

- Texting is an Addiction. For many, it's similar to heroin (see the CNN report)
- 73% of drivers admit to having Texted While Driving.
- Over 500,000 Crashes are caused by Distracted Driving each year.
- Voluntary Solutions and Pledges don't work.
- A Mandatory Solution is needed!



**The SafeTexting App knows when 2 or more phones  
are in the same vehicle. Without remote tracking.**

Seeking partners in Government and Industry to make SafeTexting a reality.

Please pass this link to a PDF of this brochure to concerned parties:

<https://www.SafeTexting.org/App>

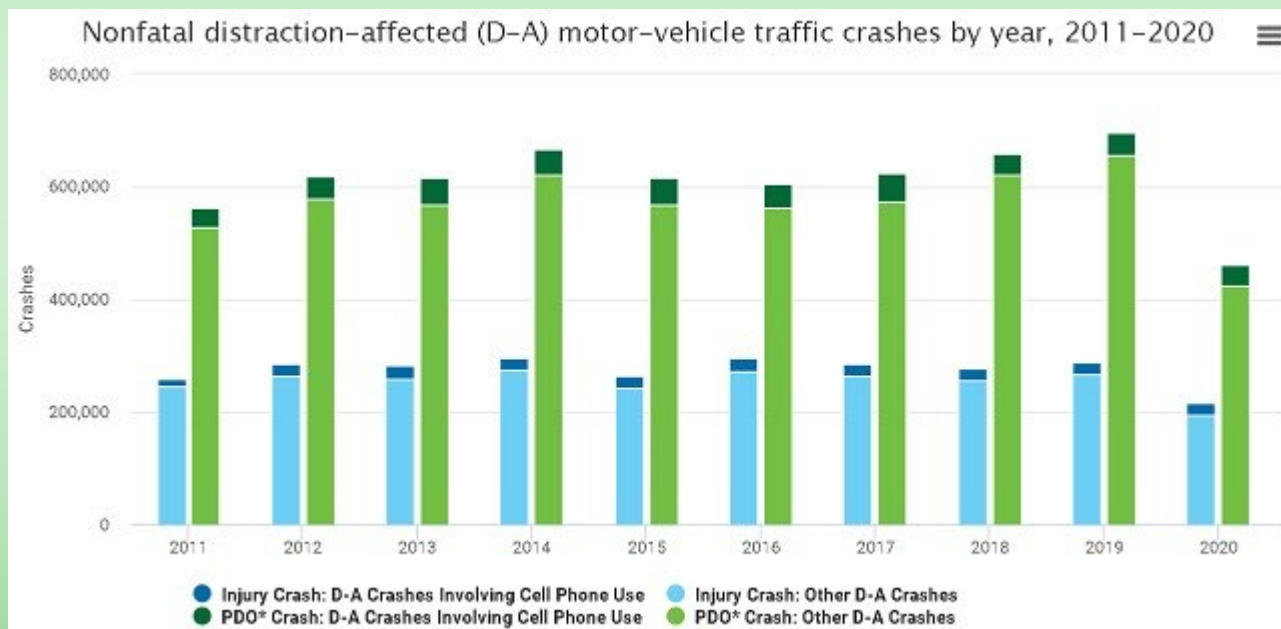
## Background

**The Addiction:** Today's teenagers are tomorrow's drivers. And, they are addicts. Texting addicts. CNN presented a feature on texting in teens entitled "Can teen texting become an addiction?" They noted: "For most teenagers, cell phone texting has become a lifeline, but is it an addiction? Ask many parents and they'll say yes...The need for instant communication not only has a social component, but a chemical one as well." According to Neuroscientist Michael Seyffert: "Neuro-imaging studies have shown that those kids who are texting have that area of the brain light up the same as an addict using heroin."

### **The Distraction:**

The average time to read a text is 5 seconds. If you're driving at 55 miles per hours, you're driving the length of a football field without your eyes on the road.

**The Consequences:** Source: [National Safety Council](#) (Note: 2020 was only down due to Covid)



### **What Doesn't Work, and What Will Work:**

Honor Systems and Pledges don't work. Voluntary software solutions don't work.

