



# Driving with Google Maps

By Ron Brown - SilvercomCTC



Where am I going?  
Babylonian Map – 6 century B.C



Copy of an original map from the Roman Empire dating from the 4th century, covering Europe,

Maps Got  
More  
Complicated

They were in  
Color  
Water and  
Land

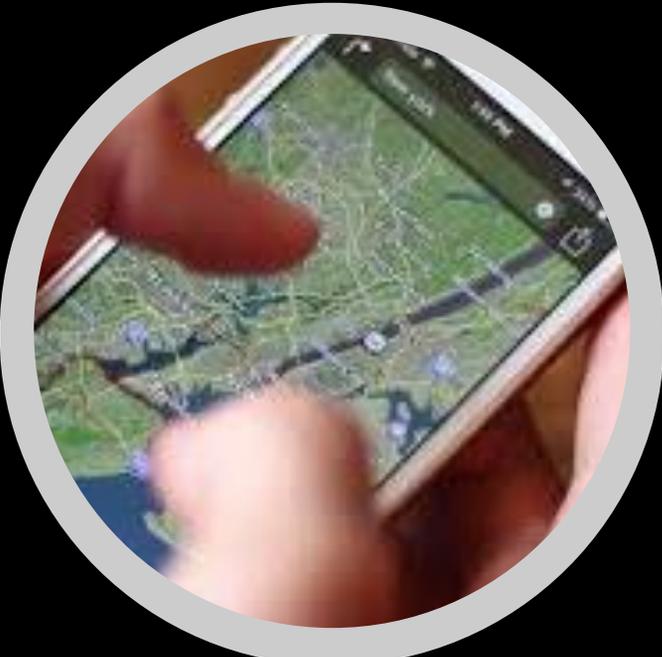
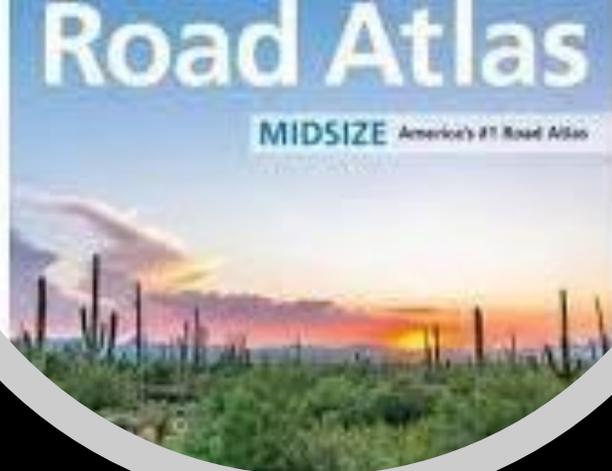




# Cockpit of 787 Dreamliner







Compass, Maps, GPS( Garmin),  
Google Maps, Android Auto for  
Cars



Maps (Garmin)

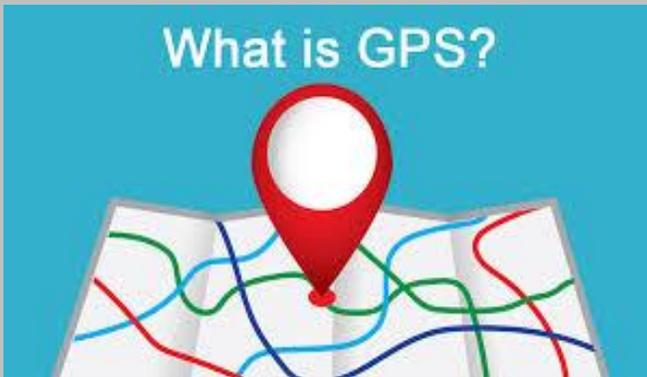
Streaming Maps (Google Maps)

HD MAPS ( Cadillac)

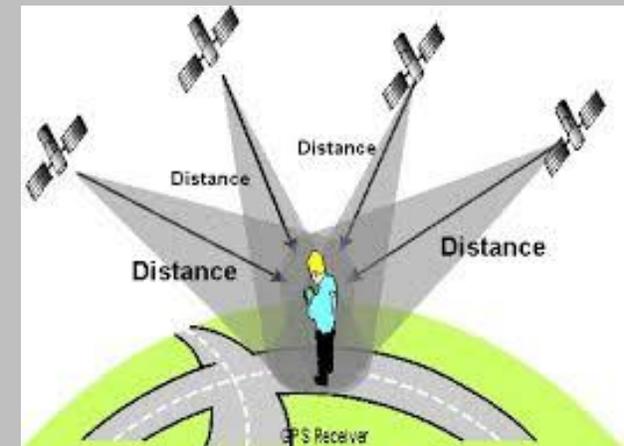
Ground Penetrating Radar ( Future)

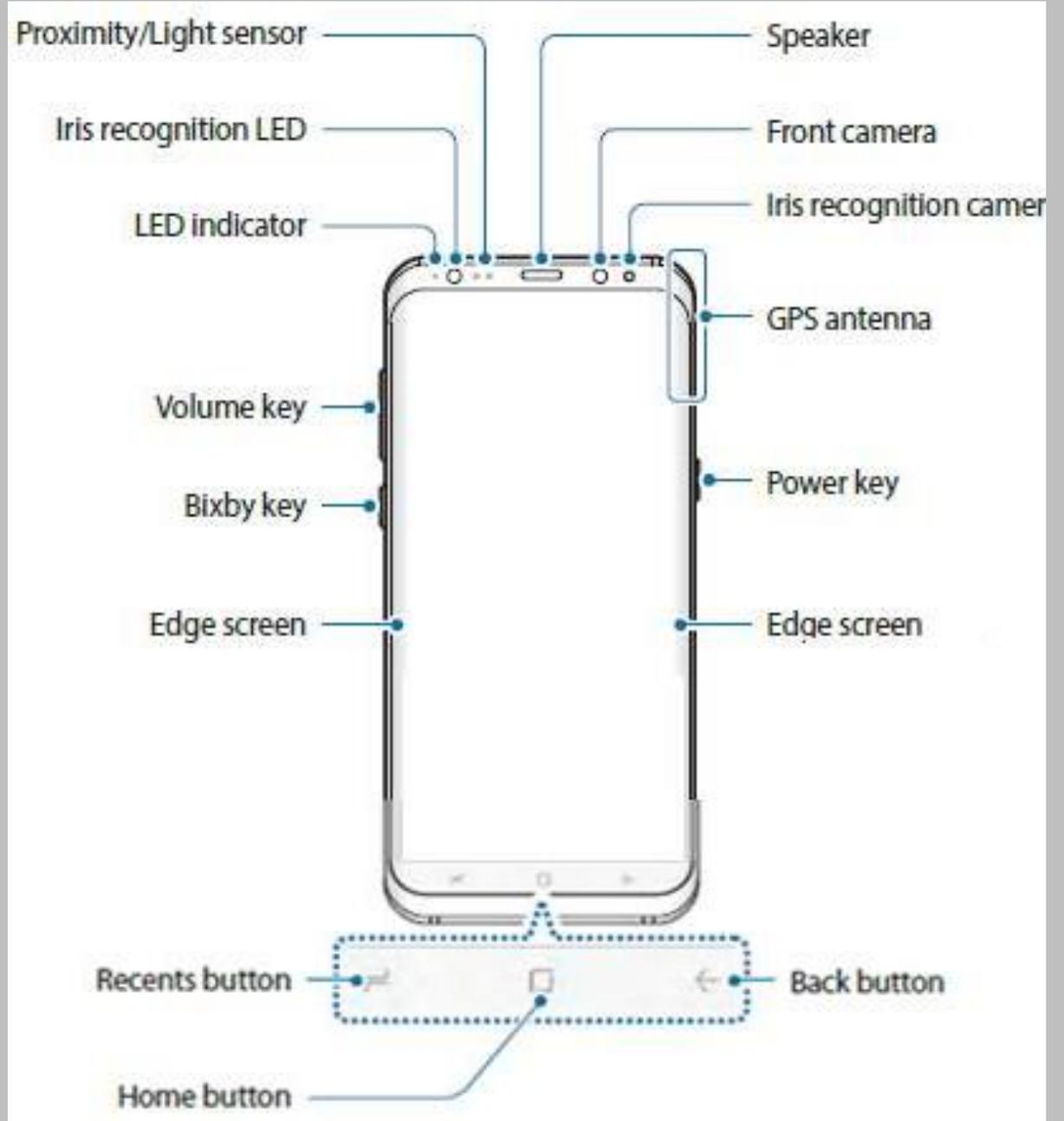
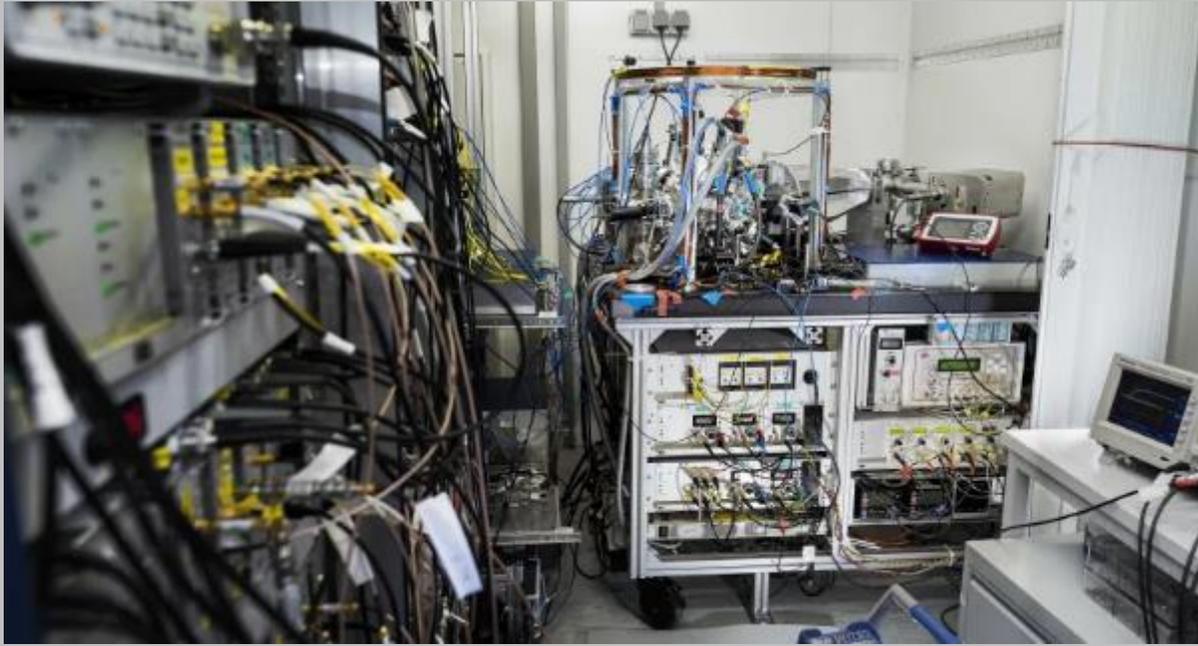


