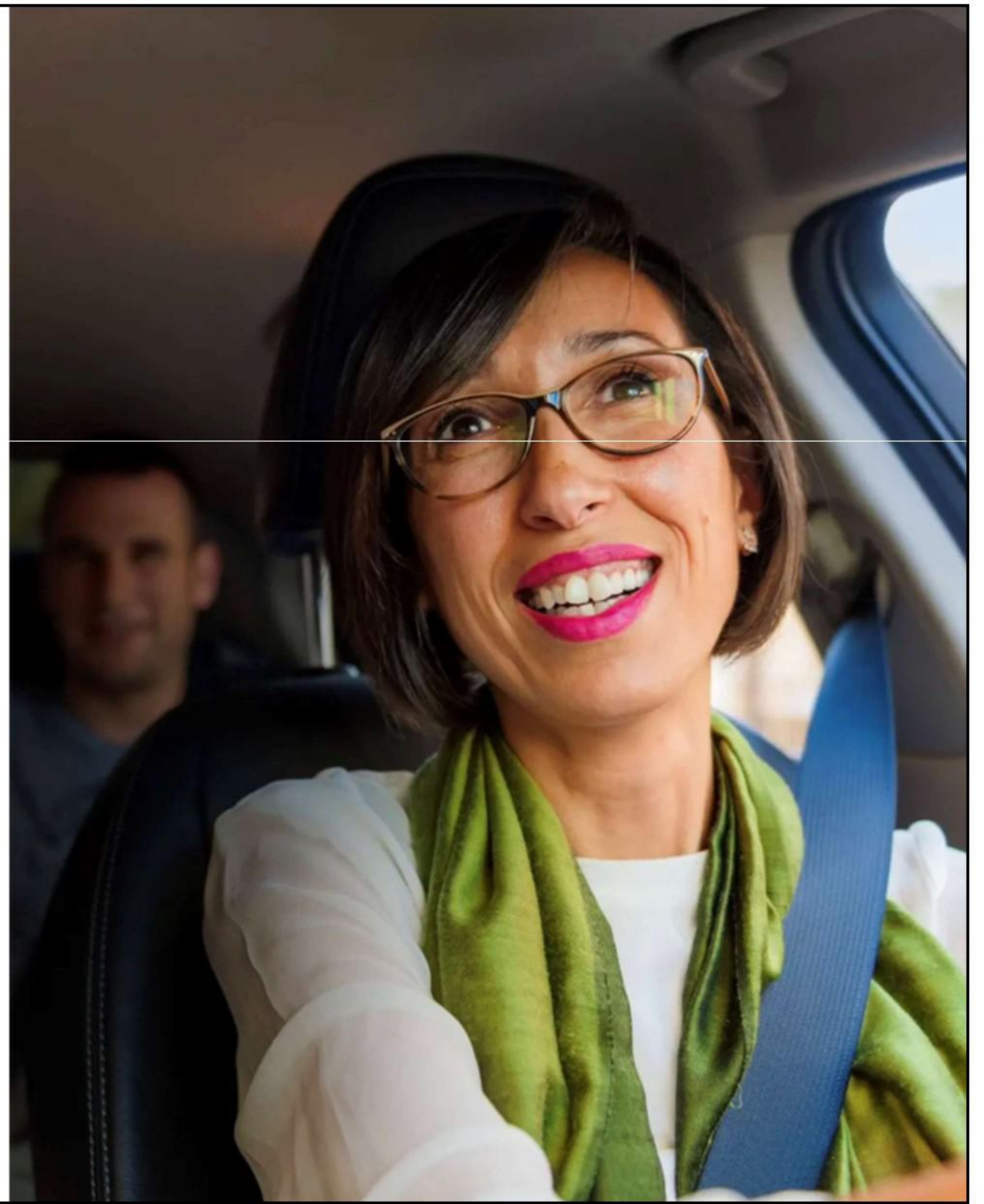


# Recording Update



*Attorney-Client Privilege*

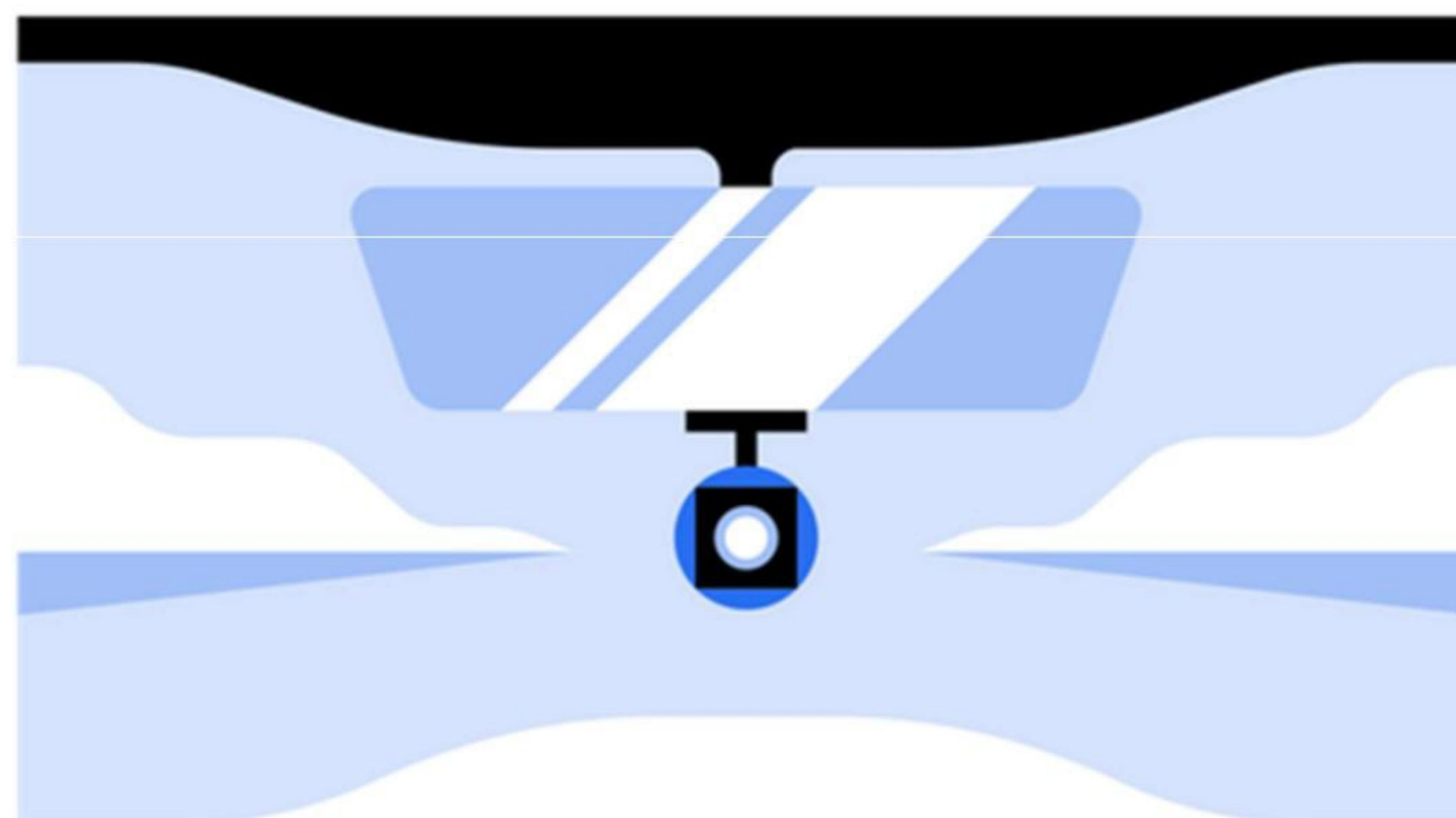
January 2023  
Monthly Tech Day

Trial Exhibit No.  
**P-01321**

# Agenda

Level set on Recording. Why we're doing it, what we've accomplished, and what challenges we still have ahead.

Quick update on our three recording products and what we're planning for 2023.



## Why recording?

IPC Reduction	Reduced Insurance Cost	Mapping Data
Crash Reduction	Increased Safety Sentiment	Teens (eg., live streaming)
Incident Ground Truth	User Trust	Live Support

We see a future where we can solve for all of these

## NARRATIVE

- We've had the belief for a long time that recording trips can be helpful in many ways:
  - Can reduce interpersonal conflict
  - Reduce auto crashes
  - Provide ground truth during safety investigations
  - Reduce insurance cost
  - Increase safety sentiment and user trust amongst our users
  - We can get valuable mapping data
  - We can incorporate as key features in products like Teens and Live Support
- We see a future where we can solve for all of these.

But achieving a world where every Uber ride is recorded requires tackling many hurdles along the way



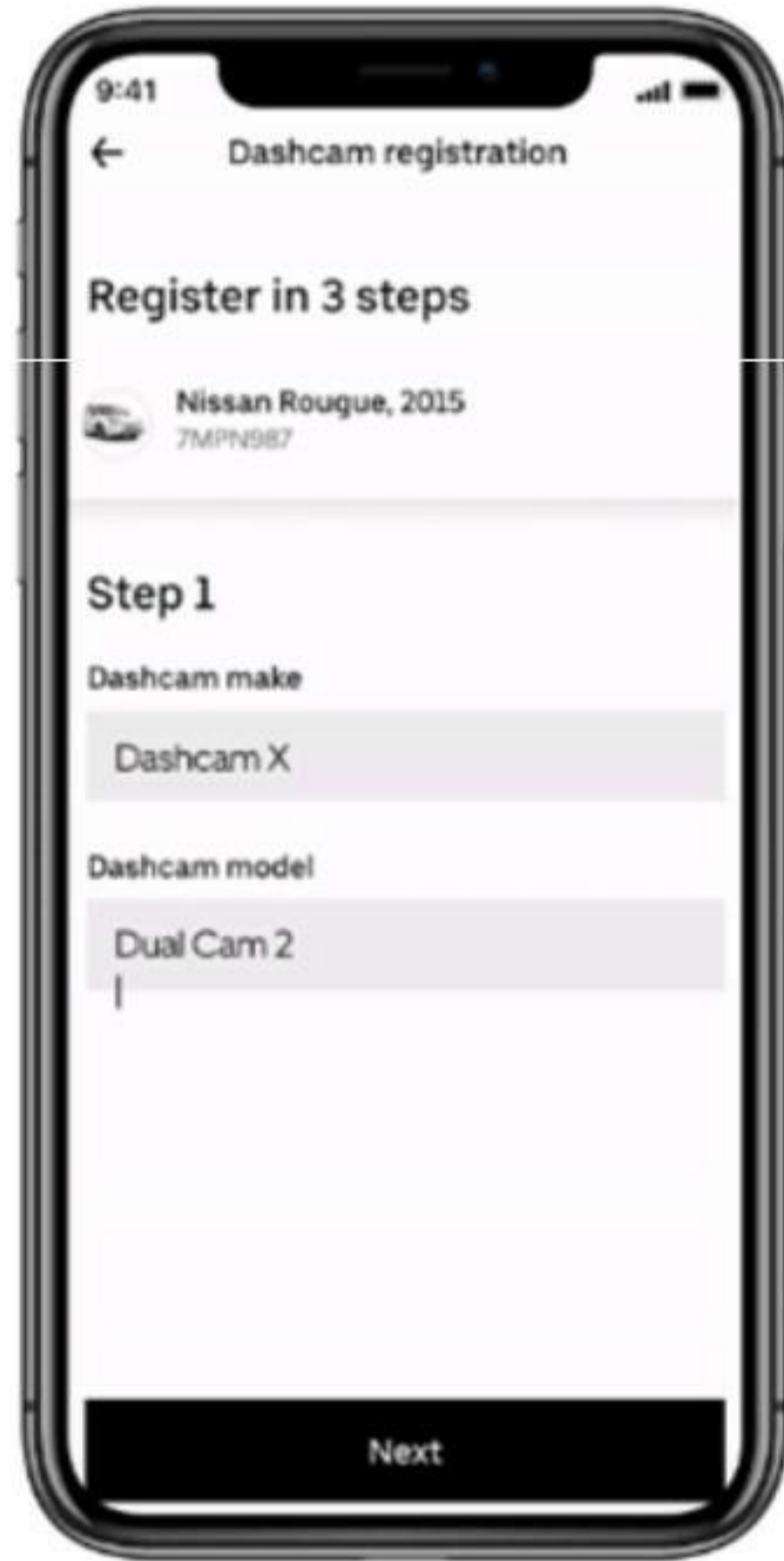
## NARRATIVE

- And in order to get to that future, we have to accomplish a series of milestones
- We first need to make sure our recording products are being adopted (whether it's drivers purchasing dashcams or opting into in-app recording)
- In the case of dashcams, we have to make sure they not just purchase but install (this is a challenge we've seen with VIP)
- We need to ensure usage
- And make sure footage can be uploaded and shared with Uber successfully
- We need to prove out Safety Impact (reduction in IPCs), Crash reduction, and insurance benefit.
- We'll need to solve for all-party consent and other privacy blockers
- Identify and build expanded use cases like Teens
- And then scale globally

We have a lot of work ahead of us.

We've made a few bets in this space, recognizing that a one-size-fits-all solution does not exist

Hardware



Bring Your Own Dashcam

US, Canada, & LatAm

71% global coverage



Join the Nexar pilot to test a dash cam

For only \$5 a month, you'll have access to this new program that helps keep you and your riders safe

Learn more

Hi [Name],

You're invited to participate in a dash cam pilot program from Nexar and Uber.

If you choose to participate, you'll receive the Nexar Pro (a dual-camera dash cam that records both inside and outside your vehicle) and one year's coverage\* for only \$5 a month for 12 months.\*\* The program includes:

- Nexar dash cam**  
The Nexar Pro is equipped with high-quality HD video, interior night vision, and unlimited cloud backup to help you drive with more peace of mind. Simply install it in just 5 minutes to start streaming videos directly to your phone.
- Seamless integration**  
The Nexar dash cam connects to your driver account and makes it easy for you to report trip issues and share videos with Uber Support. Our Support team can only watch or listen to your dash cam recordings if you choose to share them.\*\*\*

Learn more

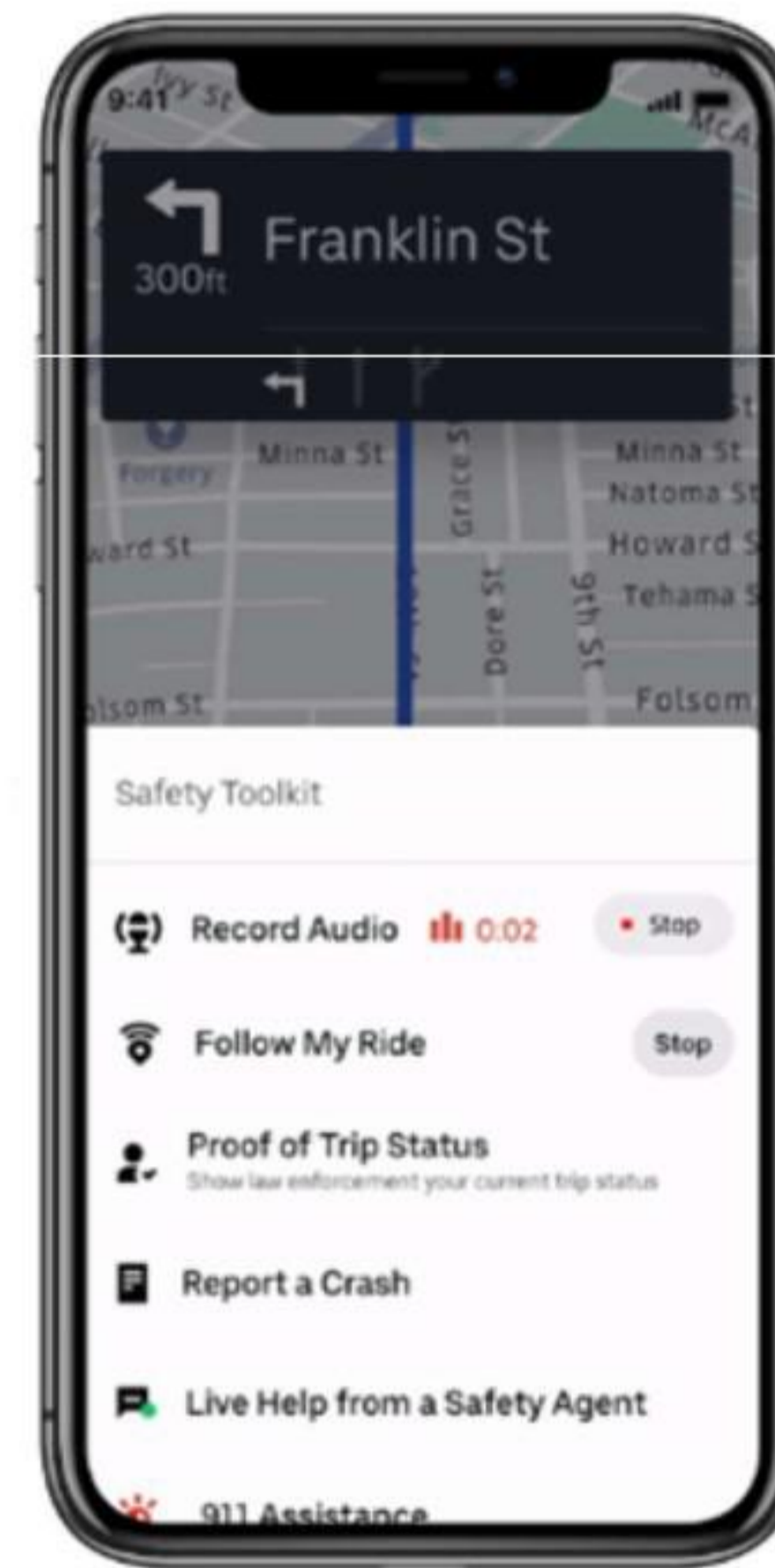
Already have a dash cam? Register it with Uber 2025.

