

Metadata

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Collaborators	jasmine.luo@uber.com; mike.akamine@uber.com; bruno.grimaldi@uber.com; shahd@uber.com; issamu.okada@uber.com; uber.com	SEMANTIC
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# RideCheck

SOT - 2024

## Agenda

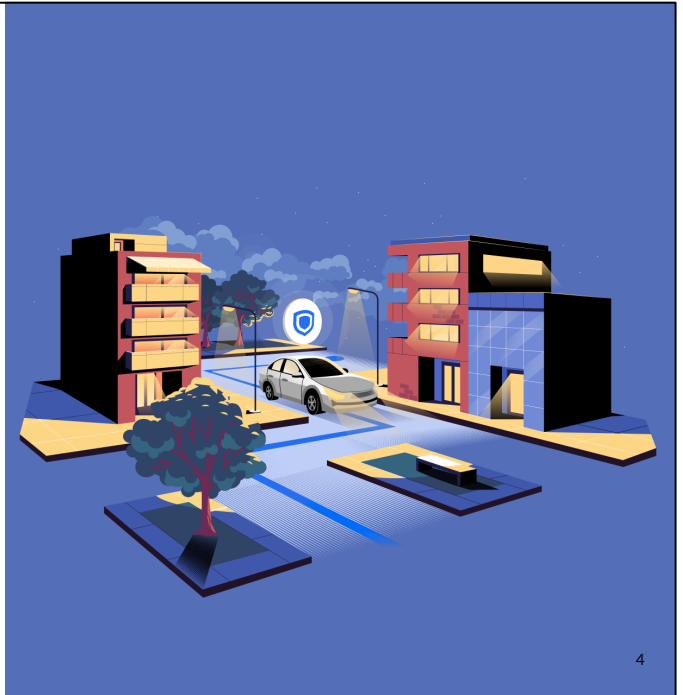
- 01 Product Flow**
- 02 Goals and Metrics**
- 03 User Feedback**
- 04 What's Next**
- 05 What we tried and is not live?**
- 06 Deep Dive [Optional]**

# Product Flow

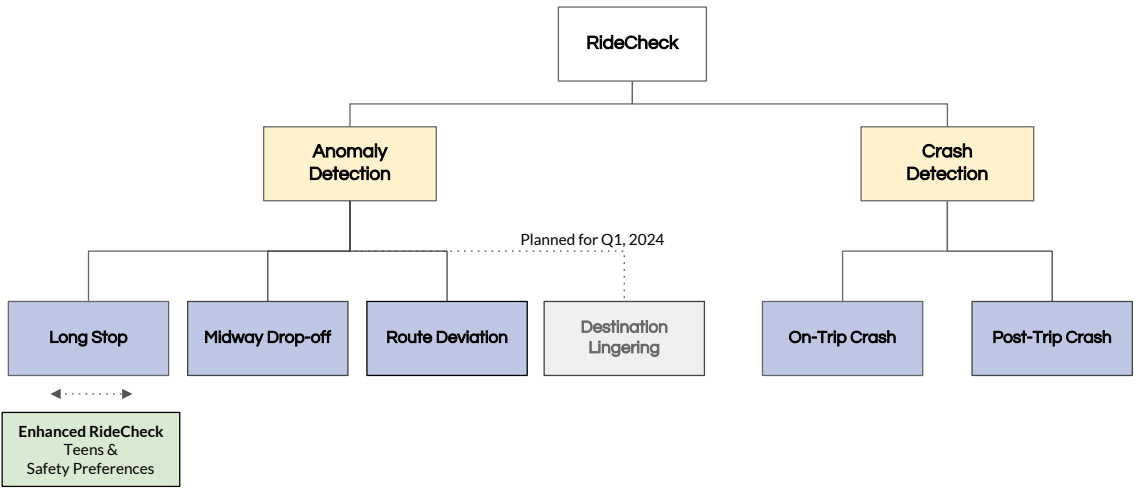
RideCheck is an Uber safety feature that monitors trips and sends a message to drivers & riders in case something out of ordinary\* appears to be happening.

In these situations, users may receive a message or call asking if everything is ok and offering other safety channels in case they need help.

