

# SmartIQBeat™

DATA INSIGHTS FOR TRANSPORTATION



## SNAPSHOT FOR TRUCKING | 04.13.2017

Smart IQ Beat Snapshots provide in-depth analysis and metrics of top fleet performance trends based on SmartDrive's database of over 180 million analyzed and scored driving events.



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## Only video reveals the hidden dangers of distracted driving.

**You thought you knew how risky distracted driving is in your fleet. With video, you now have the proof, coupled with the ability to measure risk, to eliminate it from your fleet.**

The SmartDrive Distracted Driving Snapshot for Trucking illuminates key observations that distinguish the most distracted drivers from all other drivers, along with those distracted by mobile devices.

**Findings:** This analysis demonstrates that distracted drivers are less safe overall and exhibit fundamental driving errors at a significantly higher rate than all other drivers. Furthermore, drivers distracted by mobile devices are at even more risk than those distracted by other means. For instance, they are 2.5x times more likely to run a stop sign or red light, increasing the risk and severity of collisions. Read the Snapshot for more analysis.

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## Introduction

### **Distracted Driving is an epidemic.**

Preliminary 2016 data from the National Safety Council indicates that 40,200 people died in motor vehicle crashes, a 6% rise from 2015. This is a 14% increase in deaths since 2014, *the biggest two-year jump in more than five decades*<sup>1</sup>. The estimated cost of motor-vehicle deaths, injuries, and property damage in 2016 was \$432.5 billion, *an increase of 12% from 2015*.

Equally concerning, NHTSA found that fatalities from “distraction-affected” crashes increased 8.8%. It is estimated that 10 percent of all fatal crashes and 17 percent of all accidents that caused injuries are the result of distracted driving<sup>2</sup>.

The *SmartDrive Distracted Driving Snapshot for Trucking* provides key insights and verified measurement of specific distractions that are making our roads unsafe. In particular, the Study compares the Most Distracted Drivers to all other drivers and the explicit risks that mobile devices present when operating commercial vehicles.

Traffic experts classify distractions into three main types:

- **Manual distractions** are those where the driver moves his/her hands away from the task of controlling the vehicle.
- **Visual distractions** are those where the driver focuses his/her eyes away from the road.
- **Cognitive distractions** are when a driver’s mind wanders away from the task of driving.

This study includes some aspects of all three distraction types.

In spite of monthly safety newsletters, safety briefings, rewards for safe driving

and other methods, distracted driving continues to occur. The only way to definitively measure the problem and eliminate it is with video. A video-based safety program allows fleet and safety managers to understand each driver’s level of risk and correct it through effective coaching. Use the “9 Tips to Eliminate Distracted Driving” at the end of this Snapshot to help educate your drivers.

If you tackle distractions, you will improve your safety results.

<sup>1</sup> <http://www.nsc.org/NewsDocuments/2017/12-month-estimates.pdf>

<sup>2</sup> <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812318>

## Methodology

This study was conducted by analyzing the SmartDrive database of over 180 million analyzed driving events and the accompanying continuous telematics data. Only trucking customers were included in this study. Data presented covers the period from February 2016 through January 2017.

Analysis was performed by segmenting drivers in two distinct ways: Collisions and Distractions.

First, we examined the drivers who were involved in at least one Collision to drivers who were not involved in any Collisions, and analyzed the extent to which Distractions were a factor in the weeks leading up to a Collision. For a more comprehensive overview of the Collision Segmentation results, refer to the previously-published SmartIQ Beat Collision Snapshot.

Next, we examined the drivers who were the Most Distracted (top 25% by Distraction Rate) in each given week of the analysis, and compared them to the rest of the drivers on other risk factors and fuel efficiency. Distraction Rate was calculated as the percentage of video events that contained Distractions. Distraction Segmentation was performed three times, once for each subset of Distraction types, to better understand the impact of Distractions from Mobile electronic devices.

