Intersections Task Force Meeting Summary

Subject: Nevada SHSP – Intersections Task Force Meeting

Date: Wednesday, August 5, 2026 | **Time:** 1:00 PM – 2:00 PM

Attendees

- See attached for the meeting attendees (**Attachment A**).

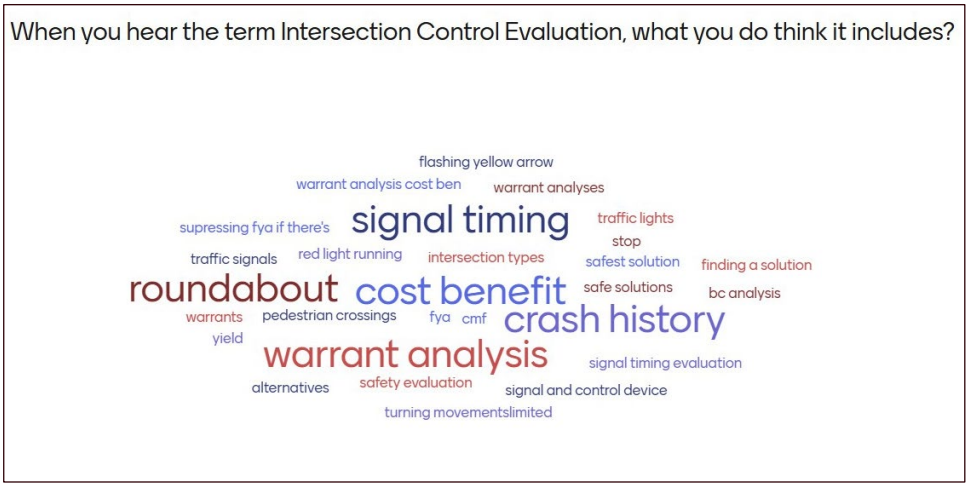
Agenda

1. Welcome and Introductions — Lindsay

- Kim Goodwin kgoodwin@dot.nv.gov (NDOT) and Dr Hao Xu haox@unr.edu (UNR)
- The intent of the task force meeting is to have an interactive conversation between all attendees to discuss activities, successes, challenges, and implementation of action steps to eliminate fatalities and serious injuries on Nevada's roadways.

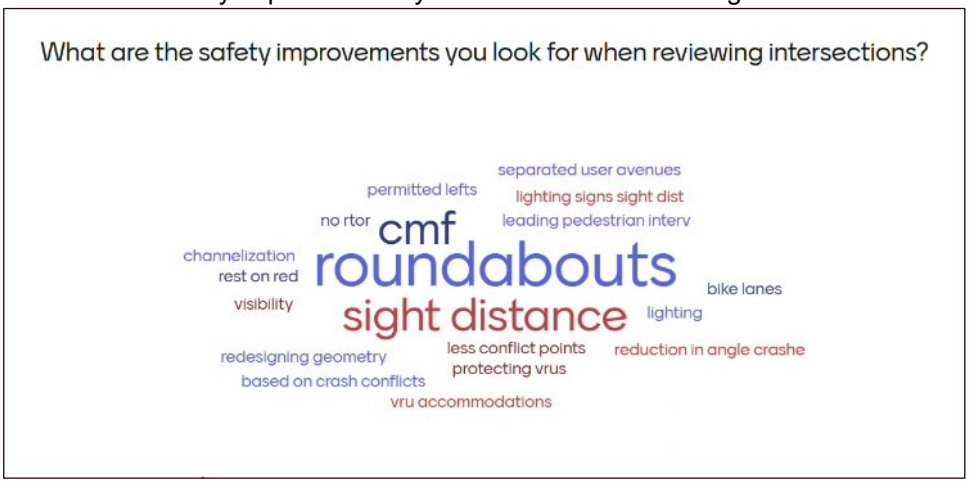
2. Data Update and Safety Moment — Kim

- Monthly Fatality Report as of June 30, 2026 (**Attachment B**)
  - Fatal crashes and fatalities are showing over a 16% reduction in 2026 compared to 2025.
  - Note: These statistics are based on preliminary crash data and will likely be revised.
- **Tip: Intersection Control Evaluations (ICE)**
  - When you hear the term Intersection Control Evaluation, what you do think it includes?



  - An Intersection Control Evaluation (also referred to as an ICE) is a data-driven, performance-based framework used to compare, select, and document the best geometric design and traffic control solution (signal, roundabout, stop controlled, etc.) for an intersection.
  - ICEs include intersection control warrants (signalized, stop controlled), evaluation of crash history, and operational assessments.
  - Lacey Tisler (NDOT) shared the MUTCD 11th Edition: Manual on Uniform Traffic Control Devices (MUTCD) - FHWA.
  - Lacey Tisler (NDOT) and Eric Harmer (NDOT) shared the 2022 Traffic Operations and Safety Study Procedures Final - Appendix D - to reference the procedures when performing an ICE.

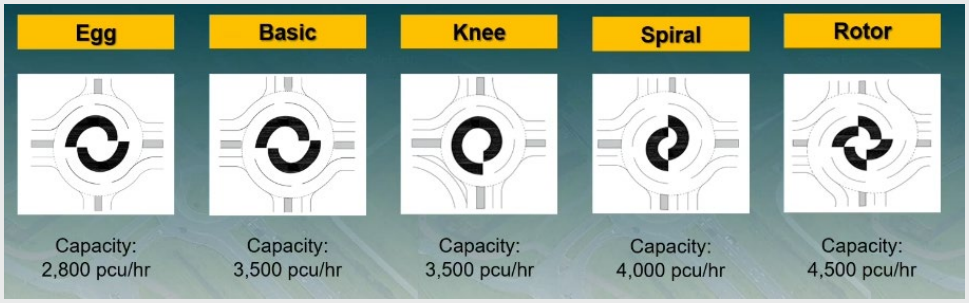
- What are the safety improvements you look for when reviewing intersections?



  - Identified roundabouts and improved sight distance as key safety improvements when reviewing intersections, with additional discussion around lighting, channelization, pedestrian and bicycle accommodations, and reducing conflict points.
  - CMF Clearinghouse: cmfclearinghouse.fhwa.dot.gov

3. Action Plan — Hao

- **Turbo Roundabouts Research Presentation**
  - Presentation: Kakan Dey, Michigan State University (slides in **Attachment C**)
    - First Turbo Roundabout in 1996.
    - Turbo roundabouts were noted to improve capacity, safety, and traffic flow compared to conventional multilane roundabouts while often requiring a similar right-of-way footprint as signalized intersections.
    - Key feature includes restricting lane changing within roundabout with physical lane divider, forcing lane choice upstream to improve traffic flow.
    - Unique design of multi-lane roundabouts with spiral format. Types of Turbo Roundabouts and capacities below:



    - A normal roundabout has 24 conflicts (8 diverging / 8 merging / 8 crossing), while a Turbo roundabout there are 14 conflicts (4 diverging / 6 merging / 4 crossing).
    - Mitch Ison (NDOT) shared 147-21-803 NDOT Final Report Investigating Implementation Potentials of Turbo Roundabouts in Nevada
- Be on the look out for a Task Force Survey of Action Steps and appropriate Intersections-focused actions.
- See attached for the Intersections Action Step Report (**Attachment D**).

