Roads Vision

COST OF TRAFFIC

US alone wasted about 3 billion gallons of fuel thanks to traffic in 2014,

America blew through $160 billion in wasted time and fuel last year -- an average cost of $960 per typical motorist, according to the study. Delays cost commercial truckers even more.
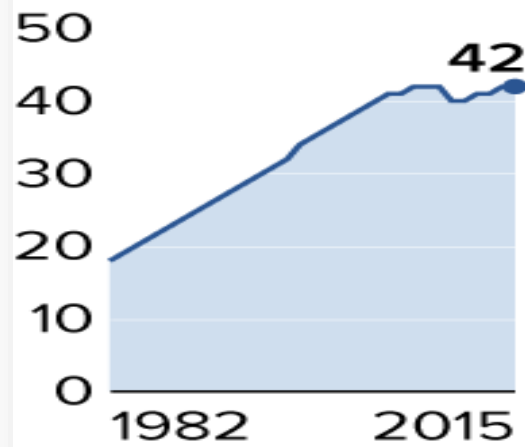
By 2020, TTI projects that the total nationwide delay time will grow to 8.3 billion hours -- an increase of 1.4 billion hours in just 5 years -- and congestion will cost $192 billion

In 2013, more than 32,000 people died on U.S. roads, roughly 90 fatalities a day, according to the CDC.
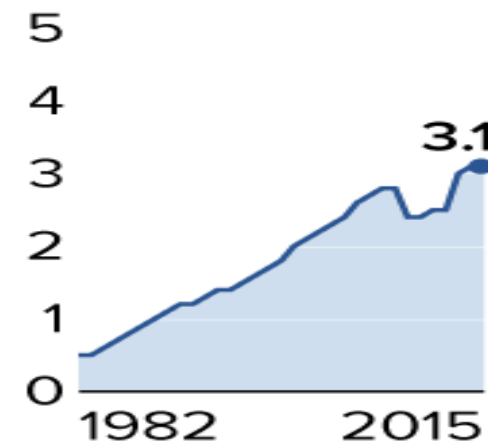
CONGESTION CONTINUES TO CLIMB

Traffic congestion has bounced back from the recession and is getting worse no matter how you measure it.
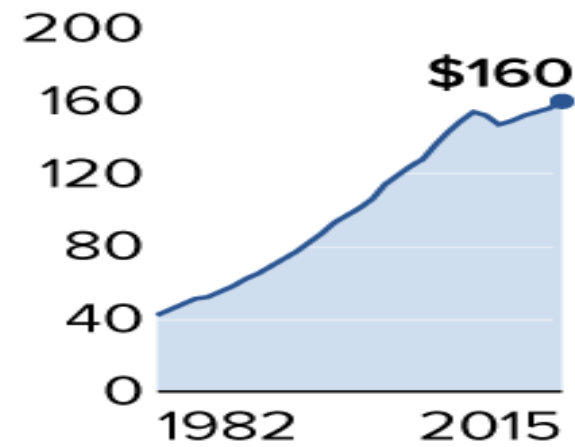
PER COMMUTER DELAY (hours)

50
40 — 42
30
20
10
0

1982   2015

+133%

FUEL WASTED (billion gallons)

5
4
3 — 3.1
2
1
0

1982   2015

+520%

TOTAL COST (billions of 2014 $)

200
160 — $160
120
80
40
0

1982   2015

+281%

abc NEWS

NATION'S CAPITAL HAS LONGEST DELAYS

Commuters in Washington DC waste the most time per year stuck in traffic among cities with over 3 million people.

YEARLY DELAY PER AUTO COMMUTER (hours)

City	Hours
Washington DC	82
LA/Long Beach/Anaheim	80
San Francisco/Oakland	78
New York/Newark	74
Boston	64
Seattle	63
Chicago	61
Houston	61
Dallas/Ft. Worth/Arlington	53
Atlanta	52
Detroit	52
Miami	52
Phoenix/Mesa	51
Philadelphia	48
San Diego	42