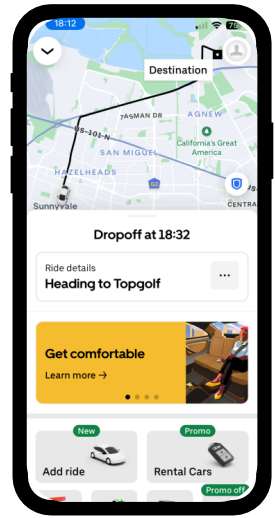
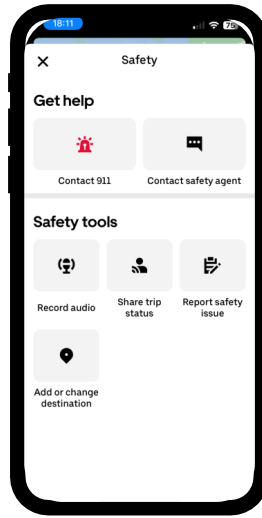
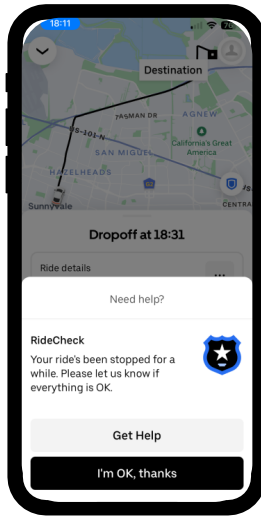
\* Long stop / Route deviation / Drop off lingering



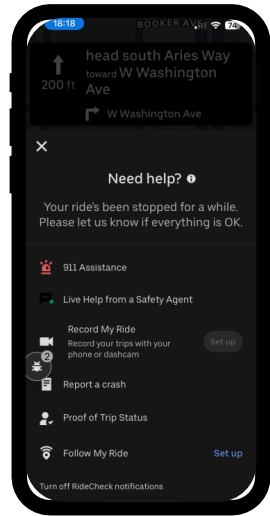
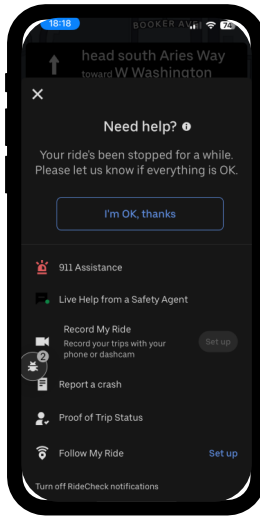
# Product Segments | 2024



# Rider Experience



# Driver Experience



# IVR - Robocall

## Heuristics

- Triggered when - The trip continues to be in anomaly state + User did not response for 3 minutes.
- When receiving the robocall, the user can input through keypad for either "I'm okay" or "connect to safety line" (which will be directed to Uber agents).

## Metrics

Trips called	Call pickup %	Redirect to IRT from pickup %
2.8MM	36.1%	2.0%

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“

*Hello, this is a RideCheck from Uber. The app detected that your ride's been stopped for a while, and we wanted to check in. If you need emergency assistance, please hang up and dial 911. If everything is OK, please press 1 and hang up. Otherwise, please press 0 or stay on the line to be connected to the Uber Safety Line."*

# Push for Guardians

[Demo](#)

## Heuristics

Triggered when:

- Teens received first push of ride check (Long Stop, Route Deviation, Vehicle Crash),
- **And** teen did not respond for 3 minutes for Long Stop
- **And** trip is still in anomaly state.

Push Notification is sent to Guardian (Parent), tap on the notification will open Trip Tracker, on the Trip Tracker it has a banner of Ride Check Status.

If Teens rider respond later, the status will update to back on track.