**All Distractions** (a total of 11 types of Distractions)

**Mobile Only** (a subset of 3 types of Distraction)

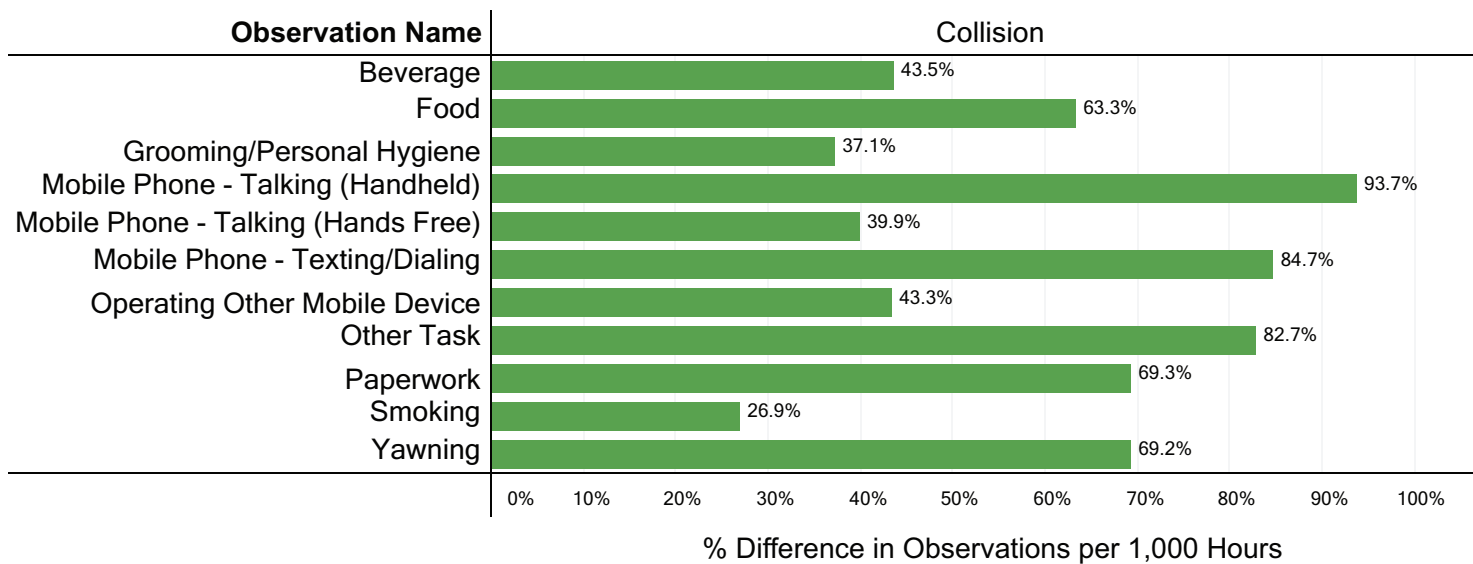
**Non-Mobile** (a subset of 8 types of Distraction)

At the end of the Snapshot, we provide details on the types of Distractions included in the analysis, the volume of data included in the analysis, as well as how the data volume breaks down for each type of Segmentation performed in this analysis.

# Distracted Driving – Collision vs. Non-Collision Drivers

**Collision Drivers have higher distraction rates than Non-Collision Drivers in all categories of distractions.**

**Distraction Frequency - Collision vs. Non-Collision**



- **Collision Drivers are consistently more distracted, with rates ranging from 27% to 94% more distracted than Non-Collision Drivers.**

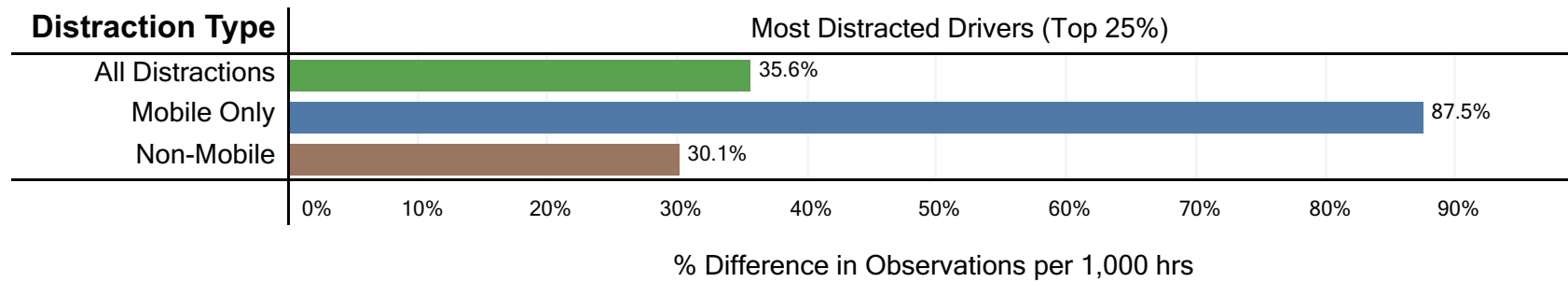
\* Measured through SmartDrive expert video analysis and observation scoring, provided as part of its managed services solution.