abc NEWS
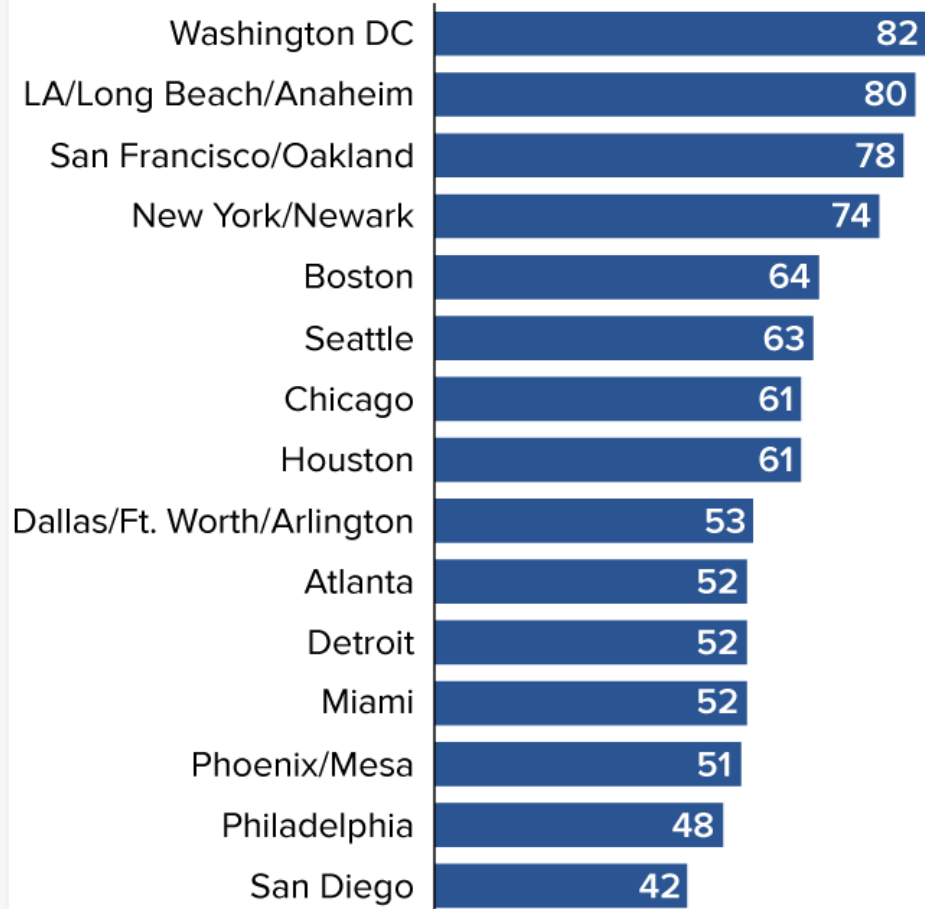
America's drivers wasted 6.9 billion hours stuck in traffic in 2014, according to a study released by the Texas A&M Transportation Institute(TTI) and INRIX. That's 42 hours a year per rush-hour commuter on average.

Table: Weather-Related Crash Statistics (Annual Averages) in US.

	Weather-Related Crash Statistics	
	10-year Average (2005-2014)	10-year Percentages
Weather-Related* Crashes, Injuries, and Fatalities	1,258,978 crashes	22% of vehicle crashes
	445,303 persons injured	19% of crash injuries
	5,897 persons killed	16% of crash fatalities

Street Level Imagery

Street Level Imagery is imagery of roads

Street level imagery is typically collected by car mounted cameras.

Over the past decade, there have been numerous efforts to capture and deliver street-level imagery of major urban areas.

The big players, Google Street View and Bing Map Street side, are well accepted, and most of us use them regularly to get around . and Apple Inc. has announced that it is creating a street view service as part of its Apple Maps service and HERE / TOMTOM / YANDEX and YAHOO MAP has their own street view.

But as they indicate in their user agreements, they are for entertainment and marketing and not intended for critical applications

Annually this company and many other smaller company's was spending billions of dollars to creating Street Level Imagery.

A growing number of automakers are now incorporating street view images technologies into their cars' navigation systems

Street View, which gives drivers real-life photos of their destination to ensure they arrive at the right location, is already available on Audi / Mercedes / Toyota / Tesla / BMW / Hyundai and Kia. But they didn't provide live pictures or videos.
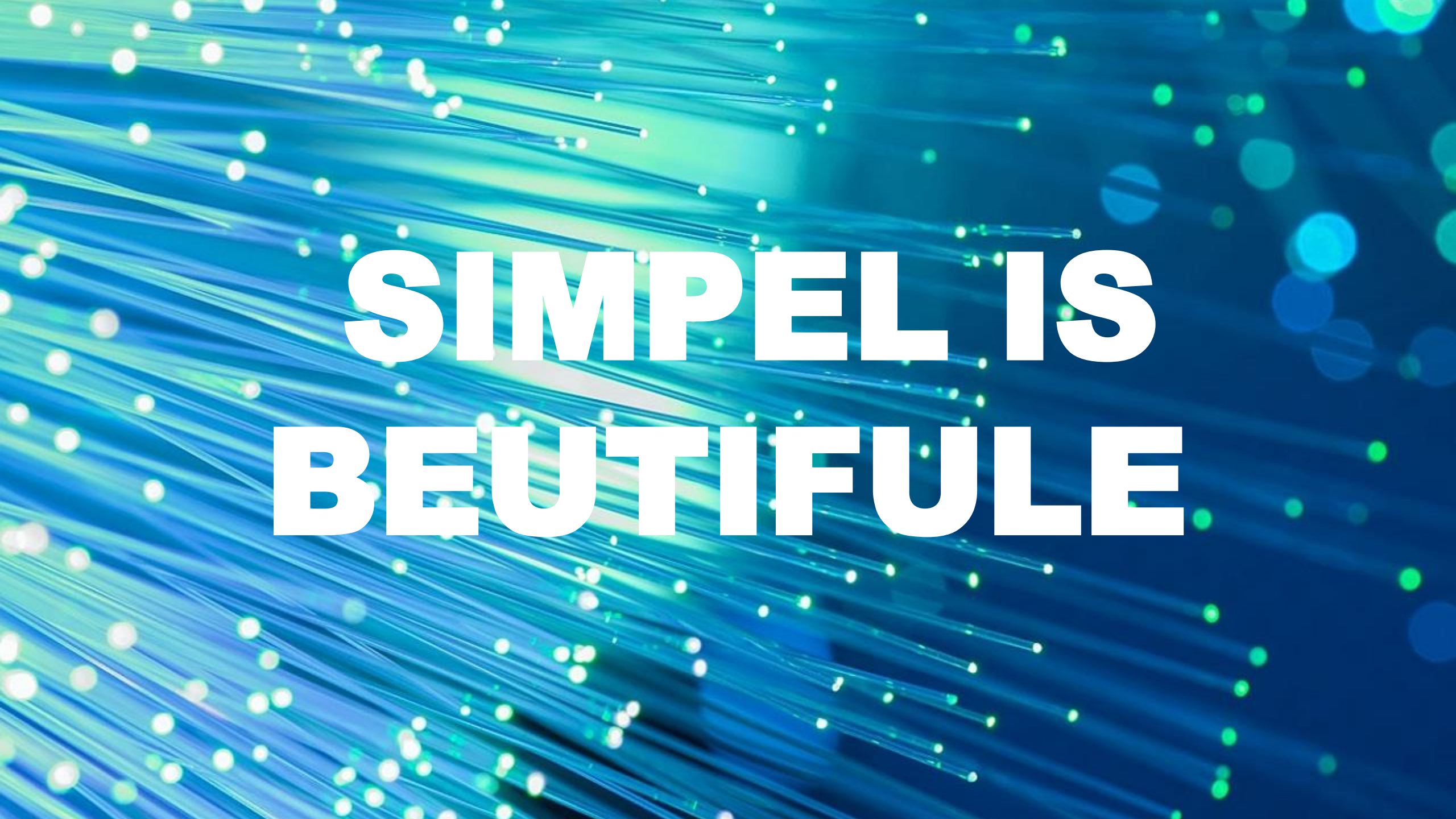
.