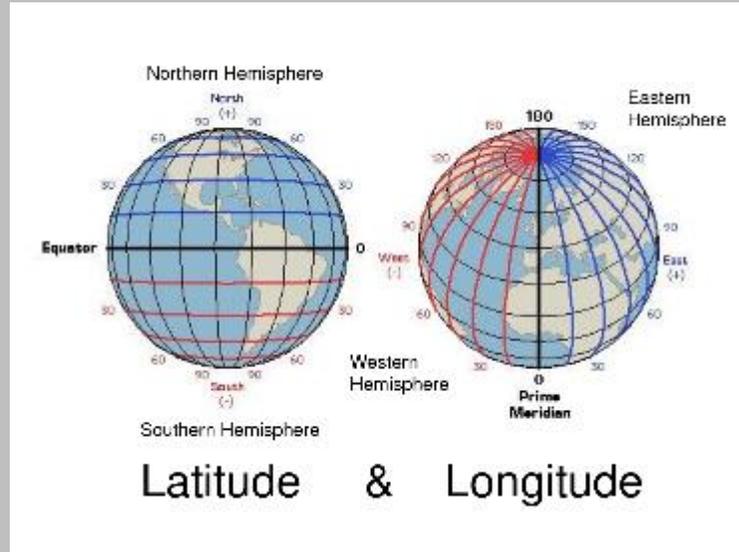
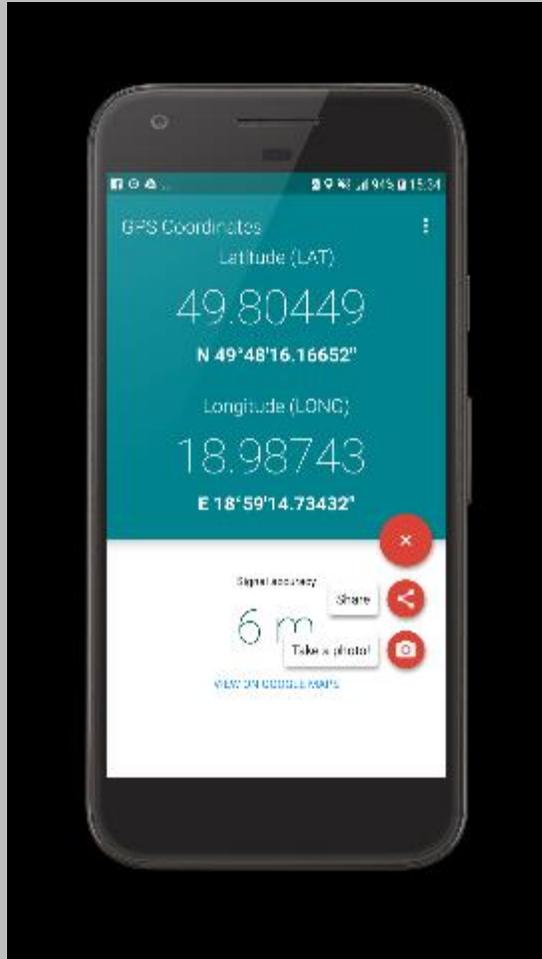
A screenshot of a YouTube video player. The main video shows Leo Laporte in a radio studio, wearing headphones. The video title is "Leo Laporte - The Tech Guy: 1605". In the top right corner, there are icons for "Watch later" and "Share". Below the main video is a "More videos" section with three thumbnails of other episodes from "The Tech Guy". The bottom of the player shows the video title "Sam ABUELSAMID" and "The Car Guy - Navigant Research", along with a play button, volume icon, and a progress bar showing "20:45 / 2:09:17". The YouTube logo and a settings icon are also visible in the bottom right corner.



GPS Satellites fly in Medium Earth Orbit  
Altitude of 12550 miles above earth  
Each Satellite circles the earth twice a day







# 3 Ways your Smart Phone locates you

*Where are you?*

## Global Navigation Satellite System (GNSS) --(US GPS)

On all Phones

Always on

Disable Apps

One-way communication

Don't need to be connected

## Tower Triangulation

Cell Towers

Triangulation

Rural Vs Urban

Not GPS

## WiFi Position System WPS

WiFi GPS

Promoted by Google

Database

Location service



USA -- GPS 3

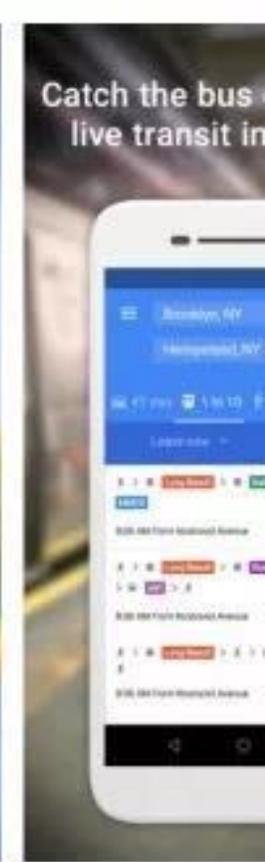
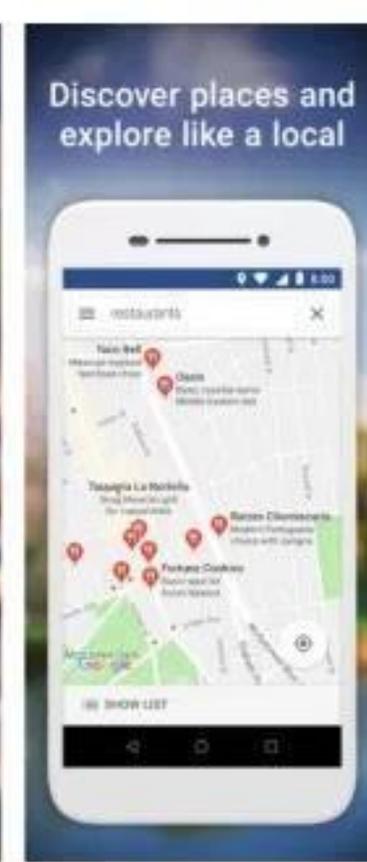
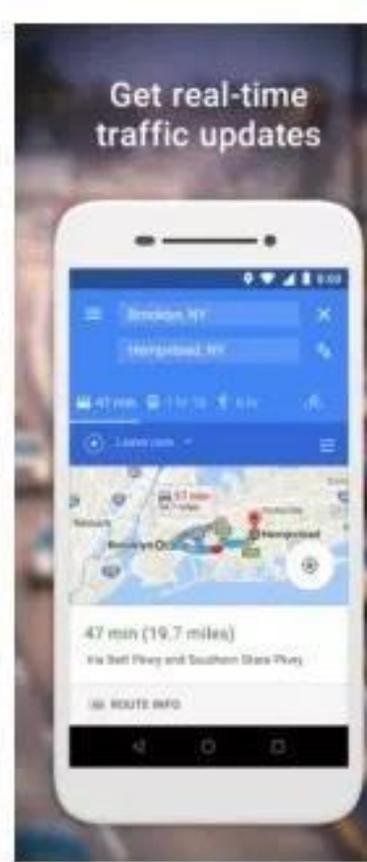
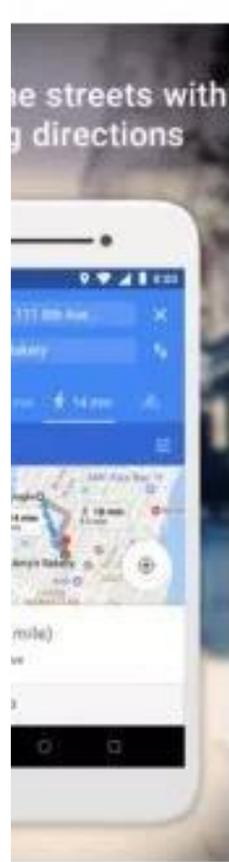
China	COMPASS
Europe	GALILEO
India	IRNSS
Japan	QZSS
Russia	GLONASS



[Amazfit Verge Smartwatch by Huami with GPS+ GLONASS All-Day...](#)

Price: **CDN\$ 209.99** ✓prime

Sold by JP Mobiles CA and Fulfilled by Amazon.



# Difference between Garmin and Google Maps



Boulder City ByPass Project ( Opened August -2018)

Travelled April 2019 returning from Mesa

2019 Honda Odyssey Updated Maps - No Hwy 11

Garmin Updated 2 months earlier - No Hwy 11

**Google MAPS - Highway 11 shown with correct speed zones**





- Both Garmin and Google Maps receive GPS Information from the same type of GPS Chip and Satellite
- Your GPS location is determined by an Atomic Clock receiving a radio transmission from the GPS Satellites.
- This is one way transmission and NOT related to the Internet
- Garmin devices have their Maps in resident Memory and must be updated manually when connected to the Internet. Traffic Information is received on a FM receiver
- Google Maps are resident in the Cloud and you must be connected to the Internet unless Off-Line use is set up.
- Traffic reports are received by Internet Connection



What device  
can you use  
Google Maps  
on?

# What is Google Maps?



Google Maps APP – Android  
/IOS - Google Earth is a  
Separate APP



Google Maps- PC - Integrated  
with Google Earth ( Elevation)



Which to Choose?

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# Distracted Driving

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Where are the 4 navigation systems in this truck?

2007 GMC HD Diesel Truck

# n Automobile



Mount Holder, Universal  
ar Phone Mount,  
ar Phone Holder,  
l Pad Compatible  
Max,X,8, Galaxy  
Google, One Plus,  
\$11.99 US



Mpow BH298A Bluetooth 5.0 Receiver,  
Exactly Sound Quality for Music  
Streaming While Driving, Bluetooth Aux  
Adapter with Built-in Mic for Hands-Free  
Calls, Easy Control On/Off Slider,

