



KELLI FRIESE INSTRUCTOR INTRO.

- Ed's Collision & Glass Marketing/Promotions Director- 24 Years to present
- Minnesota State Licensed Continuing Education Instructor- 23 years to present
- Business Development Manager- 1 Collision Network- 4 years
- St. Cloud State University/MHSRC 55+ Driver Improvement Instructor/Advisory Board Member- 14 years to present
- Toastmasters International Advanced Communicator Gold- 13 years to present
- Apache Plaza Shopping Center Marketing Director- 15 years
- Owner/Coach North Star Gymnastics, Aerobics & Dance Club - 25 years



When Did ADAS First Appear In The United States?

- **2000 Cadillac Deville – Night Vision (NV)**
- **2000 Toyota – Dynamic Laser Cruise Control (ACC)**
- **2004 Infiniti FX – Lane Departure Warning (LDW)**
- **2006 Lexus LS – Lane Keeping Assist (LKA)**
- **2007 Audi – Lane Assist (LDW)**
- **2008 GM – Lane Departure Warning (LDW)**



AUTOMOTIVE SAFETY TECHNOLOGIES

Presenter: Kelli Friese



WE'VE COME A LONG WAY!

REMEMBER
THE FIRST ORIGINAL SEATBELT



Auto Strap for front-seat tots

\$1.88

Guards your child as you're busy driving through traffic. Lets him sit, stand, kneel or sleep without disturbing driver. Prevents spills from sudden stops. Heavy web harness attaches to safety strap that snaps to car seat frame. Removes easily. Also use as walking harness. For 1 to 10-year olds. Fits any car. Shpg. wt. 9 oz.

460 SEARS 3PCBKM
49 G 7945.....\$1.88



ADAS ADVANCED DRIVER ASSISTANCE SYSTEMS

- “ADAS is to prevent deaths and injuries by reducing the number of car accidents”
- This technology can physically respond faster than a human driver ever could. From being able to see in the dark to seeing in all directions at once.
- How? Cameras and sensors can!



ADAS (Advanced Driver Assistance Systems)

Collision Mitigation Systems

Safety systems designed to prevent or reduce the severity of a collision

- Adaptive Cruise Control
- Forward Collision Warning System
- Autobrake
- Lane Keeping Assist
- Adaptive Headlights
- Blind Spot Detection
- Rear Camera and Park Assist





ADAPTIVE CRUISE CONTROL

- Adjusts vehicle speed to accommodate safe distance
- Utilizes front end radar to gauge distance
- Could also be considered a safety feature
 - Recently introduced with stop-and-go feature





FORWARD COLLISION WARNING

- Forward “looking” radar system
- Mounted in front, detects likelihood of oncoming impact with vehicles and pedestrians
- Sends audible warning, slows vehicle





AUTOMATIC EMERGENCY BRAKING SYSTEMS

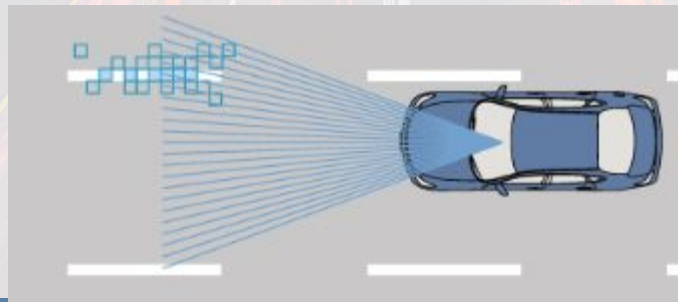
- Sends audible warning
- If driver fails to take action, the vehicle will stop itself
- Designed to avoid pedestrian impact particularly when turning corners





LANE DEPARTURE WARNING

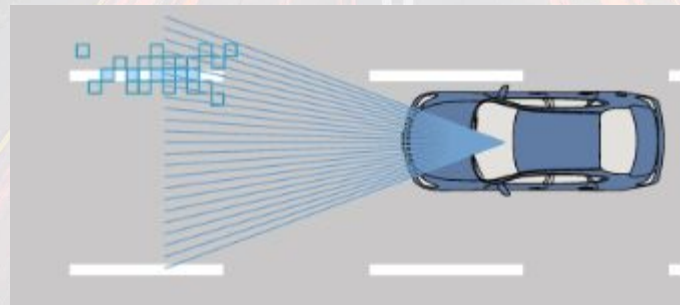
- System senses when a car is leaving its lane
- Several system types
 - Infrared
 - Laser
 - Video
- Warnings range from audible to wheel vibration





LANE KEEPING ASSIST

- System prevents a vehicle from drifting into another lane
- System corrects by gently employing automatic steering and/or braking on the opposite side of the car in order to bring the vehicle back toward the center of the lane.





