

# Driverless in SF

What can we learn from driverless robotaxis such as Cruise and Waymo?

Intertraffic Amsterdam 16 April 2024

Tom Alkim – Strategic Advisor
Connected & Automated Mobility





# Demo '98 – Rijnwoude, Netherlands





## July 2023 - San Francisco, United States





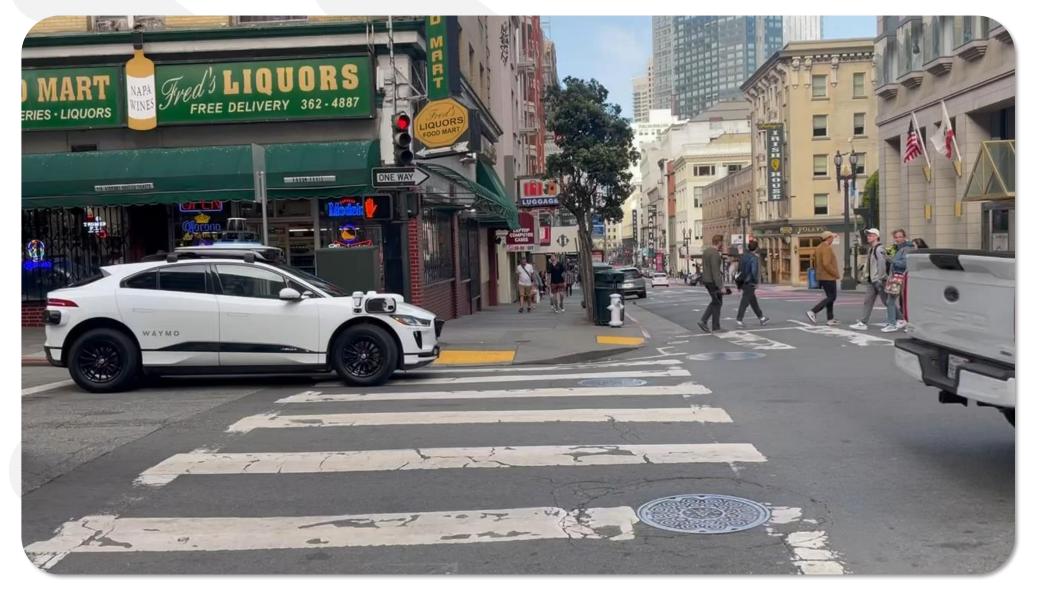




# Waymo visit 2023 - San Francisco, United States











## **Opportunity to ride with Cruise and Waymo**



Events in San Francisco, summer 2023

- ITFVHA <a href="https://itfvha.maptm.nl/">https://itfvha.maptm.nl/</a>
- ARTS23 <a href="https://trb.secure-platform.com/a/page/automatedroadtransportationsymposium">https://trb.secure-platform.com/a/page/automatedroadtransportationsymposium</a>

Many European experts who attended these events also had the opportunity to ride with Cruise

and Waymo. We asked them about their experiences, 20 responses





Self driving experiences, SF 2023

Friday, November 17, 2023

/3



## **Questions** asked



 How many rides with self driving vehicles did you take during your visit to SF and with which vehicles?

### 4,3 rides per expert

 Was this first time you had such a ride? (not counting demos with prototypes and safety drivers under controlled conditions)

Yes 16 / No 4 (80%)

- What was your experience? Can you give some positives and negatives?
- Has it changed your perspective on automated vehicles and the work you do?
   Yes 18 / No 2 (90%)

Self driving experiences, SF 2023

Can you share some pictures and/or videos of your rides?



Friday, November 17, 2023





#### Find answers

Search

**⊠** CONTACT

Q

**About R&I Projects Thematic Areas Regulations and Policies Strategies and Action** Plans Standards **Guidelines** and **Evaluation** Methodologies **Data Sharing** Glossary News **Events EUCAD CAD VIP Blog** 

FAQ

Home

### **CAD VIP Blog**



#### How sustainable is Connected, Cooperative and Automated Mobility?

Connected, cooperative and automated mobility (CCAM) sets the stage for a transformative shift in mobility paradigms, extending its impact from technological realms to social aspects and the practicalities of large-scale deployment. Priorities are usually set around safety, user acceptance and inclusiveness. However, sustainability implications are of increasing relevance also in the transport sector, making it [...]

Learn More →



### Seeing is believing: Riding with Cruise and Waymo in San Francisco

This summer, many European CCAM experts, including some FAME representatives, attended two events in San Francisco; the annual Automated Road Transportation Symposium (ARTS) 1 and the International Task Force on Vehicle Highway Automation (ITFVHA)2. This proved to be a great opportunity to catch rides with Cruise and Waymo, which now both have commercial deployments of level [...]

Learn More →



A new form of collaboration on automated mobility in Austria



Advancements in ITS and the Path to CCAM: challenges and opportunities





### **Positive**

## and negative experiences

- Smooth driving
- >> Feels safe
- Assertive
- Stops for pedestrians
- Sticks to the rules

- Sticks to the rules...
- Mobbed / attacked
- Pick up & drop off issues
- >> Illogical routes
- Bricking
- Interaction with first responders







### How to solve these negative experiences?

- Necessity of remote monitoring and remote support
- Connectivity is key to Facilitate and/or enhance automated driving
- >> Future traffic management for AVs
- use externally sourced information to close / overcome ODD gaps or deal with them (ToCs)
- >> Managing the curb is essential, PUDO locations, dynamic use
- Plans to create mobility hubs where AVs can strategically wait / charge
- Multistakeholder and multidisciplinary challenge(s), cooperation is key



Thank you for your attention

Let's discuss!

WAYMO

Tom Alkim – Strategic Advisor Connected & Automated Mobility Tom.alkim@maptm.nl