\$19.99 US





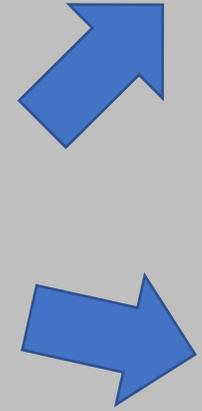
# Battery life – Plug in

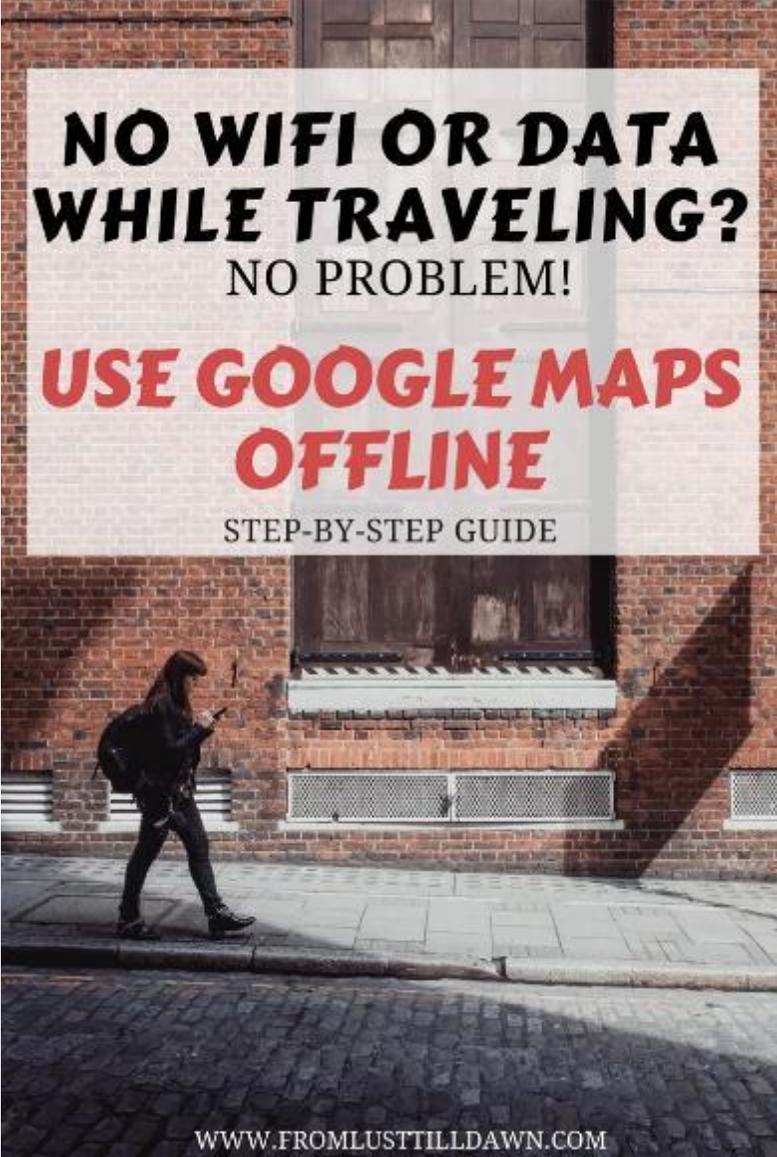
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Decision Based  
on Data Plan





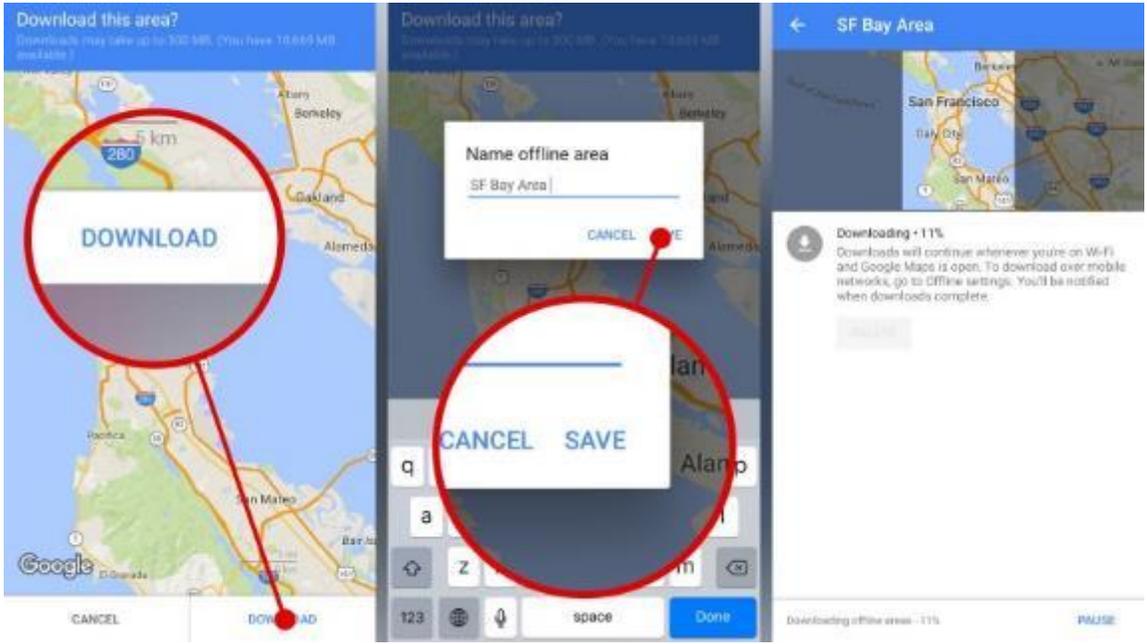
**NO WIFI OR DATA  
WHILE TRAVELING?**

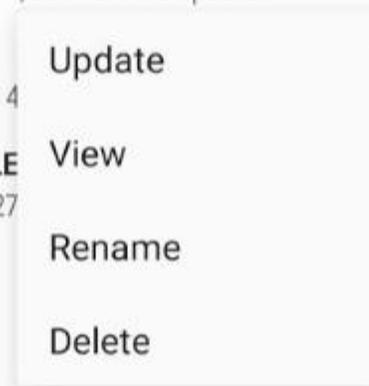
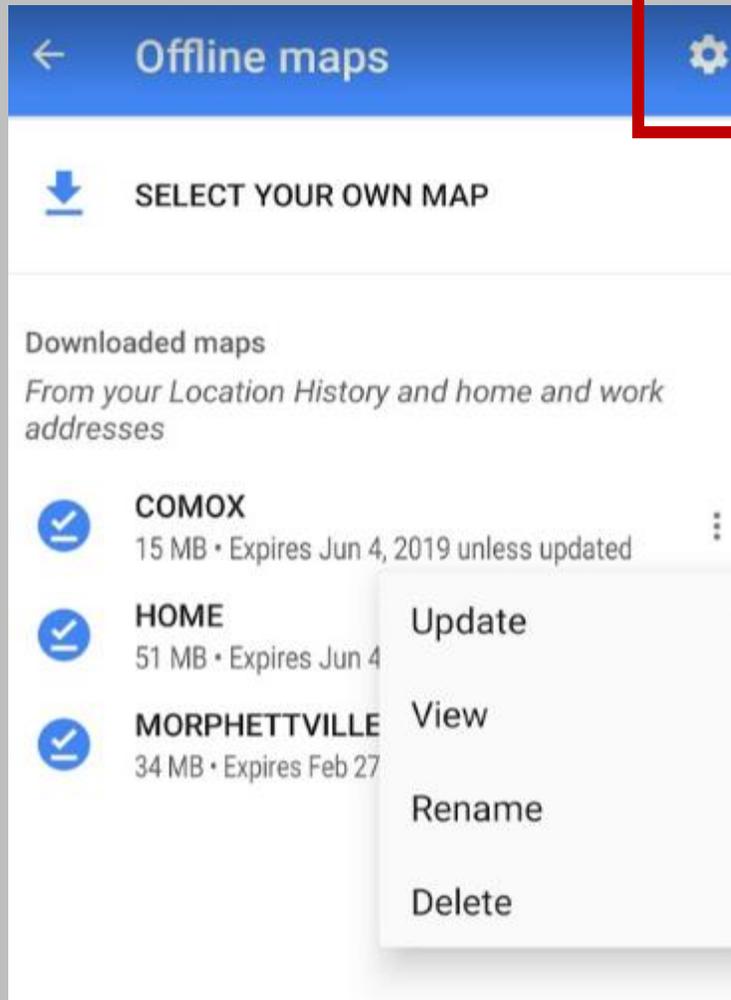
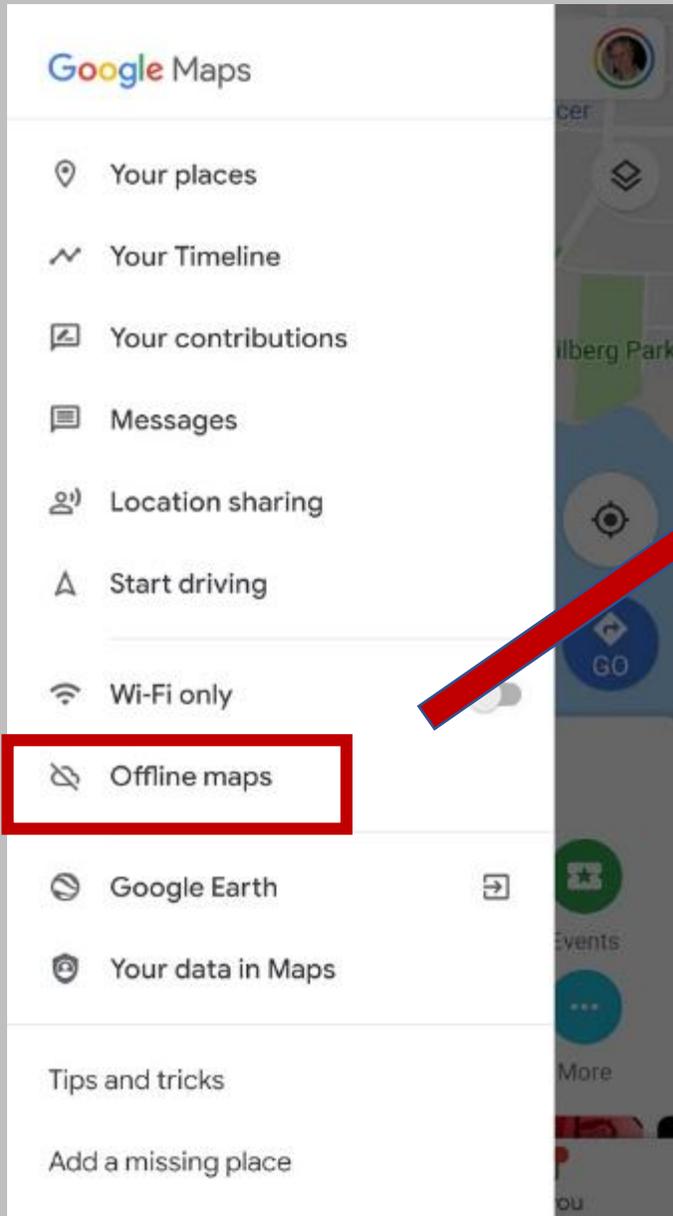
NO PROBLEM!

**USE GOOGLE MAPS  
OFFLINE**

STEP-BY-STEP GUIDE

[WWW.FROMLUSTTILLDAWN.COM](http://WWW.FROMLUSTTILLDAWN.COM)







How much Data  
does Google  
Maps Use with  
On-Line use?

# Things to consider

Data is based on Time not Distance traveled  
Location Dependent- Rural vs Urban  
Do you have an unlimited Data Plan?  
How much Data do you need for a 10-day road trip across the USA?