Vendor Integration (VIP)

US & Mexico

Pilot with 14k cameras

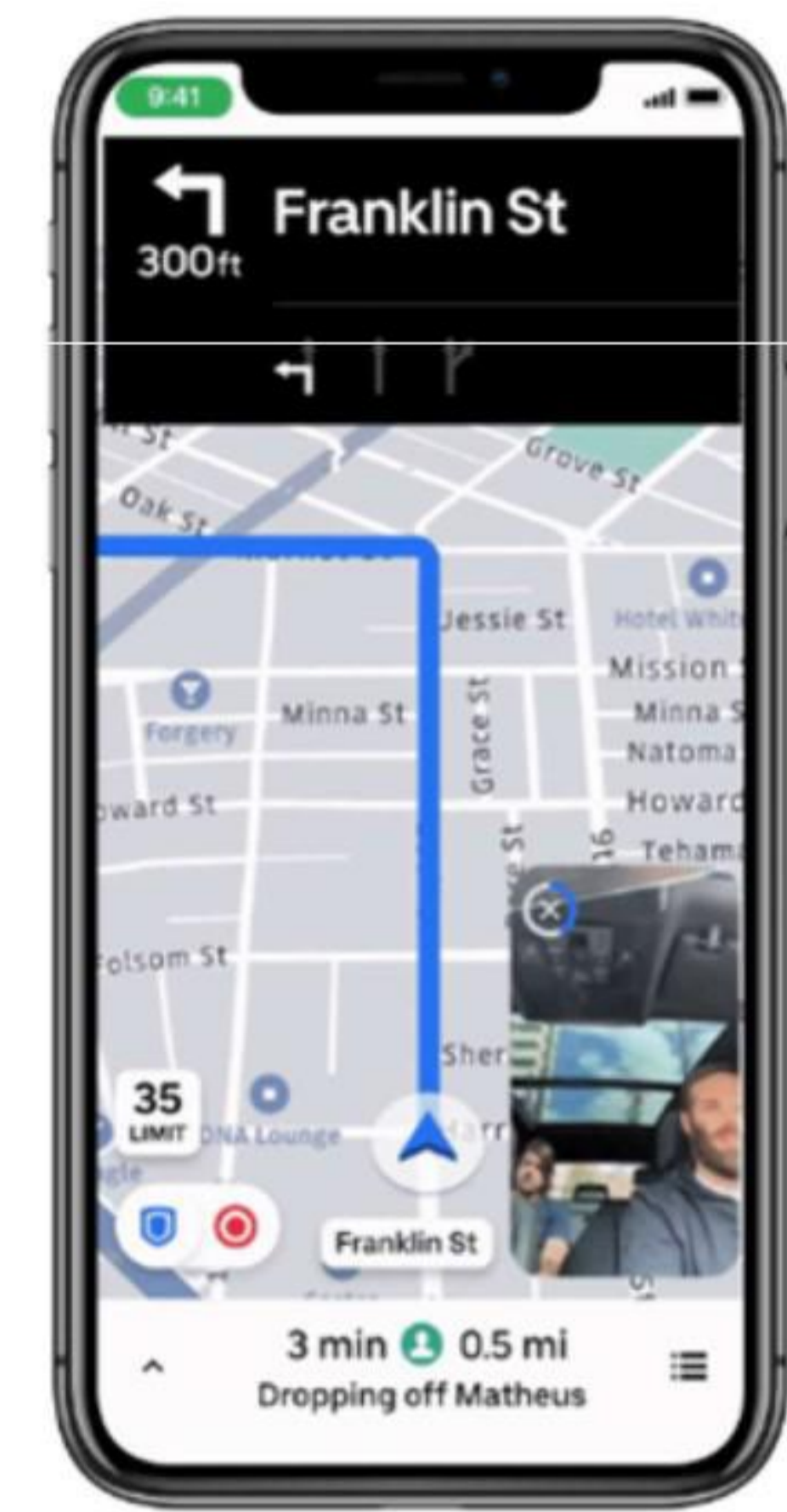
In-App



In-App Audio Recording

LatAm, India, Pakistan, S. Africa

55% global coverage



In-App Video Recording

Pilot in US, Mexico & Brazil

116 drivers

NARRATIVE

- We have invested both in hardware and software recording and made progress across four different products.

We've overcome several hurdles with each product, but there's more work to be done

	CURRENT STATE		
	BYOD	Vendor Integration	In-App Video Recording
Adoption / Opt in	Green	Yellow	Too early
Upload & Share Video	Green	Green	Green
Prove Safety Impact	Green	Green	Too early
Prove Crash Reduction	Red	Yellow	Red
Prove Insurance Benefit	Red	Red	Red
Solve Global Privacy Blockers	Yellow	Yellow	Red
Expand Use Cases	Red	Yellow	Yellow
Scale Globally	Yellow	Red	Too early

## NARRATIVE

- In slide 4 you saw the identified hurdles to scaling
- And have been hard at work addressing as many milestones as possible with each product.
- You can see a lot of green for things we have accomplished so far, but you can see that we still have hurdles to overcome.
- Provide few examples [VS walking through each row]
  - Installation and usage has been a challenge -- not everyone who pays for a dashcam has installed it
  - We have privacy blockers like GDPR in EU
- We can do more to make some of these red boxes yellow and yellow boxes green with improvements we make over time

Once we've tackled these challenges in a future state, we expect to offer our three recording solutions for different purposes

	FUTURE STATE		
	BYOD	Vendor Integration	In-App Video Recording
Adoption / Opt in	Green	Yellow	Green
Upload & Share Video	Green	Green	Green
Prove Safety Impact	Green	Green	Green
Prove Crash Reduction	Red	Green	Red
Prove Insurance Benefit	Yellow	Green	Red
Solve Global Privacy Blockers	Green	Green	Green
Expand Use Cases	Red	Green	Green
Scale Globally	Green	Red	Green

## NARRATIVE

- Once we tackle as many of these challenges in a future state, we envision a world where we need all three products. Each solves for different use cases and needs and preferences of our users.
- **> IAVR will be the default state** > any driver can opt in, and we can easily scale globally, once we optimize for local recording laws around the world. But it will be difficult for IAVR to contribute to any crash reduction or prove insurance benefit due to the fact that we are only recording internally and video is lower quality.
- **> BYOD will be for any driver who wants to install a dashcam.** It scales globally and allows us to get a higher quality video output than IAVR, but it's unlikely drivers will be purchasing high-end dashcams with ADAS / driving alerts on their own so proving crash reduction and insurance benefit will be trickier. Expanding use cases will be hard as we know if a driver has registered a camera but can't confirm if it's on

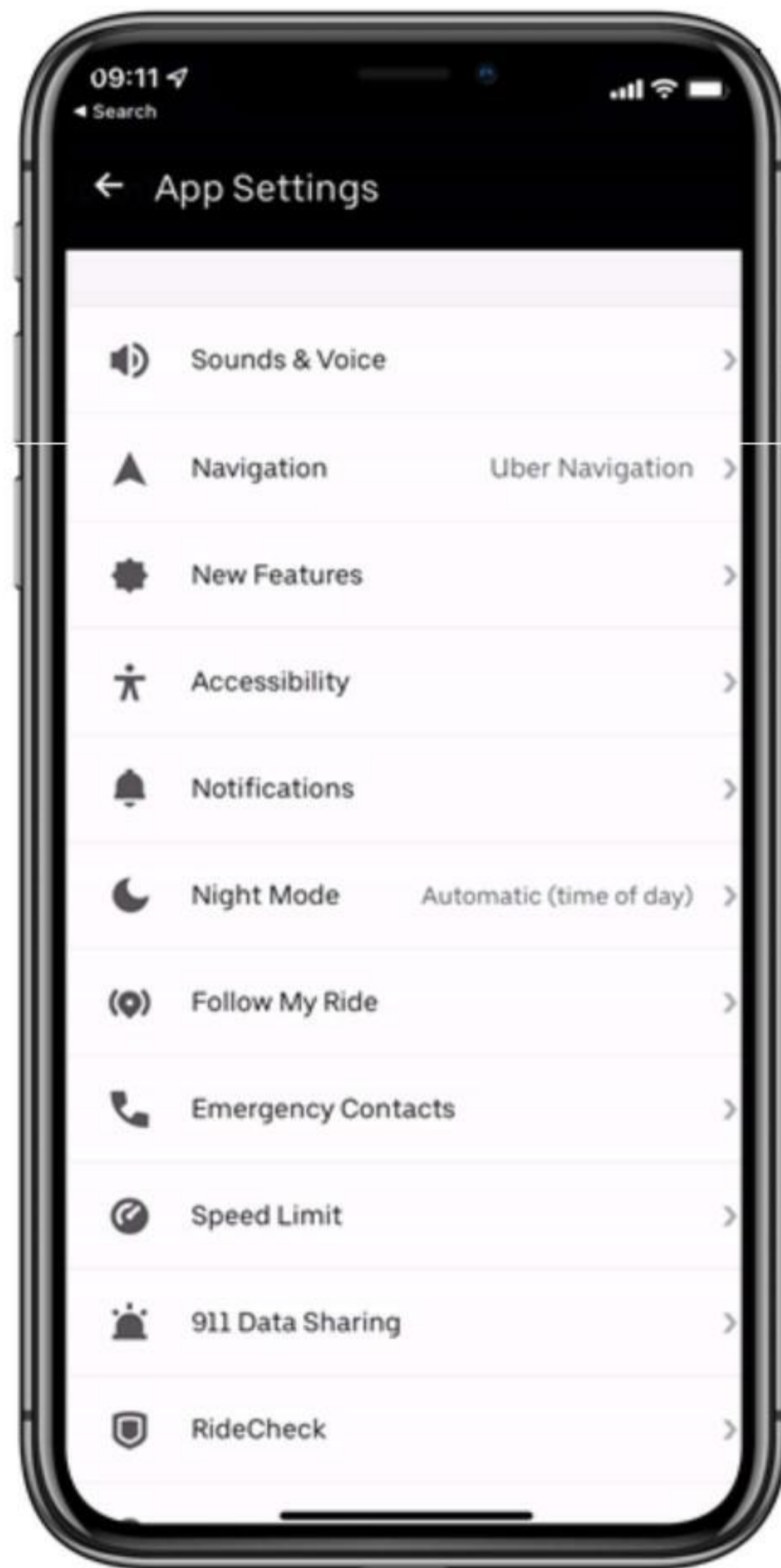
and recording.

- **> VIP will always have the challenge of scale and tech-savvy drivers to install and upload video**, and we don't expect this to be widely adopted, but this is our opportunity to actually have an impact on insurance, and capitalize on the connected cars w/ cameras of the future.

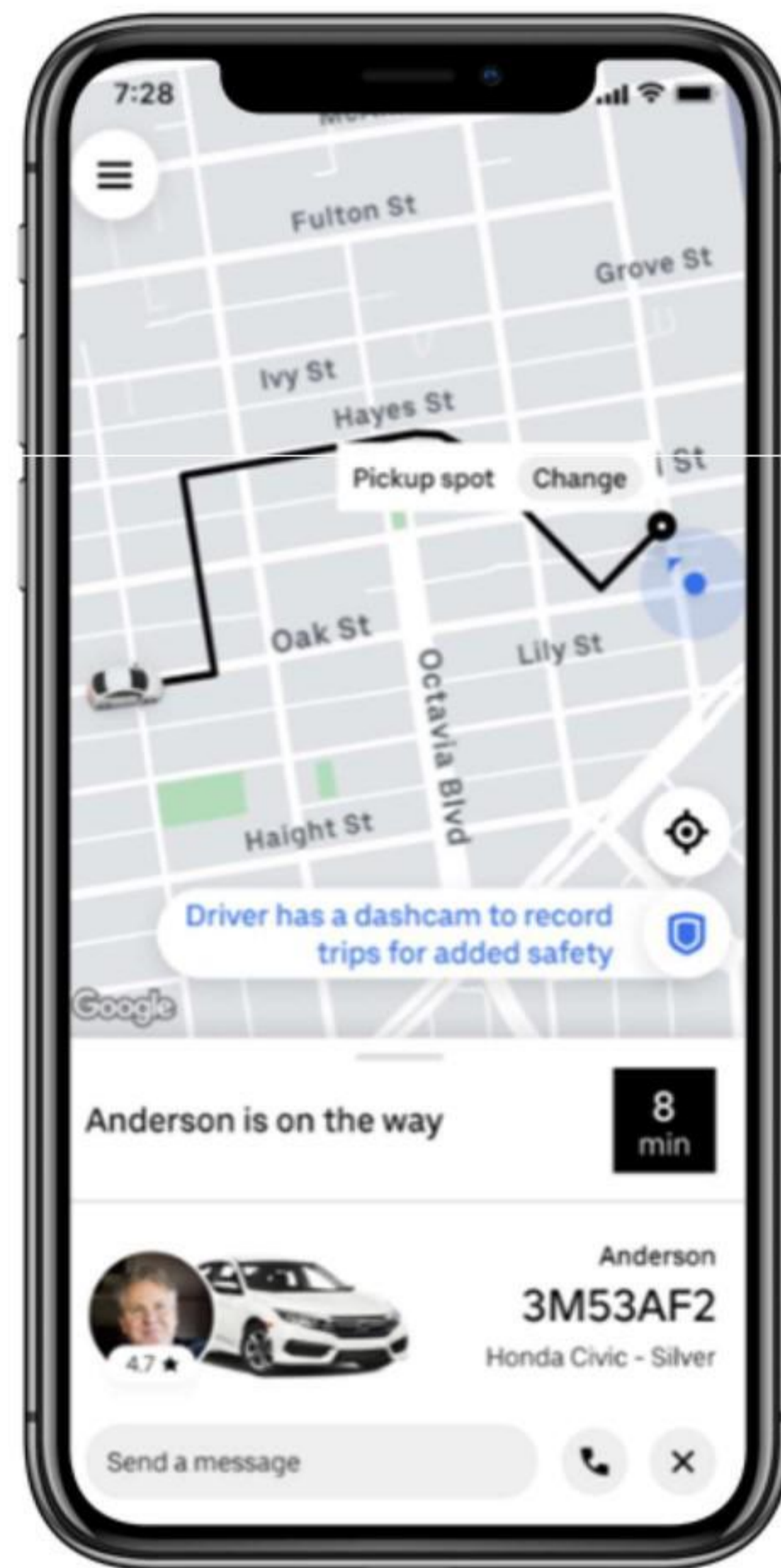
# Bring Your Own Dashcam

# Bring Your Own Dashcam

Stage: Global Rollout  
Trip Coverage: 71%



Dashcam registration



Rider notification

- Driver registers own dashcam with Uber.
- Uber notifies riders that their trip will be recorded.
- Driver can send footage to Uber Support in the case of a safety incident.

# BYOD Scorecard

Stage: Global Rollout  
Trip Coverage: 71%

**TL;DR** A mature product with proven safety impact - but will always be limited by the # of drivers who want (and have the ability) to purchase a dashcam as well as our ability to build experiences around a non-connected device.

Wins	Learnings	Challenges
<ul style="list-style-type: none"><li>• 144k active drivers on BYOD</li><li>• 4.4% of trips recorded with BYOD (8% US)</li><li>• -5.7% Verbal IPC and -16.8% Physical IPC <b>directional reduction in safety incident rate*</b></li></ul>	<ul style="list-style-type: none"><li>• <b>Registration rate highest in US&amp;C</b> (9-11% of active drivers), lower in LatAm (2-5%) given dashcam adoption</li></ul>	<ul style="list-style-type: none"><li>• Drivers must purchase &amp; install their own dashcam</li><li>• <b>Unable to verify or connect to camera</b> to build deeper experiences that depend on this (e.g., streaming)</li><li>• 2023 goal: <b>87% rollout coverage</b> (measured by global trips). Getting there will require fleet model. Getting beyond will require working through privacy blockers.</li></ul>

\*Observational study, not A/B test. [See slide here.](#)

# of active drivers currently signed up with BYOD (defined as taken a trip in the L56 days]

- Global -- ~144k
- US -- 64,000
- Japan -- 600
- LATAM PSL -- 60,000
- Can -- 9,600
- LATAM SSL -- 6,400

% Trips recorded with BYOD breakdown (based on latest monthly data Dec 2022):

- US - 8.8%
- BR - 6.1%
- MX - 1.8%

~100 videos a month. 30-40% are deemed safety related by CommOps

# Vendor Integration Pilots

## VIP

- Test complete
- We found out it was complicated tech wise
- We did VIP was that the feedback that we got was that a big hurdle was cost, the only way the legal team was going to get comfortable with us buying these for drivers was drivers paying for little of this and us subsidizing, and privacy angle. Limiting access to video, they need a way to share it with us that has proven to be very technically complex.