here
here.com
Maps for Life
Pocketlint

Apple Maps
maps.apple.com
Apple Map
280

bing maps
Microsoft
bing

NAVTEQ MAPS
NAVTEQ

SIMPEL IS BEUTIFULE

Smartphones will be used as a platform for Street Level Imagery in **Roads Vision** applications.

Using its GPS receiver, Inertial Measurement Unit (IMU), magnetometers and camera sensors, smartphones can be considered an ideal platform which contains all navigation and remote sensing sensors required for any Street Level Imagery.

Roads Vision

Is community-based Street Level Imagery technology which streaming live video of the roads by drivers to its network, and its mission was share live videos of the roads to its users and also collect and analyze the traffic data accurately and efficiently; to provide user-friendly systems to access and view roads videos and traffic data including traffic volume, speed, vehicle classification, time headways bike and pedestrian counts, collision data, speed limit and traffic signs recognition and much more

Roads Vision Driver-to-Driver (D2D) Voice Communication

Drivers need to coordinate with each other to share the road infra-structure. The social relationship between drivers also influences the driving behavior. With Roads Vision (D2D) available connectivity the relationship between drivers on the same road may gain more transparency, enabling necessary information to pass through the steel shell of the cars and giving opportunities to reduce anonymity and strengthen empathy as well as eliminate boredom, loneliness and stress.

Imagine that a driver whose child is seized with a serious sickness asks for priority on the emergency lane or ask nearby drivers who is doctor for help.
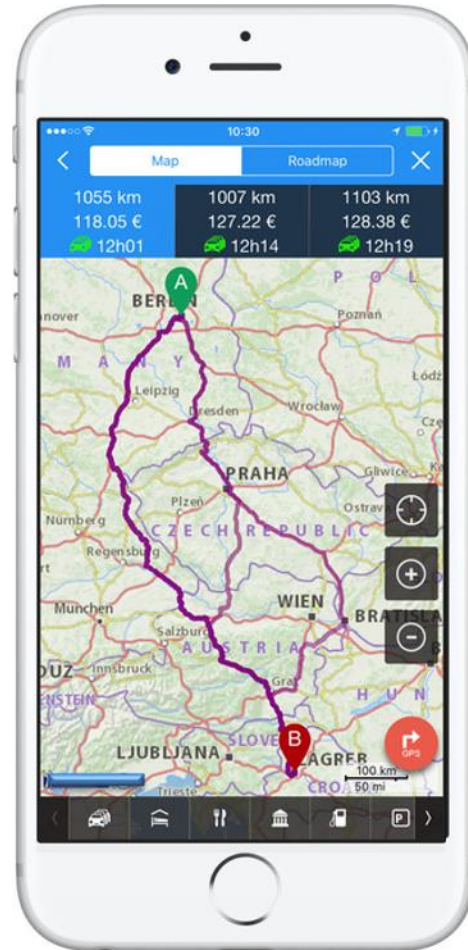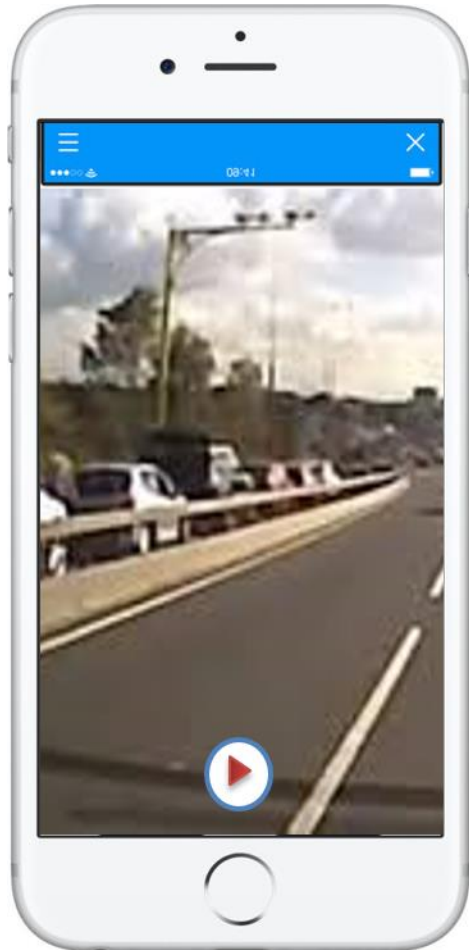
explore the cities roads through the eyes of other drivers
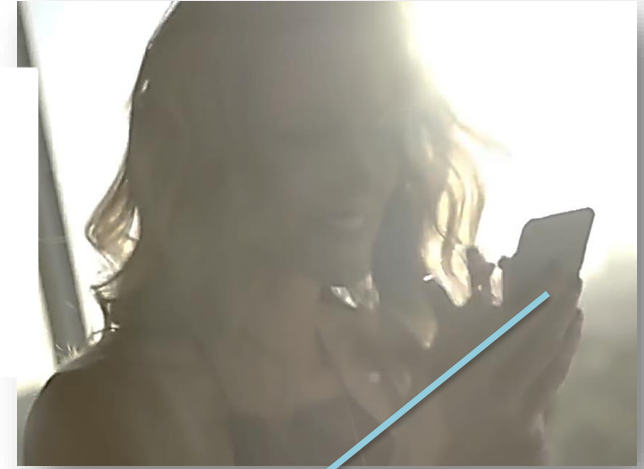
13 Milliseconds: The Incredible Speed at Which Your Brain Can Identify an Image of traffic