4.	**Needs for Implementation**	**Hao**
5.	**Open Discussion**	**Kim**
6.	**Upcoming Meetings**	**Lindsay**

▪ Safer Speeds Task Force Meeting	Thursday, August 6
▪ NVACTS Meeting	Tuesday, August 11
▪ Lane Departures Task Force Meeting	Monday, August 17
▪ Safer Vehicles Strategy Team Meeting	Tuesday, September 8
▪ NVACTS Meeting	Tuesday, October 13
▪ Nevada Traffic Safety Summit	Tues-Thurs, Oct 13-15

Attachments:

- A – August 5, 2026 Meeting Attendees
- B – Monthly Crash Data Report (as of June 30, 2026)
- C – Turbo Roundabouts Research Presentation Slides
- D – Intersections Action Step Report

Distribution: All attendees and invitees

Date Issued: August 18, 2026

NOTE TO RECIPIENTS: *These meeting minutes record Kimley-Horn's understanding of the meeting and intended actions arising therefrom. Your agreement that the notes form a true record of the discussion will be assumed unless adverse comments are received in writing within five days of receipt.*

Intersections Task Force Meeting Sign-In (August 5, 2026)				
Attended	FirstName	LastName	Agency/Organization	Email
☐	Ati	Abad	Atkins Global	atefeh.abad@atkinsglobal.com
☐	Samuel	Ahiamadi	Nevada Department of Transportation - Traffic Operations	sahiamadi@dot.nv.gov
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Intersections Task Force Meeting Sign-In (August 5, 2026)				
Attended	FirstName	LastName	Agency/Organization	Email
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	Intersections Task Force Meeting Sign-In (August 5, 2026)			
Attended	FirstName	LastName	Agency/Organization	Email
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☑	Stephanie	Lopez		
☑	Mitch	Ison		
☑	Sana	Arshad		

NEVADA STATEWIDE MONTHLY FATAL REPORT

Nevada Department of Public Safety Office of Traffic Safety

Zero Fatalities — Lives are on the Line

Date of Report: 7/6/2026
Current Reporting Period: January 1, 2026 - June 30, 2026

This report is compiled by the Office of Traffic Safety and includes detailed statistics on traffic fatalities in Nevada. The report breaks crash data down by behavior, county, and year-over-year changes, and includes monthly data, year-to-date data, and previous year data. The report aims to provide accurate data to help improve road safety and inform policy decisions while ensuring compliance with federal reporting requirements set by the National Highway Traffic Safety Administration (NHTSA).

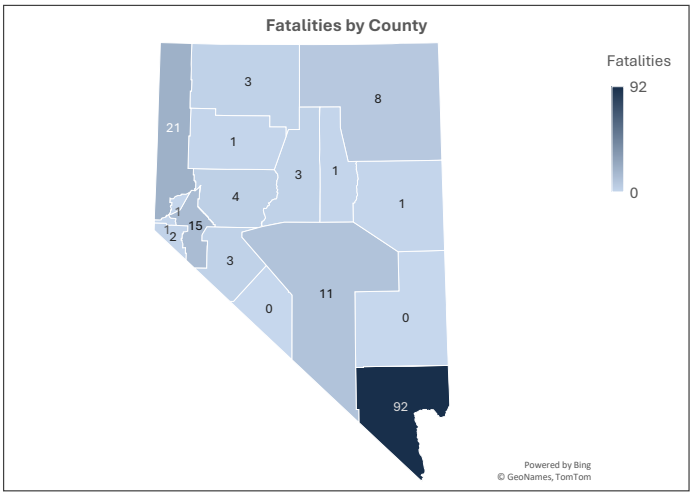
For more detailed information on traffic fatalities and the behaviors causing them, please refer to the Nevada Fatal Crash Dashboard.

Data as of: June 30, 2026

Crash Comparison by Month - Current Reporting Period

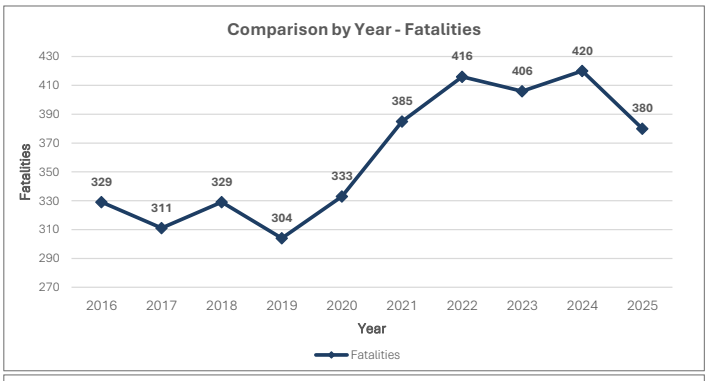
2026 Fatal Crashes During Current Reporting Period		2026 Fatalities During Current Reporting Period	
159	-15.43% % Change from 2025	167	-16.50% % Change from 2025

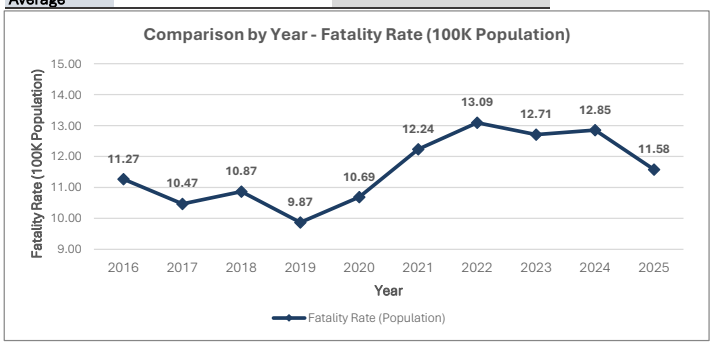
Month	2025 Fatal Crashes	2026 Fatal Crashes	% Change	2025 Fatalities	2026 Fatalities	% Change
January	38	29	-23.68%	39	29	-25.64%
February	31	23	-25.81%	32	25	-21.88%
March	26	21	-19.23%	29	24	-17.24%
April	38	29	-23.68%	38	30	-21.05%
May	25	34	36.00%	28	34	21.43%
June	30	23	-23.33%	34	25	-26.47%
July	0	0	0.00%	0	0	0.00%
August	0	0	0.00%	0	0	0.00%
September	0	0	0.00%	0	0	0.00%
October	0	0	0.00%	0	0	0.00%
November	0	0	0.00%	0	0	0.00%
December	0	0	0.00%	0	0	0.00%
Reporting Period Total	**188**	**159**	**-15.43%**	**200**	**167**	**-16.50%**
Year End Total	**362**			**380**		