# Vendor Integration Pilots

Stage: Pilots nearing completion



\$129

Dual-camera, WiFi/Bluetooth connected



\$112 + \$5/mo Service Fee

Dual-camera (separate units), WiFi connected



\$150 + \$12/mo Service Fee

Dual-camera, **LTE connected**

- Discounted dashcams for drivers (\$5/month)
- API integration with vendors
- Pilot goal: determine if investment in dashcams can be ROI positive for Uber

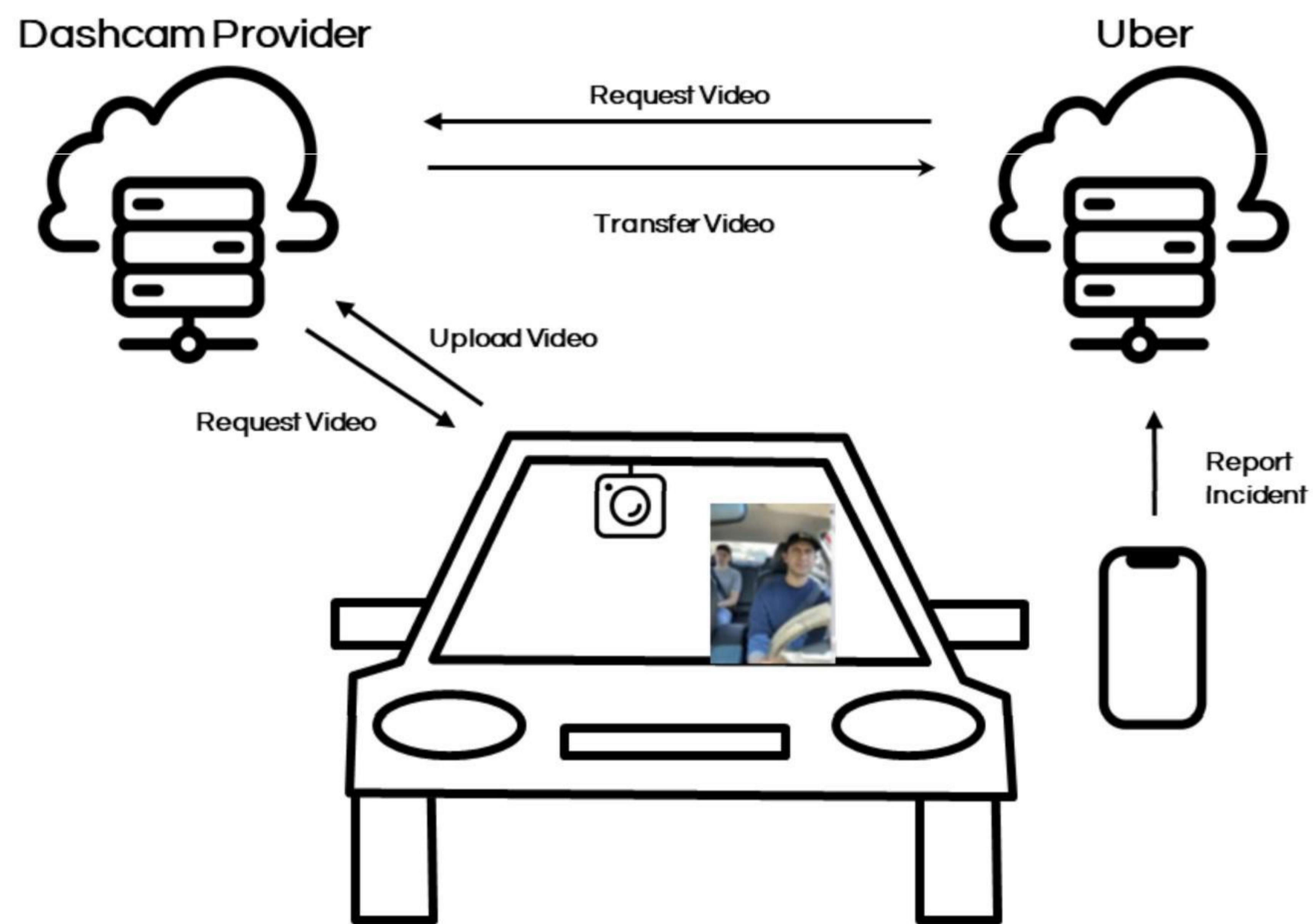
Added this, as I think it's an important transition from BYOD... since the limitation of that will be drivers purchasing their own dashcam, this pilot was aimed at seeing whether we could financially support drivers in purchasing, in a way that is ROI positive for Uber.

**Nextbase** : \$69.99/device [UBER PAYS] + \$60 [DRIVER PAYS] = **\$129 / device**

**Nexar**: \$52.50 / device [UBER PAYS] + \$5/mo / device program management fee [UBER PAYS] + \$60 [DRIVER PAYS] = **\$112 + \$5/mo management fee**

**CMT**: **\$90** / device [UBER PAYS] + \$12/mo service fee [UBER PAYS] + \$60/device [DRIVER PAYS] = \$150/device + \$12/mo Service Fee

Our API integration with vendors allows drivers to share video with Uber, but without the ability to download footage



# VIP Scorecard

**TL;DR** Successful in proving safety impact and have signal on crash reduction - but subsidized hardware remains a difficult logistical and technical challenge with unproven ROI. We have a more focused path ahead.

Wins	Learnings	Challenges
<ul style="list-style-type: none"><li>• 14.6K dashcams distributed</li><li>• -8% stat sig reduction in overall IPC incident rate*</li></ul>	<ul style="list-style-type: none"><li>• CMT's LTE connected dashcam outperformed the others</li><li>• 6% avg purchase rate</li><li>• 76% of purchasers installed the dashcam</li></ul>	<ul style="list-style-type: none"><li>• Ceiling on drivers willing to install hardware</li><li>• Most drivers unhappy about not having access to footage</li><li>• Dashcams are a sunk cost when drivers churn</li></ul>

\*Observational study, not A/B test. See [slide here](#).

- (1) we tested this
- (2) we learned a lot
- (3) we have more focused path ahead

CMT LTE Camera outperformed the others so if there is going to be forward motion, we will rely on this dashcam/LTE.

This needs to be part of our hardware strategy

## VIP in 2023

- **Narrow hardware pilot to CMT.** Exploring pilot with CMT to focus on both road safety/insurance benefits as well as driver distraction. LTE + driver alerts are key features.
- **Explore bulk discount deals** to get more dashcams to drivers at a lower price but without integration and/or financial contribution from Uber.
- **Removing integration with Nexar & Nextbase,** as LTE connectivity has proven superior.



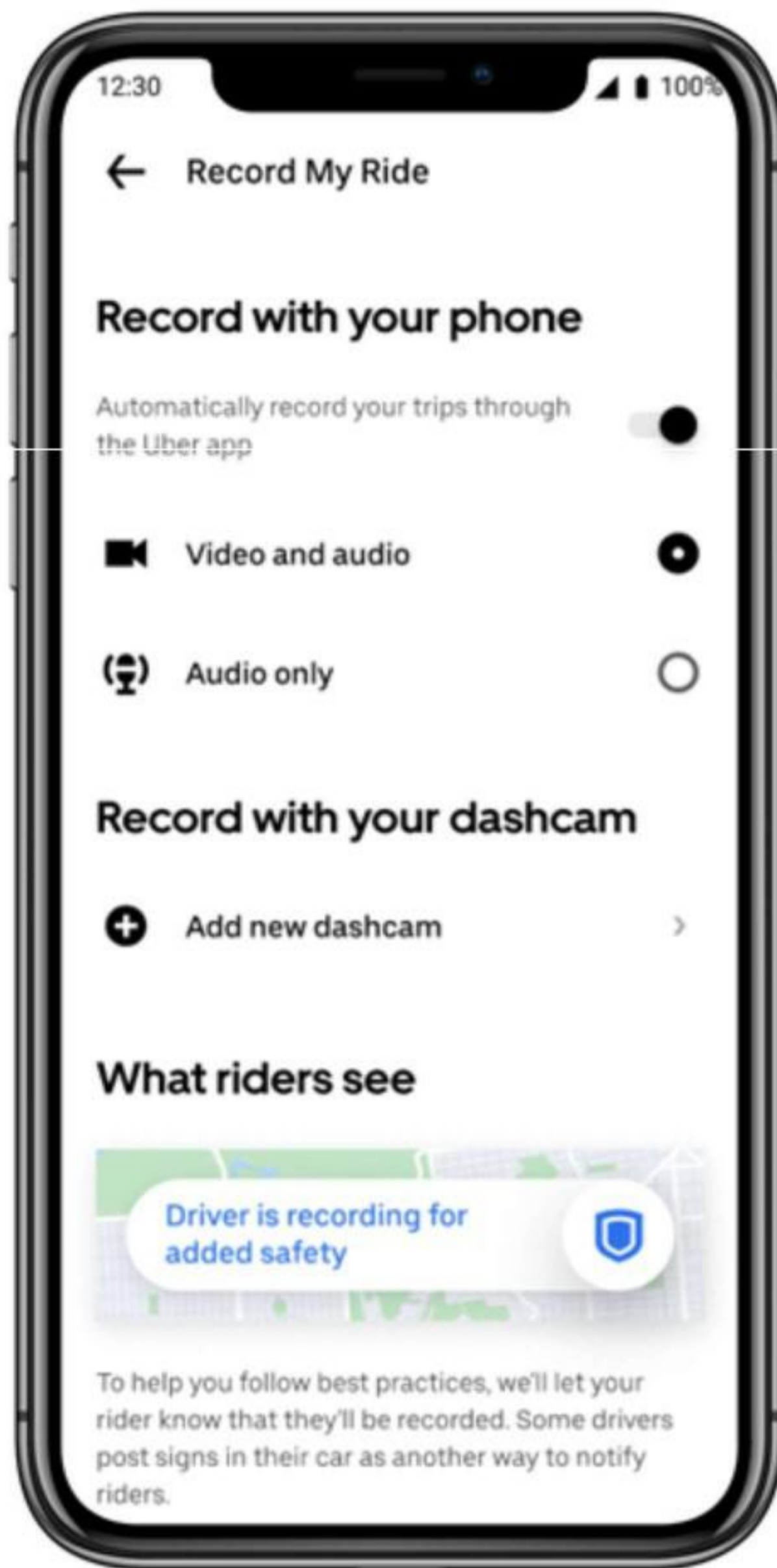
Removing integration so it's a personal dashcam.

# In-App Recording

Audio and Video -- we did audio recording, it gets positive feedback and we can go bigger -- we are doing this by doing video and automatic recording, this is more in pilot face , global rollout status

# In-App Video Recording (Record My Ride)

Stage: Pilot in US, MX, BZ



Record My Ride experience



Invite to pilot

- Launched Audio Recording in 2019. Added video capability in Q4 2022.
- Drivers can automatically record audio & video using phone's selfie camera and mic.
- Recording encrypted on the device and no one can access it. Uber can only access when user shares it.
- We are the only ones doing this.

- Uber notifies riders that their trip will be recorded.

# Record My Ride Scorecard

**TL;DR** Product is working on iOS and seeing high engagement - we're collecting feedback, optimizing the product, working through bugs, and completing Android development.

Wins	Learnings	Challenges
<ul style="list-style-type: none"> <li>• <b>116 drivers</b> with <b>16.3K trips</b> recorded so far</li> <li>• <b>92%</b> drivers surveyed reported feeling more safe with Record my Ride</li> <li>• <b>Minor reports</b> regarding technical issues (e.g., app crashes, overheating)</li> </ul>	<ul style="list-style-type: none"> <li>• Recurring education on phone position, manual deletion, access to footage is necessary</li> <li>• Drivers want a way to check their recording angle</li> </ul>	<ul style="list-style-type: none"> <li>• Technical limitations (battery, storage, temperature)</li> <li>• Recording from both cameras at once + nighttime visibility.</li> <li>• Need to build all-party consent experience in order to expand</li> </ul>
<p><i>"I was able to submit an incident with a passenger all because of Record my Ride"</i></p> <p>- US Pilot driver</p>	<p><i>"A rider commented to me that this feature is great for both rider and driver. Well done."</i></p> <p>- MX Pilot driver</p>	<p><i>"Sometimes there is friction with riders, and [Record My Ride] helps me a lot to avoid and prevent any possible incident or bad attitude."</i></p> <p>- MX Pilot driver</p>

I believe Andi took the onboarding rate, so those who completed the sign-up process. The first recorded trip rate is not far off at 22%.

Latam Ops opted out of participating in the Only On Uber Event and press, given the pilot was iOS only. So the only way drivers found out about Record My Ride was through email and Carbon. There is an opportunity to go louder in LatAm when we launch the Android pilot in March.

Invite to sign up for all three markets is 27% (435 drivers invited --> 116 signed up)  
 Broken down by market:  
 US – 34% (124 invited --> 42 signed up)  
 BZ – 30% (185 invited --> 56 signed up)  
 MX – 14% (126 invited --> 18 signed up)

# Record My Ride Feedback (so far)

## Mexico Roundtable (Jan 19)

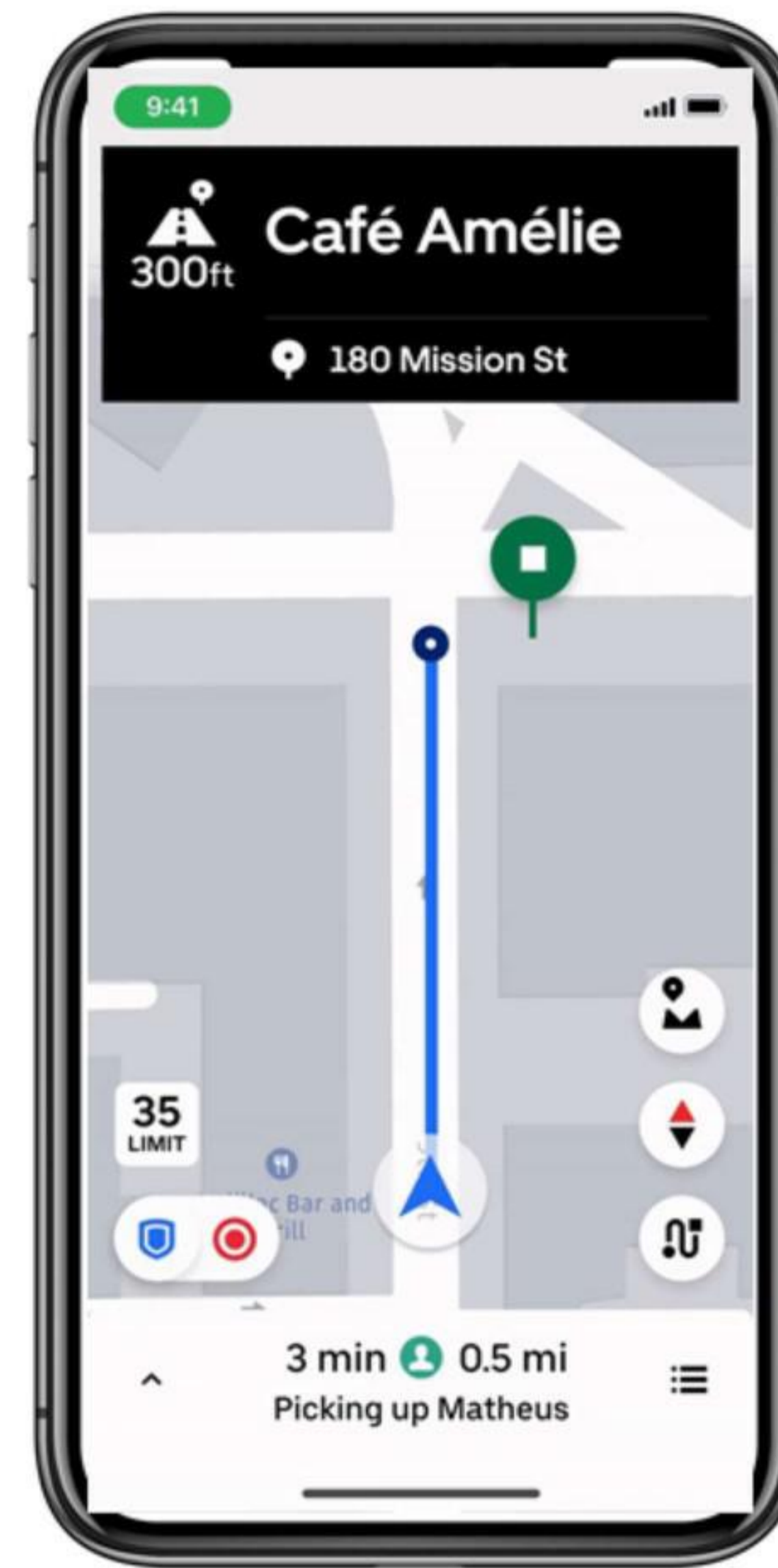
- All drivers agree they signed up for safety reasons.
- One was particularly motivated by the fact that they had a safety incident a month prior.
- General sentiment that they like automatic recording on every trip.
- Onboarding and set up experience "very simple and easy."
- No concerns from their riders so far.
- A few technical issues related to app crashes, battery, and overheating.
- Instructions on how to delete video manually needs to be clearer.