\* This analysis extracted from the SmartDrive Collision Driver SmartIQ Beat, November 1, 2016.

## Distracted Driving – Near Collisions

Near collisions are a strong indicator of collision risk and Distracted Driving is a key contributor to this risk.

### Near Collisions

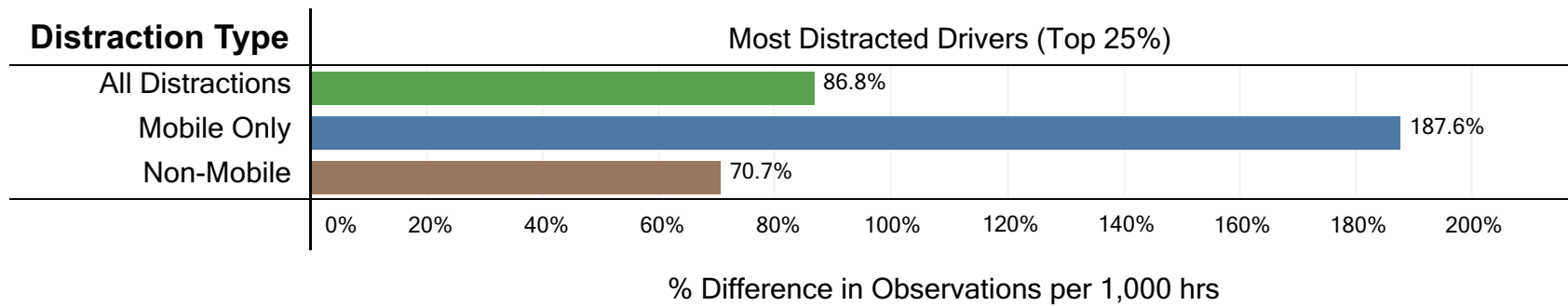


- The Most Distracted Drivers are 36% more likely to be involved in a near collision.
- The drivers most distracted by mobile devices are 88% more likely to be involved in a near collision.

# Distracted Driving – Speeding

The Most Distracted Drivers are also aggressive speeders.

## Speeding (10+ mph over)

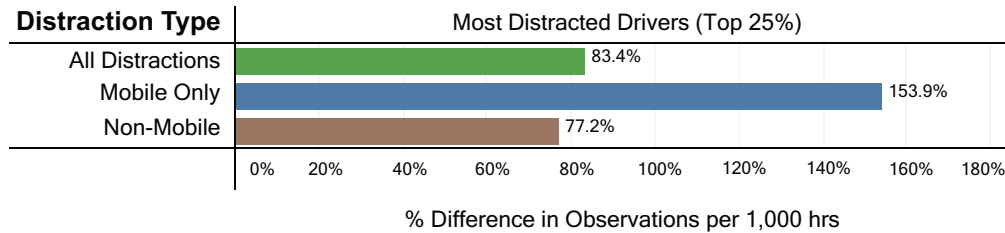


- The Most Distracted Drivers are 87% more likely to drive 10 mph or more over the speed limit.
- Those most distracted by a mobile device are nearly 3x more likely than other drivers to exceed the speed limit by 10 mph or more.

# Distracted Driving – Intersections

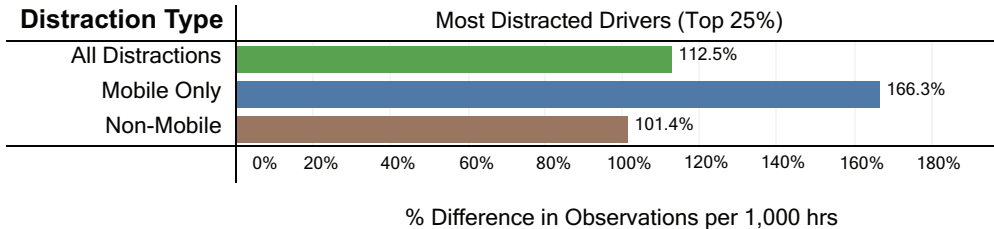
The Most Distracted Drivers do not stop at stop lights or stop signs at a rate significantly higher than other drivers.