Any effective Solution **MUST** Be **MANDATORY** – required by City, State, or national authorities, in partnership with cellular providers.

And, for a **Passenger** to text, the Driver and Passenger must have the **SafeTexting App**.

## How SafeTexting Works

Local GPS Comparison — and — Known Acquaintance Validation

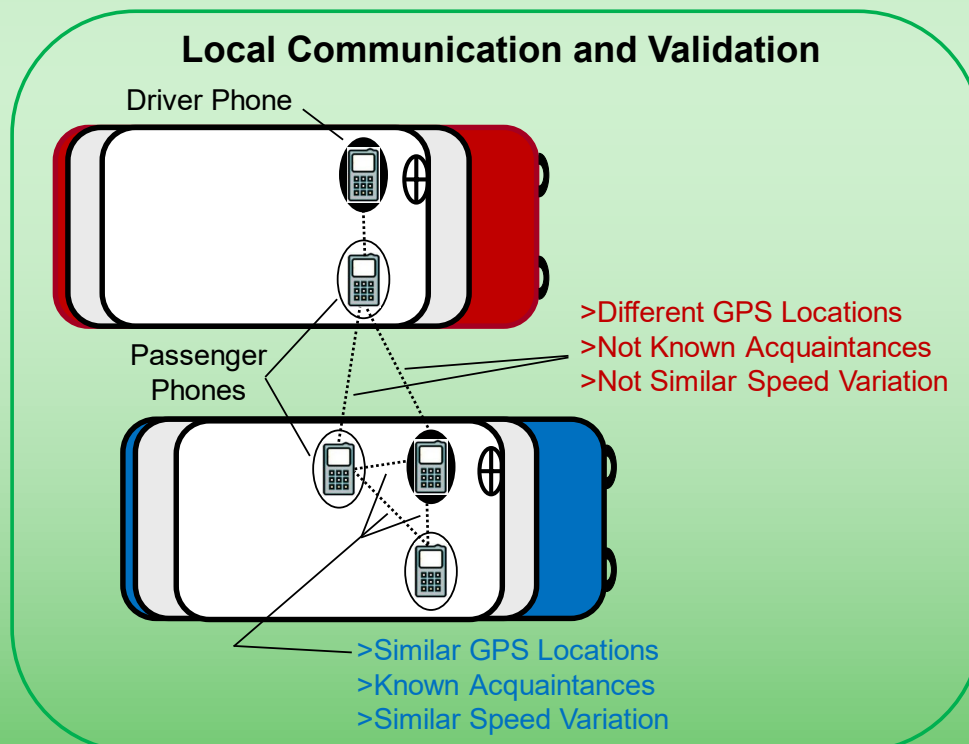
Either of these patented methods can be used for the SafeTexting App, or both used together.

### Local GPS Comparison

All Smart Phone operating systems (typically iOS or Android) have an internal framework that provides time-stamped location and speed information. Local GPS position comparisons use this readily available data. The framework also reports speed, providing further comparisons.

A Driver and their Passengers will have similar GPS locations and speed variations, while phones in neighboring vehicles will not. To enable their passengers to text, a Driver registers their phone as the driver phone – with a simple click. Via local communication, Bluetooth or WiFi, their Passengers are validated and can text.

A Proof-of-Concept project was conducted to validate that comparing time-stamped GPS locations is viable to determine which phones are in which vehicles. Results are shown on the following page.



### Known Acquaintance Validation

Passengers and Driver in the same vehicle know each other. They will be contacts of one another, and the SafeTexting App validates this and allows the passengers to text once the driver phone is registered. Also, rideshare (Uber, etc) is easily handled by the App.