## Brazil Roundtable (Jan 25)

## US Roundtable (Jan 26)

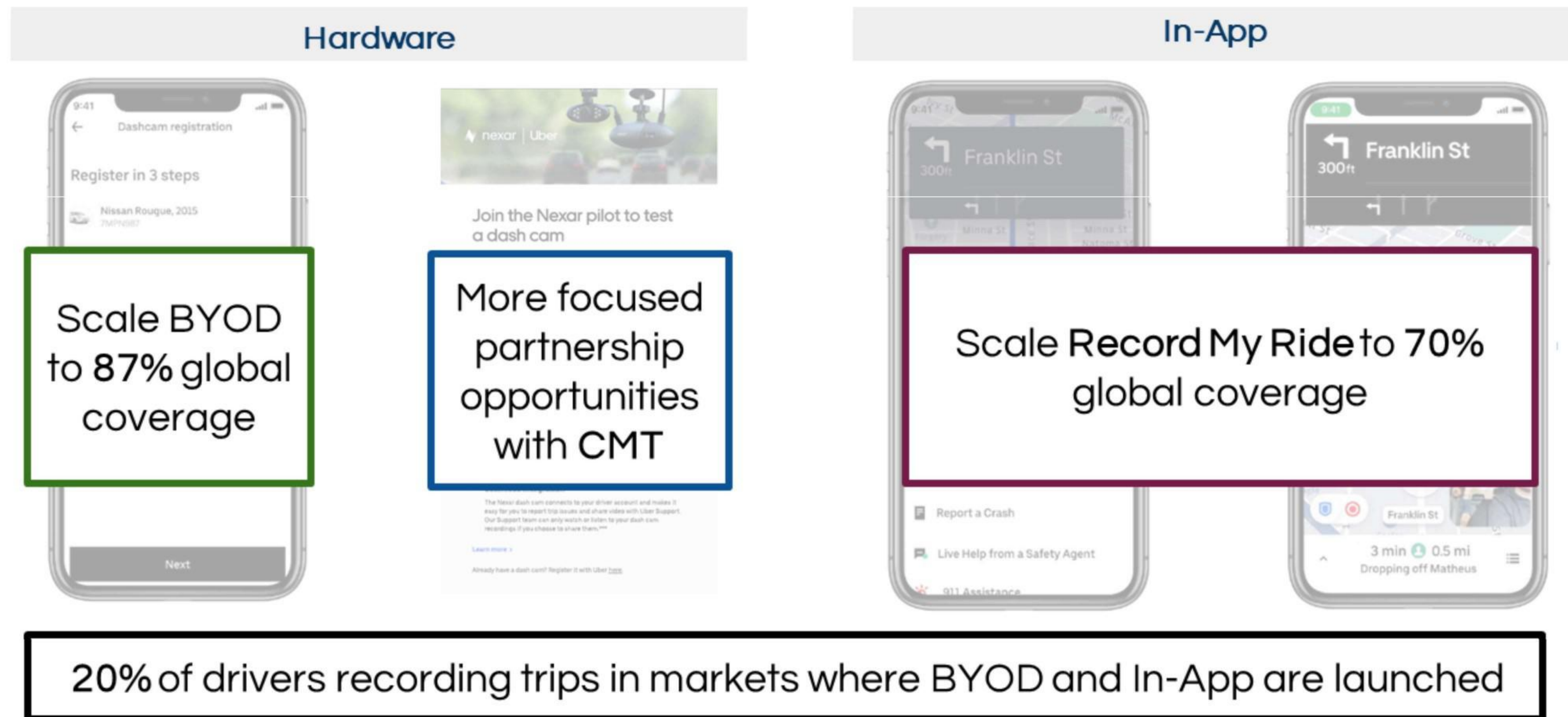
# Record My Ride in H1 2023

- Continue to address high-pri technical issues.
- Continue optimizing product (e.g., launching Picture in Picture feature)
- Hosting rest of roundtables
- Launch Android pilot
- Expand Record my Ride to all 1-party markets



# What's Next for Recording

## Where we want to get to by the end of 2023



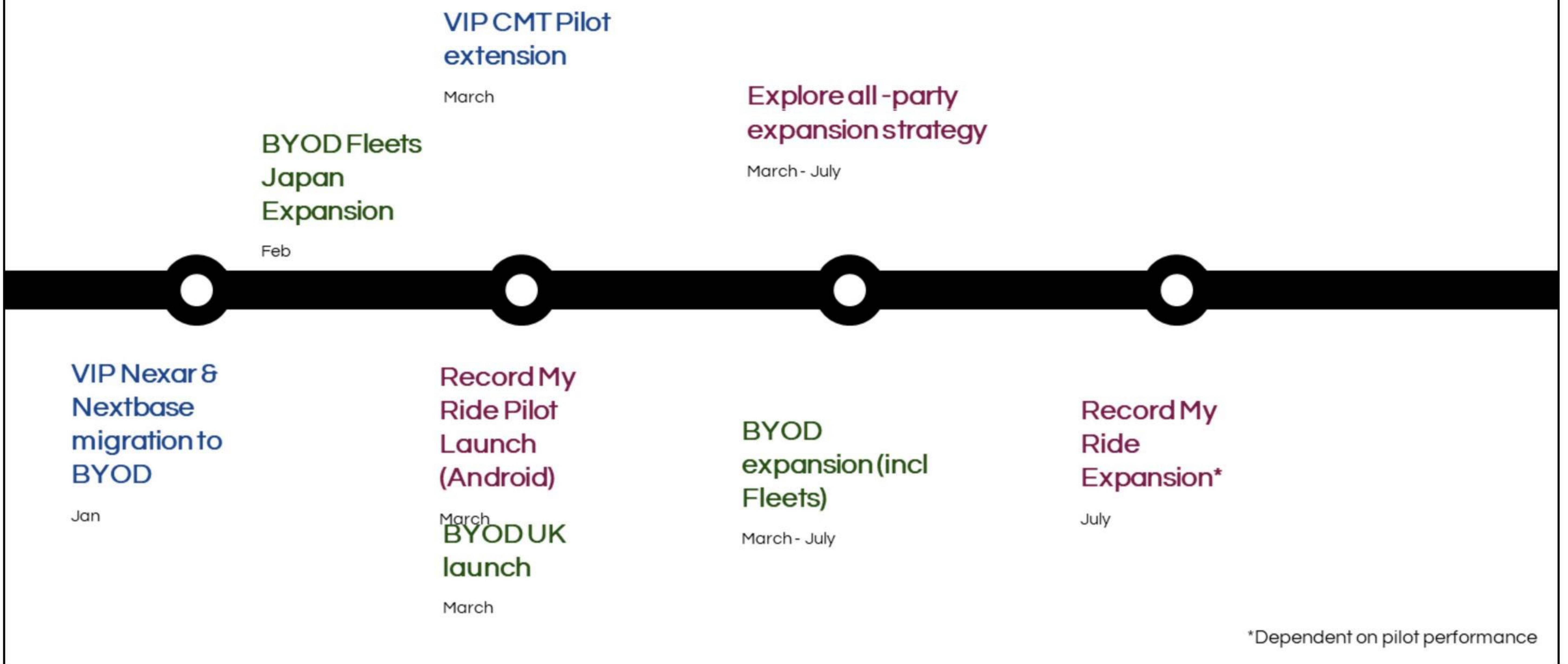
Audio markets we are live in: 55% global coverage + rest of US = 70%

Scale Record My Ride to all markets where Audio Recording is live + all of US (70% global coverage)

5% Goal BYOD rate [currently seeing 2-11% range]

+ 15% Goal RmR rate [currently seeing 26% range amongst engaged drivers] =

# H1 2023

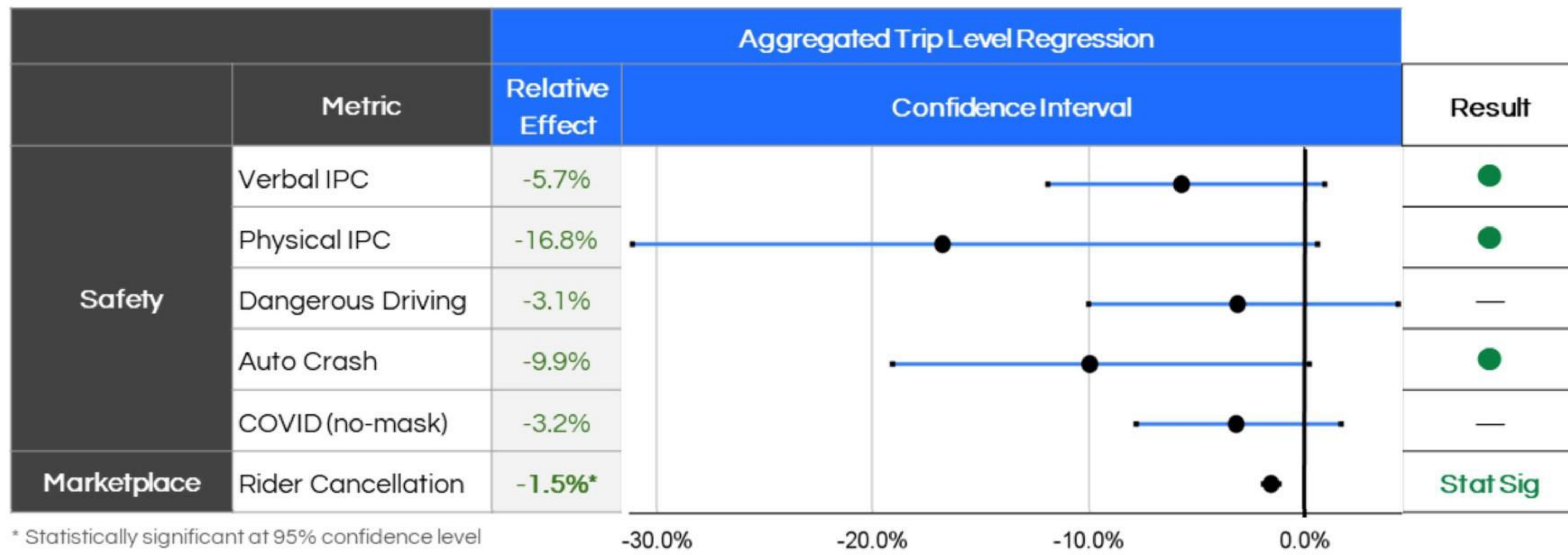


# Appendix

# US BYOD Safety Impact is promising.

BYOD drivers saw a **directional decrease** in Verbal IPC, Physical IPC, and Auto Crash tickets, with no negative signal on the guardrail metric of Rider Cancellations.

Methodology: To reduce self-selection bias, the team conducted regression analysis to account for driver and trip level characteristics. **Caveat: We cannot fully control for self-selection bias in a regression so causality is not guaranteed.**



Driver characteristics controlled for: tenure, ratings, recent trips, safety ticket rate, age, gender  
 Trip level characteristics controlled for: day/night, weekend, surge, density (zip code), weather

### Without Regression: Plain Diff in Diff Effects:

- Verbal IPC: -5.9%
- Physical IPC: -22.2%
- Dangerous Driving: -6.1%
- Auto Crash: -15.3%
- COVID: -3.5%
- Rider Cancellation: -6.2%

### Regression incident counts (Control - Pre | Control - Post | Control - Total Treatment - Pre | Treatment - Post | Treatment - Total):

- Verbal IPC: 21315 | 26967 | 48282  
 1645 | 1953  
 | 3598
- Physical IPC: 2822 | 3866 | 6688  
 216 | 243  
 | 459
- Dangerous Driving: 28891 | 37639 | 66530  
 1321 | 1651 | 2972
- Auto Crash: 9916 | 14031 | 23947  
 637 | 806  
 | 1443
- COVID: 43439 | 50649 | 94088  
 3248 | 3641  
 | 6889

# BYOD in 2023

BYOD2023  
markets

## Expand to 87% trip coverage

- Japan (BYOD fleet)
- United Kingdom
- Australia
- New Zealand
- Taiwan
- South Africa
- Nigeria
- Kenya
- Ghana
- India (BYOD fleet)

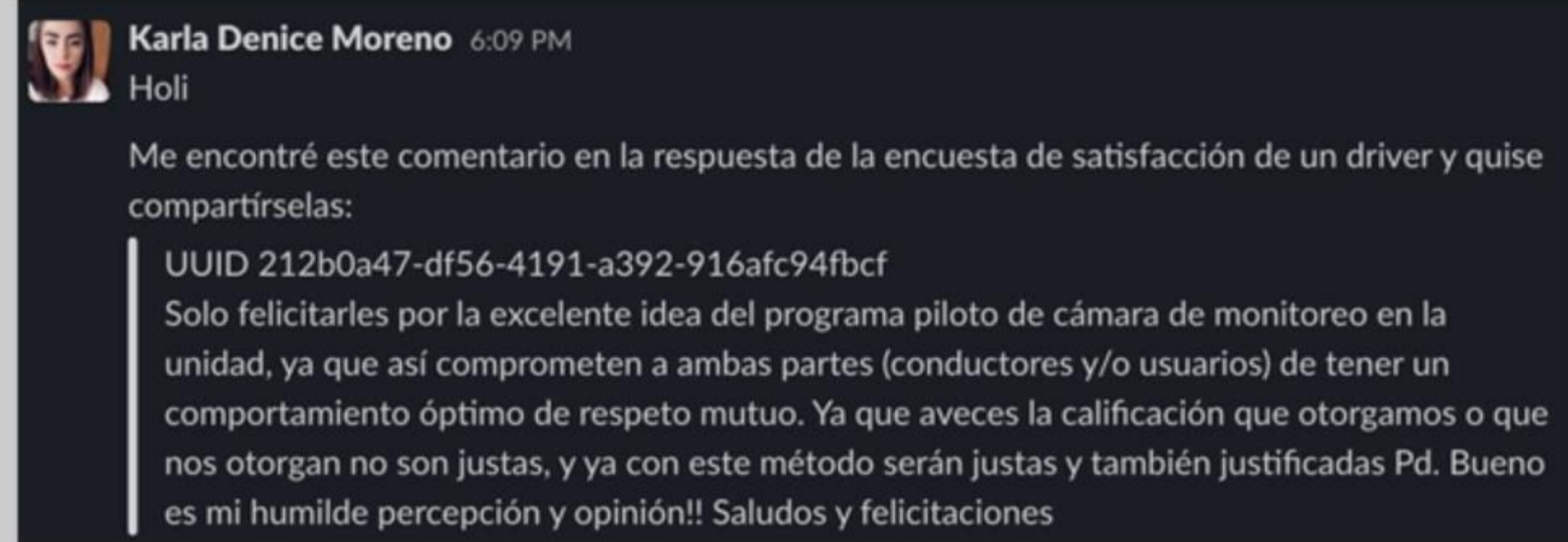


This is a list of all the markets that expressed interest during planning

If we want to launch in Japan, India, and \_\_\_\_\_, we will need to build a version of BYOD that supports fleets. We are already halfway through this process and are currently live with 16 fleets in Japan.

We are already working with UK team on the possibility of expanding BYOD. There will be some product changes needed due to GDPR like perhaps stripping videos of audio and footage retention dates may need to change. We are working through these details.

The rest of the markets here will be launched if and when we are cleared by local Legal and Privacy teams. There's an extensive rollout prep process that happens including training commops agents to review media according to timelines so we are clearing that.

**User feedback**

*"I just want to congratulate Uber for this excellent idea of the Dashcams Pilot, with this, both parties (Drivers/Riders) are committed to having an optimal behavior of mutual respect. Sometimes the ratings we give or that are given to us are not fair and with this program, we have evidence of what actually happened. Congratulations!"*

- **Nextbase pilot driver in Mexico**

*"Uber should commit to reviewing the issues/bugs with the camera, the one they have is a mess (Nextbase Camera). They never solved anything for me and only charged me for it, which didn't help me." [MX Survey](#)*

- **Nextbase pilot driver in Mexico**

**Q: What falls into the "Disabled -- Other" category?**

- Here are some of the reasons. May need to do deeper analysis on the others
- DeviceReturned
- Nextbase US: 23
- Nextbase MX: 1
- Nexar: 91
- CMT: 52
- OAuth revoked:
- Nextbase US: 23
- Nextbase MX: 9
- Nexar: 7
- CMT: 3
- VendorPaymentArrears(CC)
- Nextbase US: 0
- Nextbase MX: 0
- Nexar: 0
- CMT: 52

Installed - they installed it in the car but they never logged in with their credentials with Uber.