## My Data

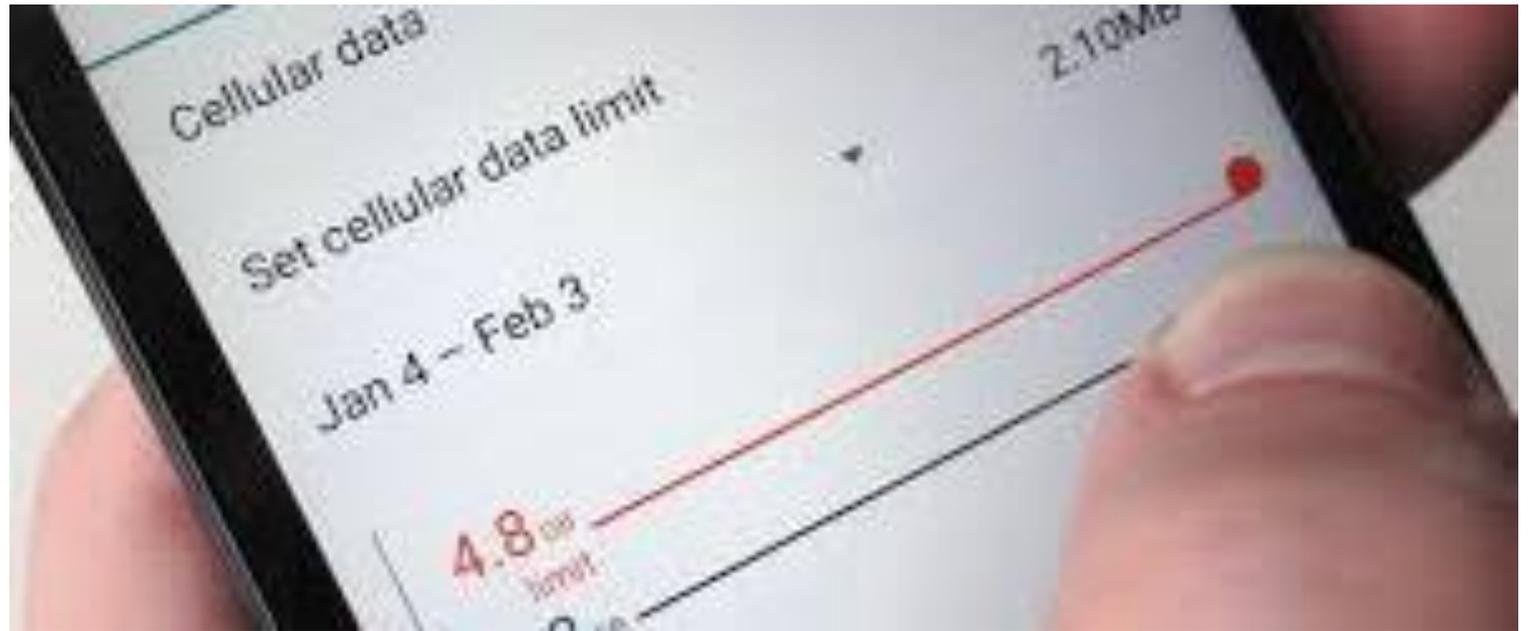
Phone Pixel 3 -- Carrier Google Fi

Mesa- No Travel Jan .7GB Feb .4 GB Mar .9 GB May .8 GB

April – Traveled from Mesa – Comox 1700 miles 4.5 days 45 hours driving

Average Data use/month is .7GB - April 3.6GB Trip Used 3GB

Roughly on my data 0.7GB/day



DRIVING HOLIDAY FOR 10 DAYS @ 10 HRS/DAY

GOOGLE MAPS WILL USE .7GB/DAY OR 7 GB/TRIP

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# Starting Google Maps



When you Bring up Google Maps APP –  
Just a Map



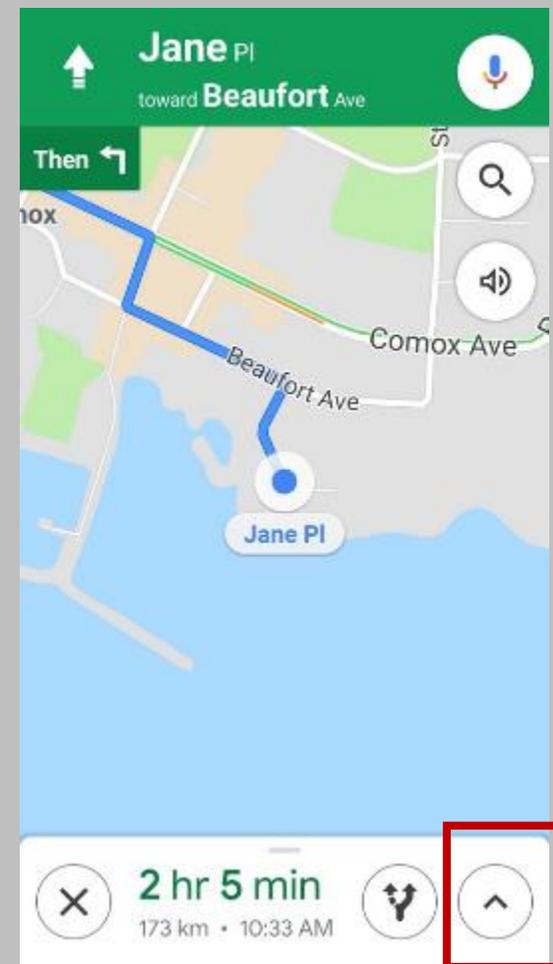
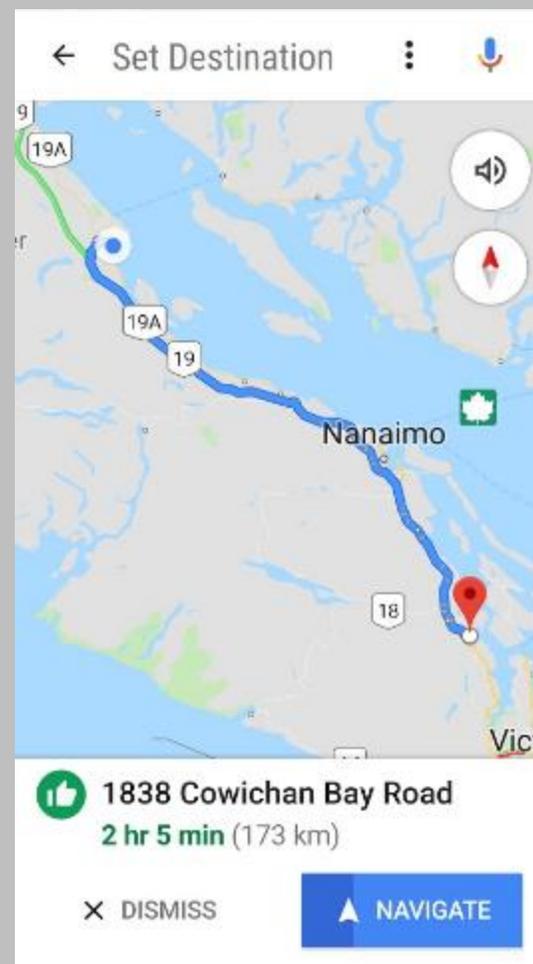
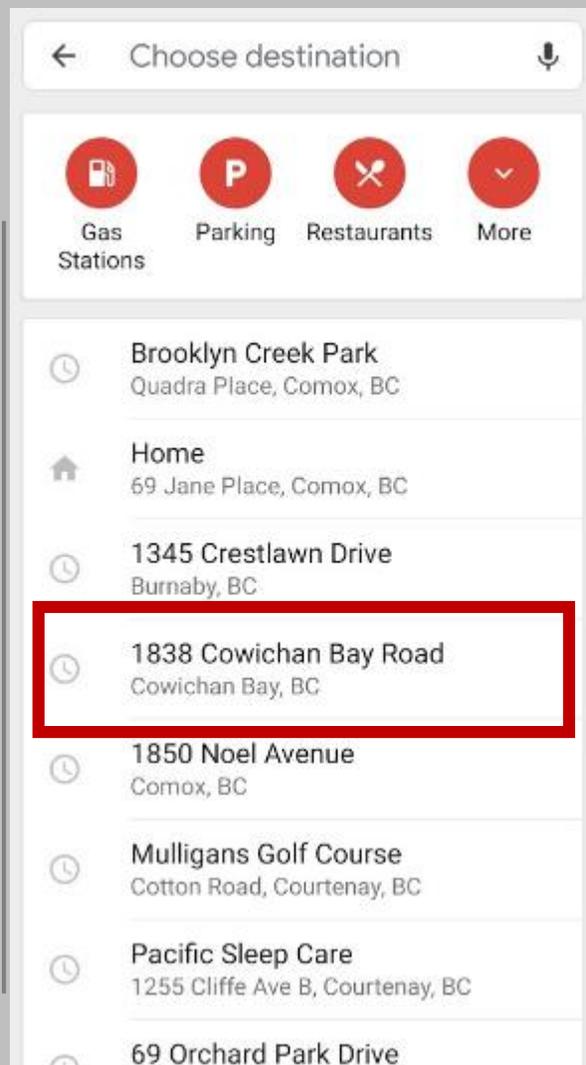
Show current Location – Blue Dot