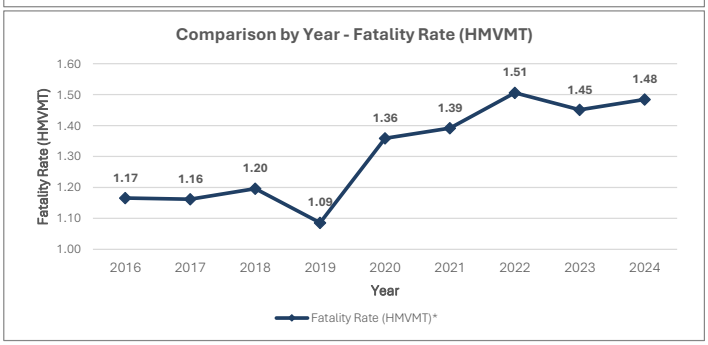


10-Year Historical Crash Comparison

Year	Fatalities	Serious Injuries	Fatality Rate (Population)	Fatality Rate (HMVMT)*
2016	329	1,267	11.27	1.17
2017	311	1,086	10.47	1.16
2018	329	893	10.87	1.20
2019	304	982	9.87	1.09
2020	333	964	10.69	1.36
2021	385	1,097	12.24	1.39
2022	416	1,130	13.09	1.51
2023	406	1,070	12.71	1.45
2024	420	1,176	12.85	1.48
2025	380	#N/A	11.58	#N/A
10-Year Total	**3,613**	**9,665**		
10-Year Average	**361.3**	**1,073.9**		







HMVMT refers to "100 million vehicle miles traveled" and is the total number of miles traveled by all vehicles statewide, aggregated to units of 100 million miles.

Continue to Page 2 for an additional breakdown of crashes by driver behavior, vehicle type, and road user.

NEVADA STATEWIDE MONTHLY FATAL REPORT

Nevada Department of Public Safety Office of Traffic Safety

Zero Fatalities — Lives are on the Line

Crash Comparison by County - Current Reporting Period

County	2025 Fatal Crashes	2026 Fatal Crashes	% Change	2025 Fatalities	2026 Fatalities	% Change	2025 Vehicle Occupants	2026 Vehicle Occupants	% Change	2025 Unrestrained	2026 Unrestrained	% Change
Clark	132	90	-31.82%	137	92	-32.85%	51	29	-43.14%	21	10	-52.38%
Washoe	26	21	-19.23%	30	21	-30.00%	16	7	-56.25%	6	4	-33.33%
Lyon	3	13	333.33%	4	15	275.00%	3	13	333.33%	0	3	300.00%
Carson City	3	1	-66.67%	3	1	-66.67%	3	1	-66.67%	2	1	-50.00%
Nye	1	9	800.00%	1	11	1000.00%	1	7	600.00%	0	0	0.00%
Elko	4	7	75.00%	4	8	100.00%	2	6	200.00%	0	4	400.00%
Douglas	1	2	100.00%	1	2	100.00%	1	1	0.00%	0	0	0.00%
Churchill	3	4	33.33%	3	4	33.33%	1	3	200.00%	0	1	100.00%
Humboldt	3	3	0.00%	4	3	-25.00%	1	2	100.00%	1	2	100.00%
White Pine	3	1	-66.67%	4	1	-75.00%	3	1	-66.67%	2	0	-100.00%
Pershing	3	1	-66.67%	3	1	-66.67%	3	1	-66.67%	1	0	-100.00%
Lander	0	3	300.00%	0	3	300.00%	0	2	200.00%	0	0	0.00%
Mineral	2	2	0.00%	2	3	50.00%	2	3	50.00%	1	0	-100.00%
Lincoln	1	0	-100.00%	1	0	-100.00%	1	0	-100.00%	0	0	0.00%
Storey	1	1	0.00%	1	1	0.00%	1	0	-100.00%	0	0	0.00%
Eureka	1	1	0.00%	1	1	0.00%	1	1	0.00%	1	1	0.00%
Esmeralda	1	0	-100.00%	1	0	-100.00%	1	0	-100.00%	0	0	0.00%
Reporting Period Total	**188**	**159**	**-15.43%**	**200**	**167**	**-16.50%**	**91**	**77**	**-15.38%**	**35**	**26**	**-25.71%**
Year End Total	**362**			**380**			**168**			**67**		

Vulnerable Road User and Motorcyclist Fatalities - Current Reporting Period

County	2025 Pedestrian	2026 Pedestrian	% Change	2025 Bicycle	2026 Bicycle	% Change	2025 Motorcycle	2026 Motorcycle	% Change	2025 Other Scooter, Moped, ATV	2026 Other Scooter, Moped, ATV	% Change
Clark	44	28	-36.36%	7	1	-85.71%	35	32	-8.57%	0	2	200.00%
Washoe	5	8	60.00%	1	3	200.00%	8	3	-62.50%	0	0	0.00%
Lyon	0	1	100.00%	0	0	0.00%	1	1	0.00%	0	0	0.00%
Carson City	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%
Nye	0	3	300.00%	0	0	0.00%	0	1	100.00%	0	0	0.00%
Elko	0	1	100.00%	0	0	0.00%	1	0	-100.00%	1	1	0.00%
Douglas	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	1	100.00%
Churchill	1	1	0.00%	0	0	0.00%	1	0	-100.00%	0	0	0.00%
Humboldt	2	1	-50.00%	0	0	0.00%	1	0	-100.00%	0	0	0.00%
White Pine	0	0	0.00%	0	0	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%
Lander	0	0	0.00%	0	0	0.00%	0	1	100.00%	0	0	0.00%
Mineral	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%
Storey	0	0	0.00%	0	0	0.00%	0	1	100.00%	0	0	0.00%
Eureka	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%
Reporting Period Total	**52**	**43**	**-17.31%**	**8**	**4**	**-50.00%**	**48**	**39**	**-18.75%**	**1**	**4**	**300.00%**
Year End Total	**109**			**17**			**83**			**3**		

KEY

Fatalities: Total number of reported deaths (vehicle occupants, pedestrian, motorcyclist, bicyclist, and other).

Vehicle Occupants: Driver and occupant fatalities in a motor vehicle.

Unrestrained: Driver and occupant fatalities in a motor vehicle unrestrained.

Pedestrian: Any person on foot, on a personal conveyance, or in a building.

Bicyclist: A person on an other road vehicle that can be propelled by pedaling (bicycle, tricycle, unicycle, pedal car, electric bike).

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.

Other: A person on a scooter, moped, ATV, or other motorized vehicle not captured above on a roadway.

100 Million Vehicle Miles Traveled (HMVMT): The total distance driven by all vehicles statewide, aggregated to units of 100 million miles.

DISCLAIMER

This report is a point in time comparison.

This data does not include data fields marked by the officer as unknown.

2025 data is preliminary and does not necessarily include final reports (Form 5, coroner, and/or toxicology).

2025 data is not final until FARS release in 2027. 2026 data is not final until FARS release in 2028.