Why are purchased % higher in mexico  
Why is Nexar purchase % higher?  
Why is CMT disabled rate higher?

User feedback



- A rider got into the car and started behaving strangely, asking if he had earned a lot of money, how much money he had earned that day, if he had cash at the moment, etc.
  - Through the rearview mirror, the driver could see that the rider was hiding a weapon and noticed that the in-app destination was a dead-end street.
  - The driver was sure he was going to be assaulted, but when the rider started to pull out his knife, he noticed the dashcam installed in the driver's vehicle and panicked. He asked the driver to confirm it was a camera, if it was recording, if there was someone reviewing the recording, if the camera recorded the faces of the passengers, etc.
  - The Rider started to get nervous and asked the driver to stop the trip and ran out of the vehicle. He forgot the weapon in the driver's vehicle.
  - Driver expressed that he is very grateful that Uber launched this pilot. *"Thanks to this dashcam I was able to avoid being assaulted, I don't know what could have happened, but this, saved my life"*
- Nextbase pilot driver as told to Karen Sandoval, Safety Ops Mexico

Recap on Vendor Pilot Program

*I think it's an excellent safety precaution, and provides extra security for riders and drivers. Additionally, for the money, this is a great dash cam with good quality!*

- Nexar pilot driver via survey

*Wouldn't work never would stay connected to WiFi*

- Nextbase pilot driver US

User feedback

*The dash cam is so big and intrusive. I would be interested in a smaller item that would not start a conversation about it with every rider.*

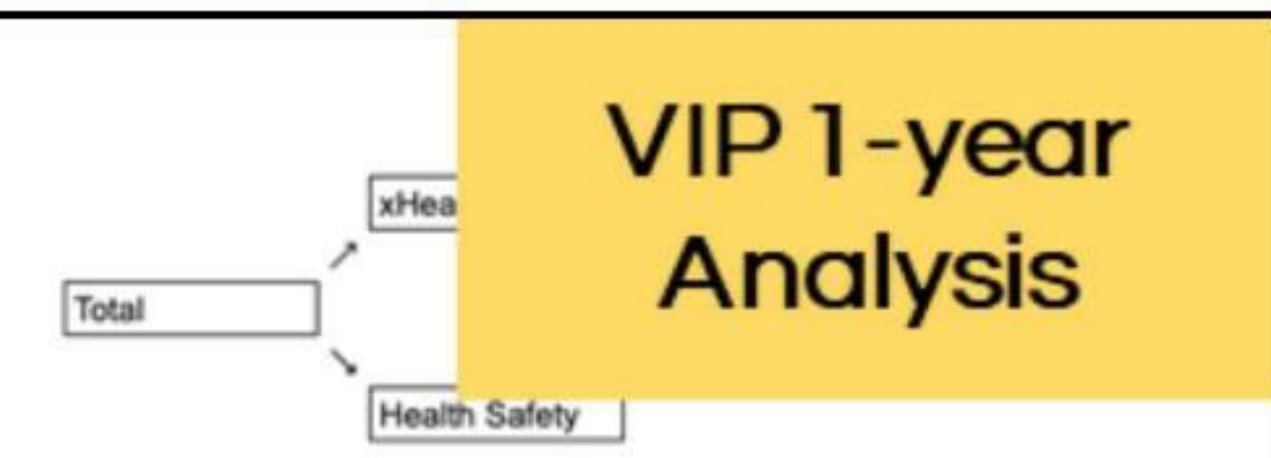
- Nexar driver who returned the camera

to see how it would work, and to see what the recordings looked like. I noticed, though, that I wasn't getting audio of the trips. I wrote to customer support and they informed me that audio recording was kept from the driver to protect rider privacy (even though riders are notified they're being recorded). Audio of rides is only available to Uber.

I clearly had missed that part of it when I reviewed their privacy section. I was hyper concerned that

I really liked almost everything about it: easy to order, easy to install, easy to use, but what soured me on it was your and my inability to hear the audios for videos recorded during Uber-time, while of course, if you send it to Uber, they can hear it.

# Safety and Marketplace Impact



VIP drivers saw a stat sig **decrease** in **IPC** and **Health Safety** incident rate, with no significant impact on Road Safety tickets. Driver and Rider ratings **improved** with no significant cancellation rate impact.

Given there is still self selection bias that we cannot fully control for and that the bounds are quite wide, the focus should be on the directional impact rather than the specific magnitude. Even the direction is not 100% certain but it is less likely to be incorrect than the magnitude.

		Aggregated Trip Level Regression Diff in Diff**					
	Metric	Relative Effect	Interval lower bound	Interval upper bound	P Values	Result	Directional Result
Safety	All IPC	-8.4%	-15.7%	-0.6%	0.036	Stat Sig	●
	SA/SM IPC	-15.8%	-32.1%	4.3%	0.115	Not Stat Sig	—
	Non-SA/SM IPC	-10.1%	-18.8%	-0.4%	0.042	Stat Sig	●
	Potential IPC	2.7%	-14.8%	23.8%	0.778	Not Stat Sig	—
	Road Safety	-0.6%	-8.1%	7.4%	0.870	Not Stat Sig	—
	Dangerous Driving	-0.9%	-9.4%	8.6%	0.853	Not Stat Sig	—
	Auto Crash	0.8%	-13.2%	17.1%	0.917	Not Stat Sig	—
	Health Safety	-17.1%	-23.7%	-9.9%	0.000	Stat Sig	●
Marketplace	Driver Cancellation	0.4%	-0.6%	1.5%	0.449	Not Stat Sig	—
	Rider Cancellation	-0.7%	-1.7%	0.4%	0.201	Not Stat Sig	—
	Driver Rating <5	-3.1%	-4.5%	-1.7%	0.000	Stat Sig	●
	Rider Rating <5	-3.0%	-3.7%	-2.3%	0.000	Stat Sig	●



\*Plain Diff in Diff is  $Treatment_{(post/pre)} - Control_{(post/pre)}$  on the group level

\*\*Drivers included in the regression needed to have driven for 6 month before enablement (to have sufficient data for Pre) and must have enabled 6 months prior to the Jul 1, 2022 end date (to have sufficient data in Post).

\*\*\*All tests were conducted with 95% of confidence

Attorney-Client Privilege

Plain DiND for Health Safety is muted due to the removal of mask requirements in May. The regression model controls for time so the treatment effect is more prominent.

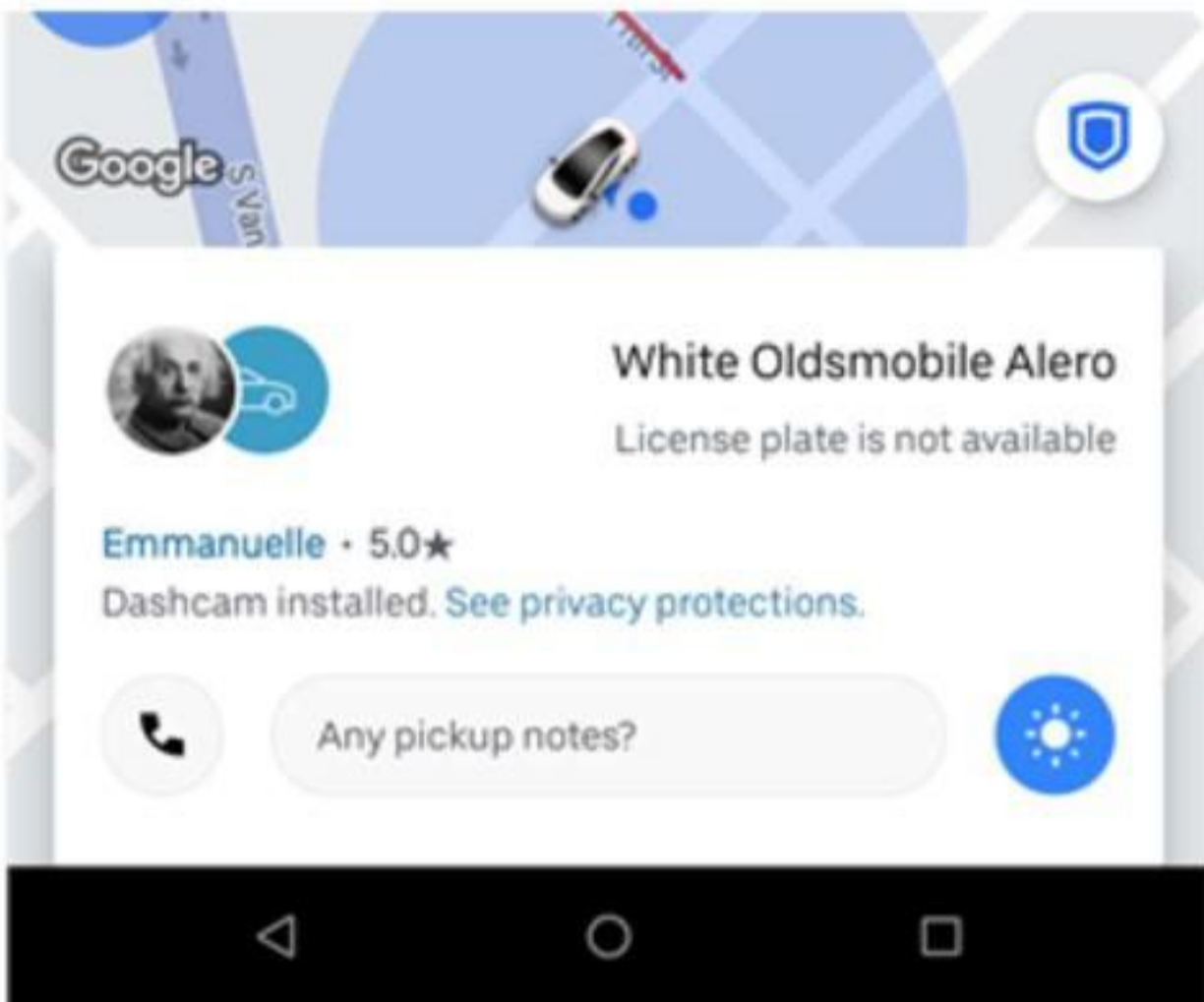
# Nauto dashcam pilot

- Forward & internal cameras, LTE connection
- Distracted driving + forward collision warnings
- Video in Nauto app w/ blurred passenger faces
- 5K devices to be installed for 12 months
- Subsidized by Uber; drivers pay \$5/month
- Florida, Texas, Tennessee

High-end dashcam



Rider recording notice



Driver reporting & agent video review

The screenshots show a driver reporting interface with a map of Melbourne, Australia, and a recording status indicator. The second screenshot shows an agent video review interface with a table of trip data and a video player.

Time	From	To	Type	Status
2019-02-22 11:12:00	2019-02-22 11:12:00	2019-02-22 11:12:00	Recording	Completed
2019-02-22 11:13:00	2019-02-22 11:13:00	2019-02-22 11:13:00	Recording	Completed
2019-02-22 11:14:00	2019-02-22 11:14:00	2019-02-22 11:14:00	Recording	Completed
2019-02-22 11:15:00	2019-02-22 11:15:00	2019-02-22 11:15:00	Recording	Completed
2019-02-22 11:16:00	2019-02-22 11:16:00	2019-02-22 11:16:00	Recording	Completed
2019-02-22 11:17:00	2019-02-22 11:17:00	2019-02-22 11:17:00	Recording	Completed
2019-02-22 11:18:00	2019-02-22 11:18:00	2019-02-22 11:18:00	Recording	Completed
2019-02-22 11:19:00	2019-02-22 11:19:00	2019-02-22 11:19:00	Recording	Completed
2019-02-22 11:20:00	2019-02-22 11:20:00	2019-02-22 11:20:00	Recording	Completed
2019-02-22 11:21:00	2019-02-22 11:21:00	2019-02-22 11:21:00	Recording	Completed
2019-02-22 11:22:00	2019-02-22 11:22:00	2019-02-22 11:22:00	Recording	Completed
2019-02-22 11:23:00	2019-02-22 11:23:00	2019-02-22 11:23:00	Recording	Completed
2019-02-22 11:24:00	2019-02-22 11:24:00	2019-02-22 11:24:00	Recording	Completed
2019-02-22 11:25:00	2019-02-22 11:25:00	2019-02-22 11:25:00	Recording	Completed
2019-02-22 11:26:00	2019-02-22 11:26:00	2019-02-22 11:26:00	Recording	Completed
2019-02-22 11:27:00	2019-02-22 11:27:00	2019-02-22 11:27:00	Recording	Completed
2019-02-22 11:28:00	2019-02-22 11:28:00	2019-02-22 11:28:00	Recording	Completed
2019-02-22 11:29:00	2019-02-22 11:29:00	2019-02-22 11:29:00	Recording	Completed
2019-02-22 11:30:00	2019-02-22 11:30:00	2019-02-22 11:30:00	Recording	Completed

# VIP in 2023 | Exploring pilots with CMT

Prelim details on focused pilots with CMT

Distraction data collection
Expand current pilot to collect driver distraction events and correlate with device activity.
<b>Benefit:</b> Determine how much distraction is caused by the Uber app, and use collected data to develop new interventions for distraction
<b>Status:</b> Completing budget and data pipeline discussions
<b>Estimated cost:</b> ~\$752K

Insurance Claim Impact
Quantify average loss cost improvement attributed to dashcams with a large deployment, in partnership with an insurance carrier.
<b>Benefit:</b> 20K dashcam distribution to understand insurance savings
<b>Status:</b> Very early discussions
<b>Estimated cost:</b> \$4.2M

## Other things we're looking to do in 2023

- Standardize reporting experience for all recording products (S4)
- Audit of and standardization safety nodes that footage can be uploaded to
- More visibility into and optimization of what happens once footage makes it to CommOps (Media Support Excellence)
- Optimize insurance funnel to make sure we are successfully sending as many claims as possible to insurance carriers

Double down on software as that is the most scalable

However we do believe that dashcams are more powerful when it comes to road safety, mapping data, and we feel there's a way to do this for a smaller subset of drivers that drive full time

It will never be 100% of drivers but we think there is something there (giving them discounts, paying them for data they are providing)

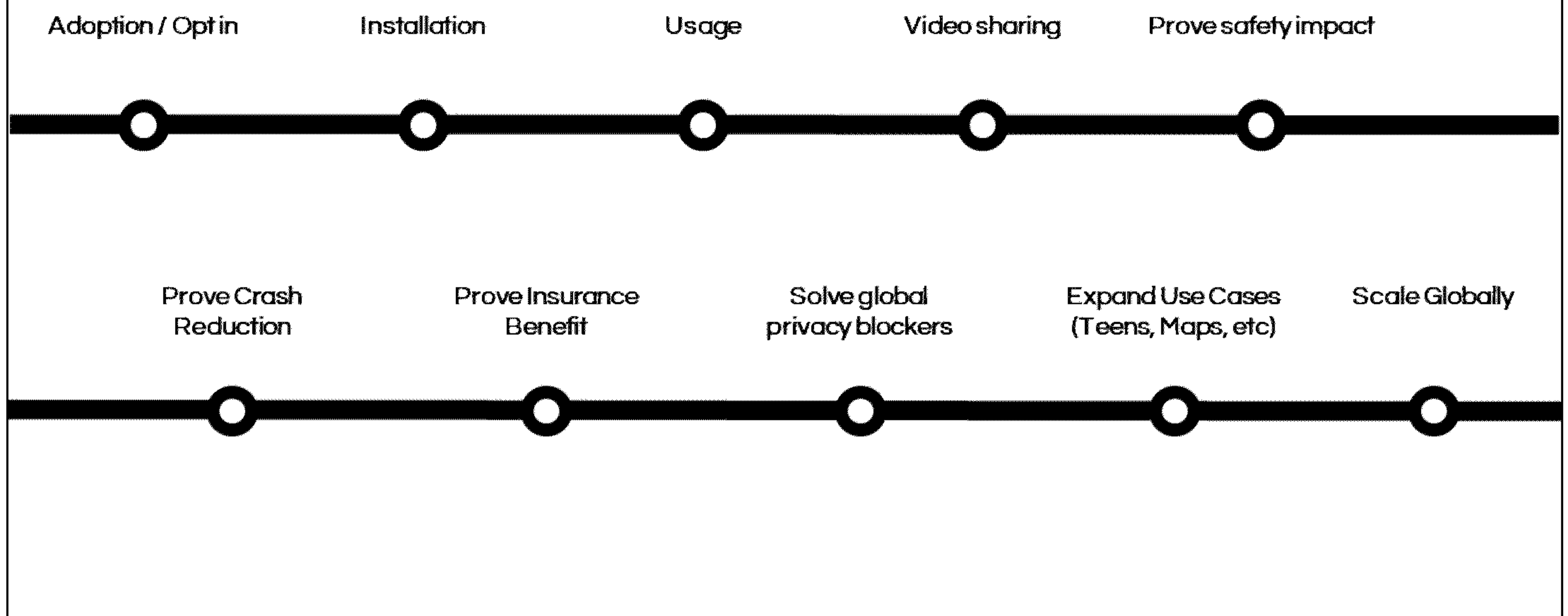
If We are aiming for a world where every trip is recorded

lavr will get us 80% of the way

Dashcams will be the other 20% for speciality use cases (e.g., insurance or road safety use cases, lte cams)