## Proof-of-Concept Results → Actual test data for GPS Position Comparisons

[Phones in the same vehicle vs. Phones in a nearby vehicle]

- 4 phones were used – 2 in each of 2 vehicles – 2 on T-Mobile and 2 on AT&T
- Vehicle #1 – Subaru: iPhone XS on T-Mobile, iPhone 6S (1) on AT&T
- Vehicle #2 – Pacifica: iPhone 8 on T-Mobile, iPhone 6S (2) on AT&T

The iPhone XS is the reference phone to which the other phones are compared. Then for each of the other 3 phones, the data below shows the **delta ( $\Delta$ ) latitude** and **delta ( $\Delta$ ) longitude** compared with the iPhone XS. Direction of motion was predominantly East to West along Highway 101 in western Washington State.

Note that for Vehicle #1 the position of iPhone 6S (1) is always very similar to the iPhone XS, while positions for phones in Vehicle #2 are quite different.



Vehicle #1 follows Vehicle #2  
Travel is East to West, therefore phones in Vehicle #2 will have different longitudes compared with phones in Vehicle #1.  
Since the cars are in tandem, the latitudes of all 4 phones will essentially be the same.  
Note that earlier in the test, Vehicle #1 follows very closely so The longitudinal deltas are smaller.

**Vehicle #1 follows Vehicle #2**

Time Stamp	Vehicle #1		Vehicle #2			
	iPhone XS Texting	iPhone 6S (1) Delta-Long Delta-Lat	iPhone 8 Delta-Long Delta-Lat	iPhone 6S (2) Delta-Long Delta-Lat		
3:40:14 PM	Reference	0.0000 -0.0001	0.0003 0.0000	0.0003 0.0000	0.0003 0.0000	0.0000
3:40:15 PM	Reference	-0.0001 0.0000	0.0003 0.0000	0.0003 0.0000	0.0003 0.0000	0.0000
3:40:16 PM	Reference	-0.0001 0.0000	0.0003 0.0000	0.0003 0.0000	0.0003 0.0000	0.0000
3:40:17 PM	Reference	-0.0001 0.0000	0.0004 0.0000	0.0003 0.0000	0.0003 0.0000	0.0000
3:40:18 PM	Reference	-0.0001 -0.0001	0.0003 -0.0001	0.0003 -0.0001	0.0003 -0.0001	-0.0001
3:40:19 PM	Reference	0.0000 0.0000	0.0004 -0.0001	0.0004 -0.0001	0.0004 -0.0001	-0.0001
3:40:20 PM	Reference	0.0000 0.0000	0.0004 0.0000	0.0004 0.0000	0.0004 0.0000	0.0000
3:40:21 PM	Reference	-0.0001 0.0000	0.0003 0.0000	0.0003 0.0000	0.0003 0.0000	0.0000
3:40:22 PM	Reference	0.0000 -0.0001	0.0003 -0.0001	0.0003 -0.0001	0.0003 -0.0001	-0.0001
3:40:23 PM	Reference	-0.0001 0.0000	0.0003 -0.0001	0.0003 -0.0001	0.0003 -0.0001	-0.0001
3:40:24 PM	Reference	0.0000 0.0000	0.0003 0.0000	0.0003 0.0000	0.0003 0.0000	0.0000
3:40:25 PM	Reference	0.0000 0.0000	0.0004 0.0000	0.0003 0.0000	0.0003 0.0000	0.0000
3:40:26 PM	Reference	0.0000 0.0000	0.0003 -0.0001	0.0003 -0.0001	0.0003 -0.0001	-0.0001
3:40:27 PM	Reference	0.0000 0.0000	0.0003 -0.0001	0.0003 -0.0001	0.0003 -0.0001	-0.0001
3:40:28 PM	Reference	-0.0001 0.0000	0.0002 0.0000	0.0002 0.0000	0.0002 0.0000	0.0000
3:40:29 PM	Reference	0.0000 0.0000	0.0003 -0.0001	0.0003 -0.0001	0.0003 -0.0001	-0.0001
3:40:30 PM	Reference	0.0000 0.0000	0.0003 -0.0001	0.0003 -0.0001	0.0003 -0.0001	-0.0001
3:40:31 PM	Reference	0.0000 0.0000	0.0004 0.0000	0.0003 0.0000	0.0003 0.0000	0.0000