2025 VMT data is expected to be released in July 2026.

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

SOURCES

State Fatal Crash Data, Office of Traffic Safety

Population Data, United States Census Bureau

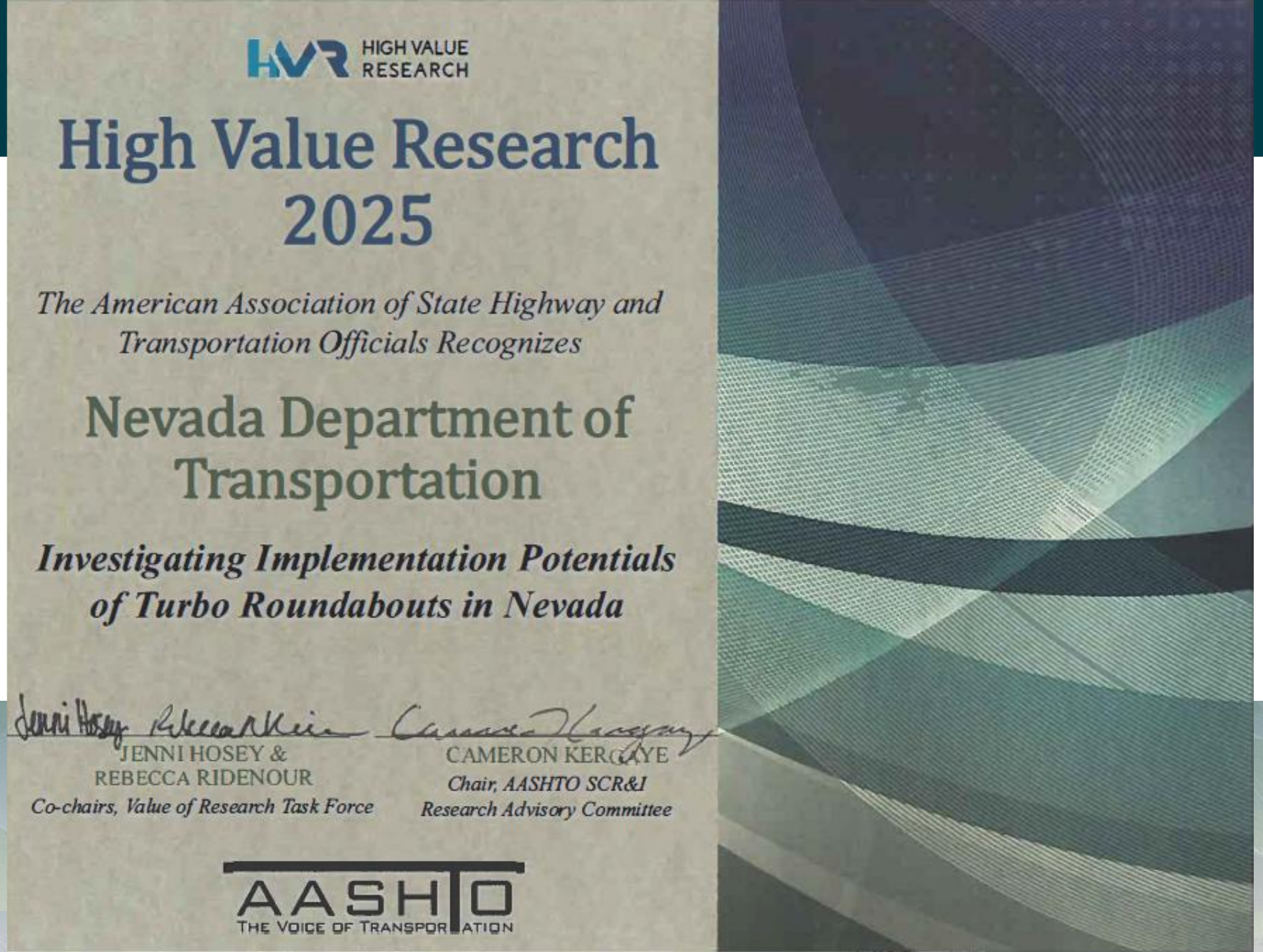
VMT Data, NDOT

Turbo Roundabout

- An emerging intersection control design

PI- Kakan Dey, Michigan State University
kakan@msu.edu

Nevada Department of Transportation


HIGH VALUE RESEARCH
High Value Research 2025
The American Association of State Highway and Transportation Officials Recognizes
Nevada Department of Transportation
Investigating Implementation Potentials of Turbo Roundabouts in Nevada
JENNI HOSEY &
REBECCA RIDENOUR
Co-chairs, Value of Research Task Force
CAMERON KERGAYE
Chair, AASHTO SCR&I
Research Advisory Committee
AASHTO
THE VOICE OF TRANSPORTATION

Presentation Overview

1. Definition
2. Benefits
3. Key Characteristics
4. Why Turbo roundabout?
5. Turbo roundabout in USA

What is Turbo Roundabout?

- Invented by Bertus Fortuijn in 1996.
- Turbo roundabouts are a unique design of multi-lane roundabouts with spiral format.
- Entry and circulating lanes are separated by raised lane-dividers.
- Named “Turbo” because of the improved traffic flow.

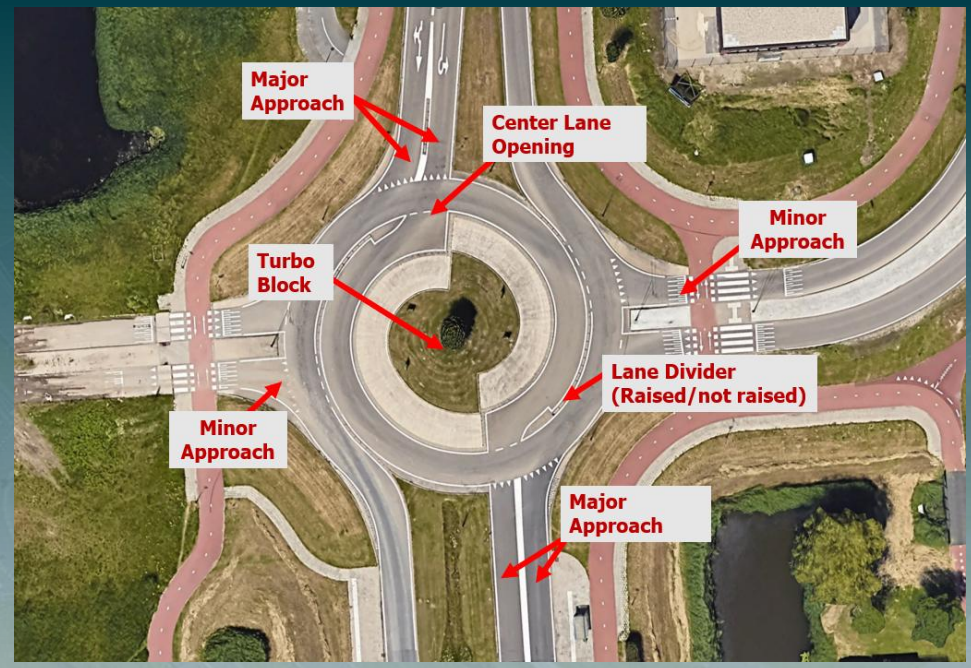


Image source: Google Maps

Benefits of Turbo Roundabout

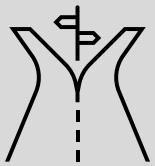
Capacity

Turbo roundabout increases capacity of the intersection.

Safety

Turbo roundabout improves traffic safety at the intersection.

Traffic Flow



Turbo roundabout
Improve traffic flow at the roundabout.

Cost

Construction cost is higher than an intersection with traffic signals, but the life-cycle cost and social costs are less.

Right of Way

Area needed for a turbo roundabout is about the same as a signalized intersection.