## Incomplete / Rolling Stop at Intersection



- The Most Distracted Drivers are 83% more likely to roll through a stop sign/red light.
- Those most distracted by a mobile device are 2.5x more likely than other drivers to roll through a stop sign/red light.

## Failure to Stop at Intersection



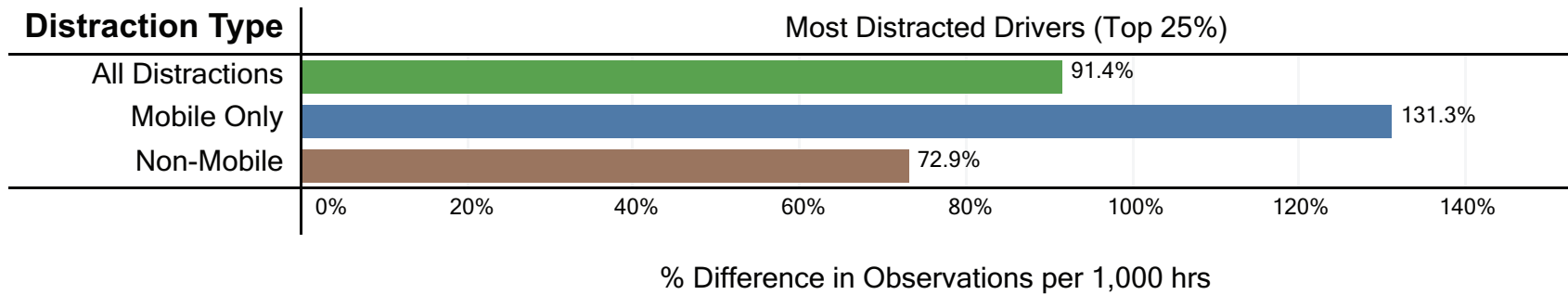
- The Most Distracted Drivers are 2.1x more likely to run a stop sign/red light.
- Those most distracted by mobile devices run a stop sign/red light at a rate 2.7x other drivers.



# Distracted Driving – Lane Control

Distracted Driving measurably affects a driver’s ability to stay in his/her lane.

## Lane Departure / Straddling Lanes



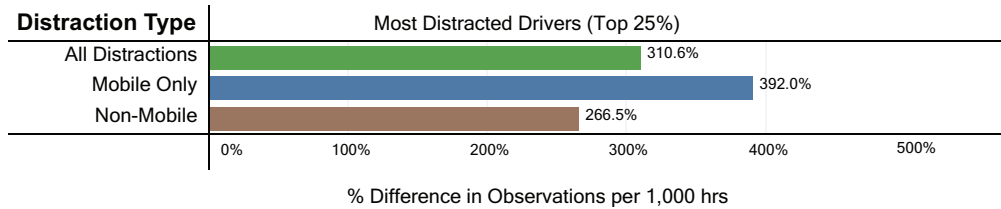
- **The Most Distracted Drivers drift out of lane 91% more than all other drivers.**
- **Lane control jumps significantly for drivers who are most distracted by a mobile device – 2.3x more than all other drivers.**
  - *Note: This does not mean that in the instant that a driver is distracted by a mobile device, they are 2.3x more likely to drift (in fact, it’s likely much higher); rather, drivers who most often use mobile devices, drift 2.3x more than all other drivers.*

# Distracted Driving – Seatbelts

**The Most Distracted Drivers are highly unlikely to wear a seatbelt.**

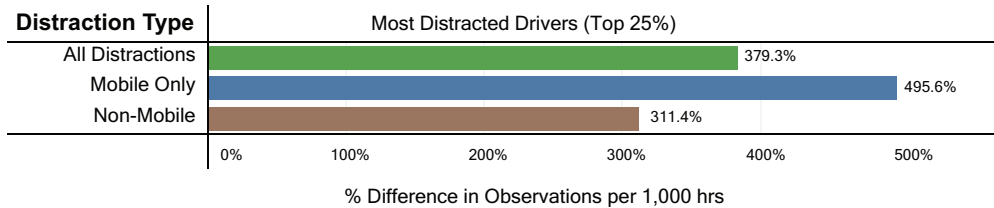
Seatbelt compliance is a key indicator of a driver’s overall attitude toward safety.