# Graveyard / Old Slides

But achieving a world where every Uber ride is recorded requires tackling many hurdles along the way

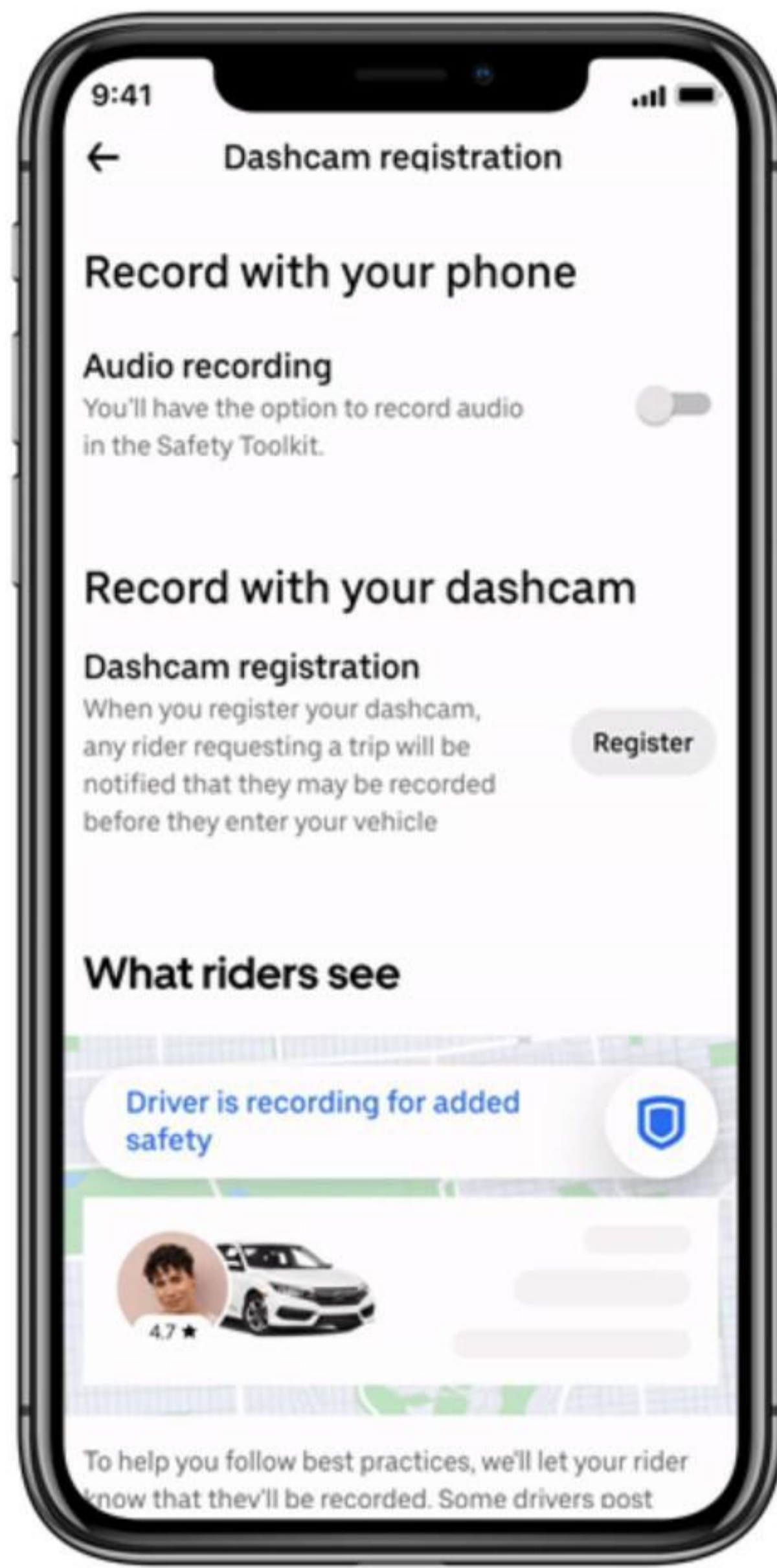


## NARRATIVE

- And in order to get to that future, we have to accomplish a series of milestones
- We first need to make sure our recording products are being adopted (whether it's drivers purchasing dashcams or opting into in-app recording)
- In the case of dashcams, we have to make sure they not just purchase but install (this is a challenge we've seen with VIP)
- We need to ensure usage
- And make sure footage can be uploaded and shared with Uber successfully
- We need to prove out Safety Impact (reduction in IPCs), Crash reduction, and insurance benefit.
- We'll need to solve for all-party consent and other privacy blockers
- Identify and build expanded use cases like Teens or Health
- And then scale globally

We have a lot of work ahead of us.

## We've made a few bets in this space



### Bring Your Own Dashcam

Live in US, Canada, & LatAm



### Join the Nexar pilot to test a dash cam

For only \$5 a month, you'll have access to this new program that helps keep you and your riders safe

[Learn more](#)

Hi [Name],

You're invited to participate in a dash cam pilot program from Nexar and Uber!

If you choose to participate, you'll receive the Nexar Pro (a dual-camera dash cam that records both inside and outside your vehicle) and one year's service\*\*—for only \$5 a month for 12 months.\*\* The program includes:

#### • Nexar dash cam

The Nexar Pro is equipped with high-quality HD video, interior night vision, and unlimited cloud backup to help you drive with more peace of mind. Easily install it in just 5 minutes to start streaming videos directly to your phone.

#### • Seamless integration

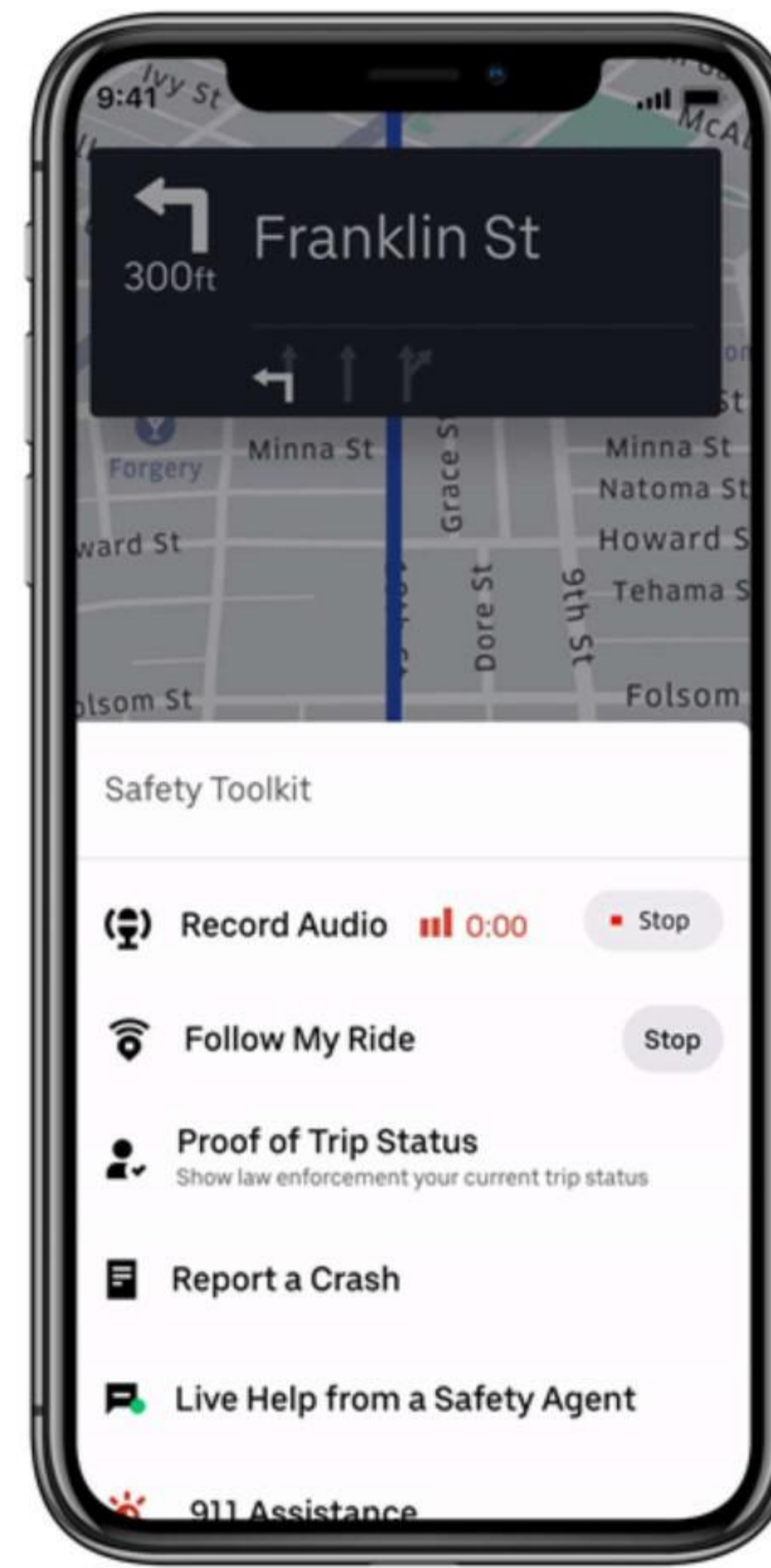
The Nexar dash cam connects to your driver account and makes it easy for you to report trip issues and share video with Uber Support. Our Support team can only watch or listen to your dash cam recordings if you choose to share them.\*\*\*

[Learn more](#)

Already have a dash cam? Register it with Uber [here](#).

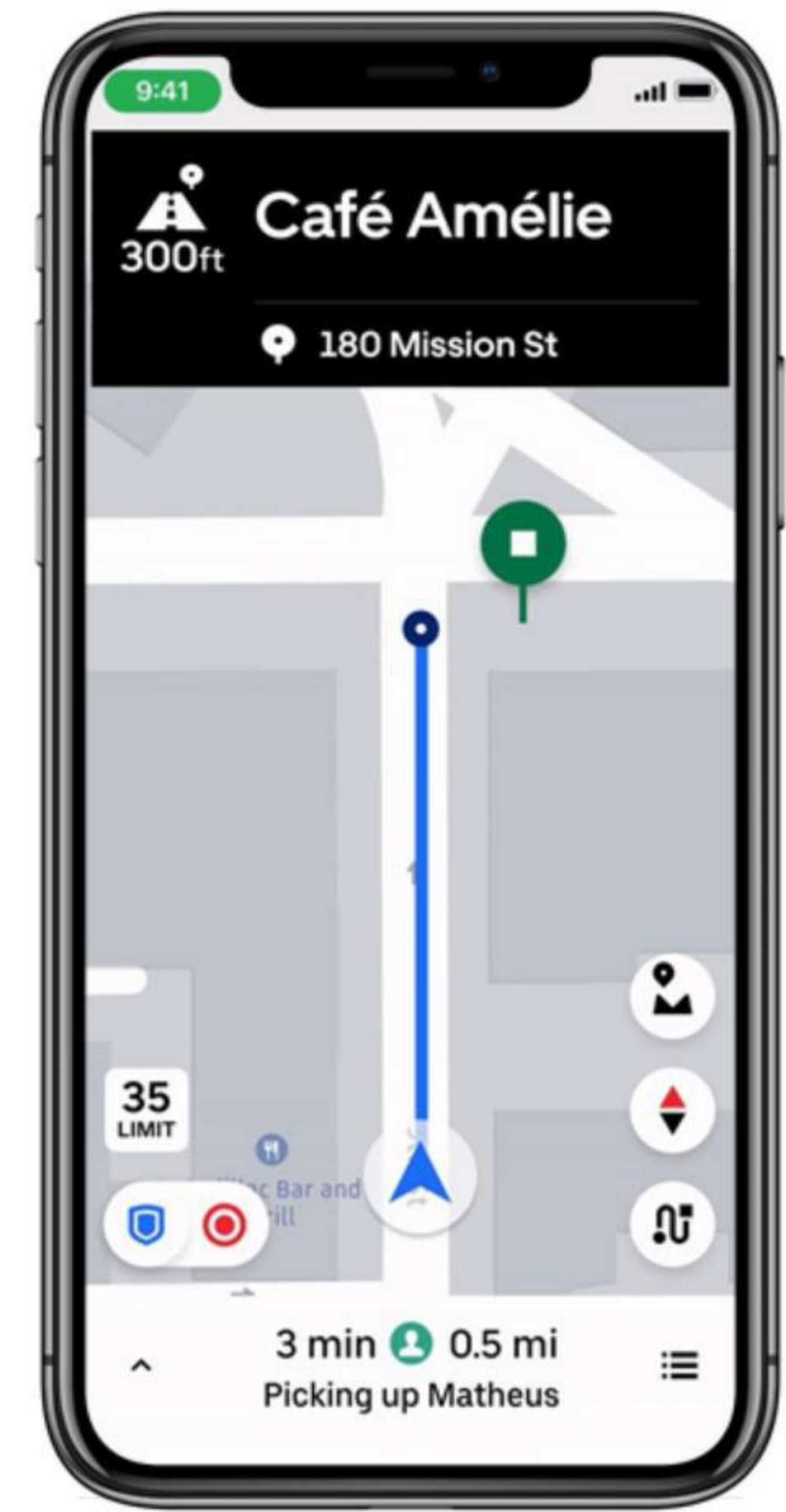
### Dashcam Vendor Integration

Live with 3 vendors in US & Mexico



### In-App Audio Recording

Live in LatAm, India, Pakistan, & South Africa



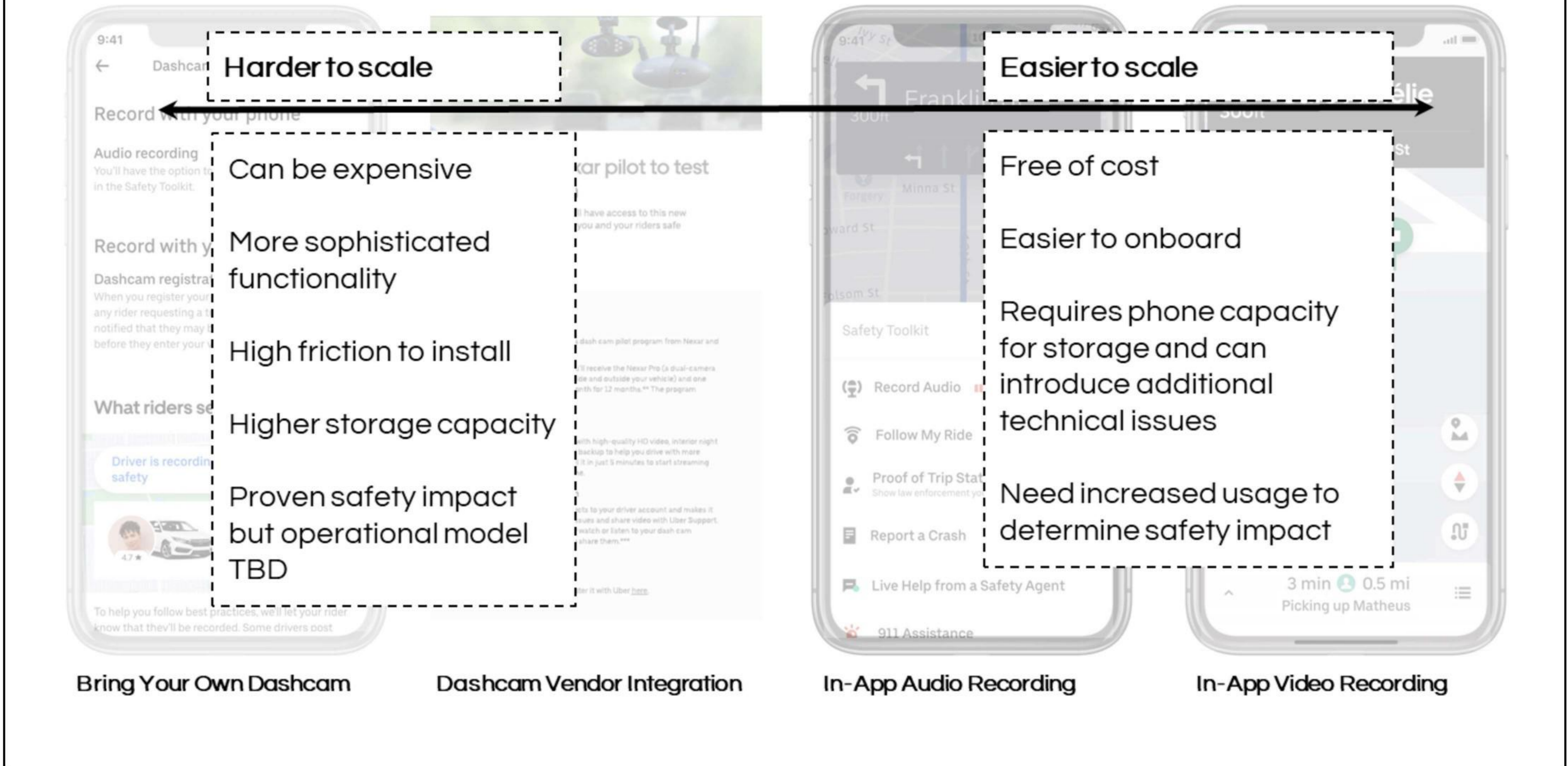
### In-App Video Recording

Small pilot in US, Mexico & Brazil

We knew we were going to need to try a few different things in the recording space, because there are pros and cons to each approach.