Geometric Characteristics

Four main geometric features of turbo roundabout.

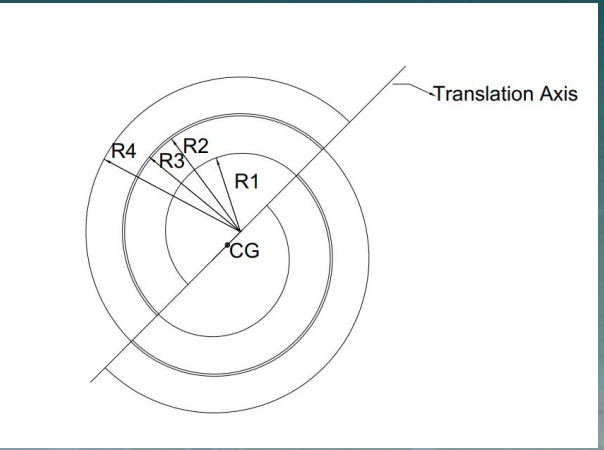
01 **Restricted lane changing within roundabout**

02 **Lane choice to be made upstream**

03 **Spiral circulatory layout**

04 **Radial Approaches**

Turbo Block –auxiliary construction used for creating an initial scheme of the turbo roundabout.



R1 in turbo block is called **"inner radius"** which serves as the:

- radius of the central island
- radius of the inside travel lane
- base value for the rest of the geometrics

Image source: Based on Džambas, T., Ahac, S., & Dragčević, V. (2017). Geometric design of turbo roundabouts. Tehnički vjesnik, 24(1), 309-318

Lane Divider

- A key feature and a significant deviation from modern multi-lane roundabouts in the U.S.
- Can be of two types-
  - **Raised and**
  - **Not raised**.
- Typically raised lane dividers have 2.7-in height and 11.8-in width.
- Turbo roundabouts without raised lane dividers are implemented to facilitate motorcyclists and snow plowing operations.

- **Prevents weaving and cut-off conflicts**
- **Prevents vehicles from straightening curves during low traffic periods**
- **Reduces fear of vehicles in other lanes**
- **Provides higher capacity due to lower speed**

Image source: Google Maps

Turbo Roundabout Types

Turbo roundabout design can be modified by varying number of lanes on the entry and exit legs.

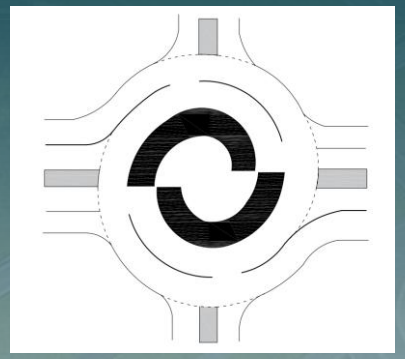
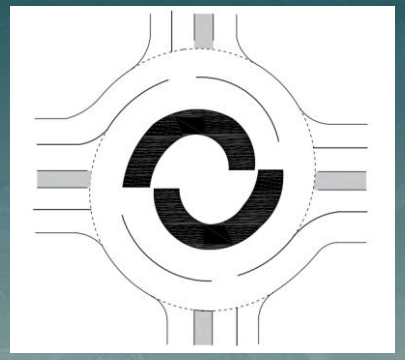
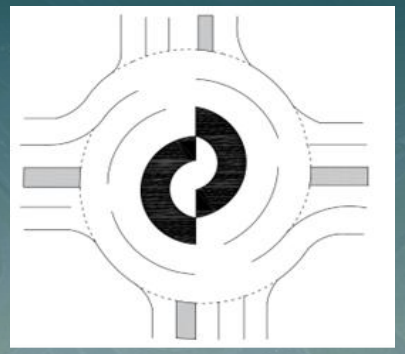
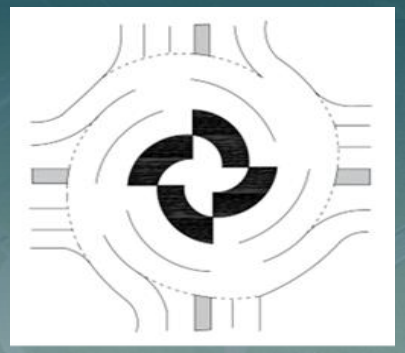
Egg	Basic	Knee	Spiral	Rotor
				
Capacity: 2,800 pcu/hr	Capacity: 3,500 pcu/hr	Capacity: 3,500 pcu/hr	Capacity: 4,000 pcu/hr	Capacity: 4,500 pcu/hr

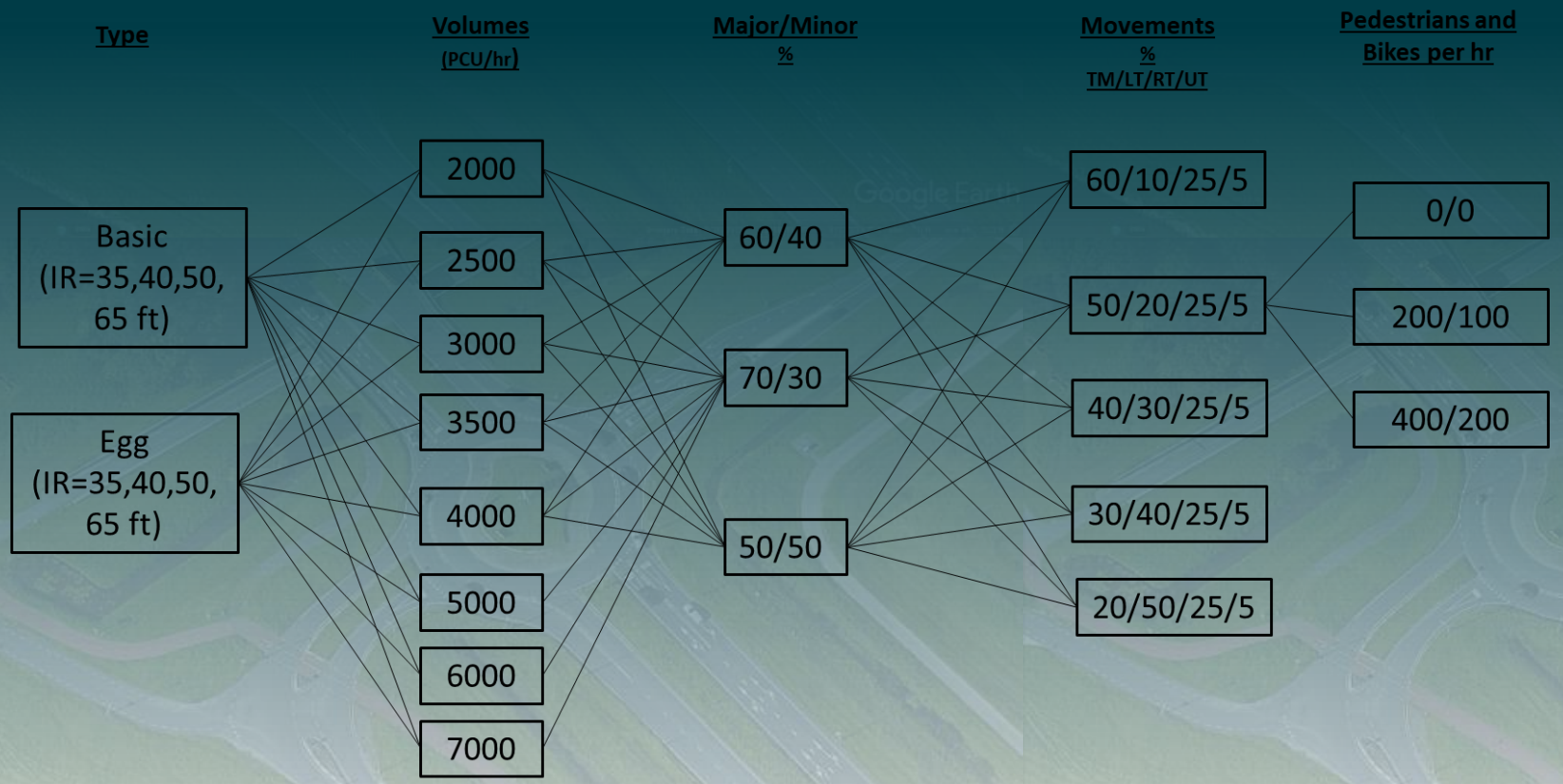
Image source: Based on Džambas, T., Ahac, S., & Dragčević, V. (2017). Geometric design of turbo roundabouts. Tehnički vjesnik, 24(1), 309-318