ROADS VISION
## three main parts screenshot

Live video broadcast

live video streaming and Street level imagery

live video streaming system automatically sharing live video of the roads to ROADS VISION network of users and live street view Video Map to enable all user to search by location to see the roads condition and traffic.

You can also Instantly share your live videos to Twitter and other social networks or broadcast privately to specific followers or friends and family.

Cloud based Dash Cam and Black Box

Online Dash Cam and Black Box recording capabilities for your car and vehicle journeys, in CLOUD

recording of video, audio, GPS and G-Impact Sensor driving score and information on your journey including travel time, distance travelled, plus your average and top speeds.
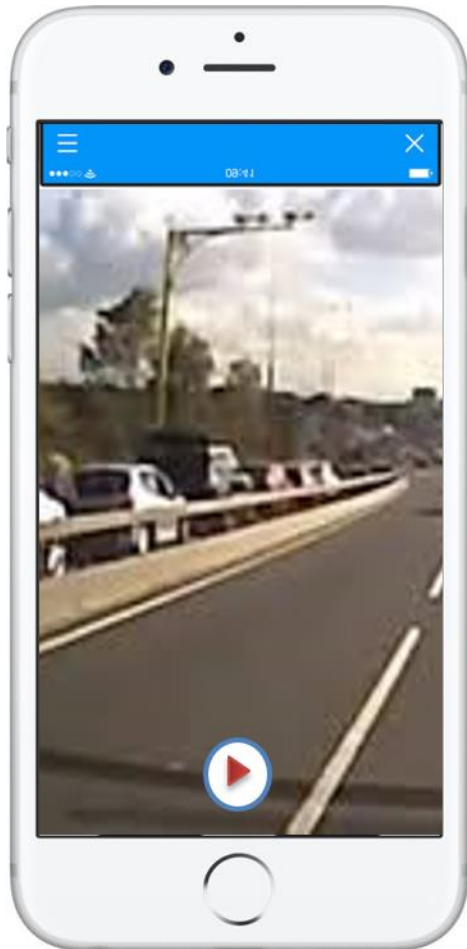
Navigation

traffic and navigation

Live routing based on community driven, real-time traffic & road info

Community alerts reported including accidents, hazards, police traps, road closures, and more

Turn-by-turn voice guided

ROADS VISION live Video Map search page

Search roads to see Community live video alerts reported including accidents, hazards, police traps, road closures, Traffic and more in live video alerts page.
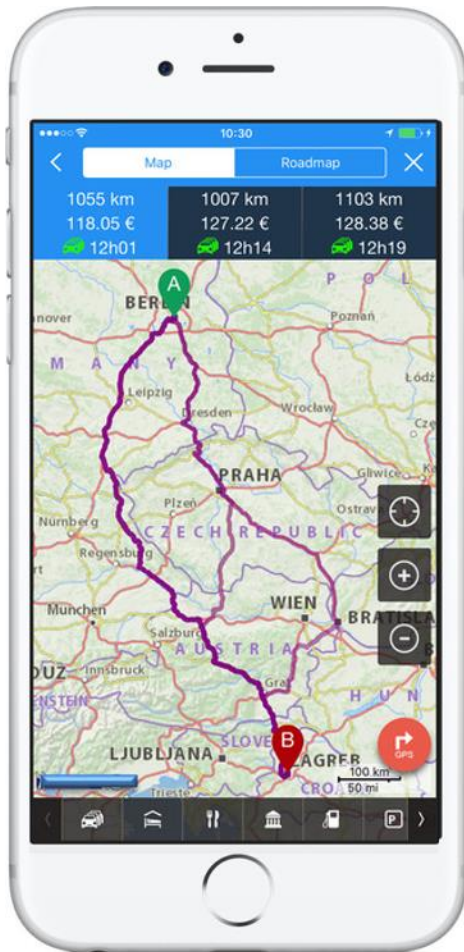
Road assistance for driver safety

Headway Monitoring and Warning

Alerts drivers when car departs from lane

Drunk-driving Prevention

Traffic Sign Recognition

live video alerts

You can see community and ROADS VISION live video alerts, including accidents, hazards, police traps, road closures, Traffic and more.

