



Zendrive Research:

Largest Distracted Driving Behavior Study
Drivers Use Their Phones During 88 Out of 100 Trips
Analysis of 3-Million Drivers Who Logged 5.6-Billion Miles Over 3-Months

April 17, 2017
Executive Summary

Zendrive Data Overview

- Total number of users: 5-million drivers
- Total driver behavior data set: 10-billion miles

Phone Use Study Data Overview

- Time period for study: December 2016, January 2017, February 2017 (89 days)
- Number of users in study: 3.1-million anonymized drivers
- Number of trips in study: 570-million trips
- Driver behavior data set for study: 5.6-billion miles

For comparison, the Federal Highway Administration's periodic National Household Transportation Survey -- considered an authoritative source on mobility data -- [surveyed about 300,000 people in 2009](#).

Zendrive Phone Use Study Findings

- **Trips with phone use: 88-percent**
- Trips per day with phone use in study data set: 5.6-million
- Based on Zendrive data, trips everyday in the U.S. with phone use: 600-million
- Average phone use per driver per day: 3.5-minutes per hour
- Vermont has the highest level of driver phone use
- Oregon has the lowest level of driver phone use

It appears that at the state-level, laws that ban hand-held phone use help reduce the amount of time per trip drivers use their phones: Of the ten states with the lowest levels of phone use, six have laws limiting phone use while driving. *It's illegal in Vermont and Oregon to use a handheld phone while driving.*

Context

- Drivers' phone use is [extremely difficult](#) for crash investigators & traffic safety experts to measure
- In 2015, [91-percent of Americans owned mobile phones](#) and [drove over 3-trillion miles](#)
- In 2015, [35,092 people died in traffic](#), and NHTSA reported just [476 mobile phone-related deaths](#)
- A [2-second distraction](#) is long enough to increase your likelihood of crashing by over 20-times
- After a steady forty-year decline, U.S. [traffic deaths shot up](#) in 2015 and 2016, exceeding 40,000 for the first time in a decade

Methodology

Zendrive's uses the technology built into smartphones to measure driving, so by virtue of running on a smartphone, Zendrive can measure phone use while driving. Use is detected when the driver handles the phone for a certain period of time for various purposes such as talking, texting or navigating.

Zendrive aggregated and anonymized data from December 2016 to February 2017 to look at the frequency and duration of phone use behind the wheel. Our data science team looked at the relationship between how long people drove each day and how much time they spent using their phones while driving. They calculated the ratio between the average daily trip time and the average amount of time drivers used their phones each day. By comparing duration to duration, i.e. apples to apples, Zendrive came up with the most direct and accurate measurement of driver distraction.

Zendrive is a mission driven company working to use data and analytics to make roads safe.