Research & Practical Findings to Reduce Distracted Driving

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Perdue's Private Fleet

➢ **800 Power Units, 30 Straight Trucks , 2000 Trailers**

➢ **750 (+) Commercial drivers**

➢ **600 Non-Commercial vehicles, (Sedans, Pickup, etc.)**

➢ **VMT, 40 MM Commercial / 14MM Non-Commercial.**

> Our entire commercial fleet has "Vehicle Based Video Technology".
> We also strategically use a host of other vehicle based safety technology.

Distracted Driving
Vehicle Based Safety Systems

- **Know what you want to achieve……**

  – **Driver Behavior management?**

  – **Maintain compliance with changing rules & regs?**

  – **Reduce accidents and risk exposure to litigation?**

  – **Action based improvement required by insurance?**

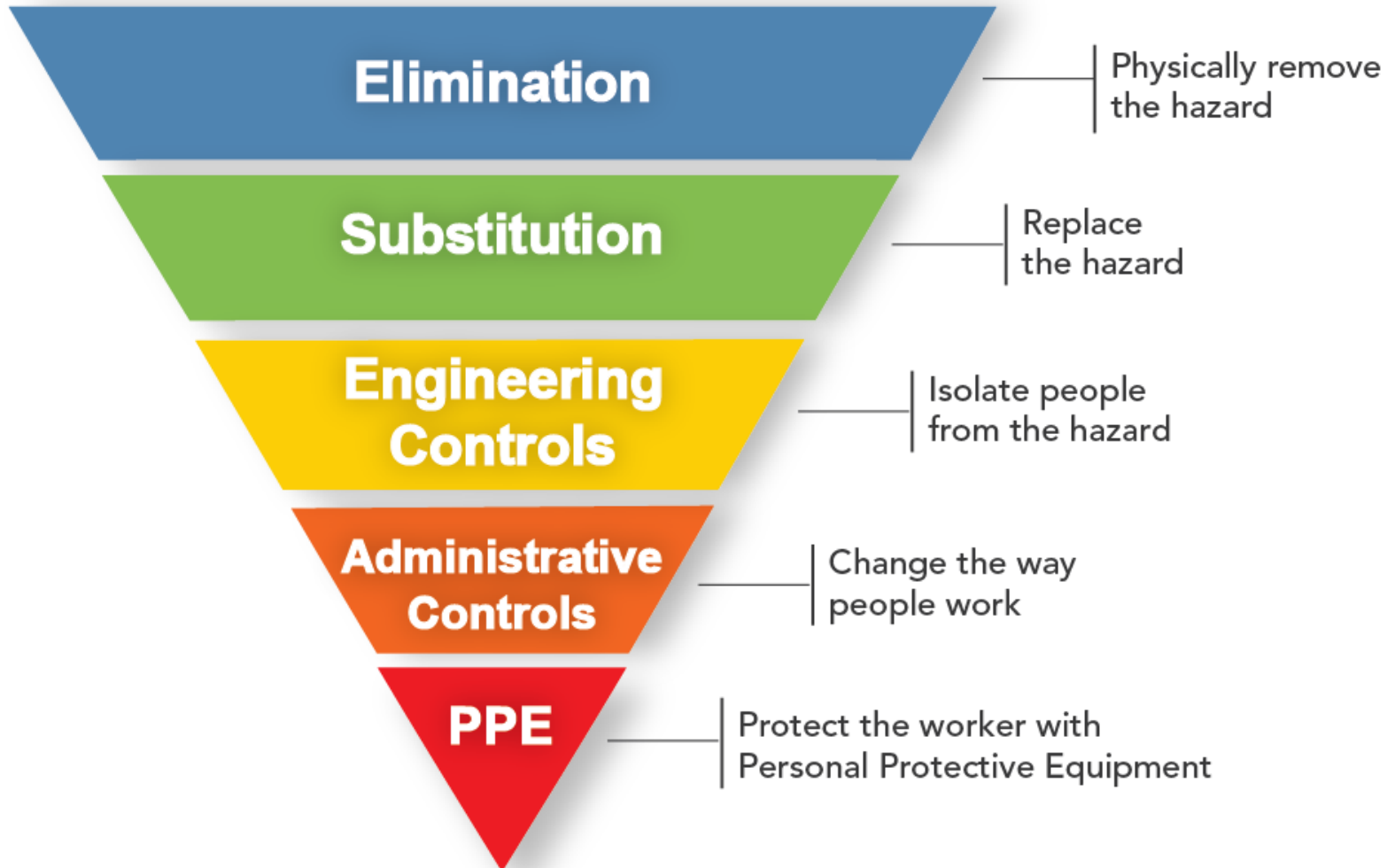 – **Reduce the cost of accidents?**

  – **Driver acceptance to add technology**

Hierarchy of Controls

Most effective

Least effective

Elimination		Physically remove the hazard
Substitution		Replace the hazard
Engineering Controls		Isolate people from the hazard
Administrative Controls		Change the way people work
PPE		Protect the worker with Personal Protective Equipment