We have made a lot of progress on each of these areas, and are at a place where we can take our learnings from each to align on our longer term strategy.

# And have learned a lot about recording...



Generally speaking, we know that our hardware product with dashcams, while it produces higher quality results, it's harder to scale.

Our in-app software recording solutions while easier to scale, produce lower quality results.

**POSSIBLE QUESTION:** Have we thought about making our own camera?

## And the benefits and challenges of each of our recording products...

Bring Your Own Dashcam	Dashcam Vendor Integration	In-App Audio Recording	In-App Video Recording
<p>Product with proven safety benefit</p> <p>Limited by drivers purchasing and installing their own dashcams</p> <p>Privacy blockers preventing us from rolling out globally.</p>	<p>Pilots nearly complete. Proven safety benefit echoing BYOD data.</p> <p>Hardware and vendor integration has proved complicated.</p> <p>Haven't been able to work out operational model that justifies dashcam financing.</p>	<p>Need high usage to determine safety benefit but anecdotal and qualitative feedback points to drivers and riders feeling safer due to this feature and wanting Uber to invest more in this space.</p> <p>Upleveling product to IAVR.</p>	<p>Early pilot results are promising. It's working!</p> <p>Technical issues not widespread and limited.</p> <p>Large number of drivers report feeling safer because of this feature.</p> <p>but we're still early here.</p>
<p><small>To help you follow best practices, we'll let your rider know that they'll be recorded. Some drivers opt</small></p>		<p><small>911 Assistance</small></p>	<p><small>Picking up passengers</small></p>

BYOD: solid product with safety benefit, but limited by drivers purchasing their own cameras, and we've still got some privacy blockers which is why it isn't global

VIP: successfully ran pilots and see safety benefit but hardware is complicated and we still haven't been able to work out an operational model that works for Uber. We do think this is still worth investing in, but need to incorporate road safety benefit and potentially only target to full time drivers.

In-app: we've made great progress in launching the pilot

## And have learned a lot about our recording products

	BYOD	Vendor Integration	In-App Video
Scalability	Easy to scale but adoption will be limited by driver purchases	Hard to scale / friction to install	Easier to scale / onboard
Functionality	As good as the dashcam the driver procures	More sophisticated; best recording angle; night-time visibility; higher storage capacity	As good as user device, phone position, time of day, and storage capabilities
Cost	No cost to Uber but can be expensive for drivers	Cost to Uber; ROI unproven to justify subsidizing	Free to driver
Safety Impact	Proven		We're early here but small signal from Grip pilot*

*\*Observational study, not A/B test. Verbal IPC.*

No cost and negligible space on phone (10 mb/hr)

## Slide 39

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- 2 Consider a separate page on goals / milestones. 1) Install, 2) Inform users, 3) get videos uploaded, 4) prove IPC benefit, 5) prove crash benefit, 6) prove insurance benefit, 7) enable live uses case (teen, health, etc.), 8) scale broadly  
Gus Fuldner, 1/18/2023
- 1 This is trying to do too much at once. I suggest one table on distribution cover safety impact (and perhaps insurance, together with safety "effectiveness") separately (safety impact is mostly about 2 vs 1 camera and smart vs not)  
Gus Fuldner, 1/18/2023
- 3 BYOD and VIP have achieved 1 / 2. Only CMT has achieved 3, most have achieved 4. None 5, none 6, none 7, none 8  
Gus Fuldner, 1/18/2023

## And are learning how our products are meeting each milestone


	BYOD	VIP	In-App Video Recording
Adoption / Opt in	Drivers purchasing dashcam	Drivers opting into program	Drivers completing setup
Installation	N/A	Drivers having LTE cam	
Usage	N/A	Driver staying in program	Feature not disruptive
Upload and share video		Drivers having LTE cam	
Prove crash Reduction	Need driving alerts & connectivity to Uber	Need driving alerts	N/A (selfie cam only)
Prove Insurance Benefit	Need more cameras & trips	Need more cameras & trips	N/A (selfie cam only)
Solve All-party Consent			Added features needed
Expand Use Cases	Functionality of camera	Functionality of camera	
Scale Globally	Privacy blockers	Cost to subsidize	Device capabilities

### NARRATIVE

- We are learning what the limit or ceiling is to each milestone.
- Walk through chart quickly and how each product has a ceiling or is capped.
- We do envision a world where we need all three products. They solve different use cases and needs and preferences of our users.
- We can do more to make some of these red boxes yellow and yellow boxes green with improvements we make over time

We imagine a world where ...

*WIP*



Every trip is recorded as an added layer of safety and to help provide ground truth in the case something happens.

To do this, we have to offer multiple recording solutions, allowing users to choose the option that works best for them.

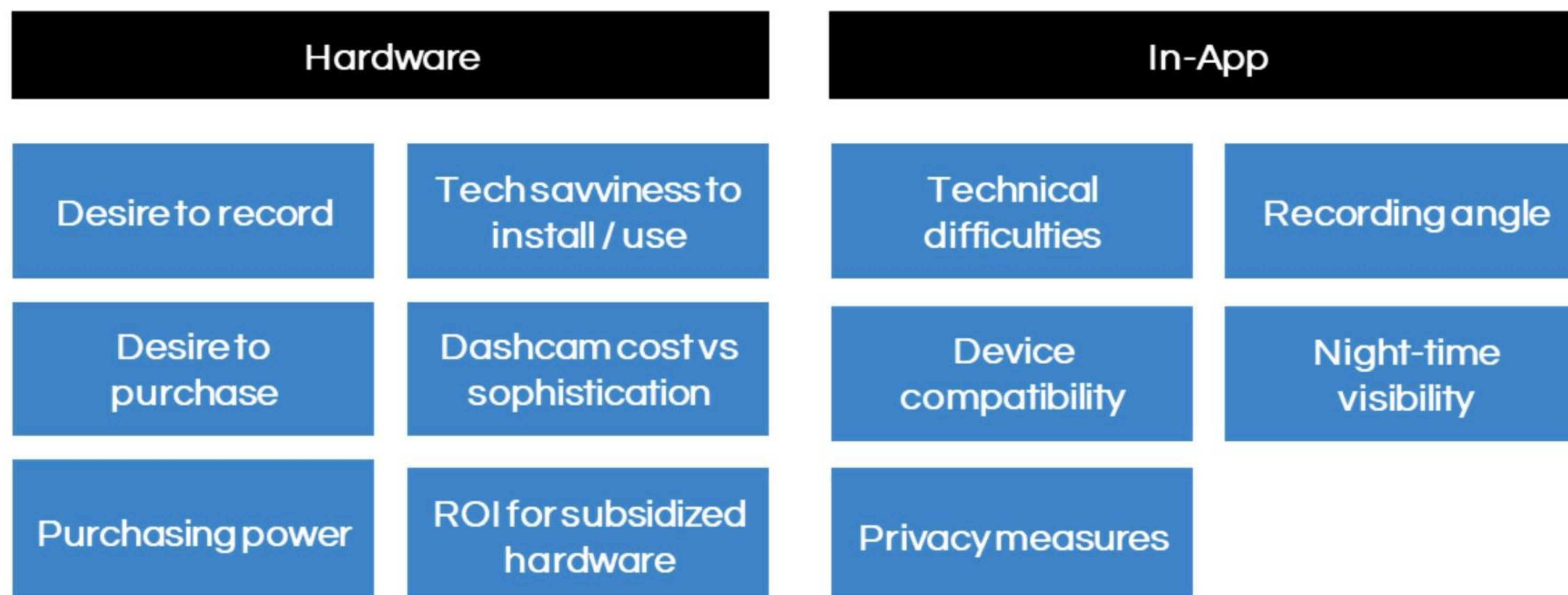
Our goal is to do this in a way that makes financial and business sense for Uber.

We knew we were going to need to try a few different things in the recording space, because there are pros and cons to each approach.

We have made a lot of progress on each of these areas, and are at a place where we can take our learnings from each to align on our longer term strategy.

## And what challenges we still need to solve

*New*










### **NARRATIVE**

- The takeaway here is that recording continues to be a gnarly, complex problem and that we are knee deep in these challenges and trying to figure them out
- No one else has figured out how to do this at scale.
- We are the only ones doing in app video recording for the moment and we have some competitors who are trying other forms of recording but no one has found the recording space

# BYOD Scorecard

Stage: Global Rollout  
Trip Coverage: 71%

IPC Reduction	Crash Reduction	Cost Per Reported Claim	Ground Truth
 Drivers who installed a dashcam saw <u>directional reduction in incident rate</u> across all categories.	 <u>Directional reduction in auto crashes.</u>	 Video has helped assist in some deactivations & incident resolutions, but we <u>don't have enough video</u> to judge its usefulness in claims decisions.	
Other			
 <u>Reduction in rider cancellations stat sig.</u>	 Driver feedback positive (anecdotal). Camera empowers them to take control of their safety and send footage to Uber Support if necessary.	 CommOps agent feedback positive (anecdotal). High quality dashcam video allows them to better understand what went on during a trip.	

Proven safety impact

# VIP Numbers

Stage: Global Rollout  
Trip Coverage: X

								
Invited	107k	--	5k	--	65k	--	72k	--
Purchased	<b>5,000</b>	4.6%	<b>1,000</b>	20%	<b>5,000</b>	7.7%	<b>3,600</b>	4.9%
Enabled (Total)	3,613	72%	669	67%	3,928	79%	3,042	85%
Enabled (Current)	2,643	53%	610	61%	2,985	60%	2,079	58%
Disabled	970	19%	59	5.9%	943	19%	963	27%
Video Upload Success Rate (Avg)	0-10%		0-10%		0-40%		80-100%	

# VIP Numbers





Stage: Global Rollout  
Trip Coverage: X

								
Invited	107k	--	5k	--	65k	--	72k	--
<b>Purchased</b>	<b>5,000</b>	<b>4.6%</b>	<b>1,000</b>	<b>20%</b>	<b>5,000</b>	<b>7.7%</b>	<b>3,600</b>	<b>4.9%</b>
Enabled (Total)	3,613	72%	669	67%	3,928	79%	3,042	85%
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W

# VIP Numbers




Stage: Global Rollout  
Trip Coverage: X

								
Invited	107k	--	5k	--	65k	--	72k	--
Purchased	5,000	4.6%	1,000	20%	5,000	7.7%	3,600	4.9%
<b>Enabled (Total)</b>	3,613	72%	669	67%	3,928	79%	3,042	85%
Enabled (Current)	2,643	53%	610	61%	<p>Onboarding integration for Nexar and Nextbase requires extensive use of vendor app and full connectivity, which adds friction.</p> <p>Installation hesitancy despite efforts to encourage drivers to set-up cameras and provided in-person help.</p>			
Disabled	970	19%	59	5.9%				
Video Upload Success Rate (Avg)	0-10%		0-10%					

W

# VIP Numbers





Stage: Global Rollout  
Trip Coverage: X

								
Invited	107k	--	5k	--	65k	--	72k	--
Purchased	5,000	4.6%	1,000	20%	<div style="border: 1px dashed blue; padding: 5px;"> <p>Most drivers in this category stop driving with Uber or stop paying for the camera. Smaller group changed their mind about the pilot (once they understood they don't have access to audio for Uber time).</p> </div>			
Enabled (Total)	3,613	72%	669	67%				
Enabled (Current)	2,643	53%	610	61%				
<b>Disabled</b>	970	19%	59	5.9%	943	19%	963	27%
Video Upload Success Rate (Avg)	0-10%		0-10%		0-40%		80-100%	

W

# VIP Numbers

Stage: Global Rollout  
Trip Coverage: X

								
Invited	107k	--	5k	--	65k	--	72k	--
Purchased	5,000	4.6%	1,000	20%	5,000	7.7%	2,000	2.8%
Enabled (Total)	3,613	72%	669	67%	<div style="border: 1px dashed blue; padding: 5px;"> <p>CMT's LTE connected camera presents a less-frictioned video upload process that does not require toggling between vendor and Uber apps. Additionally LTE connection has proved superior to wifi/bluetooth (Nextbase &amp; Nexar).</p> </div>			
Enabled (Current)	2,643	53%	610	61%				
Disabled	970	19%	59	5.9%				
Video Upload Success Rate (Avg)	0-10%		0-10%		0-40%		80-100%	

W

## VIP in 2023 -- Exploring pilots with CMT

Road Safety Pilot considerations and details -- info from Jason

Allow us to ascertain impact on insurance -- info from Patrick

**From Rebecca:** Jason, could we ask you to put one slide together with a summary of the latest discussions? TBD whether we want to include information on the scoring component, but I'm envisioning a slide with the 3 ideas, and then for each a one sentence summary / benefit to Uber, an indication of cost, and then an indication of the status of these discussions (eg. 'signed' or 'obtaining budget approval' or 'researching opportunity'). Then we can always cut down to the 2 dashcam proposals if the scoring doesn't make sense to show.

On this subject, Gus flagged to Andi yesterday that he'd like an assessment from us on whether 20K dashcams would actually give us a read on a reduction in claims costs. I believe the 20K number came from CMT, but he wants to make sure that our data folks stand behind that number being enough to reach a stat sig result. So @Patrick Muh @Sunny Wong I'm not sure if you've looked at this already and agree with the 20K number? We've got a run through with Gus on the 18th and would love to have an answer for him by then, or some indication that we will have an answer by the 23rd.

# VIP in 2023 | Exploring pilots with CMT

## Distraction data collection

Expand current pilot to collect driver distraction events and correlate with device activity.

**Benefit:** Determine how much distraction is caused by the Uber app, and use collected data to develop new interventions for distraction

**Status:** Completing budget and data pipeline discussions.

**Estimated cost:** \$752K

## Driver Risk Scoring

CMT partners with most US insurance carriers to provide telematics-based risk scores for use in driver segmentation, and we are evaluating whether this would be beneficial to Uber.

**Benefit:** We can leverage CMT scores in pricing initiatives (like safe driving incentives) and to help drivers understand how they're driving.

**Status:** completing scoring evaluation to determine CMT score predictiveness

**Estimated cost:** \$0 for scoring evaluation, ~\$300K for pilot XP with 30K drivers

## Insurance Claim Impact

Quantify average loss cost improvement attributed to dashcams with a large deployment, in partnership with an insurance carrier.

