Injury patterns, health outcomes, and healthcare utilization by varied levels of restraint use among motor vehicle occupants aged 6-12 years in Nevada: A state-wide audit

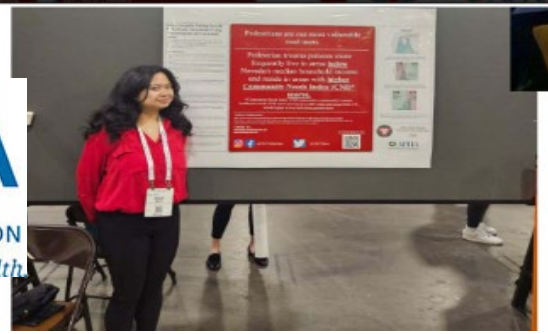
Mathew Stephen [1], Pedro Gonzalez [2], Salman Mohammed [2], Laura Gryder [4,6], Kavita Batra [5], Noehealani Antolin [3], and Deborah Kuhls [3]

SOCIAL MEDIA POSTS



COMMUNITY EVENTS

DISSEMINATION
CONFERENCES & RESEARCH PRESENTATIONS



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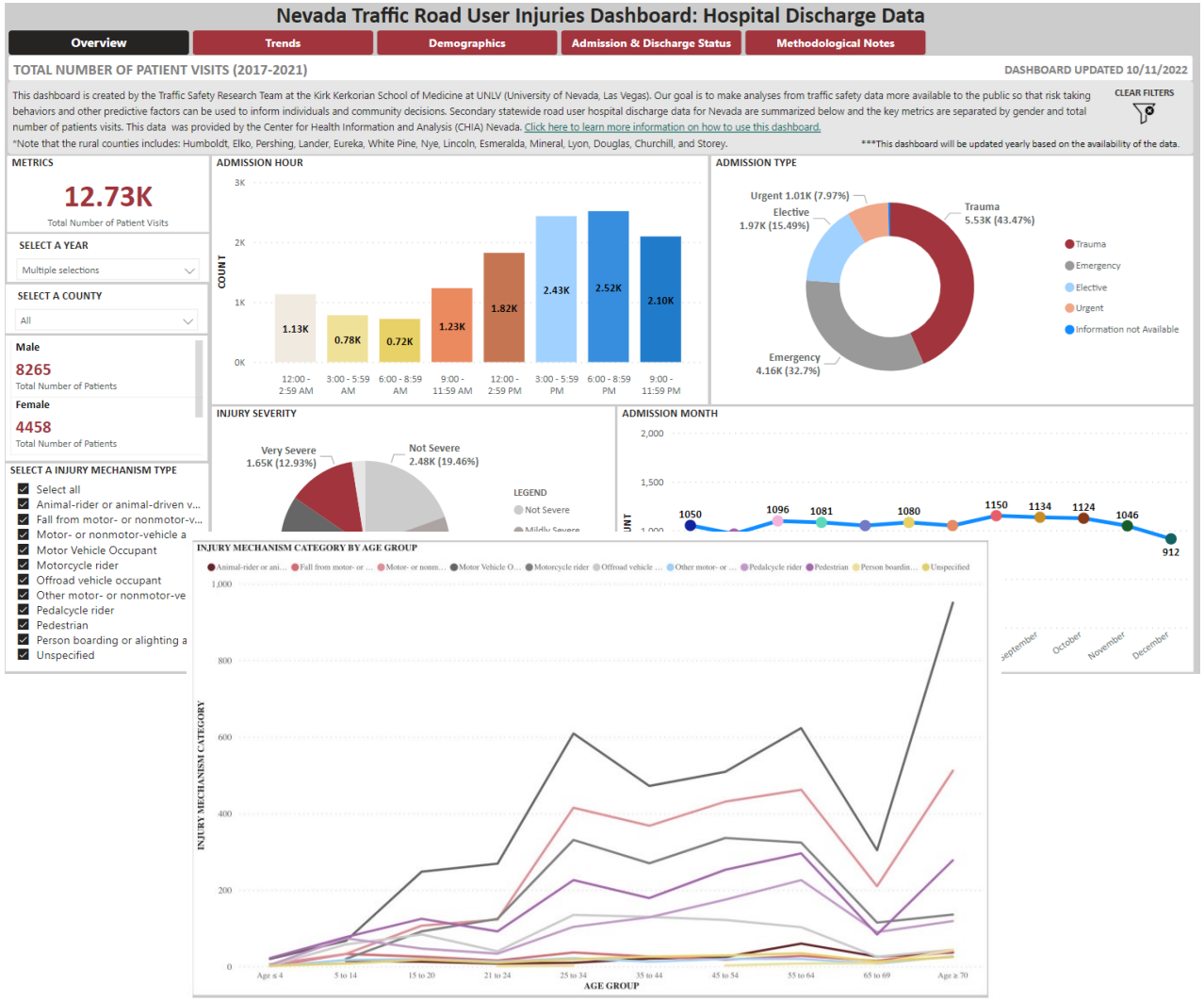
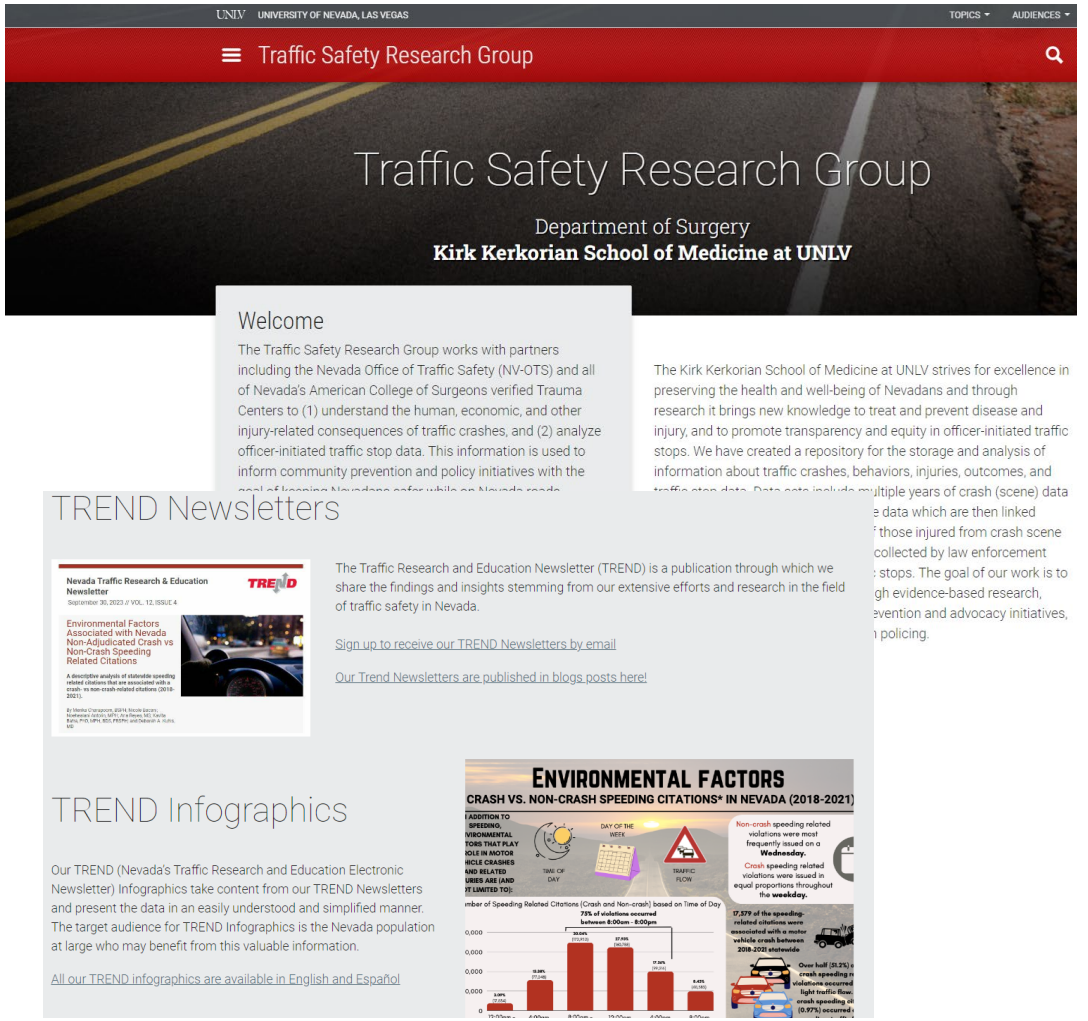
DSAA | Driving School Association of the Americas

DASHBOARD WEBSITE





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THANK YOU

NOEHEALANI.BARENG-ANTOLIN@UNLV.EDU

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