Distracted Driving

ELIMINATION

Fleet Utilization

- Increase Payload (Aluminum Trailer)
  - FY18 Reduced 647 loads ($90,500.00)
- State Legislating Agencies
  - Working is the various states increased payload from 84,000 – 90,000 Lbs.
- Equipment Specification
  - Adding the 3rd axle increased payload to 87,000 Lbs.

SUBSTITUTION

- **Change over to "Auto-Shift" trucks**
  - Hands on wheel
  - Less cognitive process
  - Less fatigue

- **Fatigue reducing seats**
  - Lumbar and side support

ons

Elite 80 Series

Front Armrest Adjustment

Independent Seat Cushion Extension

Independent Seat Cushion Tilt

Seat Fore/Aft Slides

Fore/Aft Isolator

ToggleLink Suspension® Adjustment

Backrest Adjustment – Recliner

Lumbar Adjustment – Quad Chamber Air Lumbar

Hierarchy of Controls of Distracted Driving

Engineering Controls

Collision Avoidance

- **Passive and Active (Autonomous) Intervention**
- (FWD Radar; Lane Departure & Blindside)
  - Alert for slower or stopped vehicles ahead
  - See through fog and alert to vehicles ahead
  - See and alert for unintentional lane drift / departure

Engineering Controls

In-Cab Driver Alerts

- Lane Departure
- Forward Collision
- Blind Side Spotter

Speed Governance / Speed Limiting

- Short haul fleet = 58 MPH
- Over the road fleet = 62 / 65MPH
  - Violators are reduced to 60 for one year.

Vehicle Stability Controls

- Roll stability truck and trailer

Hierarchy of Controls of Distracted Driving

Active Alert to the Driver

Report to Manager / Coach

Document for Protection & Training

FOLLOWING DISTANCE

NEARBY VEHICLES

LANE KEEPING

ADMINSTRATIVE CONTROLS

Distracted Driving Policy

Coach the Experienced Driver (Video)

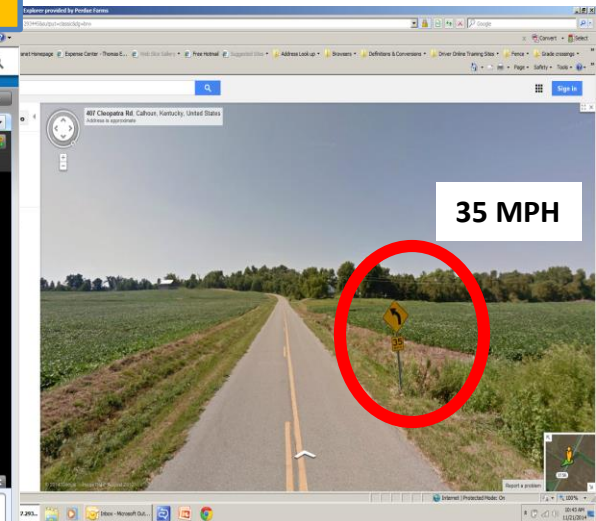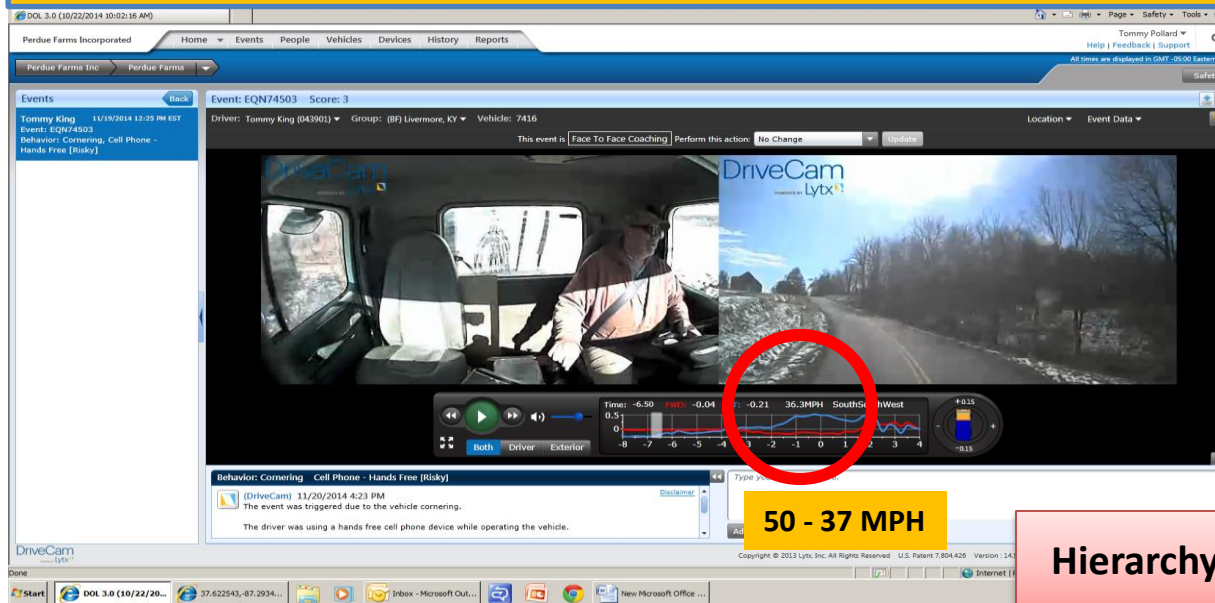**Defensive Driver Coaching / Training**