3:40:32 PM	Reference	0.0000 0.0000	0.0003 -0.0001	0.0003 -0.0001	0.0003 -0.0001	-0.0001
3:40:33 PM	Reference	0.0000 0.0000	0.0003 -0.0001	0.0003 -0.0001	0.0003 -0.0001	-0.0001
3:40:34 PM	Reference	0.0000 0.0000	0.0004 -0.0001	0.0004 -0.0001	0.0004 -0.0001	-0.0001
3:40:35 PM	Reference	0.0000 0.0000	0.0003 0.0000	0.0003 0.0000	0.0003 0.0000	0.0000
3:40:36 PM	Reference	0.0000 0.0000	0.0003 -0.0001	0.0003 -0.0001	0.0003 -0.0001	-0.0001
3:40:37 PM	Reference	0.0000 0.0000	0.0004 -0.0001	0.0004 -0.0001	0.0004 -0.0001	-0.0001
3:40:38 PM	Reference	0.0000 0.0000	0.0003 -0.0001	0.0003 -0.0001	0.0003 -0.0001	-0.0001
3:40:39 PM	Reference	0.0000 0.0000	0.0004 -0.0001	0.0004 -0.0001	0.0004 -0.0001	-0.0001
3:40:40 PM	Reference	0.0001 0.0000	0.0004 -0.0001	0.0004 -0.0001	0.0004 -0.0001	-0.0001
3:40:41 PM	Reference	0.0000 0.0000	0.0004 0.0000	0.0004 0.0000	0.0004 0.0000	0.0000
3:40:42 PM	Reference	0.0000 0.0000	0.0004 0.0000	0.0004 0.0000	0.0004 0.0000	0.0000
3:40:43 PM	Reference	0.0000 0.0000	0.0005 0.0000	0.0005 0.0000	0.0005 0.0000	0.0000
3:40:44 PM	Reference	0.0001 0.0000	0.0006 0.0000	0.0006 0.0000	0.0006 0.0000	0.0000
3:40:45 PM	Reference	0.0000 0.0000	0.0006 0.0000	0.0006 0.0000	0.0006 0.0000	0.0000
3:40:46 PM	Reference	0.0000 0.0000	0.0006 0.0000	0.0006 0.0000	0.0006 0.0000	0.0000
3:40:47 PM	Reference	0.0000 0.0000	0.0006 0.0000	0.0006 0.0000	0.0006 0.0000	0.0000
3:40:48 PM	Reference	0.0000 0.0000	0.0007 0.0000	0.0007 0.0000	0.0007 0.0000	0.0000
3:40:49 PM	Reference	0.0000 0.0000	0.0007 0.0000	0.0007 0.0000	0.0007 0.0000	0.0000
3:40:50 PM	Reference	0.0000 0.0001	0.0007 0.0000	0.0007 0.0000	0.0007 0.0000	0.0000
3:40:51 PM	Reference	0.0000 0.0001	0.0007 0.0000	0.0007 0.0000	0.0007 0.0000	0.0000
3:40:52 PM	Reference	0.0000 0.0001	0.0006 0.0000	0.0006 0.0000	0.0006 0.0000	0.0000
3:40:53 PM	Reference	0.0000 0.0001	0.0006 0.0000	0.0006 0.0000	0.0006 0.0000	0.0000
3:40:54 PM	Reference	0.0000 0.0001	0.0005 0.0000	0.0005 0.0000	0.0005 0.0000	0.0000
3:40:55 PM	Reference	0.0000 0.0001	0.0006 0.0000	0.0006 0.0000	0.0006 0.0000	0.0000
3:40:56 PM	Reference	0.0000 0.0001	0.0006 0.0000	0.0006 0.0000	0.0006 0.0000	0.0000
3:40:57 PM	Reference	0.0000 0.0001	0.0006 0.0000	0.0006 0.0000	0.0006 0.0000	0.0000
3:40:58 PM	Reference	0.0000 0.0001	0.0007 0.0000	0.0007 0.0000	0.0007 0.0000	0.0000
3:40:59 PM	Reference	0.0000 0.0001	0.0006 0.0000	0.0006 0.0000	0.0006 0.0000	0.0000
3:41:00 PM	Reference	0.0000 0.0001	0.0006 0.0000	0.0006 0.0000	0.0006 0.0000	0.0000
3:41:01 PM	Reference	0.0000 0.0001	0.0005 0.0000	0.0005 0.0000	0.0005 0.0000	0.0000
3:41:02 PM	Reference	0.0000 0.0001	0.0005 0.0001	0.0005 0.0001	0.0005 0.0001	0.0001
3:41:03 PM	Reference	0.0000 0.0000	0.0005 0.0000	0.0005 0.0000	0.0005 0.0000	0.0000
3:41:04 PM	Reference	0.0000 0.0000	0.0005 0.0000	0.0005 0.0000	0.0005 0.0000	0.0000
3:41:05 PM	Reference	0.0000 0.0000	0.0005 0.0000	0.0005 0.0000	0.0005 0.0000	0.0000