Number of Conflicts

Two-lane Roundabout

Image source: Google Maps

Micro-Simulation Study

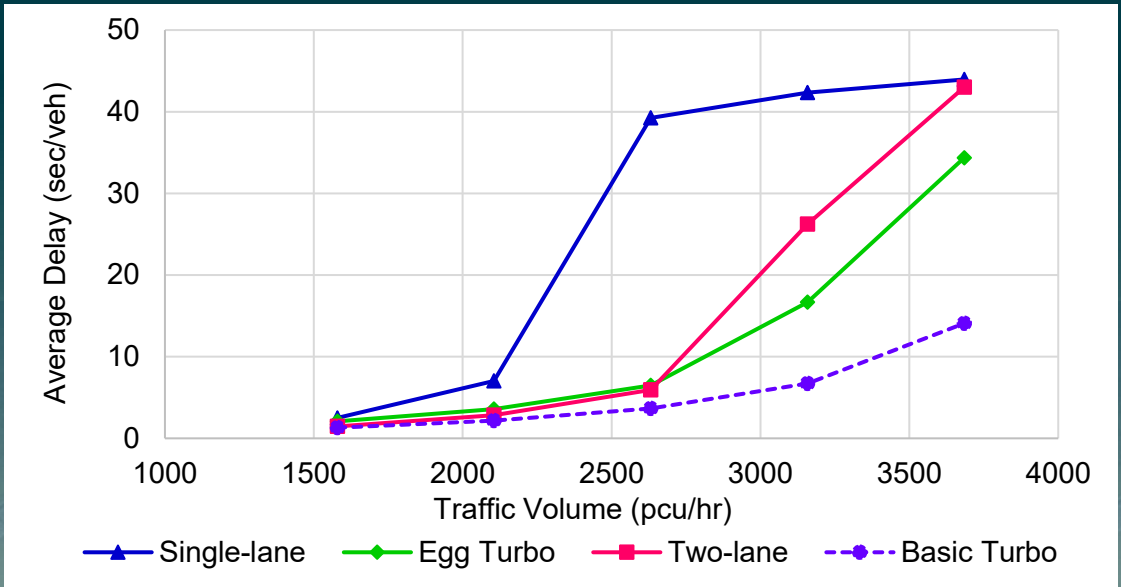


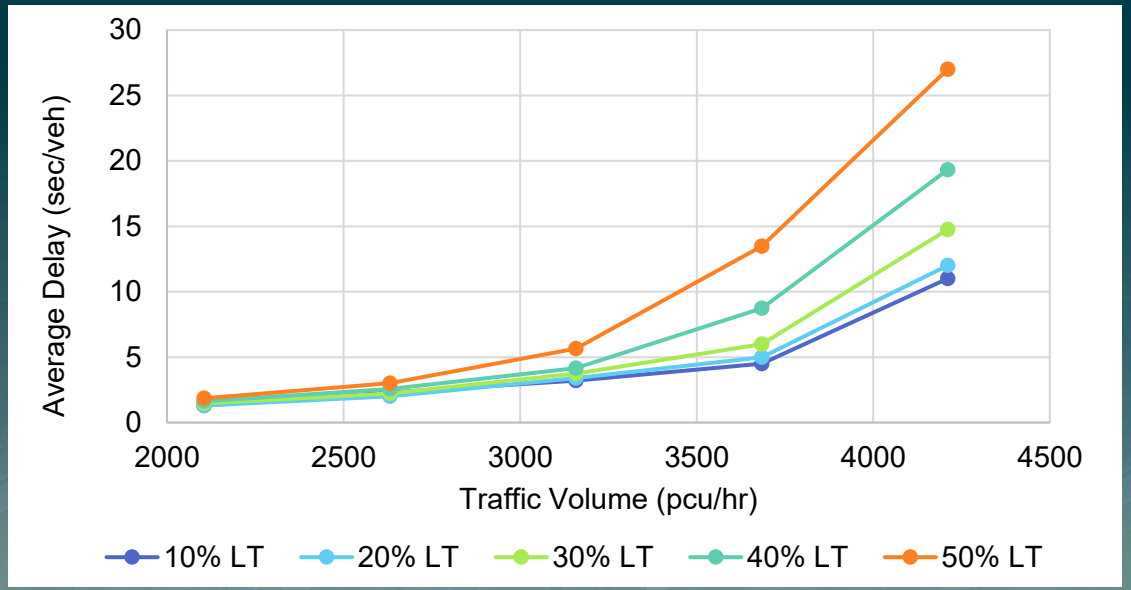
720 simulation scenarios

Table: Comparison of roundabout capacity

Roundabout Type	Observed Capacity (pcu/hr)	Simulated Capacity (pcu/hr)
Single-lane Roundabout	2,000	2,250
Two-lane Roundabout	3,500	3,300
Basic Turbo Roundabout	3,500	3,400
Egg Turbo Roundabout	2,800	2,890

Demand vs Delay





- After traffic volume of 2,600 pcu/hr, average delay in Egg turbo roundabout increased exponentially.*
- At traffic volume of 3,500 pcu/hr, average delay in Basic turbo roundabout was the lowest.*
- Delay increases as the left turn (LT) percentage increases and difference is higher in high traffic volume.**

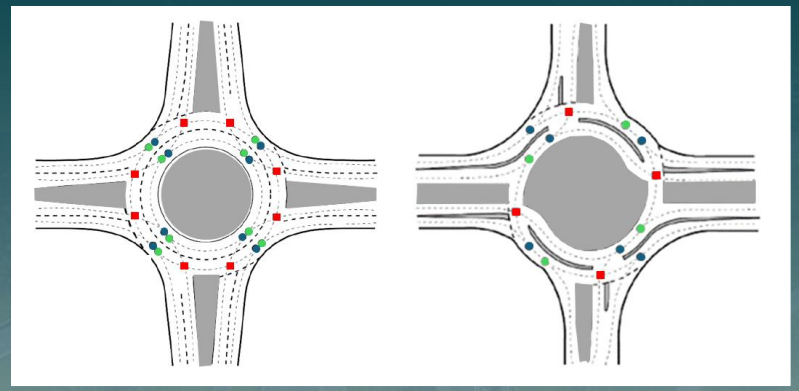
*Basic and egg turbo with 40 ft inner radius and results for 70/30 directional split and 50% left turn percentage

**Basic turbo roundabout 40 ft inner radius and results for 60/40 directional split

Safety benefits

Slower design speed reduces severe injury crashes and mountable dividers reduce crash frequency.