Driver Meetings

Media Releases/Newsletters

Trained - Driver Trainers & Examiners

Policies & SOPs to include driver accountabilities
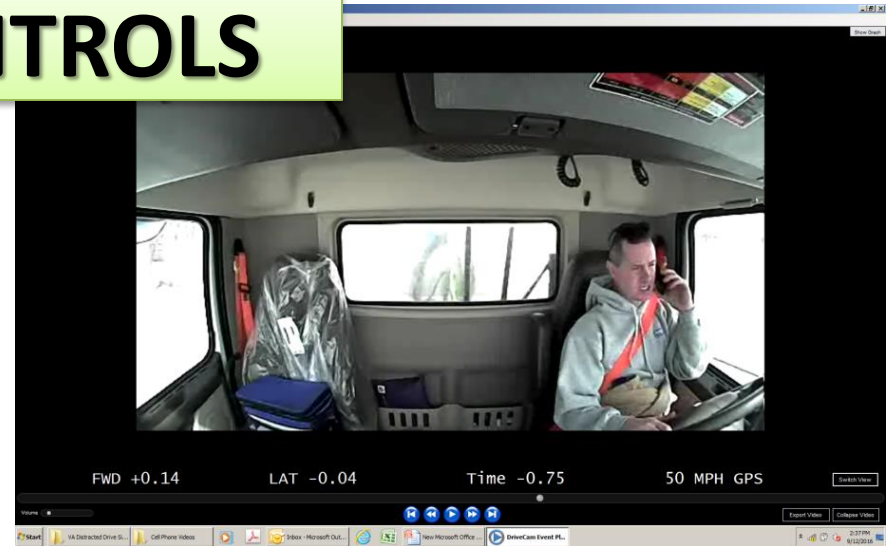
Cornering Policy – 10 MPH Below the Advanced Warning

35 MPH

50 - 37 MPH

Hierarchy of Controls of Distracted Driving

PPE

Proximity Controls
- – Less or no "Reaching".

Seat Belts
- – Creating the **"Visual Standard"**
- – Seat Belt Chimes

Blue Tooth Technology (OEM Installed)
- – Hands Free noise cancelling

Active / Passive autonomous intervention
- – Adaptive cruise control
- – Active visual and audible alerts