This technology that lets you explore the cities roads through the eyes of other drivers.

Driver can only see live video alerts when car was completely in stopped position.

Nobody give up from the safety

Roads Vision and cars driver are working together

Traffic Sign Assist increases your safety and can save you from having to pay out money on fines. That's because it helps you to keep to the maximum permissible speed limit for the area you are in and alerts you to restrictions on overtaking.

And should you ever be about to make a wrong turn into a road against the stipulated flow of traffic, Traffic Sign Assist can alert you when the appropriate signs are present via a warning in the on the Roads Vision Online display screen as well as an audible signal.

The data gathered is compared in real time with information from the digital road maps stored in the Roads Vision Online System, so that the applicable speed limit can then be displayed on the Roads Vision Online display screen.

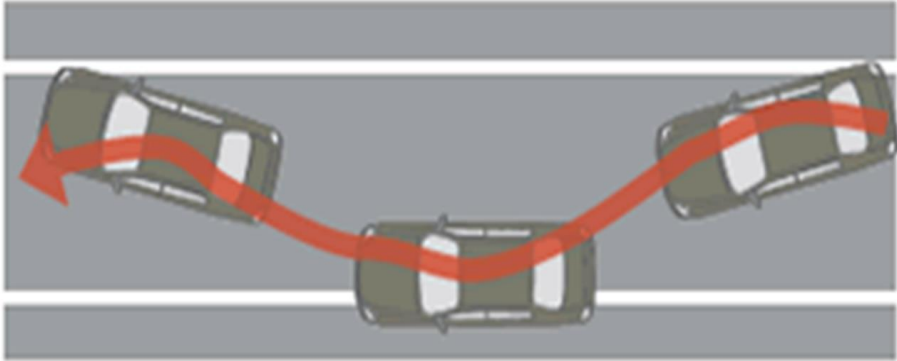# Headway Monitoring and Warning: By calculating the distance from the vehicle ahead
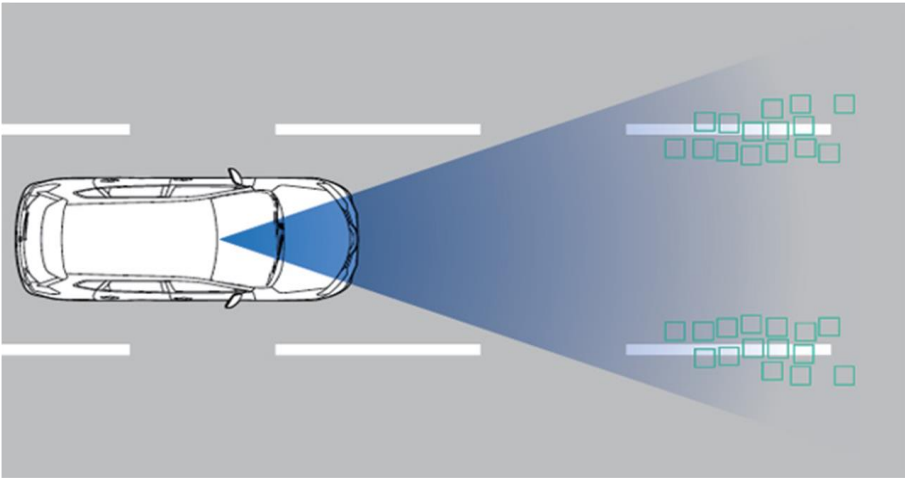
Drunk-driving Prevention

Detection of the driver's state from the Driving behavior

Alerts drivers when car departs from lane

Traffic Sign Recognition

Dash cam

**Dash cams may provide video evidence
in the event of an accident
(Car black box)**

Dash cams

You Can Prevent Fraud

Insurance fraud is one of the most common problems of the 21st century, when it comes to vehicles and traffic. Not only does the fraud affect insurance companies on a large scale, but it actually takes its toll on car drivers (the honest ones!) as well.

Simply put, some drivers purposely cause car accidents just to put the blame on the other party, in order to extort money from the victim. This is a widely used fraud practice nowadays, where those who commit it usually look for high-end car drivers to extort.

You Have First-Hand Evidence Of A Car Accident

The dash cam is the strongest and most efficient proof you have for defending yourself, in case of car crash. In the end, it is better to have one and to stay on the safe side, as it can help you save a lot of time, money and trouble in the long run.

You Can Record Your Entire Road Trip

This reason is particularly important if you are fond of road trips and you always go with your loved ones on occasional trips. Do you want to turn your road trip into an unforgettable journey that you can see over and over again, whenever nostalgia kicks in?