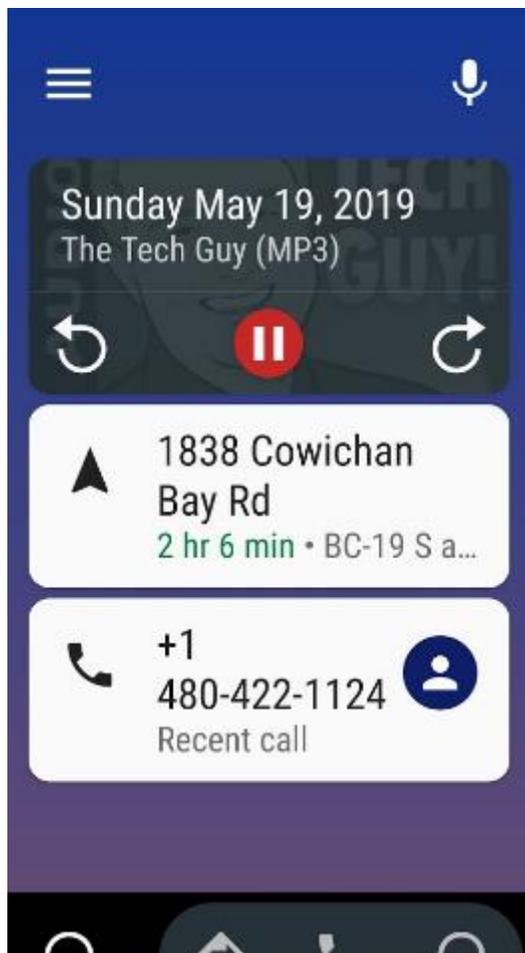


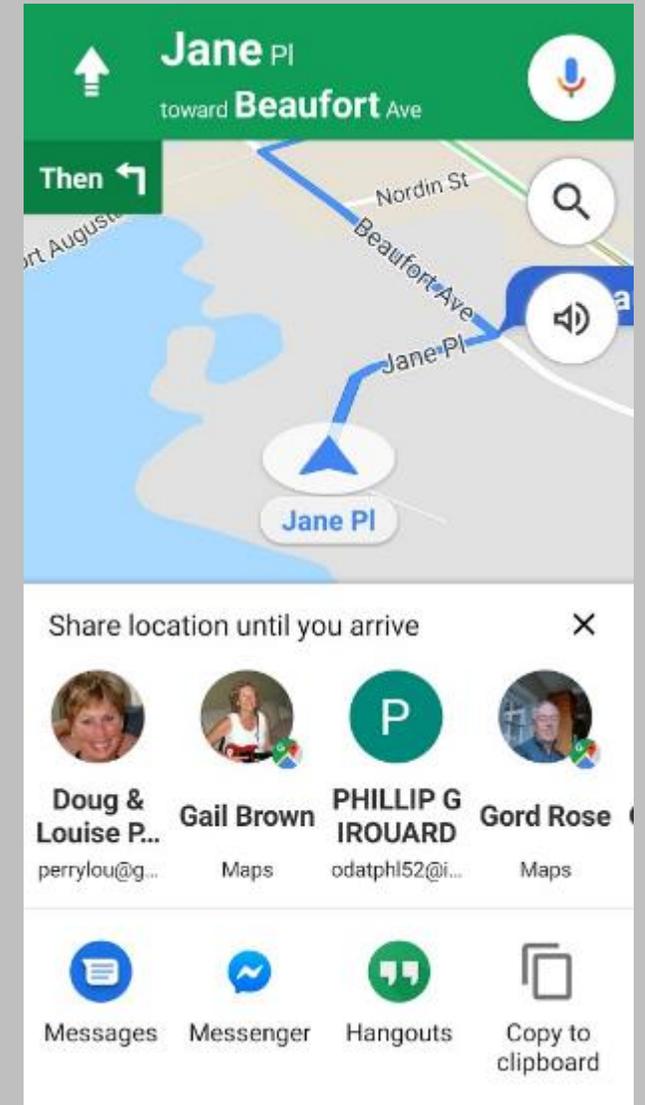
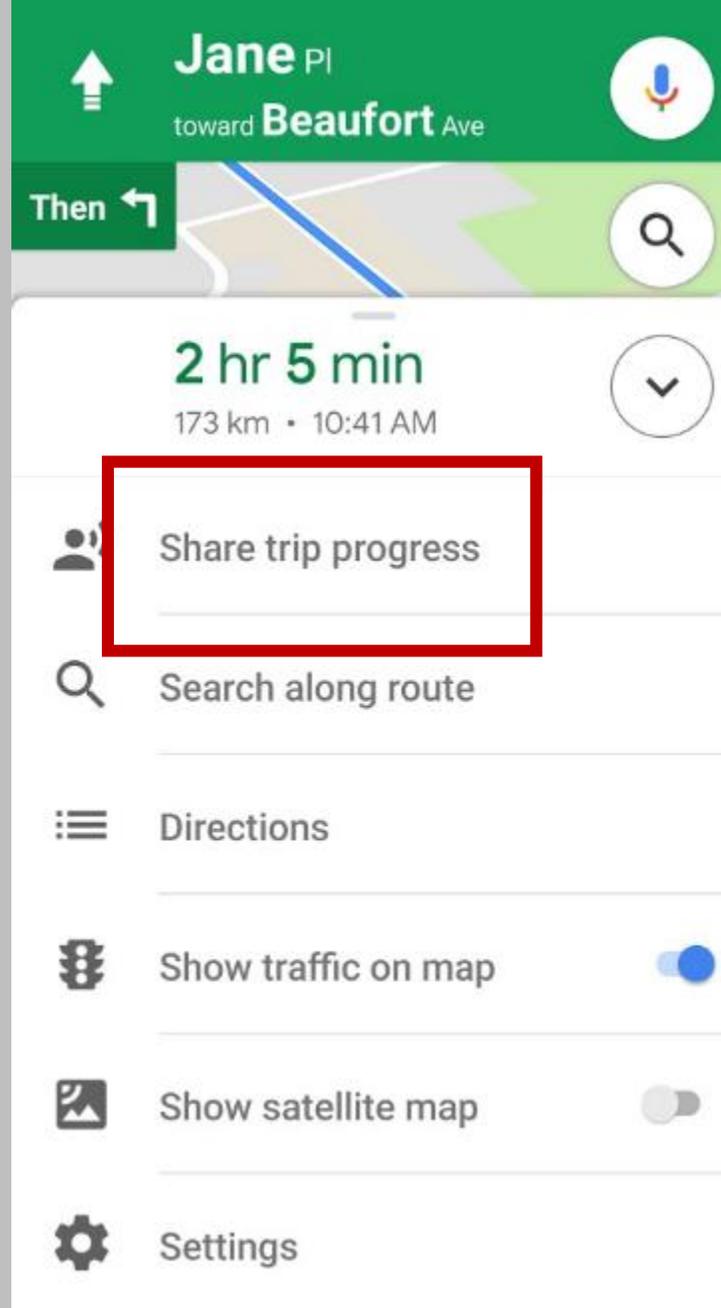
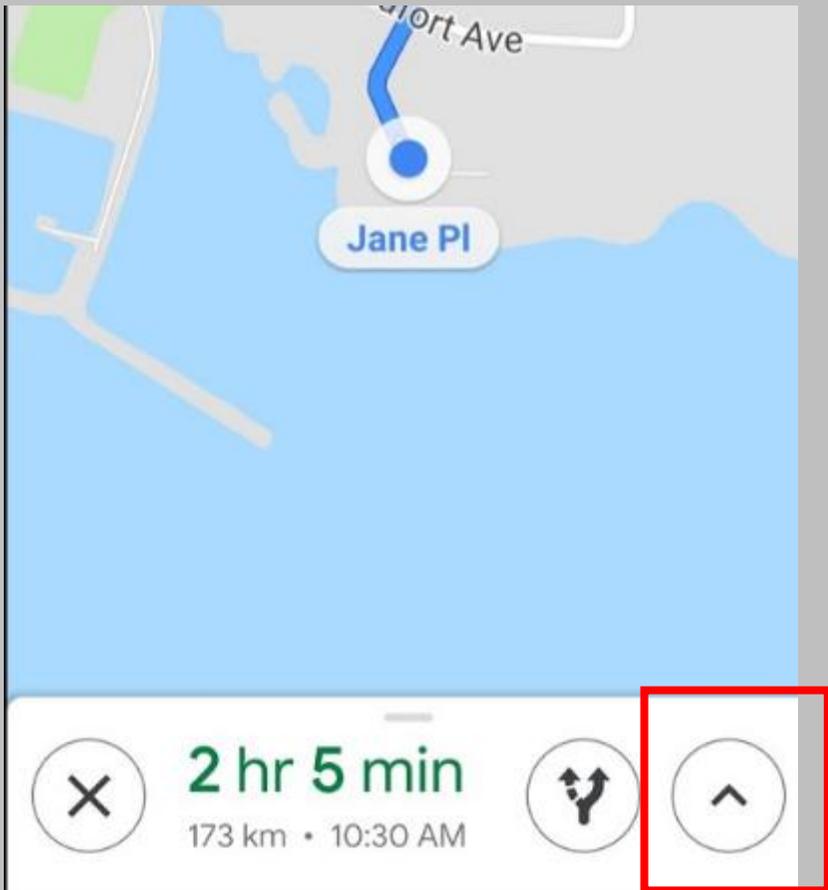
Start Navigation by entering Destination -  
Use Voice

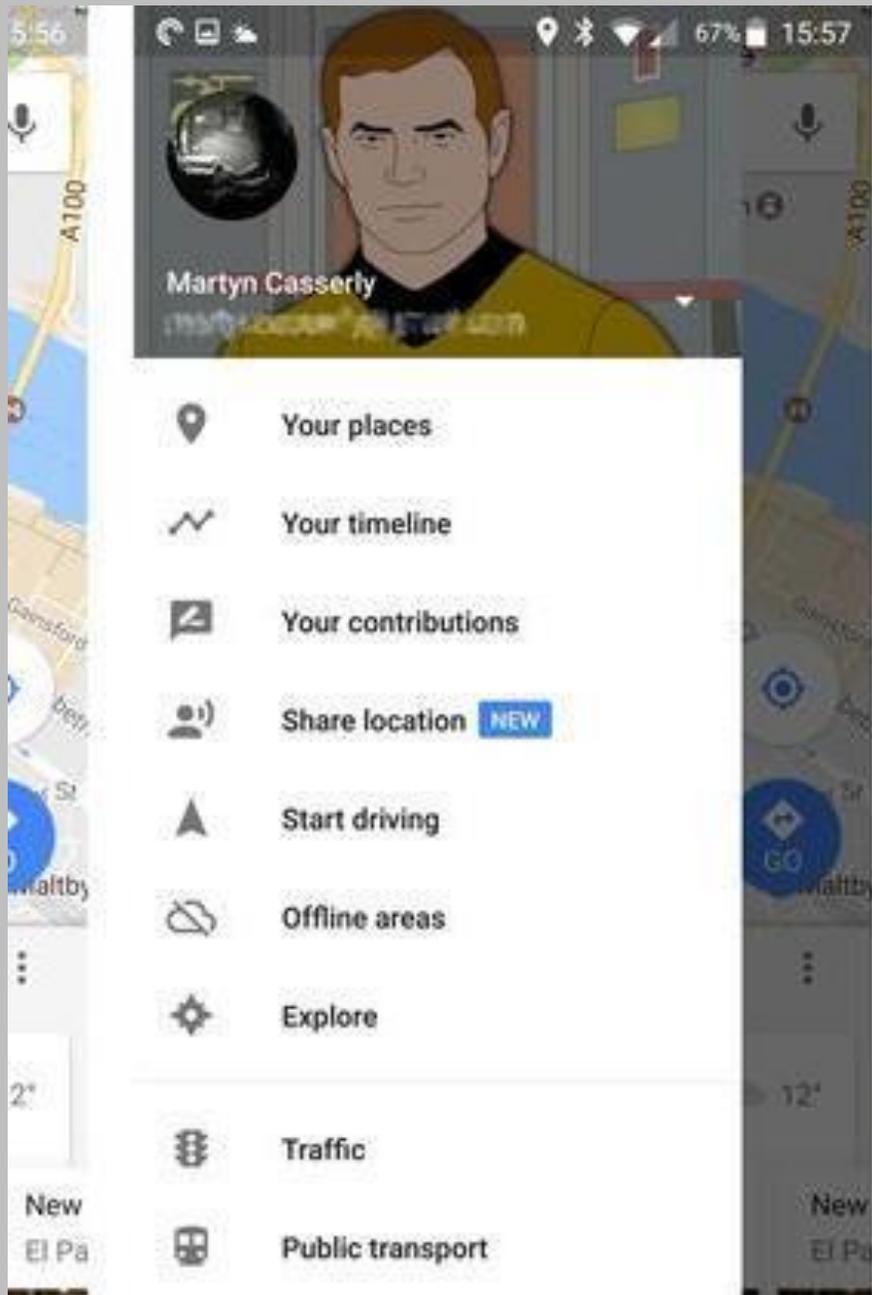


Destination can come from Calendar or  
Email









# Share Location with Multiple People

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**Android Auto is an app developed by Google that allows you to interact with mobile devices while driving legally and without distraction thanks to Google Assistant support**