AUTOMATIC HIGH BEAM CONTROL

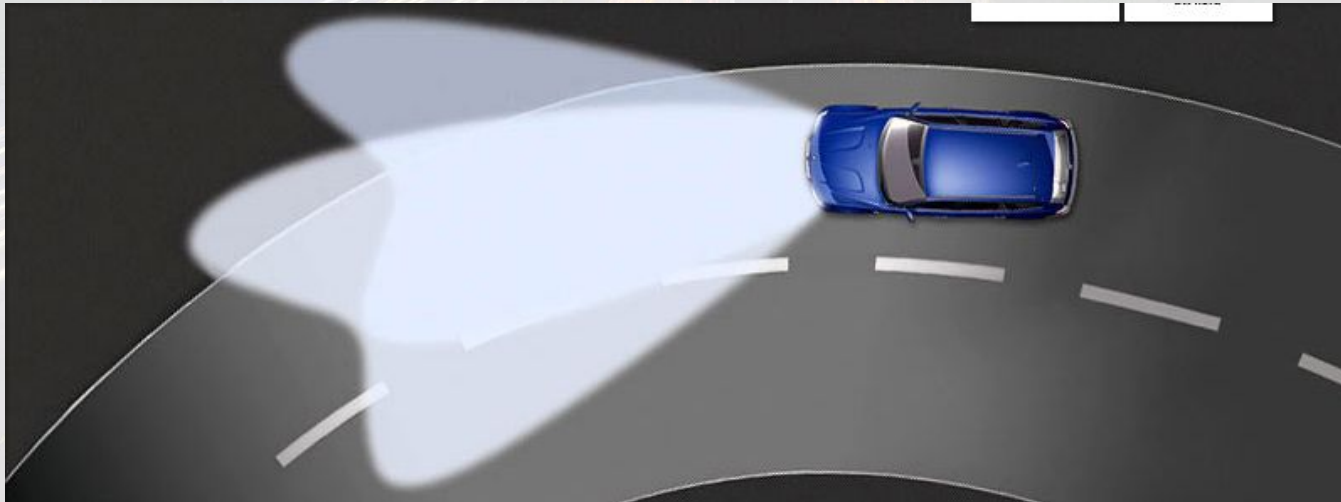
- Camera adjusts headlamps from low to high based on traffic patterns
- Some systems use a dimmer system offering more variables than low and high
- **Headlight Law Reminders:**
 - Headlights must be used when you cannot see at least 1000 feet in front of you
 - High beams must be dimmed when approaching traffic is within 500 feet
 - High beams must also be dimmed when following within 300 feet of another vehicle





ADAPTIVE HEADLIGHTS- ACTIVE CORNERING HEADLIGHTS

- Headlamp swivels in response to steering wheel
- Adjusts to speed for optimum viewing area



MN DEER VS. CAR CRASH FACTS DID YOU KNOW?

1. **How many deer vs. car crash claims are reported to insurance companies each year in our state?**

Answer: About 40,000

2. **How much does the average deer vs. car claim cost?**

Answer: About \$6,000

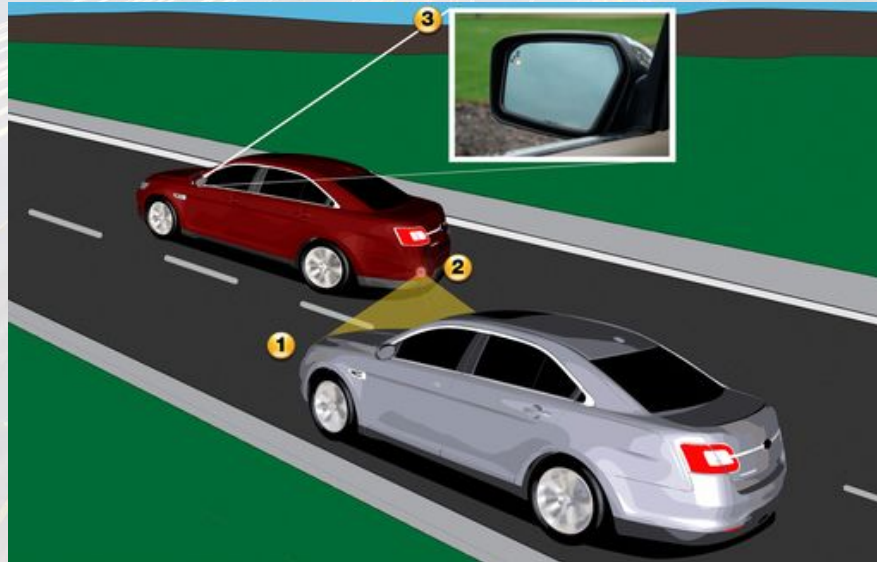
3. **What month accounts for the most deer car crashes?**

Answer: November, followed by October and December



BLIND SPOT DETECTION

- Sensor detects vehicle in the other lane
- Driver receives audible warning
- Vehicle corrects steering





REAR-VISION CAMERA

- Mounted in rear of vehicle
- Detects objects in path including children
- Audio and visual guidance
- Standard in all new production vehicles as of May 2018





REPAIRS CAN BE COSTLY





LET'S TALK TIRES

- **Tire failure is one of the most common causes of a car crash due to mechanical failure.**



Tire Age



8th week of 2016



IN CONCLUSION:

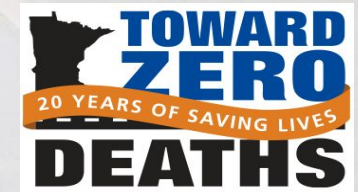


AUTOMOTIVE SAFETY TECHNOLOGIES

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- Choose your vehicles wisely
- Don't become a statistic

The most important part of a vehicle is you!





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