Driving While Distracted

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Problem Formulation

Data

- Sources
- Data Quality

Analysis

Conclusions
DATA SOURCES

- Literature Review
- Louisiana surveys
- Crash data
WHAT ABOUT OTHER DISTRACTIONS?

 Literature Review

  ▪ There are many distractions
    ▪ Cell phones
    ▪ Electronic devices
    ▪ Drinking beverages
    ▪ Make up
    ▪ Talking to passengers & kids
    ▪ Looking for items
SURVEY DATA ON
CELL PHONES

- Attitudinal Survey:
  - About 32% of the drivers surveyed used their cell phone on their last trip

- Observational Survey:
  - 9.2% of drivers on Louisiana roads were using hand-held cell phones
Two fields (Dr Condition, Distraction type)

Data inconsistencies

<table>
<thead>
<tr>
<th>Row Labels</th>
<th>CELL PHONE</th>
<th>OTHER ELECTRONIC</th>
<th>OTHER INSIDE VEH</th>
<th>OTHER OUTSIDE VEH</th>
<th>Grand Total</th>
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</thead>
<tbody>
<tr>
<td>Apparently Asleep/Blackout</td>
<td>11</td>
<td>1</td>
<td>305</td>
<td>18</td>
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<td>11</td>
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<tr>
<td>Apparently Asleep/Blackout</td>
<td>0.36%</td>
<td>0.80%</td>
<td>0.02%</td>
<td>0.56%</td>
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<tr>
<td>Distracted</td>
<td>2.76%</td>
<td>2.88%</td>
<td>0.17%</td>
<td>2.62%</td>
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<tr>
<td>Drinking Alcohol - Impaired</td>
<td>0.81%</td>
<td>2.75%</td>
<td>0.11%</td>
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<tr>
<td>Drinking Alcohol - Unimpaired</td>
<td>0.12%</td>
<td>0.40%</td>
<td>0.01%</td>
<td>0.25%</td>
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<td>Drug Use - Impaired</td>
<td>0.31%</td>
<td>0.47%</td>
<td>0.01%</td>
<td>0.37%</td>
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<td>0.02%</td>
<td>0.02%</td>
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<td>0.02%</td>
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<tr>
<td>Fatigued</td>
<td>0.19%</td>
<td>0.38%</td>
<td>0.03%</td>
<td>0.28%</td>
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<tr>
<td>Illness</td>
<td>0.17%</td>
<td>0.20%</td>
<td>0.02%</td>
<td>0.17%</td>
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<tr>
<td>Inattentive</td>
<td>27.77%</td>
<td>29.67%</td>
<td>1.86%</td>
<td>26.76%</td>
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<tr>
<td>Normal</td>
<td>63.95%</td>
<td>57.45%</td>
<td>5.44%</td>
<td>56.10%</td>
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<tr>
<td>Other</td>
<td>0.34%</td>
<td>0.45%</td>
<td>19.12%</td>
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<tr>
<td>Physical Impairment (Eyes, Ear, Limb)</td>
<td>0.06%</td>
<td>0.08%</td>
<td>0.36%</td>
<td>0.09%</td>
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<td>Unknown</td>
<td>3.13%</td>
<td>4.45%</td>
<td>72.85%</td>
<td>9.18%</td>
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<tr>
<td>Grand Total</td>
<td>100.00%</td>
<td>100.00%</td>
<td>100.00%</td>
<td>100.00%</td>
<td></td>
</tr>
</tbody>
</table>
DISTRACTION BY GENDER

- Apparently Asleep/Blackout
- Distracted
- Drinking Alcohol - Impaired
- Drinking Alcohol - Unimpaired
- Drug Use - Impaired
- Drug Use - Unimpaired
- Fatigued
- Illness
- Physical Impairment (Eyes, Ear, Limb)
DISTRACTIONS AND ALCOHOL FATAL CRASHES

- Apparently Asleep/Blackout
- Distracted
- Drinking Alcohol - Impaired
- Drinking Alcohol - Unimpaired
- Drug Use - Impaired
- Drug Use - Unimpaired
- Fatigued
- Illness
- Physical Impairment (Eyes, Ear, Limb)
TYPES OF DISTRACTIONS

The bar chart shows the percentage distribution of different types of distractions by gender. The categories include:

- **CELL PHONE**
- **OTHER ELECTRONIC**
- **OTHER INSIDE VEH**
- **OTHER OUTSIDE VEH**

The chart compares female and male participants:

- **Female**
  - CELL PHONE: 45.00%
  - OTHER ELECTRONIC: 15.00%
  - OTHER INSIDE VEH: 15.00%
  - OTHER OUTSIDE VEH: 15.00%

- **Male**
  - CELL PHONE: 40.00%
  - OTHER ELECTRONIC: 20.00%
  - OTHER INSIDE VEH: 20.00%
  - OTHER OUTSIDE VEH: 20.00%
DISTRACTION BY AGE GROUP

- Distracted
- Drinking Alcohol - Impaired

Age Groups:
- Adult 25-45
- Adult 46-64
- Senior
- Teen 15-17
- Youth 18-20
- Youth 21-24
DISTRACTION BY AGE

- ADULT-25-45
- ADULT-46-64
- SENIOR
- TEEN-15-17
- YOUTH - 18-20
- YOUTH-21-24

- CELL PHONE
- OTHER ELECTRONIC
- OTHER INSIDE VEH
- OTHER OUTSIDE VEH
VIOLATIONS

- Careless Operation
- Disregarded Traffic Control
- Failure to Yield
- Following Too Closely
- Improper Backing

Legend:
- Cell Phone
- Other Electronic
- Other Inside Veh
- Other Outside Veh
1. Is cell-phone use while driving a danger?
2. Are hands-free cell phones safer than hand-held cell phones when driving?
3. How much does cell-phone use while driving contribute to crashes?
**Is Cell-Phone Use While Driving a Danger?**

- **Literature:** A Definite YES
- **Survey:** What do Louisiana drivers think about hand-held cell phones?
  - It is very dangerous: 43%
  - It is at least somewhat dangerous: 82%
  - They could drive safely with it: 46%
  - Support a law banning it while driving: 65%
ARE HANDS-FREE CELL PHONES SAFER THAN HAND-HELD CELL PHONES WHEN DRIVING?

- Literature: Not a clear answer
  - Most say NO some say YES
- Survey: What do Louisiana Drivers think about hands-free cell phones?
  - They are more safe 57%
  - They could drive safely with it 66%
  - Oppose a ban 61%
### CELL PHONE TASK

<table>
<thead>
<tr>
<th>Task</th>
<th>Risk of Crash or Near Crash event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dialing Cell Phone</td>
<td>2.8 times as high as non-distracted driving</td>
</tr>
<tr>
<td>Talking/Listening to Cell Phone</td>
<td>1.3 times as high as non-distracted driving</td>
</tr>
<tr>
<td>Reaching for object (i.e. electronic device and other)</td>
<td>1.4 times as high as non-distracted driving</td>
</tr>
</tbody>
</table>
Cell-phone usage increased by 300%

Crashes increased by 3%

Risk of licensed driver being involved in a crash decreased by 1 percentage point, from 11% to 10%.

Less than 1% of crash reports indicate cell phone usage, 90% of them for vehicle at fault

But 16% of crashes should have cell phones involved
There are many driver distractions; cell phones are only a small part of it.

Cell-phone use while driving is distracting and drivers are aware of it.
- Dialing like texting is most distracting

What can we do about it? Education is the main method.
- All distractions should be covered.
- Different messages for male, female, seniors, teens
- Legislation-focus on teen driving