Safety benefits in terms of conflicts



Turbo roundabout reduces the number of conflict points from 24 (in a two-lane roundabout) to 14.

Safety benefits reported in previous studies

- 50%* Less number of Crashes
- 59%** Less Crossing Conflicts
- 82%** Less Injury Crashes

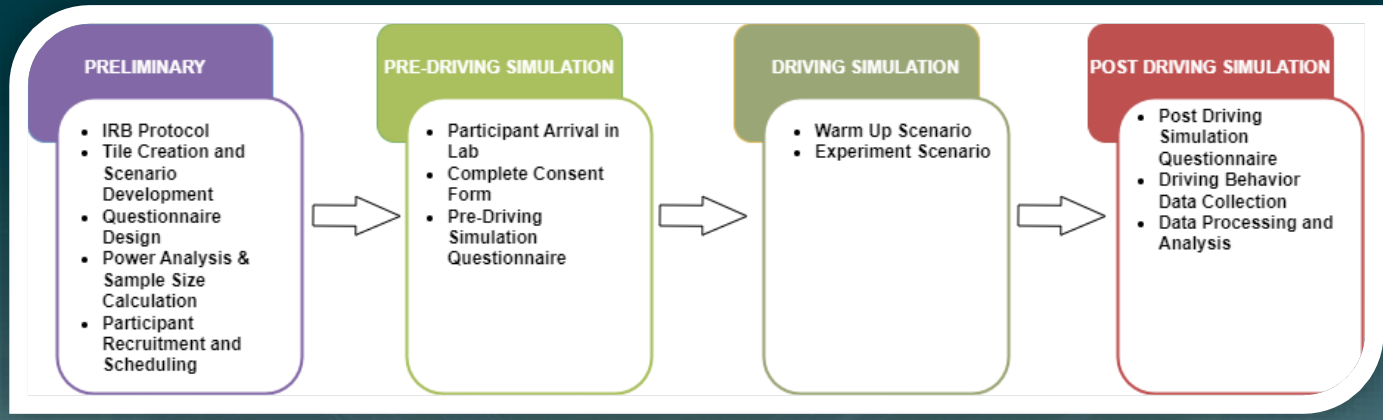
Turbo roundabouts are 70% safer than intersections without traffic signals, 50% safer than intersections with traffic signals.

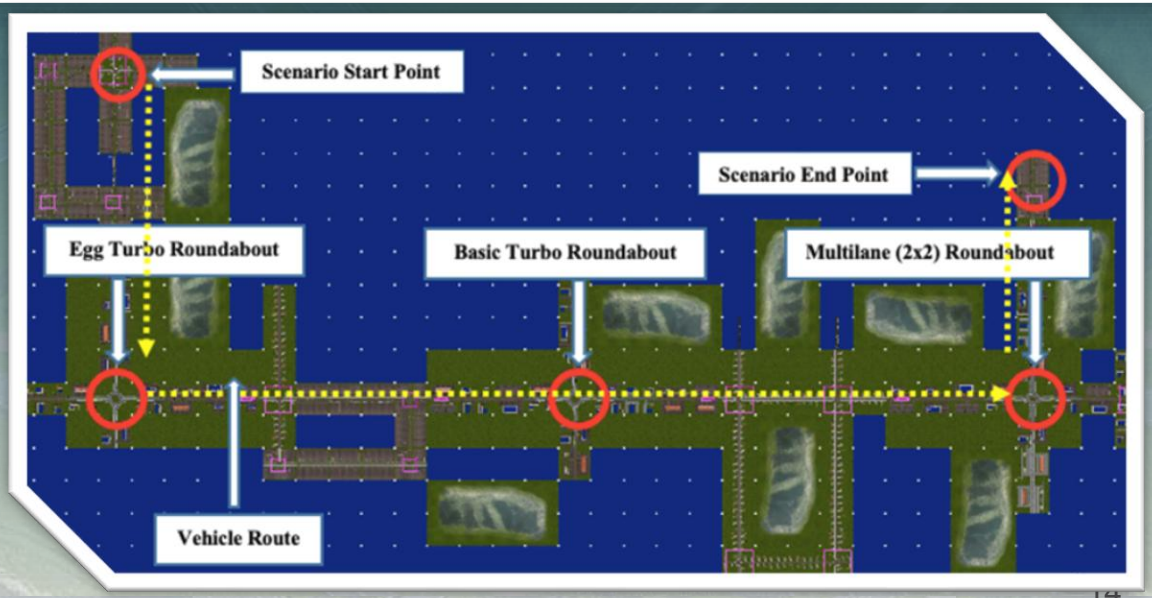
* Federal Highway Administration. (2019). Turbo Roundabouts: Informational Primer. Federal Highway Administration, Report No. FHWA-SA-20-019, Washington, D.C.

** Fortuijn, L. G. (2009). Turbo roundabouts: Design principles and safety performance. Transportation Research Record, 2096(1), 16-24.

Driving Simulator Study

- **<u>24 participants</u>** navigated through three different roundabout types (i.e., Basic turbo, Egg turbo, Two-lane)
- Each driving simulation experiment took **<u>approximately 40 minutes</u>**
- Average accepted gaps were **not significantly different** in **Basic turbo** roundabout and **Two-lane** roundabout

