A Human Factors Approach to Traffic Safety Campaigns
Meeting Agenda

- Florida’s Strategic Highway Safety Plan and Vital Few Focus
- Safety Campaign Overview and Approach
- Campaign Schedule and Partner Engagement
Florida’s Mission: Target Zero
Introductions

• Name
• Agency
• What is your role in safety?
On Florida's roads..

94% of Crashes are Caused by Human Error

8 Daily Fatalities

49 Daily Serious Injuries

... but even one life lost is too many.
Florida Strategic Highway Safety Plan

**VITAL FEW**
- LANE DEPARTURES
- PEDESTRIANS AND BICYCLISTS
- INTERSECTIONS

**FLORIDA STRATEGIC HIGHWAY SAFETY PLAN**

TARGET ZERO
FATALITIES & SERIOUS INJURIES

MARCH 2021
FHWA: The Safe System Approach

- Safe Road Users
- Safe Vehicles
- Safe Speeds
- Safe Roads
- Post-Crash Care

Dealing with death and serious injury is unacceptable. Redundancy is crucial. Safety is proactive. Responsibility is shared. Humans make mistakes. Humans are vulnerable.
Influencing Safe Behavior

The 2021 Strategic Highway Safety Plan (SHSP) acknowledges crashes rarely have a single contributing factor. The plan outlines strategies to address high-priority issues facing the transportation system, including:

**Roadways:**
- Lane departures; and
- Intersections.

**Road Users:**
- Pedestrian and bicyclist safety;
- Aging road users;
- Motorcyclists and motor scooter riders;
- Commercial motor vehicle operators; and
- Teen drivers.

**User Behavior:**
- Impaired driving;
- Occupant protection;
- Speeding and aggressive driving; and
- Distracted driving.
4 Es and 4 Is of Traffic Safety

4E’s
1. Engineering
2. Education
3. Enforcement
4. Emergency Response

4I’s
1. Information Intelligence
2. Innovation
3. Insight into Communities
4. Investments and Policies
**Rumbles**

More than half of fatal crashes are caused by lane departure — when drivers run off the road or cross the center median into oncoming traffic.

**Center Line, Edge Line and Shoulder Rumble Strips and Stripes**

Rumble strips are milled elements in the pavement. The vibration (and resulting sound) alerts drivers if they are leaving the travel lane. These rumbles are proven to help reduce roadway departure crashes caused by inattentive, distracted, or drowsy drivers who drift from their lane.

Cost Effective Safety Engineering Countermeasures Help Reduce Lane Departure Crashes

**What is a Flashing Yellow Arrow?**

A new traffic signal that means you can turn left if there is a safe gap in traffic.
The Objective
Identify behaviors contributing to serious and fatal crashes, and the reasons for those behaviors.

Influence safe behavior.
Partner Input

- Using your mobile device, access the QR code on the next slide.
- Q: Think of a marketing campaign or campaigns that caused you to change your perception or behavior.
- They can be
  - Safety campaigns, for example: Click It or Ticket, or Drive Sober or Get Pulled Over
  - Public service campaigns, for example: Smoky the Bear, or Tips from Former Smokers
  - Commercial campaigns, for example: Got Milk? or Like a Girl
Think of a marketing campaign that caused you to change your perception or behavior.
Thinking about the campaign(s) you named:

• Where did you see it?

• Why did it resonate with you?

• How did it influence your behavior?

• How can this safety campaign maximize the effectiveness of public engagement on transportation safety?
Changing behavior requires a better understanding of why people behave the way they do, how people change and how to help people in their efforts to change.

Social marketing is the application of commercial marketing principles to change behavior, increase use of a product or increase access to services. All of this is done for the good of the individual and society.
Behavior Change in Practice
Safety Campaign Approach
Campaign Approach Summary

• **Goal** = Changing Behavior | Saving Lives
• **Root cause data analysis** = what, where and who
• **Assess previous campaigns** = effectiveness and best practices
• **Human data analysis** = why and how
• **Create engaging campaign** = content and media
• **Execute the campaign**
• **Measure the effectiveness** = outputs and outcomes
• … and repeat.
Root Cause Analysis
Campaign Approach

- Analyze Behaviors
- Analyze Data
- Evaluate Previous Campaigns
- Measure Campaign Effectiveness
- Develop & Test New Campaigns
- Research Audiences
Root Cause Analysis

On Florida's roadways between 2015 and 2020, there were:
- 18,781 fatalities
- 116,067 serious injuries

Total Fatalities and Serious Injuries by Year

Please note: 2020 data are preliminary.
Florida Campaigns and Industry Scans

Evaluating the effectiveness of current safety and messaging efforts
Evaluation of Existing Florida Safety Campaigns
Evaluation of Effective Campaigns

Drivers who rush when they’re 10 minutes late for their shift

Drivers who stay in control and watch their speed

Embrace Life - always wear your seat belt

Got Milk?