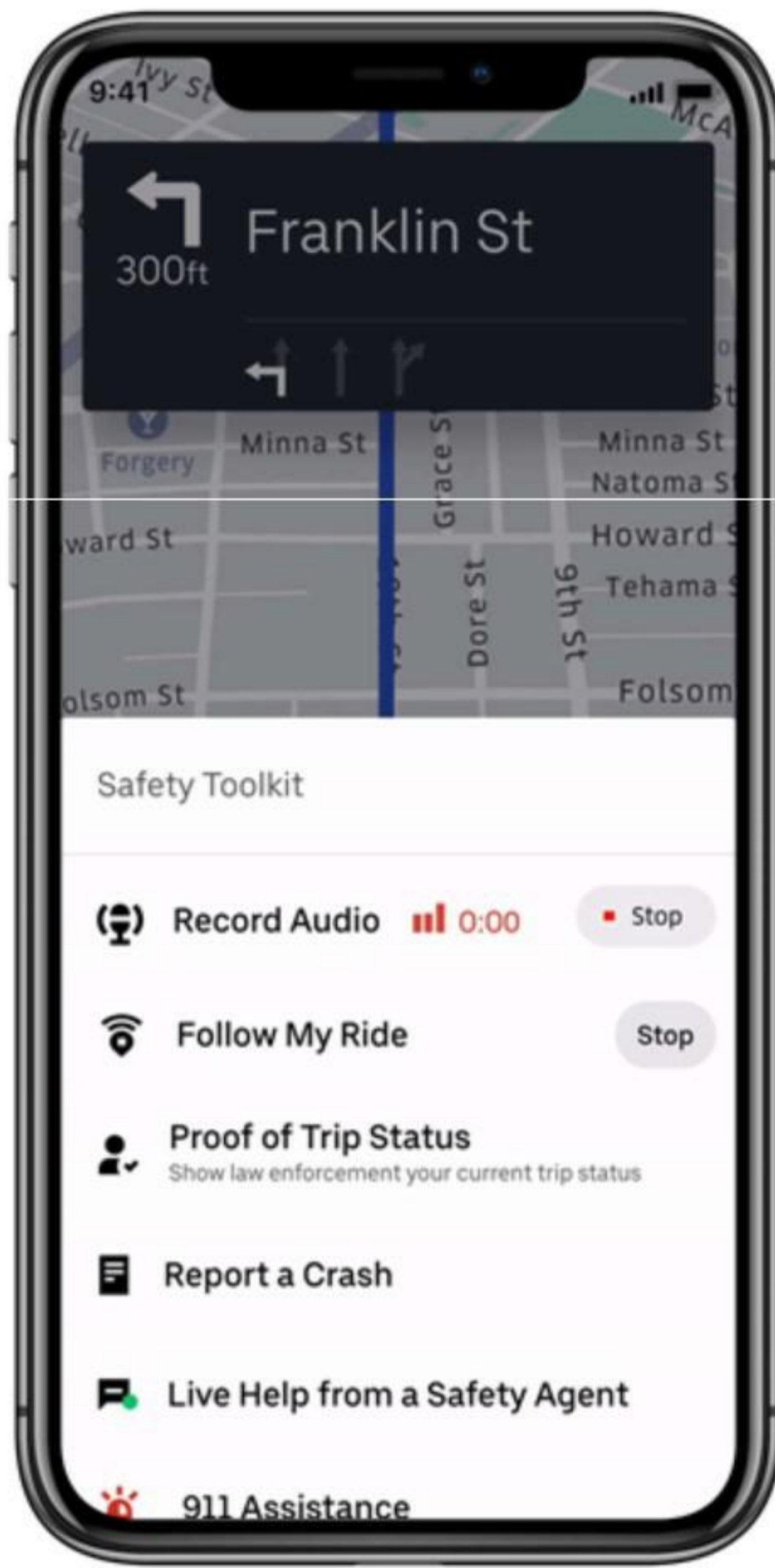
**Benefit:** 20K dashcam distribution to understand insurance savings

**Status:** very early discussions

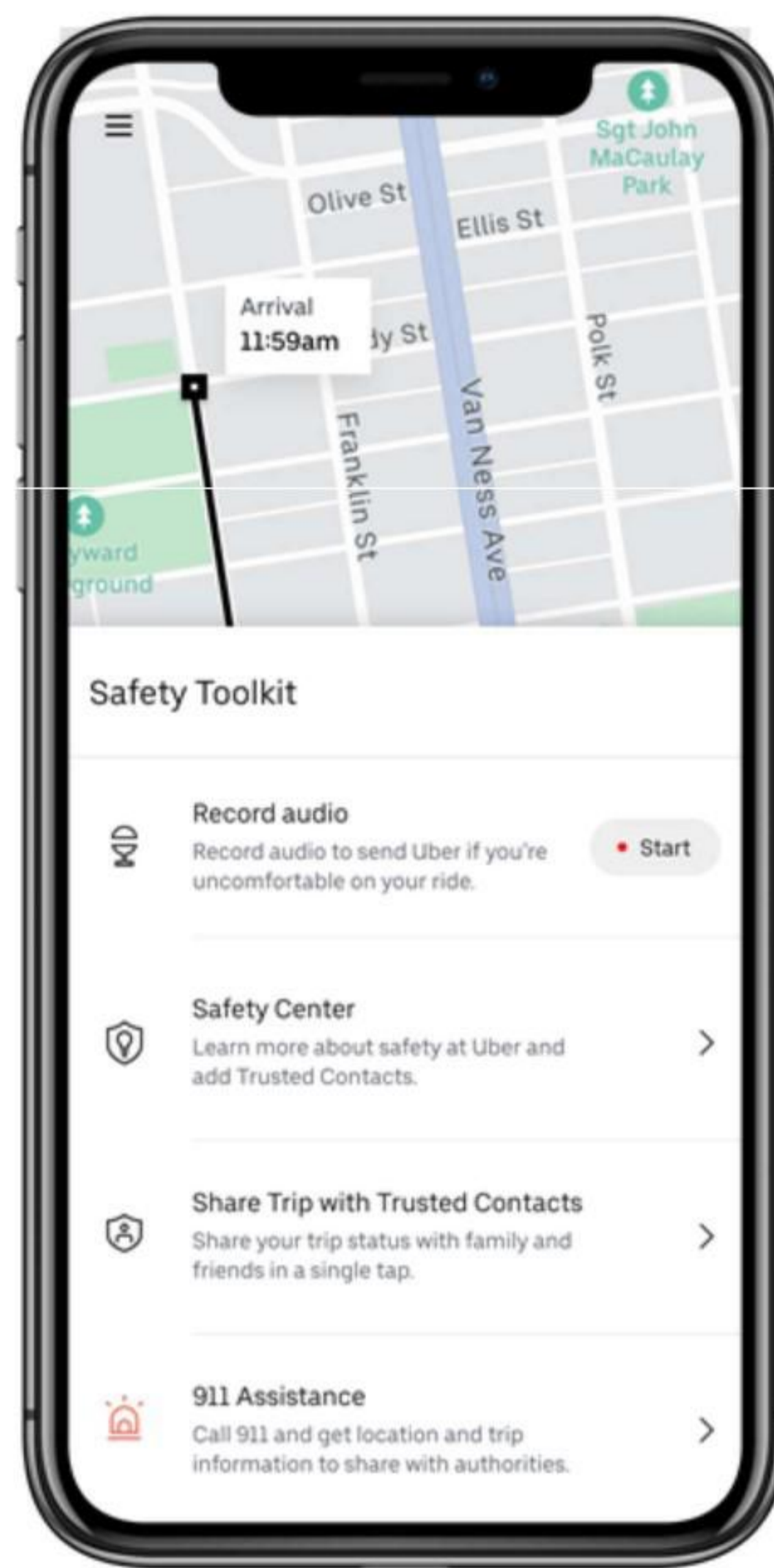
**Estimated cost:** \$4.2M

# In-App Audio Recording

Stage: Global Rollout  
Trip Coverage: 55%



Driver Audio Recording



Rider Audio Recording

- Available to both riders and drivers.
- Rider or driver cannot listen to recording. Uber does not have access until user sends it to us in the case of a safety incident.
- Uber notifies riders that their trip may be recorded.
- At launch, 20-35% of drivers in launched markets have set up the feature.

I think we'll need to do a bit of positioning here to combine audio and video recording from the start... A reminder that we started with audio recording for both riders and drivers because it was a (relatively) easier technical challenge, but we are now progressing to add video recording for drivers. So over time, these will transform into "Record My Ride" for drivers, and Audio Recording for riders. But we are still in this in-between phase while we make sure video recording works.

20% showing more recent US numbers and 25% LatAm, and 34% Calgary driver sign up rate.

## Slide 51

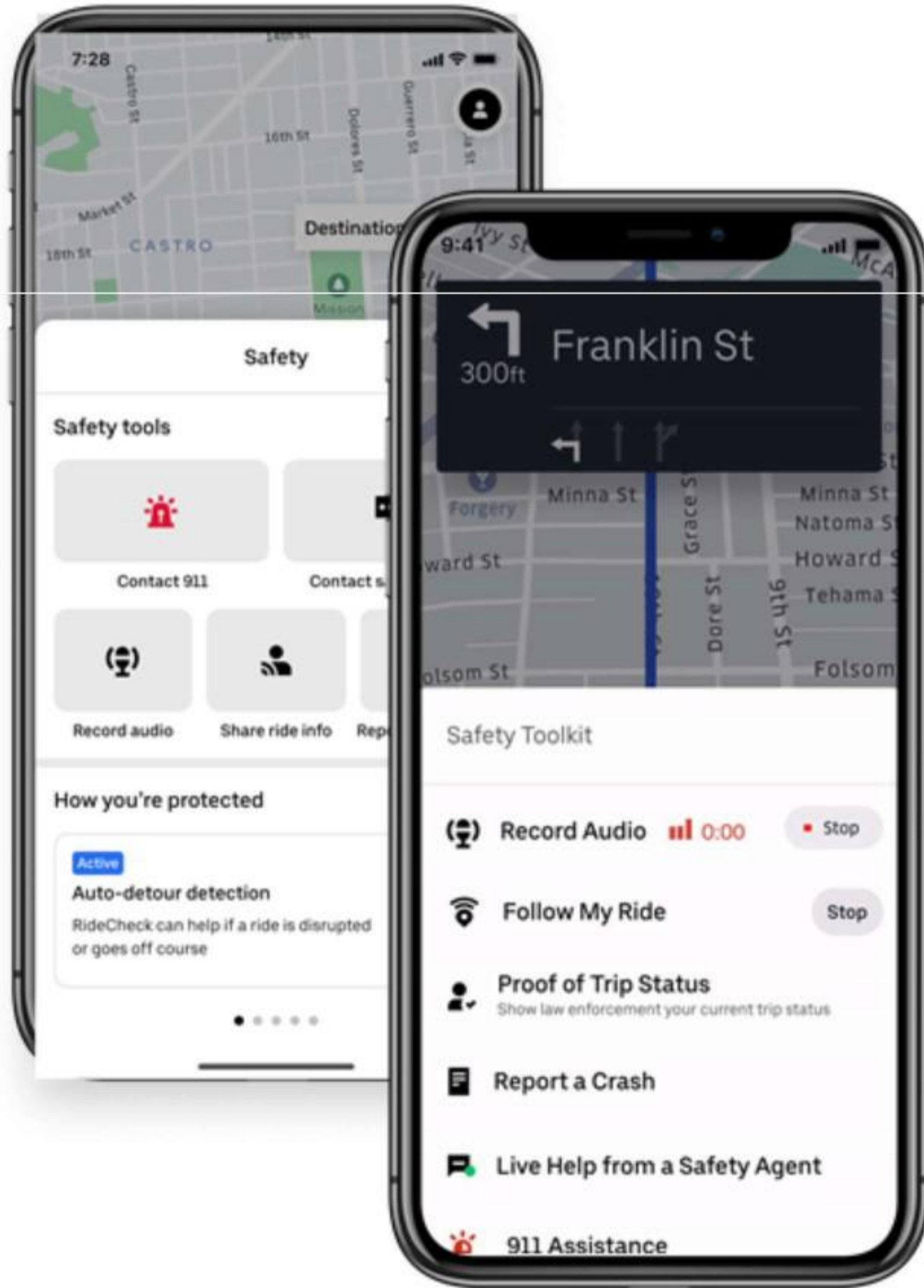
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1 \*For Ponon\*  
@ponon@uber.com What would be range for riders?  
\*For Rebecca\*  
@rebecca.payne@uber.com  
Not going to proactively call this out.  
Andi Pimentel, 1/18/2023

1 Low. 0.2% to 1.6% for the US + Calgary Pilots.

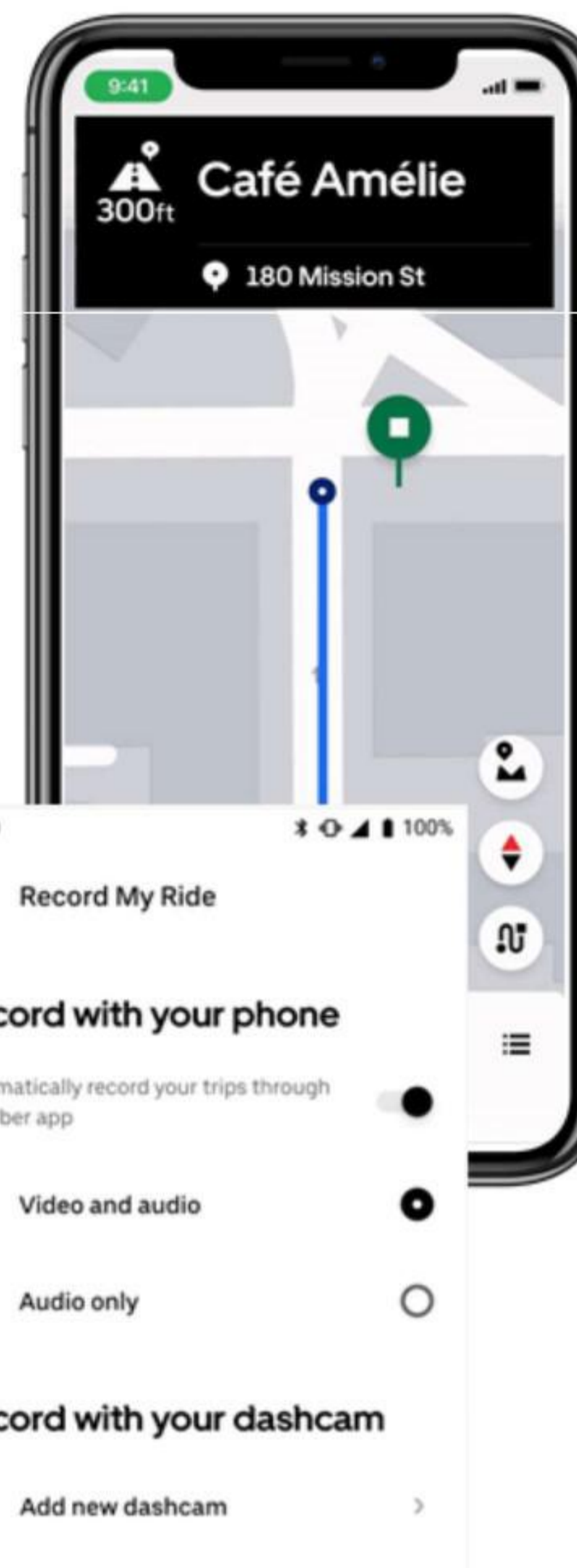
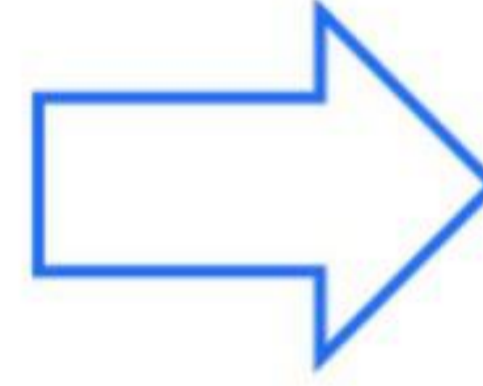
Slide. [https://docs.google.com/presentation/d/1YfWh\\_t1XFDu7u--zmwErITGhTQcXH0UWz91SaZsz0M/edit#slide=i](https://docs.google.com/presentation/d/1YfWh_t1XFDu7u--zmwErITGhTQcXH0UWz91SaZsz0M/edit#slide=i)  
Ponon Shyu, 1/18/2023

# In-App Recording



## Before: Audio Recording

- Users:
- Riders & drivers
- Usage type:
- Manual recording



## Now: Audio + Video recording

- Users:
- Audio Recording for **riders**
  - Video + Audio Recording for **drivers**

- Usage type:
- Recording is automatic
  - Video recording is automatic for drivers (now)
  - Audio recording will be automatic for riders (future)

# Record My Ride Pilot [iOS]

Stage: Pilot  
Trip Coverage: XX

115

Drivers have set up Record My Ride

26%

Onboarding rate

16K

Trips recorded with Record My Ride

7

Recordings submitted

92%

Drivers surveyed reported feeling more safe with Record my Ride.

X%

Trips with reported technical issues (app crashes, overheating, battery, or insufficient storage). We are triaging, investigating, and pushing out fixes to address this.

## Slide 53

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- 3 Separate technical issues (graceful degradation) from app crashes.  
Andi Pimentel, 1/16/2023
- 2 \*For Ju\*  
@jbarreto@uber.com  
List of issues we have had and outcomes of the investigations.  
Might be good to have one slide on graceful degradation and how we are getting in front of it.  
Andi Pimentel, 1/17/2023
- 1 Unless we can extract this trip information from the Eng alerts, we don't have this from the survey.  
  
We have X% of drivers complained about issue A or B, but we don't have trips count.  
Juliana Barreto, 1/17/2023

# Big Picture

Our mission is to be the safest and the most trusted transportation choice, supporting riders and drivers with empathy and care when things go wrong.

We imagine a future where every trip is recorded as an added layer of safety and to help provide ground truth in the case something happens. We want to offer multiple recording solutions for drivers to choose what is best for them.

Our goal is to do all of this in a way that makes financial and business sense for Uber is our goal.

## Where we want to get to by the end of 2023

- Scale BYOD to 87% global coverage
- Scale Record My Ride to all markets where Audio Recording is live + all party markets in the US (70% global coverage)
- 20% of drivers recording trips in markets where both products are available.