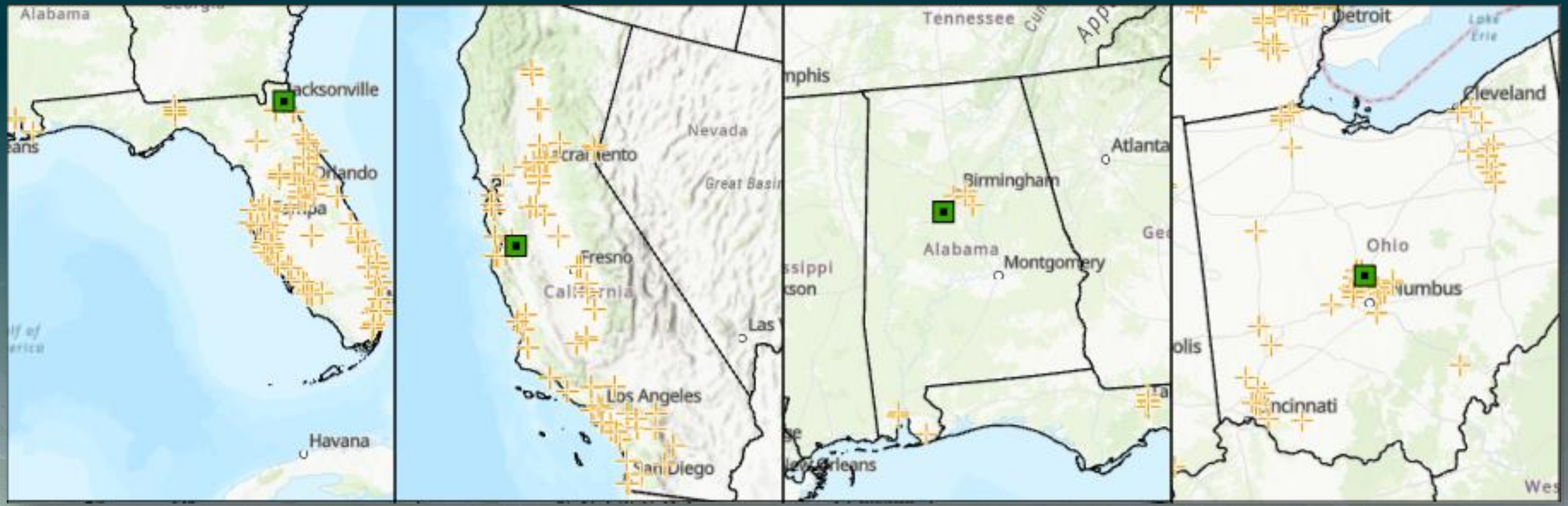




Turbo Roundabout in USA?

Current status of implementation in the U.S.

Turbo Roundabout in USA



Rotor Turbo Roundabout in CA

Khan, M. I., Ashraf, M. T., & Dey, K. (2026). **Evaluating Driver Behavior in Navigating Rotor Turbo Roundabout Features and Intersection Safety Performance**. *Journal of Transportation Engineering, Part A: Systems*, *152*(9), 04026067.

Khan, M. I., Dey, K., & Ashraf, M. T. (2025). **Understanding Speed, Acceleration, and Critical Gaps at First Rotor Turbo Roundabout in the US**. *Transportation Research Record*, 03611981251401592.

Thank You

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Strategy Team: Safer Roads (SR)

Strategy #SR.1: Statewide High-Injury Network (HIN) Partnership Program

No.	Description	Action Step Leader	Completion (Est.)	Last Update	Status	Output Measure	Comment	Task Forces	Partners
2	Expand communication between state and local agencies to identify projects to improve safety at top high-risk signalized intersections.	N/A	N/A	01/16/2026	○ Not Started	Based on input from state and local agencies, develop a list of projects to improve high-risk signalized intersections.	N/A	Intersections	N/A
3	Develop a systemic approach to prioritize improvements for high-risk intersections.	Kimberly Goodwin (NDOT - Traffic Safety Engineering)	N/A	05/07/2026	○ In Progress	Identify improvements for high-risk intersections at a systemic level.		Intersections	N/A
4	Utilizing environmental context, determine how access management is implemented at the local level.	Chris Bell (NDOT - Traffic Operations)	N/A	01/16/2026	○ Not Started	Confirm all local agencies have their own access management guidance or follow NDOTs and how it is implemented.	N/A	Intersections	N/A

Strategy #SR.2: Safe Corridor Demonstration Projects with Local Codesign

No.	Description	Action Step Leader	Completion (Est.)	Last Update	Status	Output Measure	Comment	Task Forces	Partners
1	Identify locations where temporary and permanent road safety countermeasures should be placed.	Andrew Bennett (Clark County)	N/A	01/16/2026	○ Not Started	Generate a ranked list of locations for temporary and permanent traffic safety countermeasures.	N/A	Safer Speeds Intersections Lane Departures Vulnerable Road Users	N/A
2	Implement demonstration project with user feedback to guide permanent redesigns.	Daniel Fazekas (RTC SNV) Lia Grimaldi (City of Las Vegas) LaShonn Ford (RTC Washoe)	N/A	05/07/2026	○ In Progress	Install, observe, and report on demonstration projects.		Safer Speeds Intersections Lane Departures Vulnerable Road Users	N/A

Strategy #SR.3: Integrated Safe Infrastructure Design Policy for All Jurisdictions

No.	Description	Action Step Leader	Completion (Est.)	Last Update	Status	Output Measure	Comment	Task Forces	Partners
1	Review and pair the context-appropriate proven safety countermeasures (FHWA) and context-sensitive multimodal design principles on all state-funded road projects, regardless of local government ownership.	Laura Wise (NDOT - Planning)	N/A	01/16/2026	○ Not Started	Incorporate safety countermeasures on all projects funded by the state.	N/A	Safer Speeds Intersections Lane Departures Vulnerable Road Users	N/A
2	Evaluate and assign a score into all state infrastructure project approvals.	Laura Wise (NDOT - Planning) Kimberly Goodwin (NDOT - Traffic Safety Engineering)	N/A	01/16/2026	○ Not Started	As part of the OneNV process, develop scoring for various scope elements on all projects.	N/A	Safer Speeds Intersections Lane Departures Vulnerable Road Users	N/A
3	Create and distribute educational materials promoting safe infrastructure design.	McKenna Bacon (NDOT - Traffic Safety Engineering) Laurie Sanders (CSN) Erin Breen (PedSafe Vegas)	N/A	01/16/2026	○ Not Started	Develop online resources for safe infrastructure design.	N/A	Safer Speeds Intersections Lane Departures Vulnerable Road Users	N/A
4	Update Nevada Intersection Control Evaluations process with national best practices (all modes of travel).	Chris Bell (NDOT - Traffic Operations)	N/A	01/16/2026	○ Not Started	Summarize findings of national best practices to aid in establishing an ICE Process for agencies in Nevada and use as part of statewide processes.	N/A	Intersections	N/A

Strategy Team: Safer Speeds (SS)

Strategy #SS.4: Advance the use of infrastructure techniques, design and technology to manage target speeds and set speed limits.

No.	Description	Action Step Leader	Completion (Est.)	Last Update	Status	Output Measure	Comment	Task Forces	Partners
1	Conduct a study to prove the issue of Automated Traffic Enforcement. Review hearing from the 2025 Legislative Session to determine what made the bill fail and look to make changes to address those concerns.	N/A	N/A	01/16/2026	○ Not Started	Conduct a best practice review on automated enforcement technology, address equity in automated enforcement. (Consider calling these safety cameras).	N/A	Intersections	N/A

Strategy Team: Safer Vehicles (SV)

No Strategies

Strategy Team: Safer People (SP)

Strategy #SP.2: Road Safety Education through Lifespan Approach

No.	Description	Action Step Leader	Completion (Est.)	Last Update	Status	Output Measure	Comment	Task Forces	Partners
3	Review driver education materials to ensure they incorporate comprehensive information on all key driving concepts.	N/A	N/A	01/16/2026	○ Not Started	Coordinate with the Department of Motor Vehicles (DMV) to ensure relevant driving scenarios, such as roundabouts, are included in the driving test when applicable.	N/A	Intersections	NDOT - Planning

Strategy Team: Post-Crash Care (PCC)

No Strategies

Strategy Team: Traffic Records Coordinating Committee (TRCC)

No Strategies