Drive Like Gran’s in the Car
Don’t Drive Distracted

#Drivesmart

Speeding. No one thinks big of you.
Industry Scan + FDOT Campaigns
Three Ways of Measuring Success

- Conversions / Sales: 39%
- Engagement or clicks: 27%
- Views / Reach / Impressions: 34%

- Total Project Cost: $42M
- Total Benefit: $67.56M
- Average Benefit/Cost Ratio: 1.6
- Average Rate Change: -35%
- Average Rate Change: -37%
- Average Rate Change: -34%
Audience Research
Campaign Approach

- Research Audiences
- Evaluate Previous Campaigns
- Develop & Test New Campaigns
- Measure Campaign Effectiveness
- Analyze Behaviors
- Analyze Data
- Measure Campaign Effectiveness
Influential Messages Are Not One-Size-Fits-All

- Reasons for safe and unsafe behaviors
- Attitudes regarding transportation and safety
- Value systems/motivators
- Test current messages
• Name: Elyse
• Age: 28
• Gender: Female
• Location: Flagler Beach
• Activities and interests
  • Waitress
  • Dog rescuer (pitties)
  • Cooking and baking
  • Homebrewing beer
  • Drawing and painting
  • Board games
  • Eating out
  • Vintage TV shows (80s and 90s)
  • Disney movies
  • Electronic dance music (EDM) fan
  • Minor league hockey fan
  • Traveler
• Income: $28,000 annually
• Education: A.A. degree, general studies
• Housing: 1-bedroom apartment
• Goals in life
  • Short-term:
    • Earn a bachelor’s degree in counseling
    • Find a larger apartment closer to the beach
    • Pay off her car
    • Get out of the service industry
  • Long-term:
    • Earn a master’s degree in psychology
    • Become a school counselor
    • Marry her boyfriend/ start a family
    • Move to Tennessee
    • Buy a house with a big yard
    • Rescue more dogs
Thinking about the campaign(s) you named earlier:

• Why would they resonate with Elyse and what behavior would she change?

• Relating this persona to our goals:
  • What prevents Elyse from driving safely?
  • What would motivate Elyse to drive safely?
Partner Engagement
<table>
<thead>
<tr>
<th>Task</th>
<th>Start Date</th>
<th>End Date</th>
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<tbody>
<tr>
<td>Analyze Existing Safety Campaigns and Scan Successful Behavior Change Campaigns</td>
<td>Mar 2021</td>
<td>Jun 2021</td>
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<tr>
<td>Analyze Existing Crash Records and Conduct Root Cause Analysis</td>
<td>Mar 2021</td>
<td>Sep 2021</td>
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<td>Identify Audiences for Campaigns</td>
<td>Mar 2021</td>
<td>Nov 2021</td>
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<td>Conduct Research with Focus Groups and Audiences</td>
<td>Mar 2021</td>
<td>Dec 2021</td>
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<td>Develop and Test New Campaigns</td>
<td>Mar 2021</td>
<td>Jan 2022</td>
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<td>Launch Targeted Campaigns (Lane Departures, Intersection Crashes, Pedestrian, Bicycle)</td>
<td>Mar 2021</td>
<td>Jan 2022</td>
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<td>Run Campaigns</td>
<td>Mar 2022</td>
<td>Jan 2022</td>
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<tr>
<td>Measure Effectiveness of Campaigns</td>
<td>Mar 2022</td>
<td>Jan 2022</td>
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Identification of Related Partner Efforts
General Discussion
Safety Moment

DO YOU RIDE SMART?

S Say no to drinking and riding
M Make yourself more visible to motorists
A Always wear your helmet when you ride
R Ride in control (within legal and personal limits)
T Train regularly and get endorsed

www.RideSmartFlorida.com
Funded by the Florida Department of Transportation
Thank You!

Brenda Young, P.E., CPM
State Safety Engineer
Florida Department of Transportation
Email: brenda.young@dot.state.fl.us

How May We Support You?

https://www.fdot.gov/safety/safetyengineering/safetyengineering.shtm
Together Toward Zero