If so, then a dashboard camera is certainly a great investment that will help you turn your road trip into a great experience and a memory you will cherish over the years.
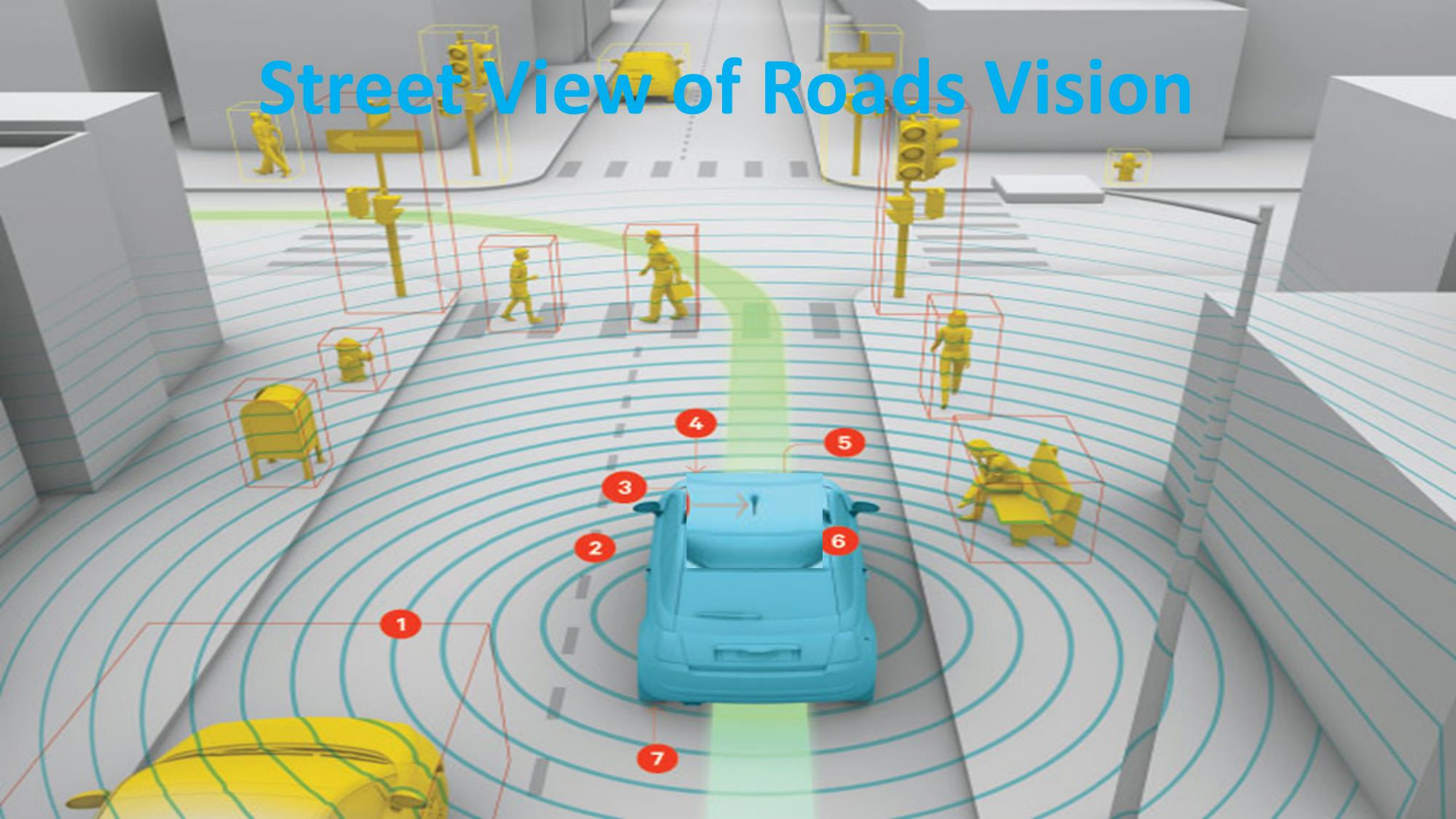
Privacy concerns

We are committed to protecting your privacy while collecting this data. For example, we will blur faces and license plates on collected images prior to publication

Street View of Roads Vision

Live Street View, and Video Map

Video Map can available as a component of Roads Vision as a **web application**, and as a mobile application for **Android** and **iOS**

Roads Vision can acted as a Surveillance cameras

Surveillance cameras are video cameras that observe an area.
The system is useful in gathering a variety of data in daily life and disasters scenarios.
According to the statistics, the use of surveillance cameras has dramatically increased over the last decade. In the US, for example, the Department of Homeland Security provides billions of dollars annually in Homeland Security grants for the agencies of all levels to install video surveillance equipment.
Installing one surveillance camera cost more then $20.000 to government and if include service and maintenance charge it will be more then this.

What makes our services so special and unique

1 Highly accurate traffic data

in this day the only parameter you see in Google / INRIX or HERE map is average traffic sped in red or green line to indicate traffic condition of the roads and only WAZE application show some roads report in its map bot in our technology you can see live videos of the roads before stating your daily commute, Each driver will have access to 'near real-time' info of road conditions, traffic data and various hazards that will help make better decision on the road during the driving on live map.

And while collaboration plays a huge part in each of these services, the difference between them is significant.