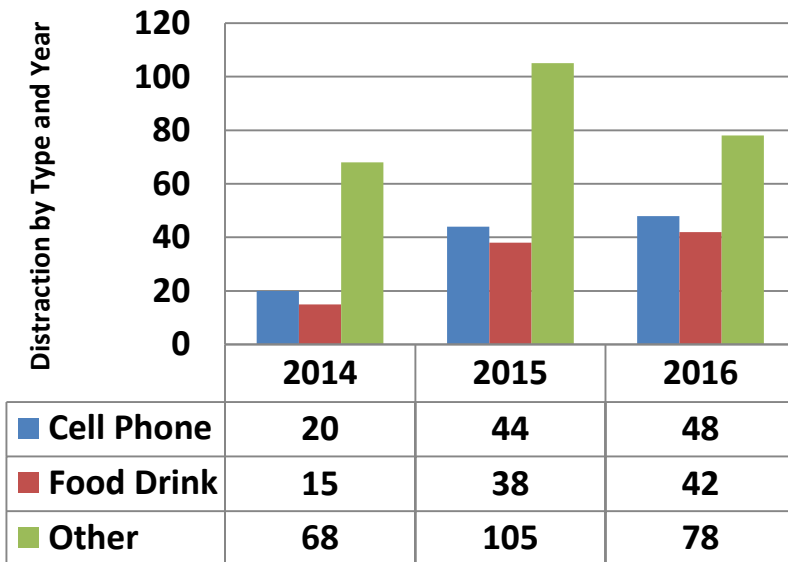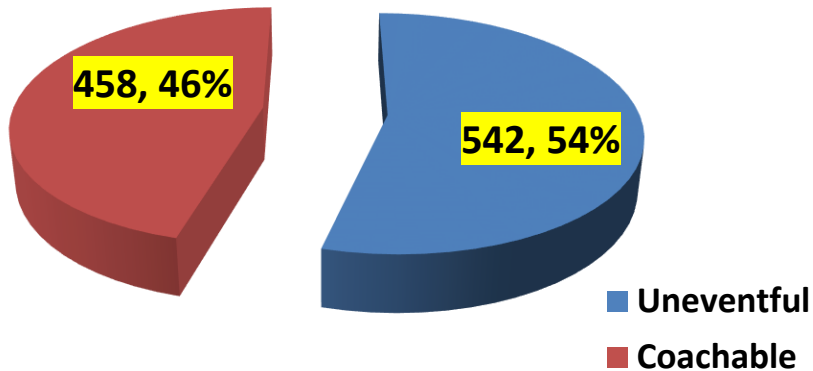**Vehicle Based Video - Protect Driver and Company**
- – Frivolous actions

Does it give you the data you need?

Total Distractive Activity 2014 - 2016

458, 46%

542, 54%

- Uneventful
- Coachable

Near Collision From a Distracting Event by Year

	2014	2015	2016
Near Collision	10	20	7

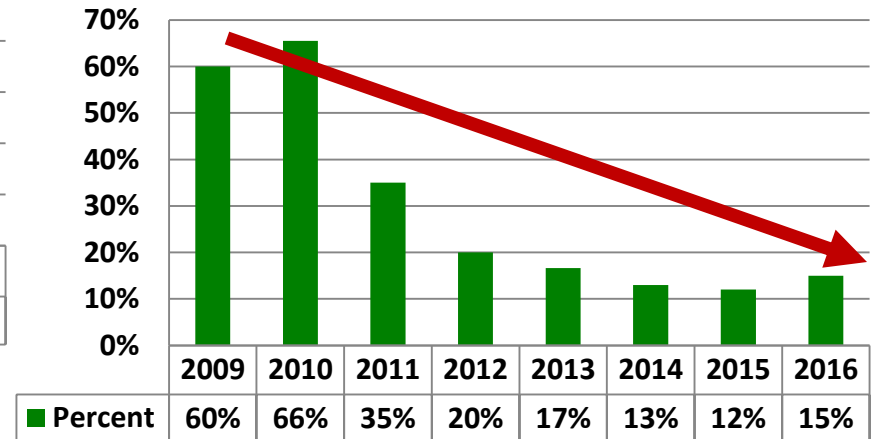| Distraction by Type and Year	2014	2015	2016
Cell Phone	20	44	48
Food Drink	15	38	42
Other	68	105	78
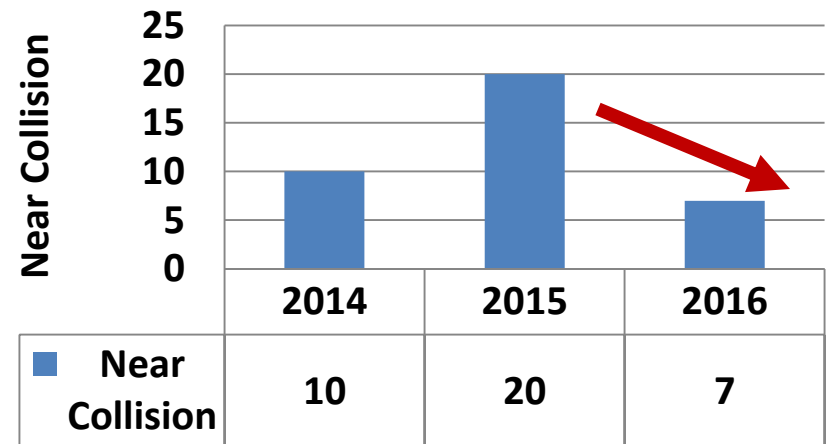
Action Items
- ✓ **Increase accountability for Cell Phone (24%)**
- ✓ **Focus on drivers who repeat behaviors (13%)**
- ✓ **Near Collision IRB Review (required)**