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# Android Auto

- Android Auto – Much wider adoption than older car play
- Google is adding Assistant to Android Auto
- Android Auto links to your Android Phone
- Integration with Google Maps and Spotify



# How to avoid tolls on Google Maps and save yourself money on your next road trip

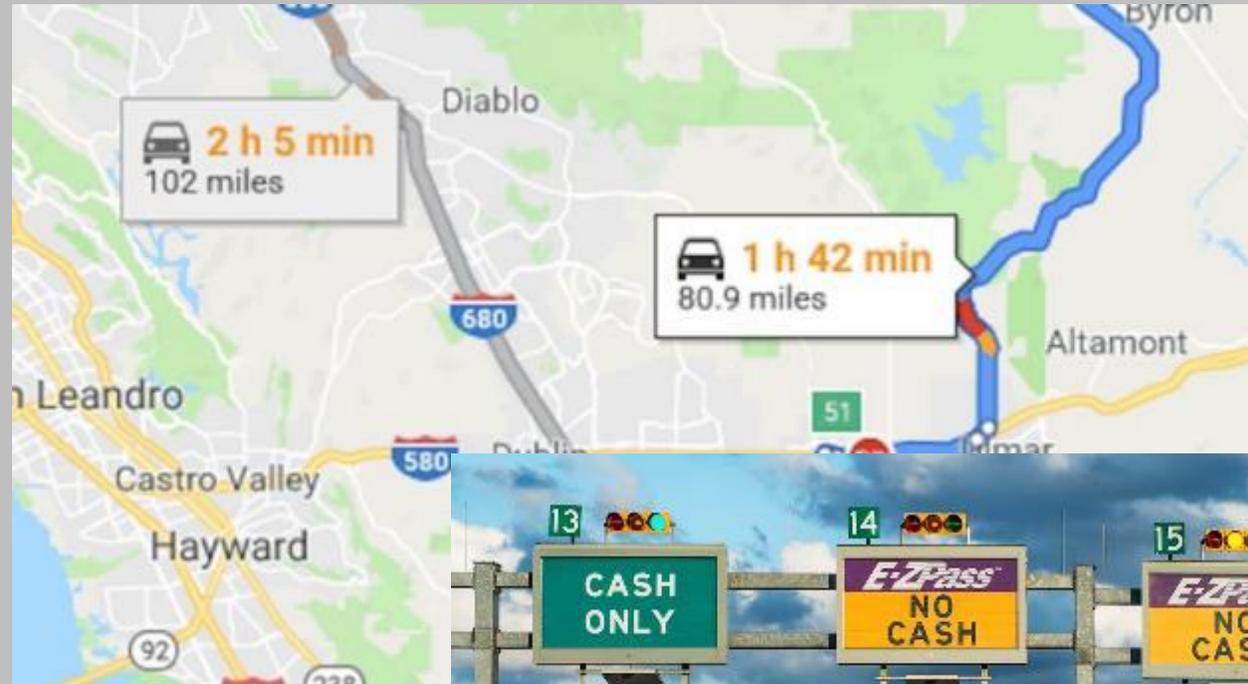
## How to use the "avoid tolls" feature on the Google Maps mobile app

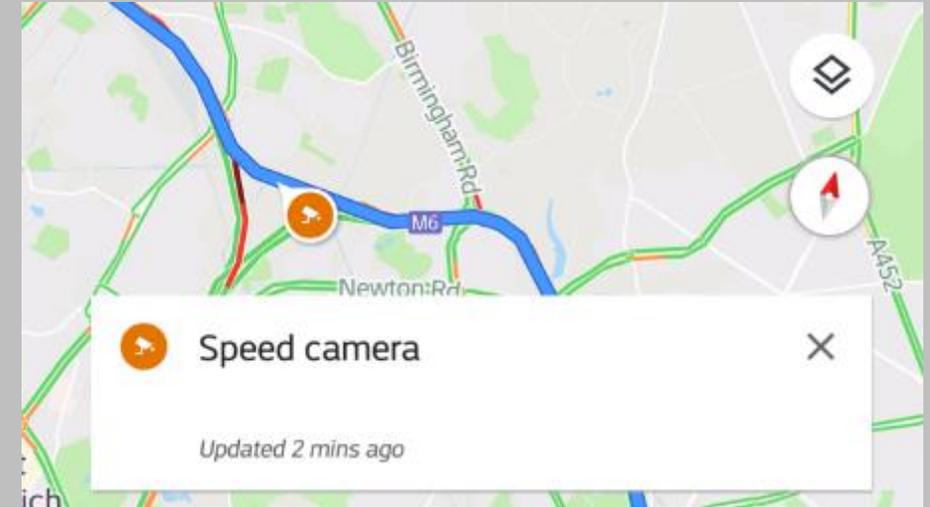
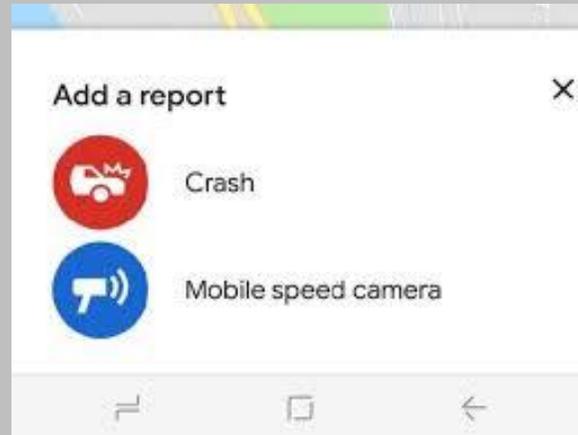
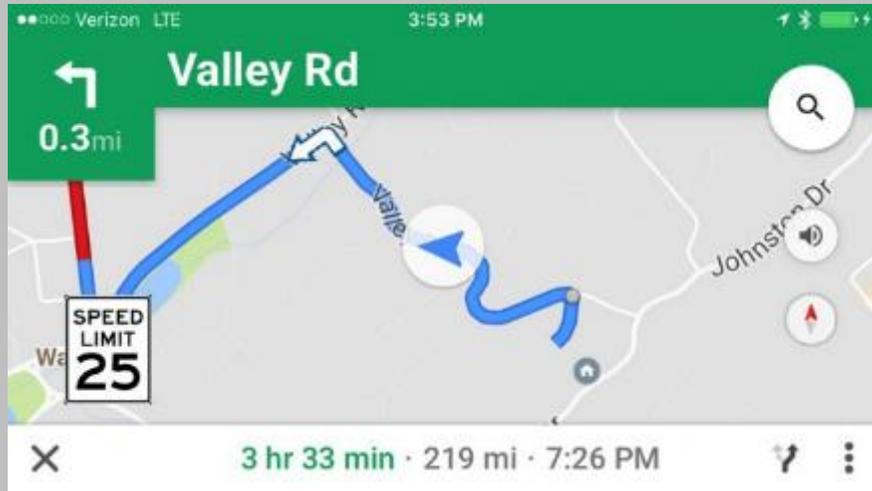
Avoiding tolls on Google Maps' mobile app is easy to accomplish.

Here's what you need to do:

2. Input your destination into the search bar and search for it.

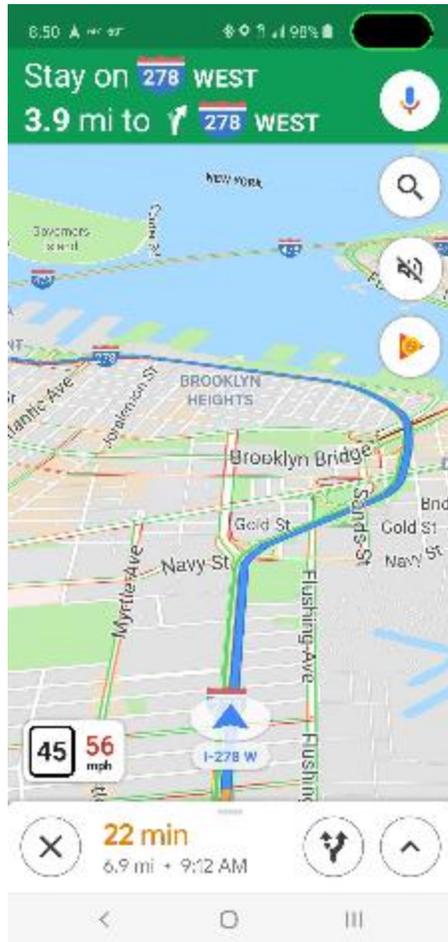
3. Tap "Directions." 4. Tap the three vertical dots next to "Your Location" (located at the top of the screen), then tap "Route Options."