ROADS VISION services are driven by data pooled from the live videos and GPS, and IMU of smartphone mounted in front of car windshields with help of deep neural network and computer vision and highly accurate, ensuring that the data is up-to-date, and reliable."

Other offerings on the market, while useful, are pooled from community data – this means that it is editorialized, meaning that, in some instances, useful information may be missing, late or even incorrect.

By using only automatically generated data from roads live video and GPS data, our services not only capture all relevant signals, but do so without needing drivers to interact with a mobile device in a potentially unsafe way to send a road reports and the quantity and quality of data we receive was so grate and it is a (BIG DATA)

Roads Vision are helping create services resulting in smoother, more efficient journeys and a lower risk of accidents.

2 Real time data for Live and HD map for Autonomous cars.

ROADS VISION Highly and fully live video information will provide an important additional layer of real-time contextual awareness for gathering landmark and roadway information to assist in making a vehicle more aware of - and better able to react to - its surroundings, as well as allow for more accurate vehicle positioning on the road. Detecting changes in the real world and adjusting the map accordingly is critically important for automated vehicles to plan better driving strategies.

With more live video and GPS data available from cars equipped with ROADS VISION technology, the Live Map will be updated even more quickly, achieving very short Time to Reflect Reality.

3 Sensors in motion:

Today's roads traffic sensors was fixed in one place on the road, and for this reason they can received traffic data from one especial part of the road but Roads Vision Camera will act like in motion sensors and receive data from all stage of the roads and this help us to offer real time incident and accident detection and for this reason we can offer faster response to Road Crashes, by providing live video and GPS data to emergency responders and medical personnel at critical moments

ROADS VISION Can Send the Right Help that may lead to a better and safer world.

4 On-street parking

On-street parking information is harder to find. We want to provide drivers with details information on whether an on-street space is actually available.

In cities, people looking for parking spaces can not only result in frustration for the driver, but also causes traffic congestion when the driver must go around in circles looking for a space. This also causes pollution and devours fuel, making it a real headache for drivers, pedestrians and the city.
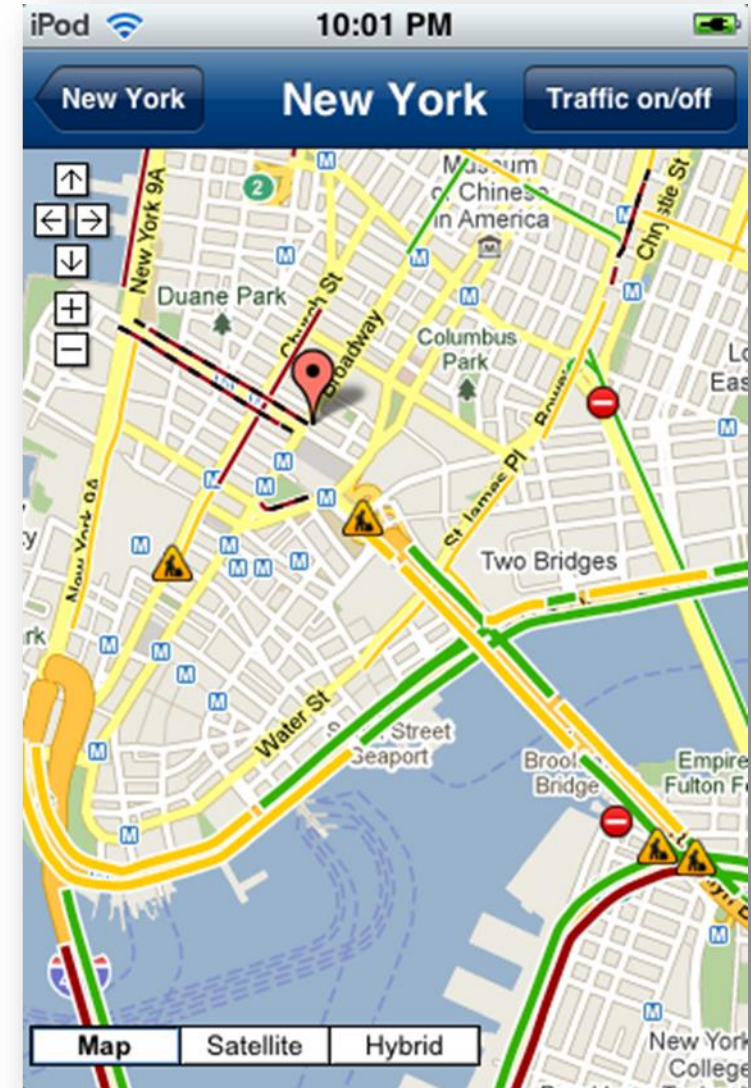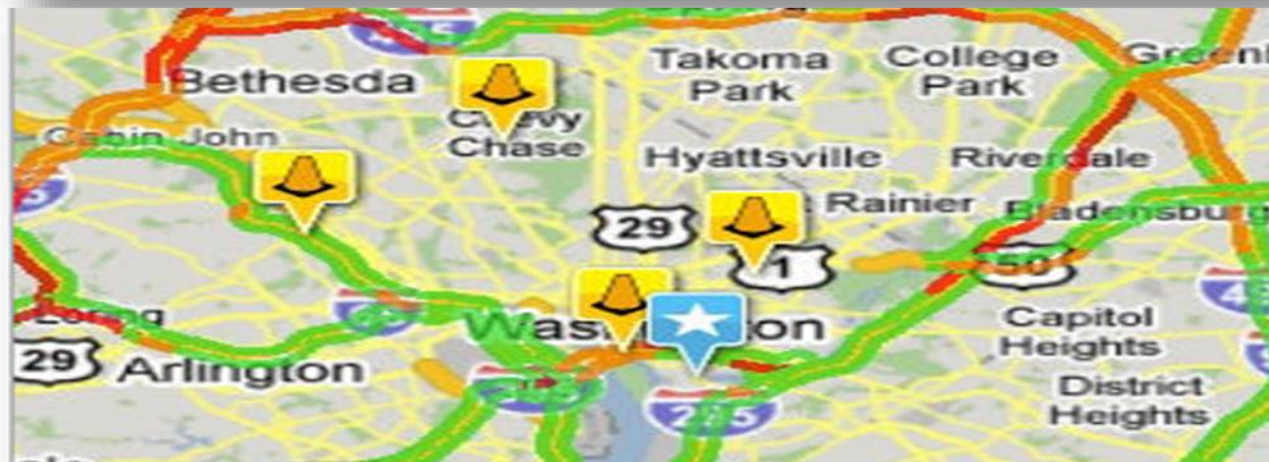
5 Weather conditions