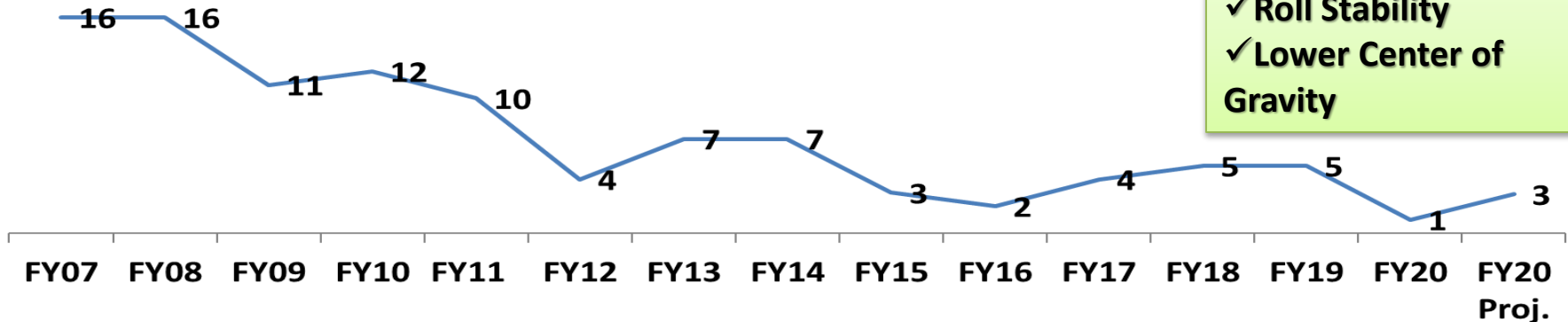## Crashes Arising From Distracted Driving 10 Year Trend (CMV)

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
■ Frequency	30	17	30	19	11	5	6	4	3	3
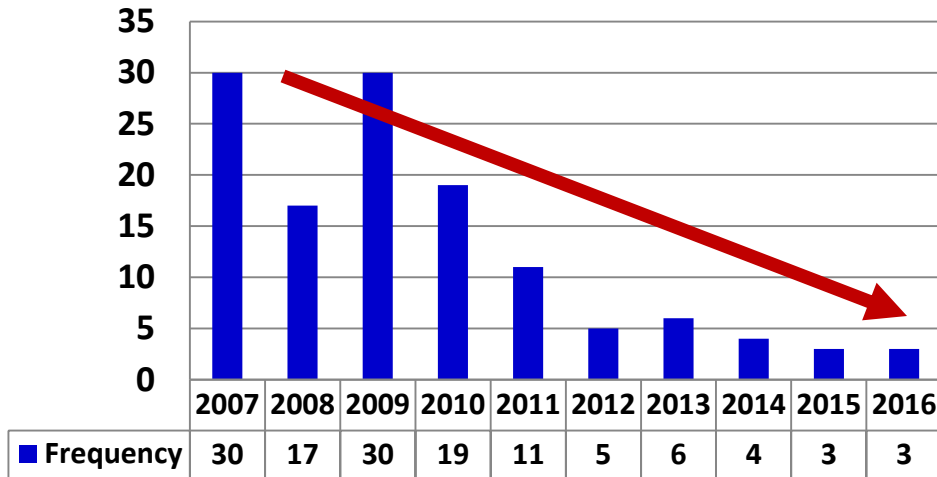
Does it make sense?

Percent of Total Crashes Attributed to Distracted Behavior (CMV)

	2009	2010	2011	2012	2013	2014	2015	2016
■ Percent	60%	66%	35%	20%	17%	13%	12%	15%

Does it reduce management time?

Total Rollover - 97 (FY07 - FY18 YTD)

Single Vehicle "Roll Over" Reduction.