## No Seatbelt



- **The Most Distracted Drivers are 4.1x more likely to not wear a seatbelt.**
- **This number rises to 5x among the drivers most distracted by mobile devices.**

## No Seatbelt (Over 20mph)

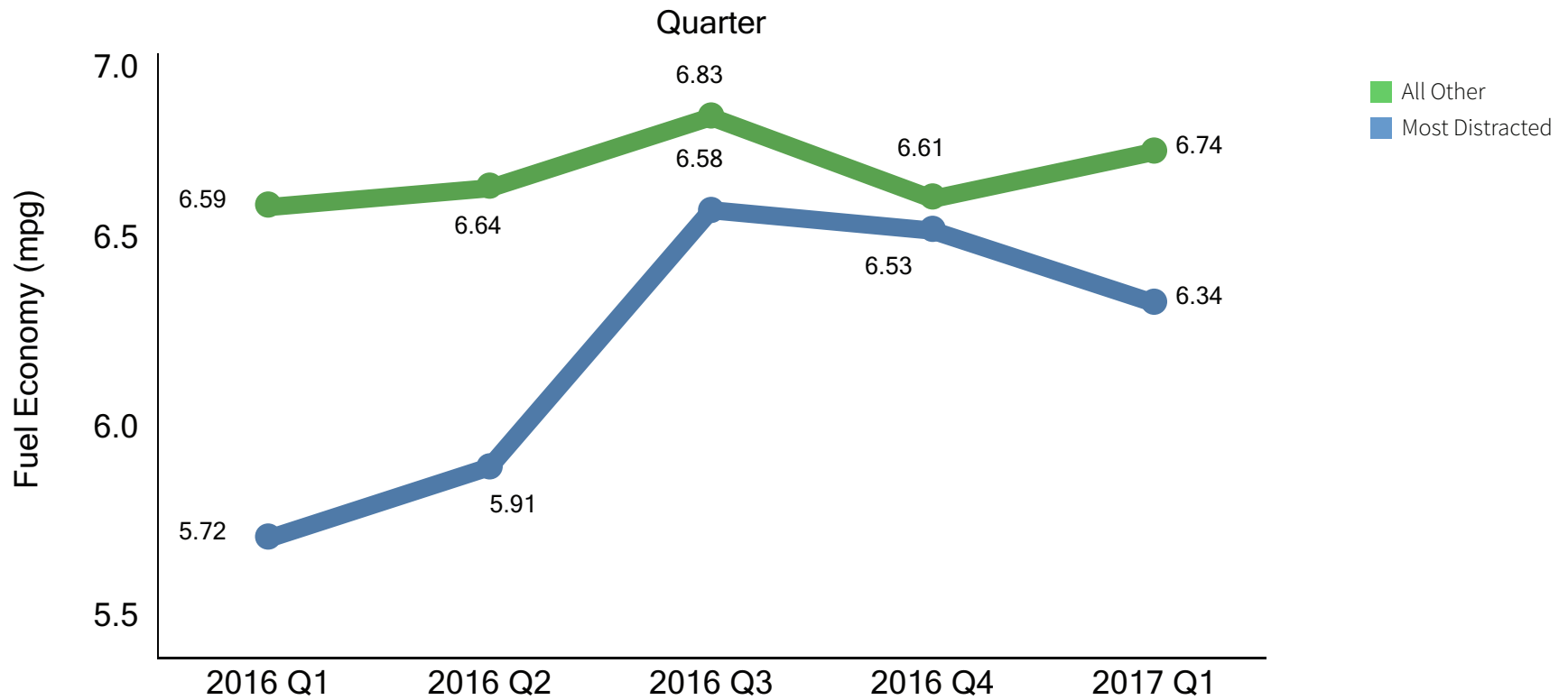


- **Drivers distracted by mobile devices are nearly 6x more likely to have their seatbelt unfastened while driving over 20 mph, increasing injury risk and cost in the event of a collision. In addition, it adds to CSA violation scores.**

