Highway Traffic Safety Culture
A Tennessee Perspective

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Background & Acknowledgements

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Background

What is the definition of Highway Safety?

“Methods and measures for reducing the risk of a person using the road network being killed or seriously injured.”
Background

Why does it matter?

- Traffic Crashes = 6,064,000 in 2014
- Economic Cost = $200+ billion annually
- Crash Related Injuries = 2,338,000 in 2014
- Fatalities
  - 32,367 in 2011
  - 32,675 in 2014
  - 38,300 in 2015
Background

Traditional Approach to Highway Safety

- 4 E’s of Highway Safety
  - Engineering (hwy. design, traffic, maint., operations...)
  - Enforcement (state & local law enforcement agencies)
  - Education (driver ed., advocacy groups, prevention specialists)
  - Emergency response (e.g., first responders, paramedics, fire, and rescue).
Traffic Safety Culture (TSC)

- Traffic Safety Culture is an emerging approach to highway safety
- Focus is on how social factors in culture influence how people prioritize safety & respond to interventions
- Assumes behaviors are a product of a deliberative process influenced by OUR culture
- Improving highway safety requires an understanding of the processes that produce behavior
Traffic Safety Culture

What is the Definition of Traffic Safety Culture?

“Values, beliefs, frames, norms and attitudes shared by a group of people that influence their individual decisions regarding driving behaviors and safety interventions.”
Traffic Safety Culture

- Values – Principles to which we aspire (*I want to drive well to protect my family*)
- Beliefs – Perceptions of the way things work/interrelate (*I can drive fast – cops are never on this road segment*)
- Frames – The reference point from which we interpret a situation (*Big government is bad – traffic cameras are a money grab*)
- Norms – Perceptions of common behaviors among peer groups (*My friends don’t wear seatbelts so it must be okay*)
- Attitudes – Emotional reaction/perception associated with a behavior (*I will be an outcast if I don’t respond to that text immediately*)
Traffic Safety Culture

- TSC is an emerging field
  - Definitions are still evolving
  - Research frameworks are under development
  - Measurement procedures/tools being tested
  - Interventions/program strategies not yet standardized
TSC Surveys

- AAA Research Foundation
- Other States
- Tennessee Comparison Surveys
  - 2014 – N = 1579 age 16 to adult US outside TN
  - 2014 – N = 1034 age 16 to adult Tennesseans
Traffic Safety Culture

- Tennessee’s Experience with TSC
  - Limited understanding of the approach by staff
  - Not yet on policymakers radar
  - Baseline data are being collected
TSC Surveys

- Tennessee Surveys
  - 2011 – N = 928 age 16 to adult Tennesseans
  - 2012 – N = 2027 age 16 to adult Tennesseans
  - 2013 – N = 407 age 16 to adult Tennesseans
  - 2013 – N = 1087 age 15 to 19 year olds (Teens)
  - 2014 – N = 1034 age 16 to adult Tennesseans
  - 2015 – N = 796 age 16 to adult Tennesseans
Survey Methods

- Statewide – Started with mostly adults
  - Representative of 3 Grand Divisions
- 2011 - Only landline phone
- 2012 - Cell & landline phone
- 2013 Adults - only landline phone
- 2013 Teens
  - landline phone
  - phone/other recruitment with web response
- 2014 – Landline (15%), cell (4%) and web (81%)
- 2015 – Landline (23%), cell (27%) and web (50%)
Driving Behavior Perceptions

Q. What behaviors cause the most traffic crashes each year?

• Texting/emailing – 2011 = 41% - 2015 = 60%

• DWI – 2011 = 34% - 2015 = 22%

• Talking on a phone – 2011 = 13% - 2015 = 11%
Q. Do you think driving feels safer, less safe or about the same as it did five years ago (2011)?

**Tennessee**
- Safer: 42%
- About the Same: 45%
- Less Safe: 3%
- Not Sure: 1%

**2014**
- Safer: 52%
- About the Same: 36%
- Less Safe: 9%
- Not Sure: 2%

**USA**
- Safer: 45%
- About the Same: 36%
- Less Safe: 13%
- Not Sure: 40%
Q. How acceptable is it to send text messages while driving? (2014)

- 97% of respondents find it unacceptable to send text messages while driving.
- 74% consider it unacceptable for others to send text messages while they are driving.
- 24% think it is acceptable to send text messages while driving.
- 3% consider it acceptable for others to send text messages while driving.

How I Feel: Yellow bars
How Neighbors Feel: Blue bars
Q. How acceptable is it to drive when you have had too much to drink? (2014)
Q. How acceptable is it to drive without wearing a seatbelt? (2014)

How I Feel

89% Unacceptable
69% Neutral
10% Acceptable

How Neighbors Feel

1% Unacceptable
4% Neutral
27% Acceptable

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Driving Behavior

Q. How often do you read or send text messages while driving?

- Never: 80%
- Rarely: 13%
- Sometimes+: 7%

Q. How often do you talk on cell phone while driving?

- Never: 30%
- Rarely: 26%
- Sometimes+: 44%
Driving Behavior & Perceptions

Q. Do you wear your seatbelt more often at night, less often or the same?

- More Often: 6%
- Less Often: 2%
- No Difference: 93%

Q. Do you think driving during daylight hours feels more safe, less safe or the same as driving at night?

- More Safe: 47%
- Less Safe: 16%
- The Same: 35%
- Not Sure: 2%
Q. Most teen drivers in TN are well prepared when they first begin driving independently.

![Bar graph showing responses to the question.]

- Strongly Disagree: 34%
- Somewhat Disagree: 29%
- Neither: 5%
- Somewhat Agree: 15%
- Strongly Agree: 6%
Q. Do you support having a law against these actions while driving (2011)?

**Strongly or Somewhat Support**

<table>
<thead>
<tr>
<th>Action</th>
<th>2014</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Text messaging</td>
<td>N/A</td>
<td>91%</td>
</tr>
<tr>
<td>Using hand-held phone</td>
<td>62%</td>
<td></td>
</tr>
<tr>
<td>Using any cell phone</td>
<td>50%</td>
<td></td>
</tr>
</tbody>
</table>
Elderly Driving Issues

Q. Do you Support Requiring Drivers over 75 Pass a simple screening for health problems that can affect their driving?

- 57% Strongly Support
- 25% Somewhat Support
- 9% Neither
- 4% Somewhat Oppose
- 4% Strongly Oppose
Understanding of Issues

Q. How distracting is each of the following when you are driving? National 2014

Percent responding “NOT at all distracting”

- Friends in car: 35%
- Music adjustments: 35%
- Emotional state: 22%
- Talking on cell: 14%
- Texting: 11%
- Bad weather: 8%
Q. Men are better drivers than women.
(TN - 2014)
Q. Men are better drivers than women. (National - 2014)
Findings

- Tennesseans are similar to the rest of U.S.
- Talking is acceptable – texting is NOT
- Distracted driving is most prevalent concern
- Disconnect between personal beliefs and perceptions of other’s beliefs
Opportunities

- TSC field is not fully established in US
- We are not sure of the best way to measure TSC
- Question wording & topics evolving
- Survey data collection methods being evaluated
- We need better insights into how to transfer knowledge into practice