16 16 11 12 10 4 7 7 3 2 4 5 5 1 3

FY07 FY08 FY09 FY10 FY11 FY12 FY13 FY14 FY15 FY16 FY17 FY18 FY19 FY20 FY20 Proj.
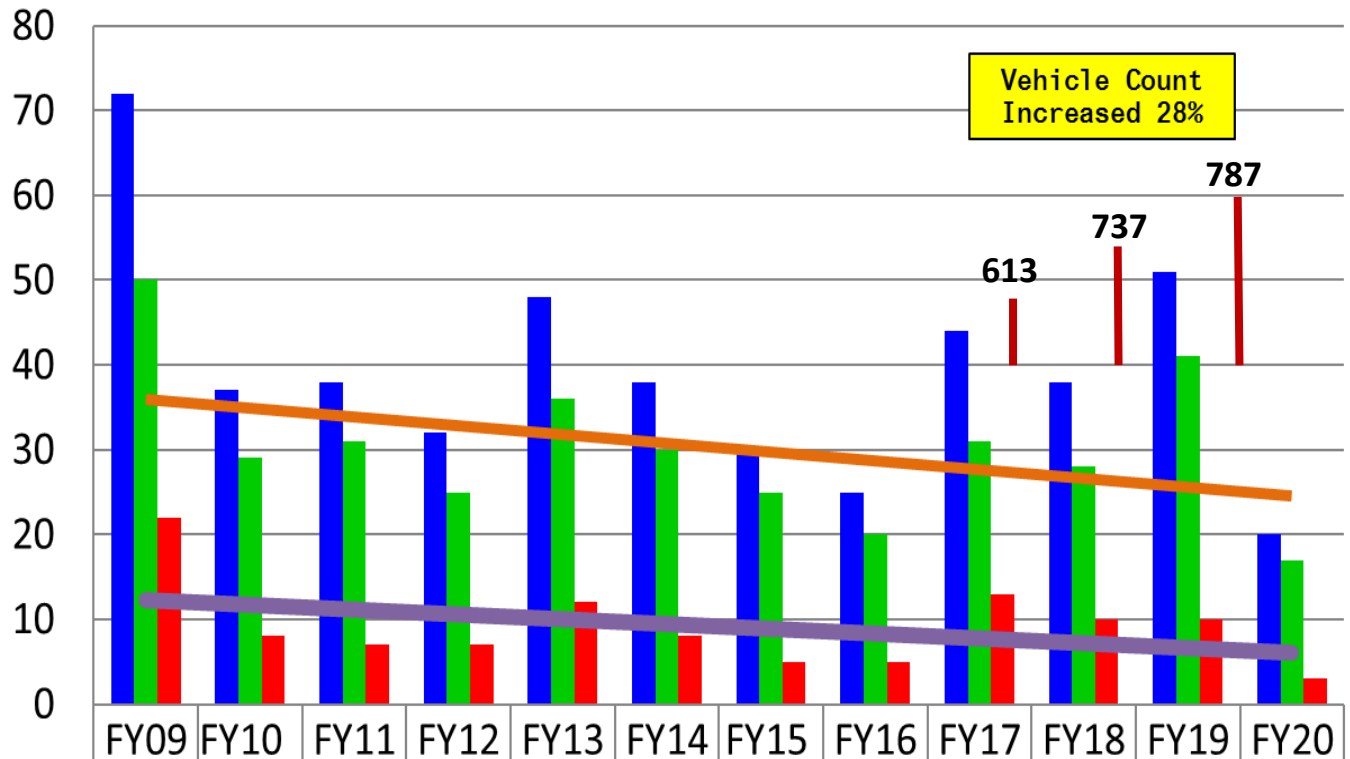
✓In Cab Camera
✓Speed limiters
✓Roll Stability
✓Lower Center of Gravity

Does it Add Value?

Non-Commercial Highway Crashes

Total Highway Cases by Class, Commercial vs, Non-Commercial)

Vehicle Count Increased 28%

787
737
613

	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
■ Chargeable Highway	72	37	38	32	48	38	30	25	44	38	51	20
■ Chargeable Highway Commercial	50	29	31	25	36	30	25	20	31	28	41	17
■ Chargeable Highway Non-Commercial	22	8	7	7	12	8	5	5	13	10	10	3

SUBSTITUTION

Mobile Device Blocking

App goes on the phone

- **Cell Blocking Device allows** all Bluetooth calls in and out. Allows voice receiving and dialing. Allows emergency dialing.

- **Cell Blocking Device blocks - when the vehicle is in motion** calls, text-messages, email, apps, etc.,

- Autoreply turned on will send a message that the recipient is driving, and will notify the driver of missed calls, etc.

- Defines driver versus passenger. Blocks driver. Passengers can override the app.

Hierarchy of Controls of Distracted Driving

Installation Steps / Your device should be labeled with your vehicle number

1   **Raise the rearview mirror out of the way**

2   **Pull the tab**

3   **Remove red backing**

4   <mark>**USB port facing down**</mark>
Center it under the rearview mount
Press it to the windshield

How It Works

---------------------------- BEFORE --------------------------------------

Incoming calls, facetime, texts, FB, emails, snapchats, etc.

