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### PROBLEM IDENTIFICATION



Driver fatigue is responsible for around one in five vehicle crashes.



Drivers who are texting while driving are eight times more likely to get into an accident than non-texting drivers.



Speeding is a major factor in approximately 30% of all vehicle crashes.

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#### TARGET DEMOGRAPHIC

Shotgun is catered towards long-distance drivers, as they are more susceptible to fatigue and speeding:









Most accidents occur from 12-2AM and 4-6AM— times when drivers are most likely to fall asleep at the wheel



Around 76% of Americans drive to work; 27% of these people admitted to driving while feeling drowsy at least a few times per month

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### UNDERSTANDING OUR USERS

From our contextual inquiries, we learned that our target demographic:



Tends to look at their phones when notifications pop up



Will continue driving when they are sleepy or tired

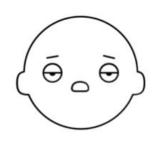


Are likely to lose track of speed when the freeway is empty

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### **SOLVING USER PROBLEMS**







**Intrusive Notifications** 

Fatigue

Speeding

Disable notifications from other applications

Periodic intervals that tell the driver to take a break

Notify driver when going above the speed limit

Give each Shotgun notification a specific color Tiredness detection with future technology that vibrates the watch to keep the user awake

Tolerance level to avoid false positives

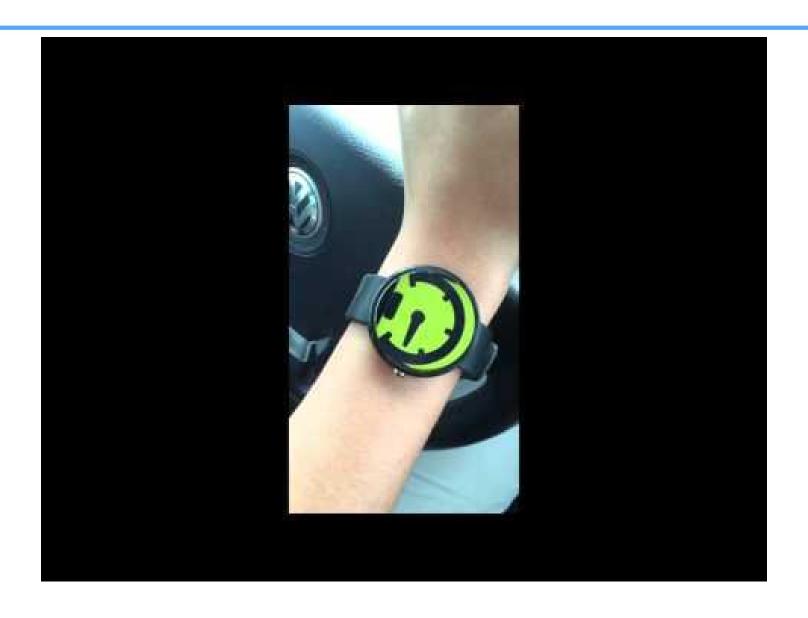
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# APPLICATION DEMONSTRATION



Impact

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### **DESIGN CHANGES**



Avoid false positives via a "speed tolerance"

Choose the frequency for sleep alerts

Cleaner UI that's more user-friendly



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## **COMPETITIVE ANALYSIS**







Optimize driving efficiency

Navigation application

Provides your current speed

Requires hardware component

Crowdsourced information for traffic/police/accidents

Flashes when going above a preset limit

View previous trip data

Update route based on traffic conditions

Provides information on maximum/minimum/ average speed for a trip

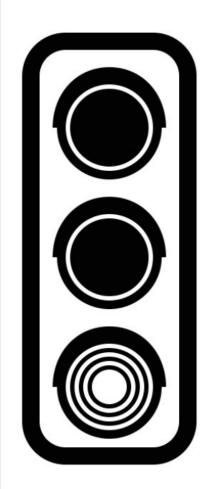
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#### IMPACT AND GOAL



Nearly 1.3 million people die in road crashes every year, and over 20 million sustain some type of road related injury or disability.

A study done by the Sleep Foundation demonstrates that it's safer to drive with a companion on longer trips.

Shotgun leverages wear technology to serve as a driving companion that reduces distractions and sends important notifications to enhance safety.

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