We also offer to the driver weather conditions report for each parts of roads, Weather condition cause %30 of the accidents.
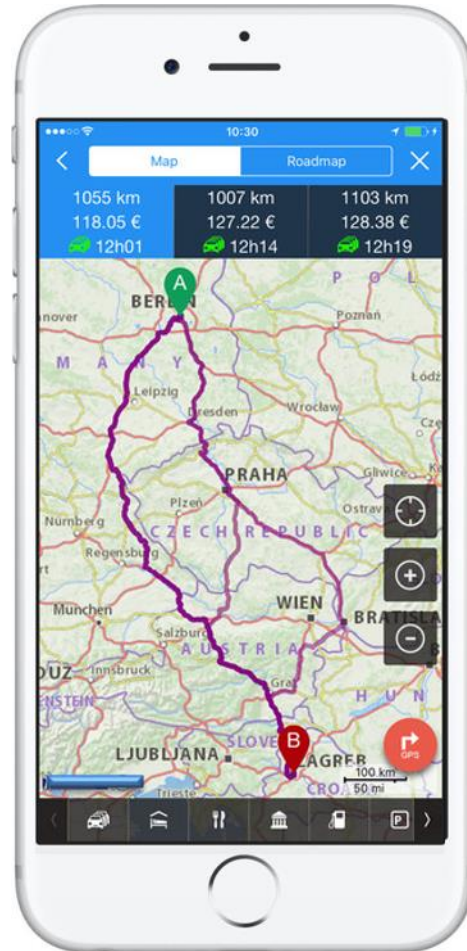
Our competitor is:

What you see in other App

What you see in our App

traffic and navigation Live Map

Hazard and traffic. live video alerts, and live Roads View.

MARKET SIZE

It is include 5 million miles of roads, covering 39 countries and about 3,000 cities

The business model Canvas

Roads Vision Company

Key Partners

- ❖ Drivers
- ❖ local authorities.
- ❖ Map API provider.
- ❖ Investors.
- ❖ fleet companies.
- ❖ local traffic providers.

Key Activities

- ❖ Product Development and Management
- ❖ Marketing and Customer Acquisition
- ❖ Customer Support
- ❖ Managing Payment

Key Resources

- ❖ Technological Platform

Value Proposition

- ❖ Live Street level imagery
- ❖ Community traffic reports
- ❖ safer traffic environment
- ❖ collective pool of roads live video and an automated system for extracting data from these videos for enhance the driving experience
- ❖ Use roads live video data for develop our cities
- ❖ Video Maps of the roads
- ❖ Driver assistant
- ❖ Free Dashcam and Free cloud space for recording
- ❖ Surveillance camera in disaster scenario.
- ❖ Free fleet management
- ❖ Finding the park place before arriving to our destination

Customer Relationship

- ❖ Social Media.
- ❖ Customer supports.
- ❖ Review, Rating and feedback systems.

Channels

- ❖ Websites.
- ❖ Mobile App for Android.
- ❖ Mobile App for IOS.

Customer Segments

- ❖ Commuter
- ❖ Government
- ❖ Commercial GIS
- ❖ NGO
- ❖ Location-based apps
- ❖ Automotive / navigation
- ❖ Urban Planning / Architecture
- ❖ Earth and Environmental Science
- ❖ Tourism and Recreation
- ❖ map-based precision vehicle localization in urban environments Company

Cost Structure

- ❖ Technological infrastructure.
- ❖ Salaries to permanent employees.
- ❖ launch Events, Marketing Expenditure.
- ❖ Pay foe car drivers (cab or taxi) Roads video streaming on per Km/Miles basis.in new cities.

Revenue Streams

- ❖ Digital video and real time location based advertisements
- ❖ traffic information licensing fee.
- ❖ Big Data Licensing fee.
- ❖ Fermium.

63% agencies agree location-based marketing is most exciting opportunity.

eMarketer survey, 2015

THANK YOU

Fazel Pavand

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