BLOCK MODE
DEVICE INACTIVE

Call 911   CC Help   CC Info   CC Ticket

Apple Maps   Google

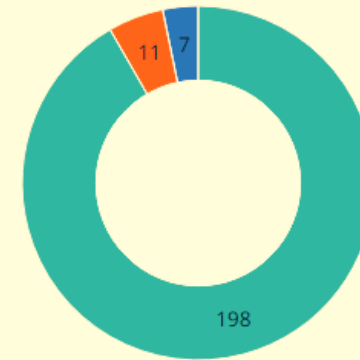PHONE   CONTACTS   OVERRIDE
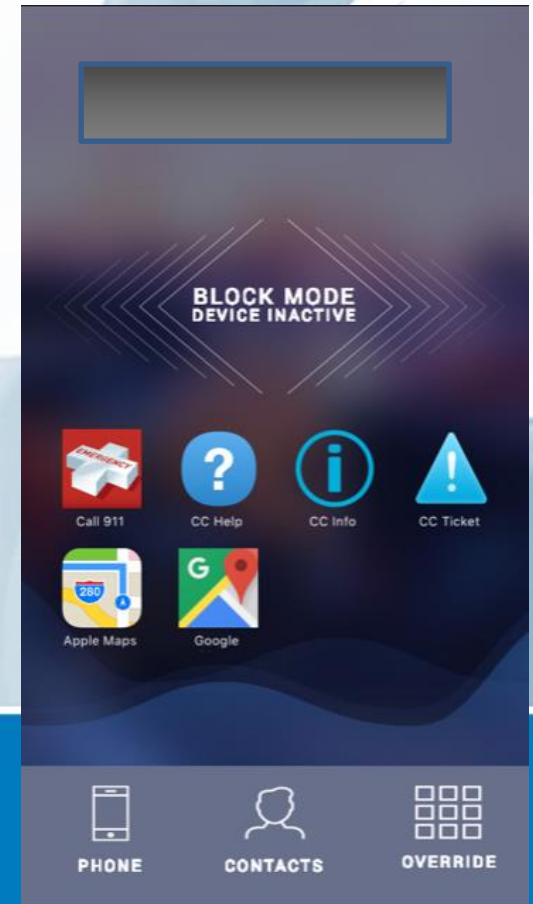
Perdue Pilot

Non-Commercial Drivers
Company Cell Phones
Company Assigned Vehicles

DEVICE UTILIZATION - THIS MONTH

○ SEEN WITHIN MONTH ○ NOT SEEN WITHIN MONTH ○ NEVER SEEN

11 7

198

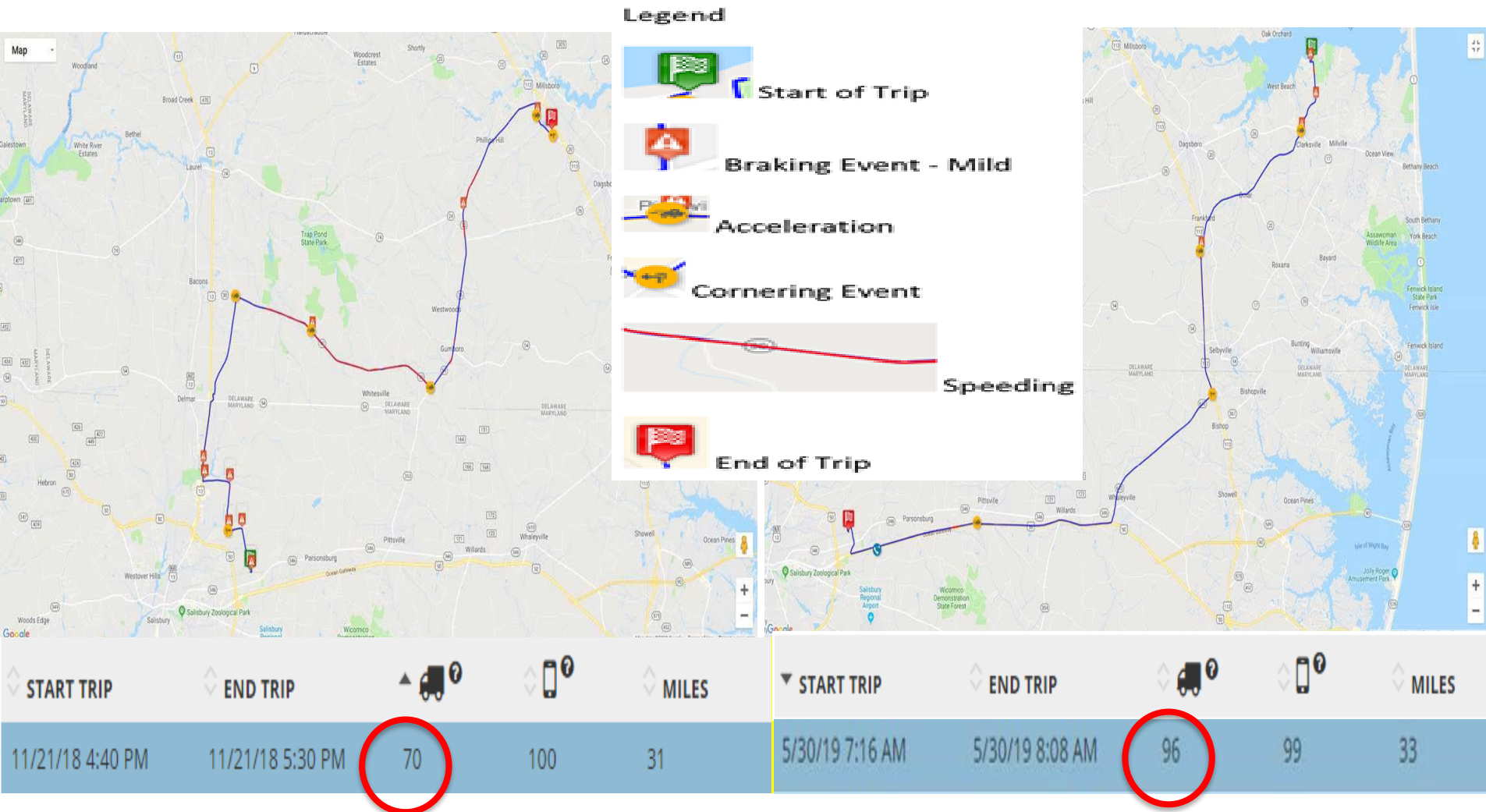| Managed Hours	Blocked Calls	Blocked SMS	Blocked Apps
96,523	1,996	81,829	7,626