## Distracted Driving – Fuel Waste

**Distracted Drivers consistently waste the most fuel.**  
Distracted Driving impacts more than safety.

### Fuel Economy - All Distractions

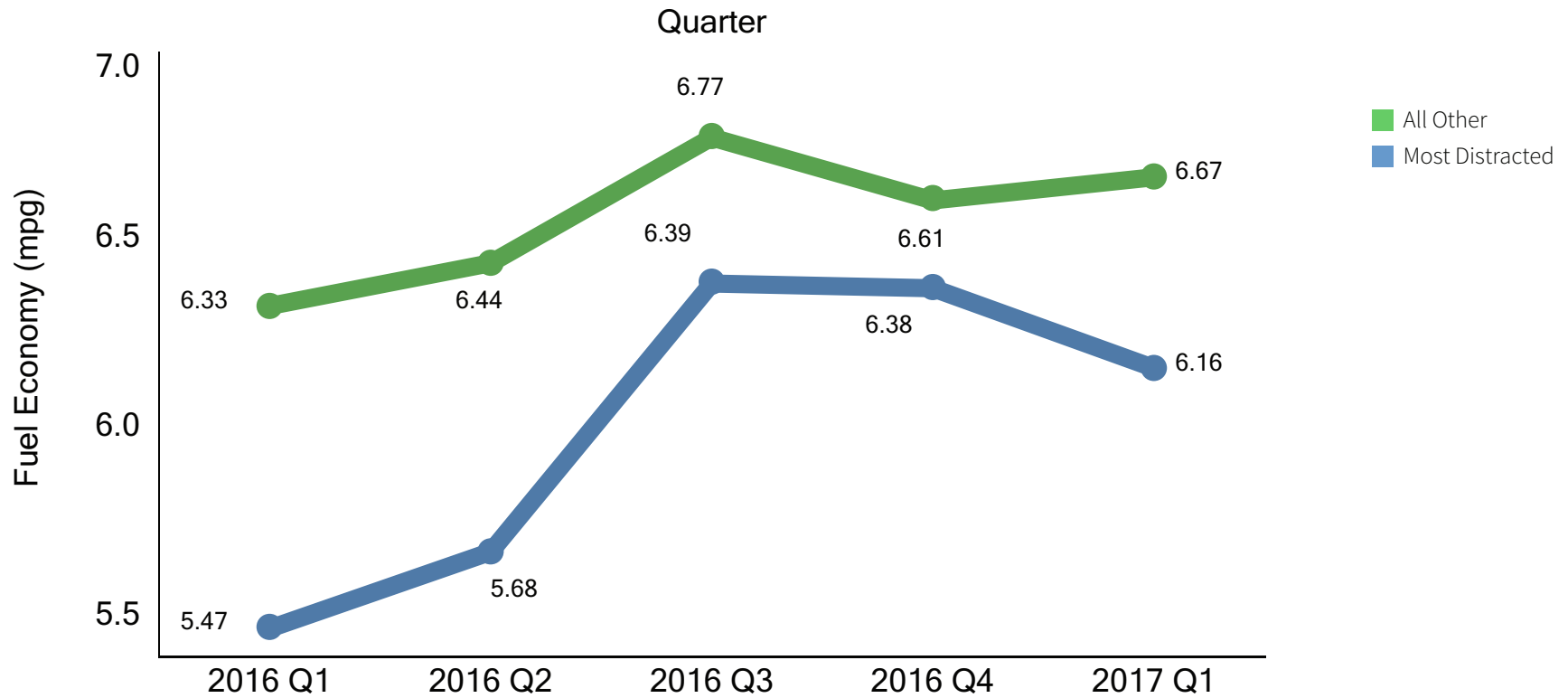


• On average, MPG for the Most Distracted Drivers is 6.1% lower than for all other drivers.

## Distracted Driving – Fuel Waste (Mobile Device)

**Distracted Drivers consistently waste the most fuel.**  
Distracted Driving impacts more than safety.

Fuel Economy - Mobile



- On average, MPG for the Most Distracted Drivers using a mobile device are even worse – 8.4% lower than for all other drivers.