## Selected Elements from Patent Claims covering GPS Location Comparison

...determining, upon registering the first cell phone as the master phone (driver), that a second cell phone (passenger) is within the vehicle when the second cell phone is within an envelope of the master phone; and

**US 8,594,705**

detecting that the first cell phone has a velocity that is greater than a disable threshold and disabling text messaging for the first cell phone; and

permitting text messaging for the second cell phone at any velocity when the first cell phone is registered as the master phone...

**US 9,609,621**

**Includes**

**Telematics**

**Systems and**

**Phone Hotspots**

...cell phones and GPS-enabled telematics systems are in a first envelope; if a cell phone determined to be in the first envelope has been registered by its user as a master phone and is determined to be travelling in excess of a specified threshold velocity, preventing texting for that master phone wherein texts are communicated by any of the following:

- a) via a cellular network of the at least a first service provider;
- b) via a telematics system determined to be in the first envelope; or
- c) via a hotspot of another phone within the first envelope;

**US 8,295,854**

...temporarily registering the first cell phone as the master phone in response to the request to register;

wherein the master phone is presumed to belong to a driver of the vehicle;

determining the position and velocity of the master phone;

disabling texting for the master phone when the velocity of the master phone exceeds a disable threshold;

establishing an envelope relative to the master phone that encompasses other cell phones within the vehicle;

providing time-stamped information parameters for the master phone envelope to be used for comparison with at least the position and velocity of the second cell phone;

...wherein determining, using local communication, that the first and at least second TCDs (Texting Capable Devices) are both located within the same position envelope is performed by comparing time-stamped GPS position data passed locally among the first and the at least second TCDs.

**US 17/861,206**

**US 8,594,705**

...allowing texting for the first cell phone if the speed of the first cell phone tracks that of the additional master phone within the predetermined deviation threshold value....

**US 17/861,206**

...wherein neither the DTCD (driver) nor any of the PTCDs (passenger) in the position envelope transmit their GPS coordinates to the TCS.

## Known Acquaintance Validation

Driver and Passengers in the same vehicle know each other. For this validation mode, the SafeTexting App determines, using local communication among (TCDs) Texting Capable Devices (Smart Phones, laptops, tablets, etc.) that the two or more TCDs are all located within the same position envelope. Known Acquaintance Validation is based on one or more contact data types and/or communication modalities determined to be in common among the two or more TCDs. Further, the contact data types and communication modalities can include, for example:

- a) cellular contact numbers
- b) email addresses
- c) social media contact numbers or user identifiers
- d) a common URL from which the two or more TCDs attempt to text/communicate

For vehicles that include a telematics system including a WiFi hotspot that provides a cellular data connection, the patent claims cover the common use of the hotspot's URL as an indication that these known acquaintances are in the same vehicle.

## Query Methods for Local Validation

To minimize the amount of information passed locally between phones/TCDs during validation, a registered DTCD (Driver TCD or Driver Phone) queries one or more TCDs in their vicinity. The registered DTCD supplies certain key information, and each TCD performs an internal analysis to determine if there is a match. If there is, then the PTCD (Passenger TCD) can text.