MONTHLY BLOCKED ACTIVITY

○ BLOCKED CALLS ○ BLOCKED SMS ○ BLOCKED APPS

12,500

10,000

7,500

5,000

2,500

0

9/1/18   1/1/19   5/1/19   8/1/19
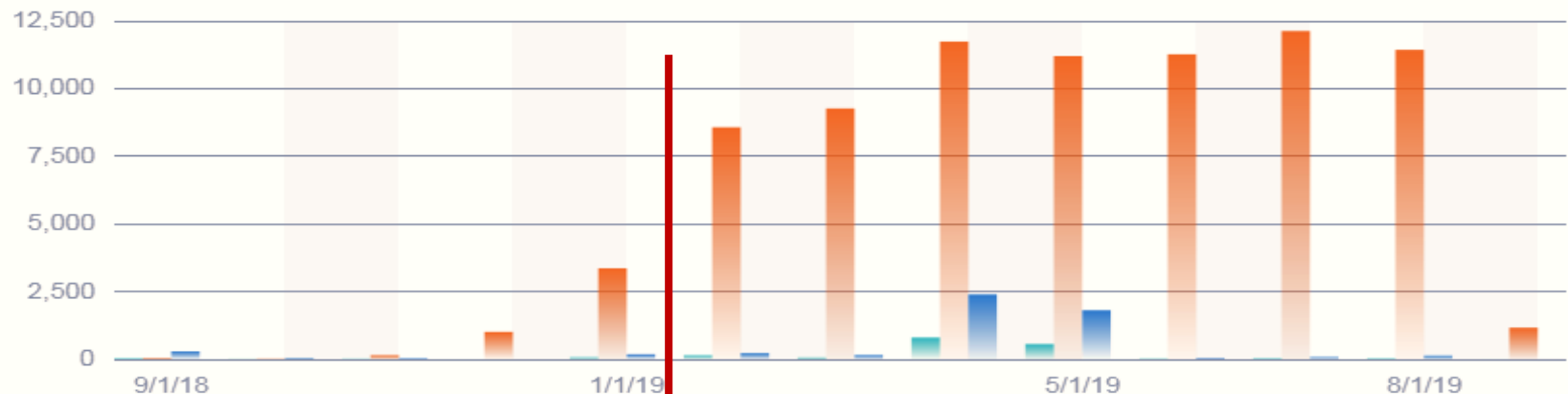
Began Install February 2019

Driver Performance Improvement

Truce/Cellcontrol phone Dashboard

Study Group Results YTD

- **Target Study Group = 200 +- non-commercial drivers**

  - **Target Study Group 22% reduction in highway crashes**

    - **Target Study Group has ZERO chargeable highway crashes since Feb. 2019**

Take Away's

- **Fleet Telematics can & does reduce Distracted Driving**
- **Technology is not a Silver Bullet**
  - **Must have management & driver engagement**
  - **Provide regular training on distracted driving**
  - **Create recognition for compliance & use of systems**
  - **Focus "Behavioral Management" on "Repeated Behaviors" & appropriate HR actions as needed**
- **Finally, use of Cell Blocking technology, Event Onboard Recording Devices & other vehicle telematics systems have changed the way drivers drive in a positive way**

Questions

GET THE MSG:
Don't talk
or text
when driving