## Distracted Driving

### All Distracted Drivers

	Most Distracted (Top 25%)	Least Distracted	Grand Total
<b>Distance Driven (miles)</b>	199,247,731	469,481,573	668,729,304
<b>Trip Duration (hours)</b>	5,942,666	13,445,784	19,388,451
<b>Reviewed Event Count</b>	1,269,512	1,796,239	3,065,751
<b>Unique Drivers</b>	13,883	26,177	27,162

### Drivers Distracted by Mobile Devices

	Most Distracted (Top 25%)	Least Distracted	Grand Total
<b>Distance Driven (miles)</b>	48,447,378	620,281,926	668,729,304
<b>Trip Duration (hours)</b>	1,516,837	17,871,614	19,388,451
<b>Reviewed Event Count</b>	430,469	2,635,282	3,065,751
<b>Unique Drivers</b>	8,044	26,831	27,162

### Drivers Distracted by Means Other than Mobile

	Most Distracted (Top 25%)	Least Distracted	Grand Total
<b>Distance Driven (miles)</b>	186,888,141	481,841,163	668,729,304
<b>Trip Duration (hours)</b>	5,574,081	13,814,369	19,388,451
<b>Reviewed Event Count</b>	1,192,174	1,873,577	3,065,751
<b>Unique Drivers</b>	13,062	26,421	27,162

### Collision Segmentation

	Collision	Non-Collision	Grand Total
<b>Distance Driven (miles)</b>	21,881,539	639,423,057	661,304,596
<b>Trip Duration (hours)</b>	671,379	18,137,312	18,808,691
<b>Reviewed Event Count</b>	103,025	2,266,428	2,369,453
<b>Unique Drivers</b>	1,749	23,323	25,072

### Distraction Segmentation

Distraction Type	Distraction
Mobile Distractions	Mobile Phone - Talking (Handheld)
	Mobile Phone - Texting/Dialing
	Operating Other Mobile Device
Non-Mobile Distractions	Beverage
	Food
	Grooming/Personal Hygiene
	Mobile Phone - Talking (Hands Free)
	Other Task
	Paperwork
	Passenger(s)
Smoking	

## How can you eliminate distracted driving in your fleet?

According to the National Highway Traffic Safety Administration (NHTSA), distracted driving is “any activity that could divert a person’s attention away from the primary task of driving.” It’s not just texting or making calls on a mobile device; any activity that diverts a driver’s attention puts that driver and everyone else sharing the road, at serious risk.

Follow these top 9 tips to eliminate distracted driving in your fleet. If you tackle distractions, you will improve your safety results.

## Top 9 Tips for Drivers to Eliminate Distracted Driving

- 1. Focus:** Fully focus on driving. Do not let anything divert your attention, actively scan the road, use your mirrors and watch out for pedestrians and cyclists
- 2. Emergencies:** Use your cell phone for emergency situations only. While you're driving, a cell phone should only be used for emergency purposes. Even then, it's best to pull over safely to the right shoulder to make a call. Even hands-free devices can still cause you to miss important visual and audio cues needed to avoid a crash.
- 3. Drowsy Driving:** If you are drowsy, pull off the road. Drowsiness increases the risk of a crash by nearly four times. A government study showed that 37 percent of U.S. drivers have nodded off or actually fallen asleep at least once during their driving careers. If you feel tired, get off the road; don't try to get home faster.
- 4. Multi-Tasking:** Do your multi-tasking outside the truck. Everyone spends a lot of time in their vehicles, and it may seem like the perfect time to get little things done: calling friends, searching for good music, maybe even text messaging. Don't do it. Focus on the road and the drivers around you. Get everything settled before you start driving.
- 5. Storage:** Store loose gear, possessions and other distractions that could roll around in the truck, so you do not feel tempted to reach for them on the floor or the seat.
- 6. Adjustments:** Make adjustments before you begin your trip. Address vehicle systems like your GPS, seats, mirrors, climate controls and sound systems before hitting the road. Decide on your route and check traffic conditions ahead of time.
- 7. Dressing:** Finish dressing and personal grooming at home – before you get on the road.
- 8. Snacking:** Snack smart. If possible, eat meals or snacks before or after your trip, not while driving. On the road, avoid messy foods that can be difficult to manage.
- 9. Other Tasks:** If another activity demands your attention, instead of trying to attempt it while driving, pull off the road and stop your vehicle in a safe place. Drivers should use caution while using voice-activated systems, even at seemingly safe moments when there is a lull in traffic or the truck is stopped at an intersection, because potentially dangerous distractions can last longer than most drivers expect.