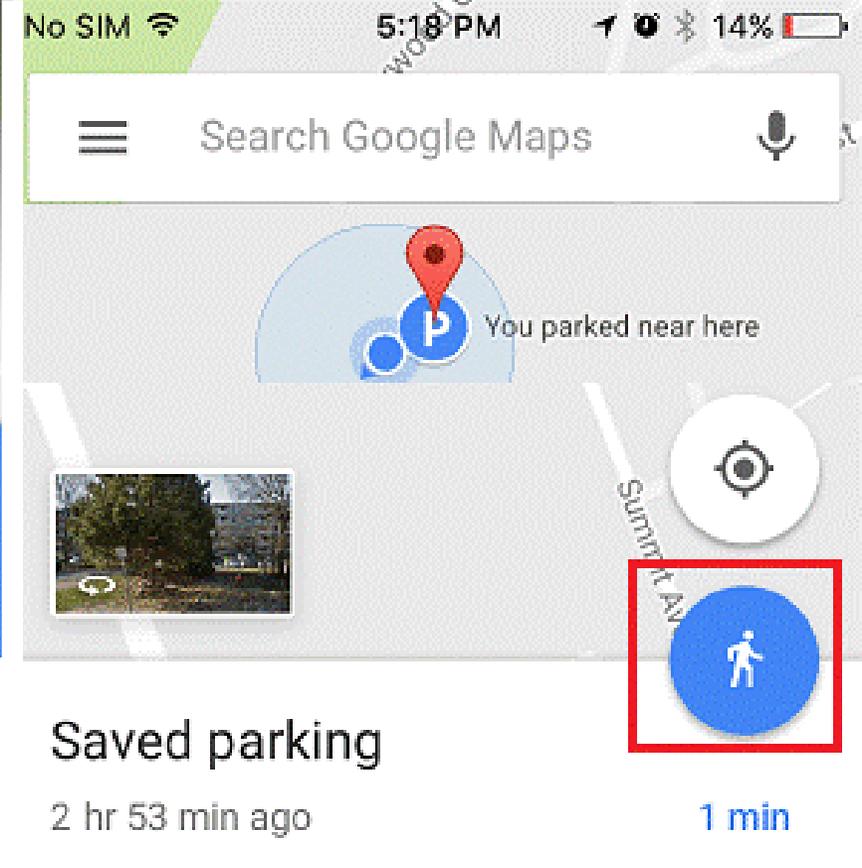
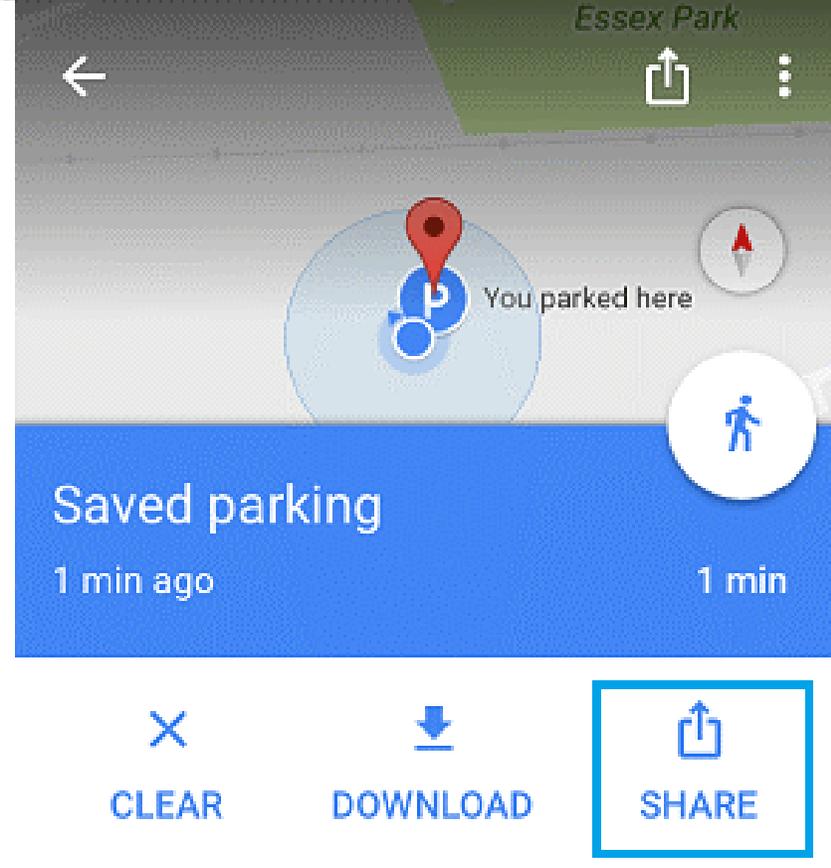


Google Maps now offers speed limit warnings and radar locations in over 40 countries

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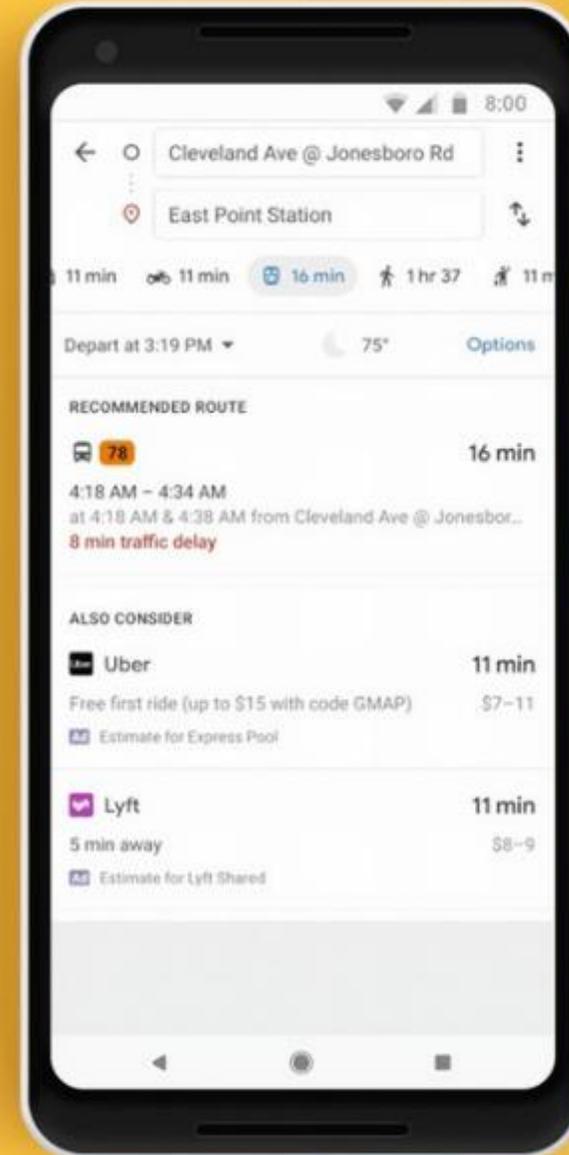


Google Maps gets an on-screen speedometer while driving



# Parking Location

Google Maps  
can now  
predict how  
crowded  
your bus or  
train will be



## Googles SOS Alerts



Alerts for hurricanes will attempt to map their route.

Flooding alerts will show the affected area and its severity.

Earthquake alerts will show the epicenter and magnitude.

A close-up photograph of the rear quarter panel of a white electric vehicle. The car is parked at a charging station, with a white charging cable plugged into the charging port. The text "electric drive" is embossed on the rear fender. The background shows a green wall with a blue wheelchair symbol, indicating a designated parking space for disabled persons.

electric  
drive

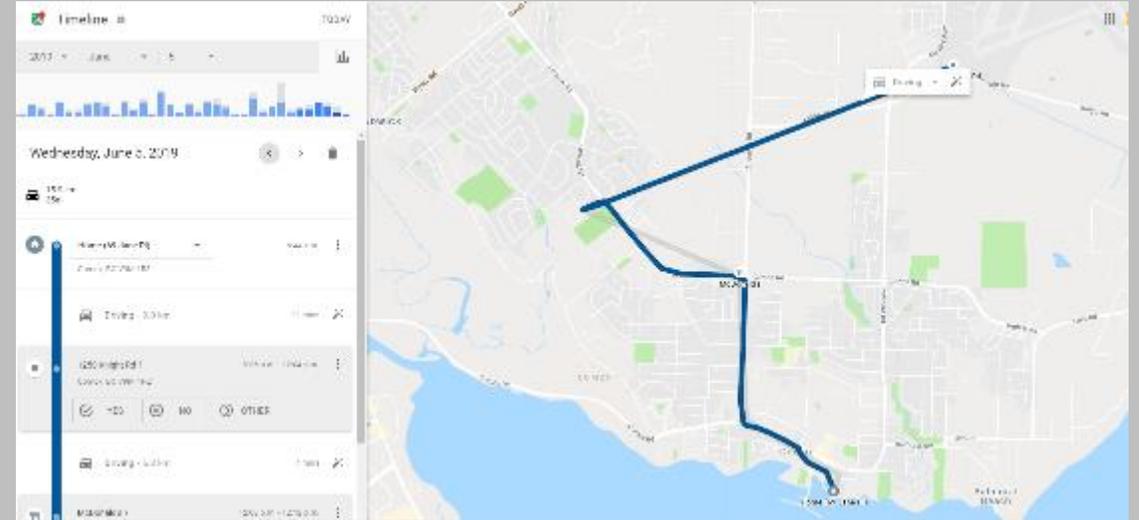
Finding a place to  
charge your EV is easy  
with Google Maps



## Your May in review

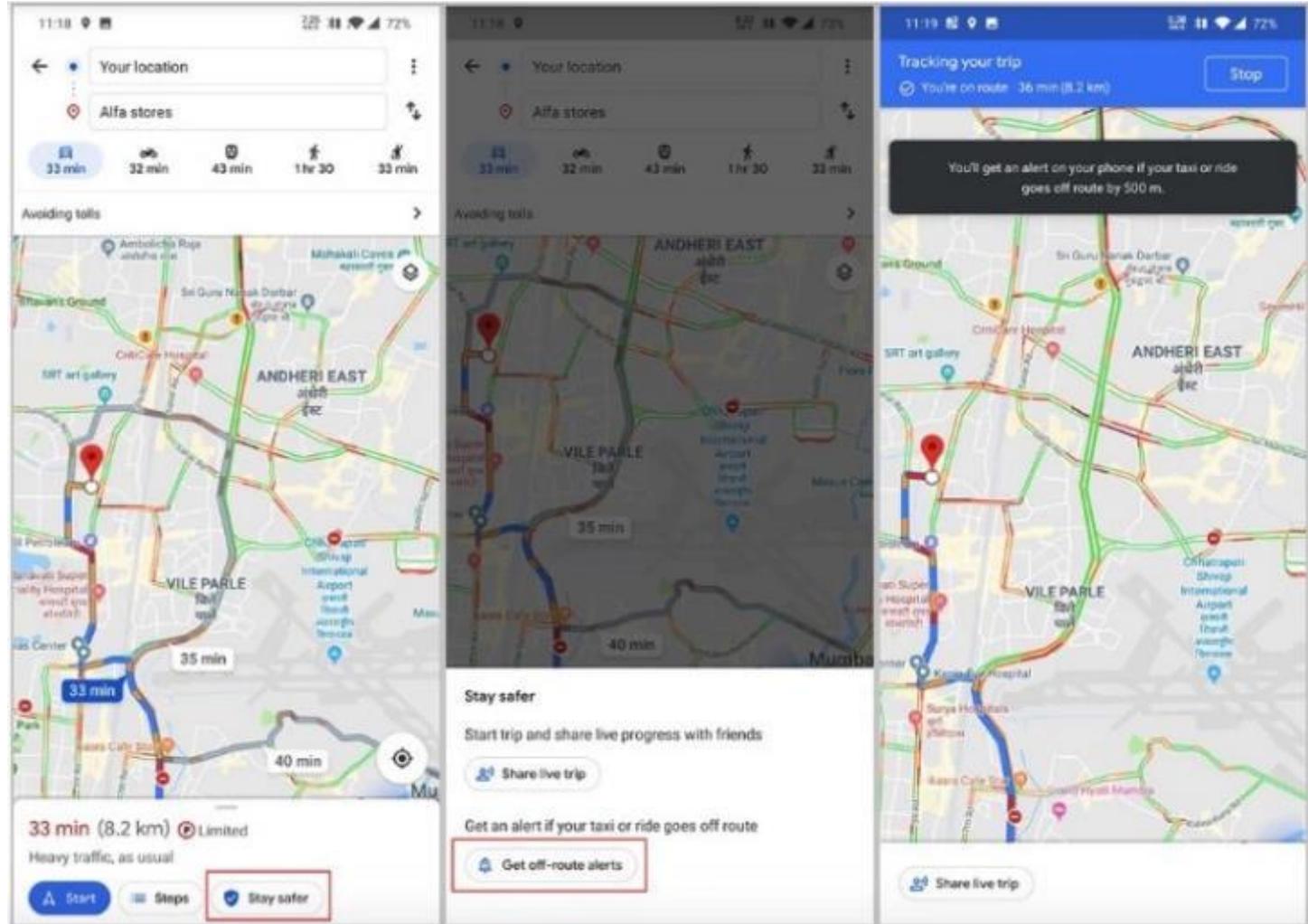
Your timeline in Google Maps helps you curate the places you've been. Look back on the past month and reminisce about recent trips and past places.