For Known Acquaintance Validation, a registered DTCD supplies selected contact data that would likely also be stored in the contacts in each passenger's TCD. If there is a match, then the passenger TCDs are allowed to text.

Likewise for Local GPS Validation, a registered DTCD supplies its GPS location data to one or more neighboring TCDs. Then, each of the queried devices replies to the DTCD indicating whether or not the supplied GPS data tracks within a pre-set margin with the corresponding GPS data, and speed variance data, of the queried TCD. If it does, then the TCDs are within the same position envelope and considered to be in the same vehicle.

## Selected Elements from Patent Claims covering Known Acquaintance Validation

...disabling texting for the DTCD (driver) and enabling texting for other TCDs (Texting Capable Devices) determined to be within the position envelope;

wherein the other TCDs determined to be within the position envelope are assumed to be Passenger TCDs (hereinafter: PTCDs);

wherein the determining that the first and at least second TCDs are located within the position envelope is performed using local communication involving the first and at least second TCDs, wherein the local communication is established by wireless communication, and comprises one or more of the following methods:

- a) direct communication among the first and the at least second TCDs via Bluetooth or WiFi; or
- b) indirect communication among the first and the at least second TCDs via a local wireless hotspot operating within the same position envelope where the first and the at least second TCDs are located; or
- c) common communication wherein the first and the at least second TCDs communicate with one or more Texting Control Servers (hereinafter: TCS) by way of a common URL, the common URL being associated with a wireless capable device located in the same position envelope where the first and the at least second TCDs are located...

**17/861,206**

...wherein determining, using local communication among the first and at least second TCDs, that the first and at least second TCDs are all located within the position envelope, is performed using known acquaintance validation based on one or more contact data types and/or communication modalities determined to be in common among the first and at least second TCDs.

**17/861,206**

...wherein neither the DTCD nor any of the PTCDs transmit their GPS coordinates to a TCS.

**17/861,206**

...wherein determining, using local communication, that the first and at least second TCDs are both located within the same position envelope, is performed using a combination of:

i) comparing time-stamped GPS position and/or speed data passed locally among at least the first and at least second TCDs; and

ii) performing known acquaintance validation involving at least the first and second TCDs.

**17/861,206**

### Intellectual Property for Safe Texting

Our technology is covered by US and British patents, as well as pending patent applications.

United States Patents and Applications:

8,295,854 ; 8,594,705 ; 8,855,682 ; 9,179,297 ; 9,324,121 ; 9,609,621, 17/861,206

British Patents and Applications: GB2476543 ; GB2507684 ; GB...

We also own the following Domain Names related to Safe Texting:

SafeTexting.com; Safe-Texting.com; SafeTexting.org; Safe-Texting.org; SafeText.app; SafeTexting.app



## Conclusion

We have worked on this problem for many years, and now have both Proof-of-Concept Data and a broad Patent Portfolio for stopping Texting-While Driving. Texting is an addiction, and only a mandatory solution can stop it. Over 500,000 distracted driving crashes/year demand it. If you are concerned about Distracted Driving Fatalities, related injuries, and property damage, please consider supporting a new solution to the problem.

NHTSA data shows that Annual Deaths due to Distracted Driving are not declining in spite of numerous PR campaigns for pledges and other voluntary solutions. Addicted texters will continue to text while driving just as heroin addicts will not stop without intervention.

## Voluntary Solutions Do Not Work!

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### Please Act Now!

We are currently seeking partners in Government and Industry to make SafeTexting a reality. If you are aware of a company or organization that would make a suitable partner, please respond and let us know. We have a rich portfolio of Intellectual Property and will be flexible in working with Industry and Government to move ahead toward a common goal. The most important thing is stopping the pain and loss due to the distraction of Texting While Driving.

Please pass the link to this PDF brochure to concerned parties:

<https://www.SafeTexting.org/App>

Sincerely,

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