[EXPLORE YOUR TIMELINE](#)



Time Line

Google Maps will tell you if your taxi driver is veering off course to rack up a higher fare (Not yet available in North America)

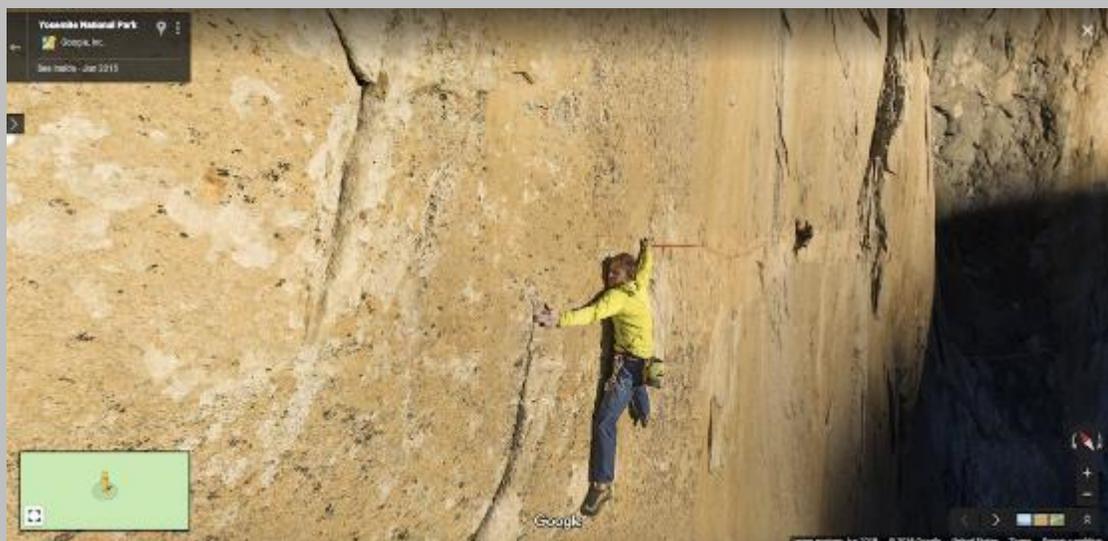




Google Maps adds  
over 45,000 Indian  
toilets in 'Loo Review'

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# Mapping stories with a new Street View Trekker



On the left, the previous version of the Trekker. Right: the new Trekker.

# Questions?

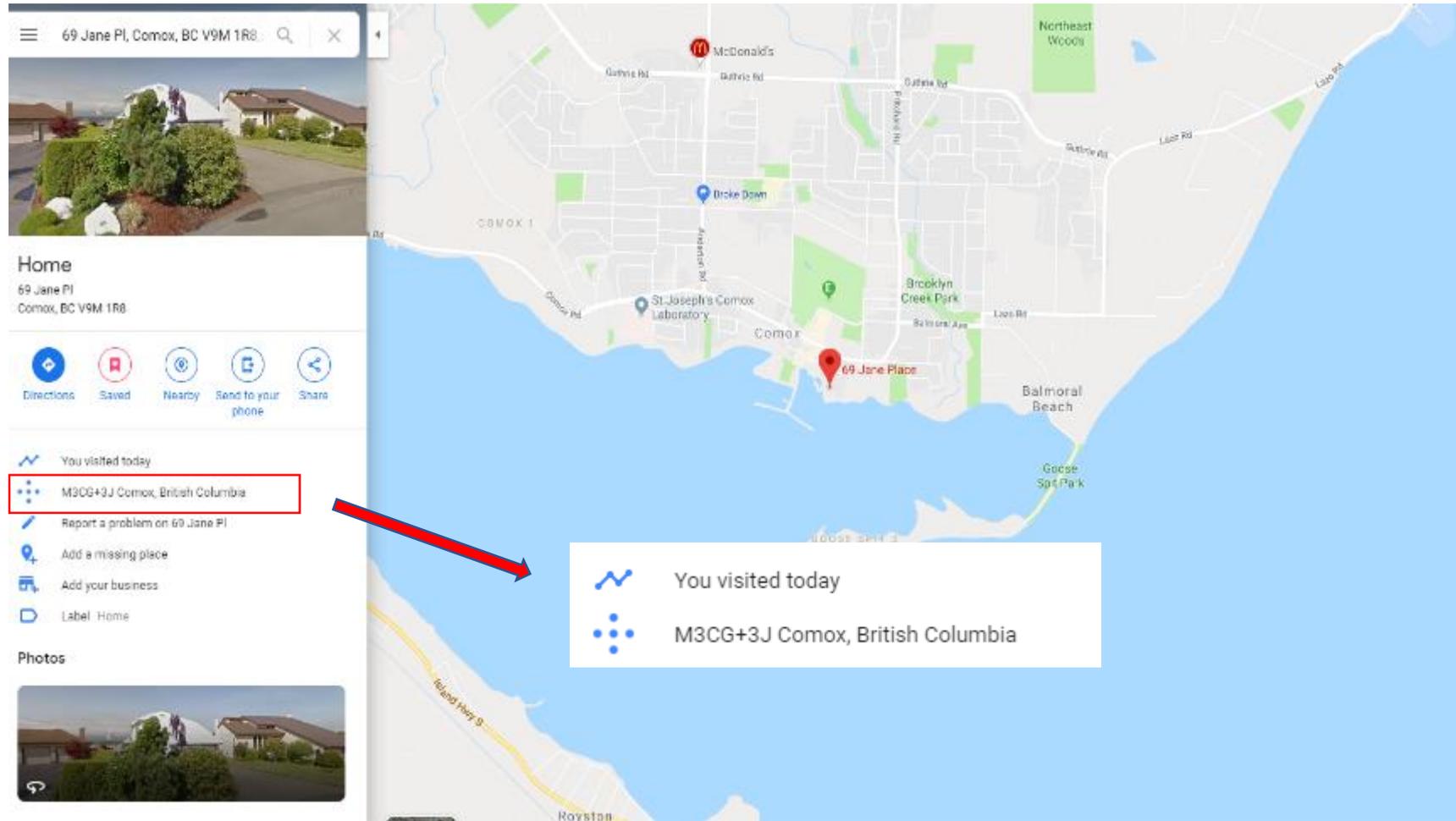
Driving with Google Maps  
SilvercomCTC

69janepace@gmail.com



An International  
Association of Technology  
& Computer User Groups

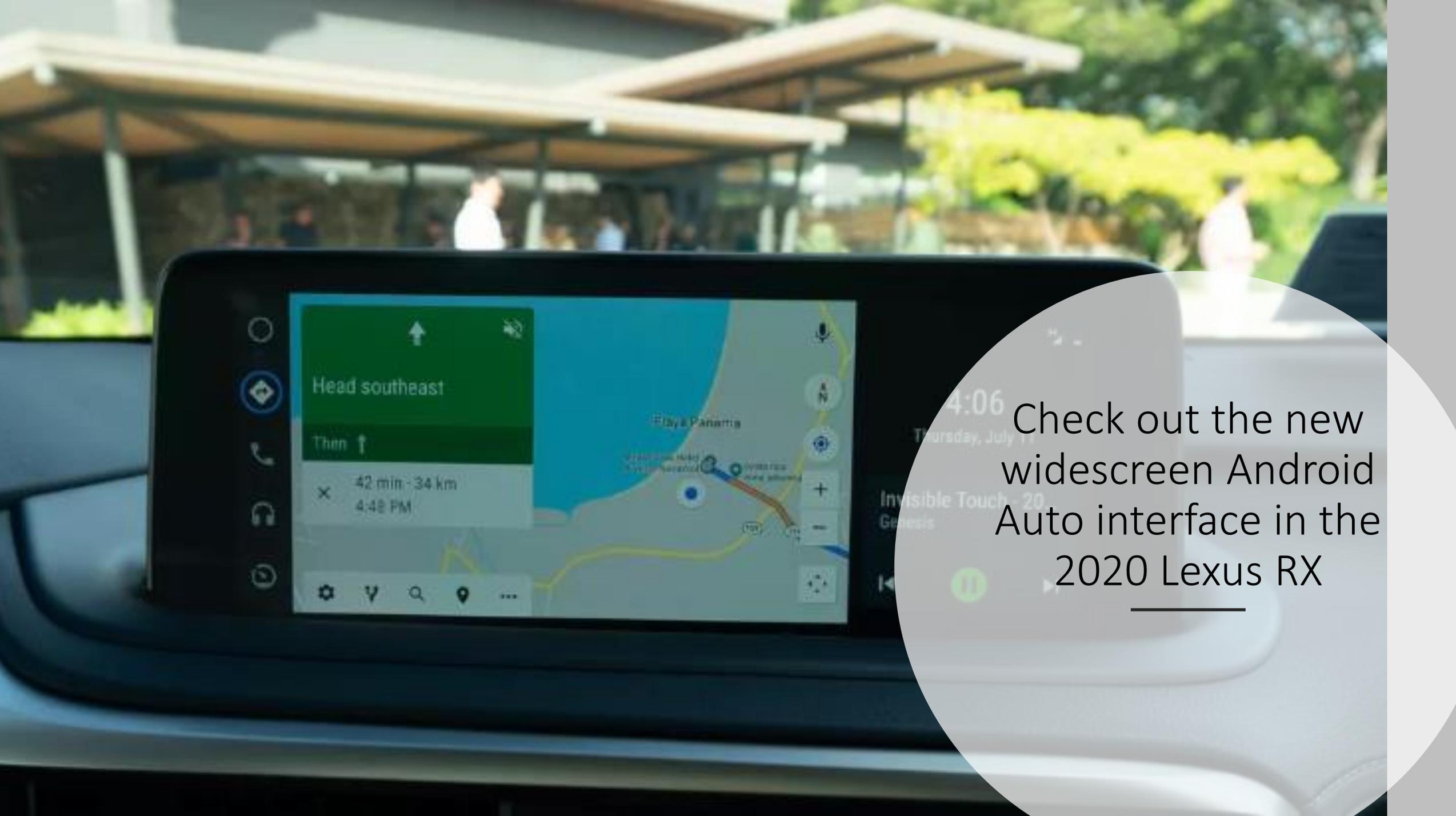
# What are Plus Codes



<https://plus.codes/individuals>



Hands-on  
with Google  
Assistant  
Driving mode,  
Linked to  
Calendar-  
suggestion on



Check out the new  
widescreen Android  
Auto interface in the  
2020 Lexus RX

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A photograph of a BMW car's interior dashboard. The central infotainment screen displays the Apple CarPlay interface with icons for Phone, Music, Maps, and Messages. Below the screen are air vents and a control panel with various buttons and knobs. The text "BMW Wants You to Pay an Annual Fee to Access Apple CarPlay" is overlaid in white on the image.

# BMW Wants You to Pay an Annual Fee to Access Apple CarPlay