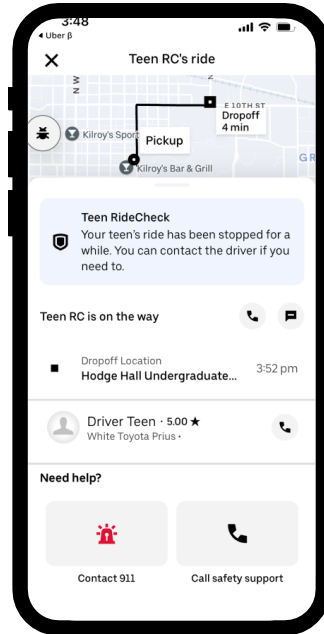
## Metrics

Push send %

**1.61%**  
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Push view %

**33.9%**



# Where it is live?

	Long Stop - Courier	Long Stop - Mobility		Midway drop-off		Route Deviation		IVR
	Courier	Rider	Driver	Rider	Driver	Rider	Driver	
<b>US&amp;C</b>	All	All	All	All	All	All	All	United States
<b>LatAm</b>	<b>Not launched:</b> Jamaica, Argentina, Colombia, Paraguay, Peru, Uruguay, Honduras	All	All	All	All	All	All	
<b>EMEA</b>	<b>Not launched:</b> Malta, Austria, Bahrain, Cote d'Ivoire (Ivory Coast), Croatia, Czech Republic, Egypt, Estonia, Finland, Ghana, Greece, Israel, Jordan, Lebanon, Lithuania, Nigeria, Norway, Pakistan, Qatar, Romania, Saudi Arabia, Slovakia, Tanzania, Uganda, Ukraine, UAE, Turkey, Spain, Netherlands, Hungary	<b>Not launched:</b> Turkey	<b>Not launched:</b> Turkey Netherlands Belgium	<b>Not launched:</b> Malta Hungary	<b>Not launched:</b> Malta Nigeria Netherlands Belgium Hungary	<b>Not launched:</b> Malta Portugal Netherlands Belgium France Switzerland Hungary	<b>Not launched:</b> Malta Netherlands Belgium France Switzerland Hungary	
<b>APAC</b>	<b>Not launched:</b> Japan, Taiwan (ROC), India Bangladesh, Hong Kong Korea, Sri Lanka	All	All	All	All	<b>Not launched:</b> New Zealand Australia	<b>Not launched:</b> New Zealand Australia	

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## Slide 10

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1

What about Crash Detection?

@vidyad@uber.com for viz  
Shermin Ng; 12/18/2024 2:02:26 AM

# Goals and Metrics

# RideCheck aims to increase peace of mind and could possibly reduce safety incidents

## Primary Goals

### Enhance safety sentiment

- Increase user confidence and satisfaction while riding with Uber

### Enhance safety support experience

- When something happens, give quick and easy access to safety response tools

## Secondary Goals

### Prevent crimes of opportunity

- Hypothesis: Even if it seems like there's an opportunity for an easy crime, RideCheck will remind people that Uber is actively monitoring every trip.

### Push away bad actors

- Hypothesis: Bad actors don't like being monitored and don't like that their behavior is being flagged in unexpected situations. They will either behave or go elsewhere - making Uber safer.

## Non-goals

### Reduce incident rate is *not* a primary OKR for RideCheck

- We have not been measuring impact of RideCheck on safety incidents.

## Slide 12

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1

@bajaj@uber.com This looks like incident-prevention goals.

Could we change it to something like:

Primary goals:

- Enhance Safety Support experience / when something happens, Uber's got your back.

Secondary goals (harder to measure):

- Crimes of opportunity
- push away bad actors

\_Reassigned to bajaj@uber.com\_

Mariana Esteves; 2/21/2024 6:37:09 PM

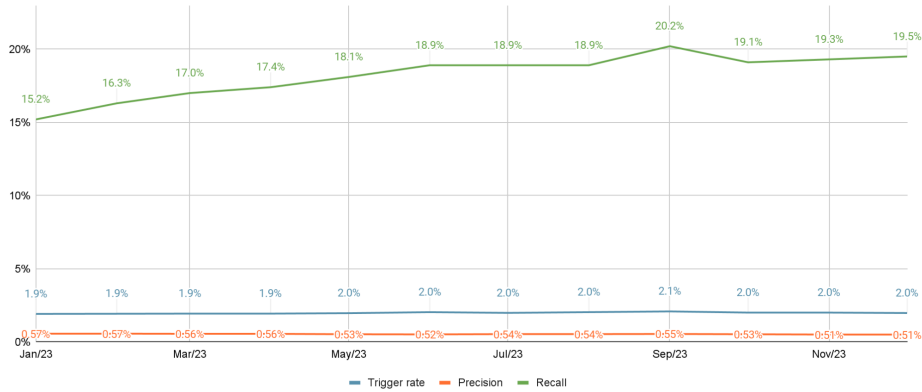
1

**Added**

Srishiti Bajaj; 2/21/2024 6:37:09 PM

With no changes, overall recall rate increased by **28%** and trigger rates increased by **5%**, while precision dropped by **11%**

Overall RideCheck Metrics



## Slide 13

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2

It would be good to add after this a slide on precision and recall, comparing the anomaly types and the finding:

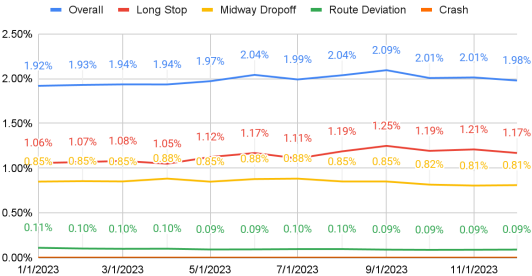
- which anomaly has the highest precision, which has the highest recall, etc

Mariana Esteves; 2/21/2024 7:30:04 PM

# Deep dive on heuristics and segments

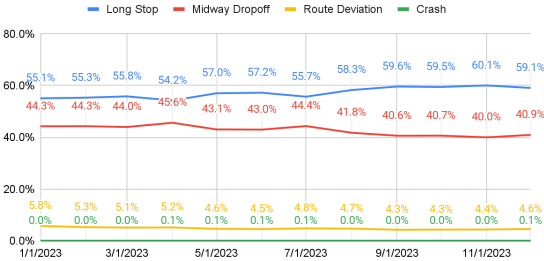
## Breakdown by heuristics

Trigger rate by heuristic (as % of trips)



% share of Ridecheck triggers by heuristic

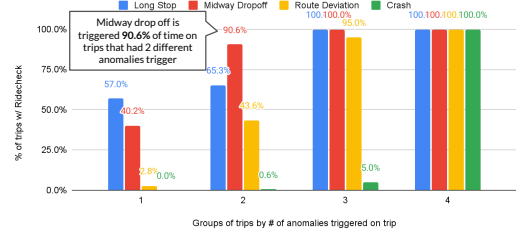
Total sums up to >100% as multiple Ridechecks may happen for the same trip



# Multiple anomalies have higher precision

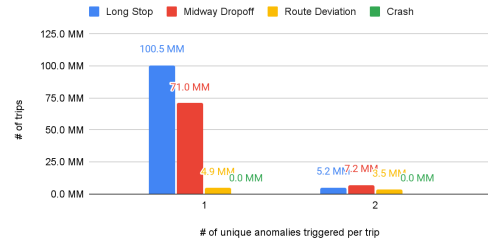
# of unique RC anomalies triggered	# of trips	% of total RideChecks	Precision (% of RideChecks that triggered on trips w/ safety incidents)
1	176,472,455	95.4%	0.5%
2	7,956,264	4.3%	2.0%
3	460,430	0.2%	4.3%
4	148	0.0%	73.7%

Proportion of each anomaly triggers within Ridecheck trips



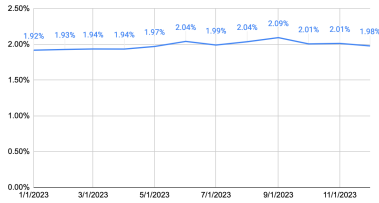
Breakdown of anomaly triggers within Ridecheck trips

Trips with 3+ anomalies excluded due to low volume

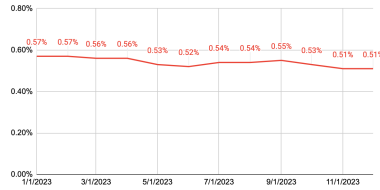


# 2023 overall ridecheck trends

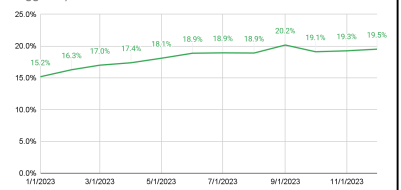
Overall monthly trigger rate (as % of all trips)



Overall monthly precision (as % of RC triggers that had any safety incidents)



Overall monthly recall (as % of safety incidents with Ridecheck triggered)



# Detailed metrics

Metric		2023	Jan/23	Feb/23	Mar/23	Apr/23	May/23	Jun/23	Jul/23	Aug/23	Sep/23	Oct/23	Nov/23	Dec/23
Overall	Trigger rate	1.99%	1.92%	1.93%	1.94%	1.94%	1.97%	2.04%	1.99%	2.04%	2.09%	2.01%	2.01%	1.98%
	Precision % of Ridecheck triggers that had incidents	0.54%	0.57%	0.57%	0.56%	0.56%	0.53%	0.52%	0.54%	0.54%	0.55%	0.53%	0.51%	0.51%
	Recall % of incidents with Ridecheck triggered	18.2%	15.2%	16.3%	17.0%	17.4%	18.1%	18.9%	18.9%	18.9%	20.2%	19.1%	19.3%	19.5%
Long Stop (Mobility)	Trigger rate	1.14%	1.06%	1.07%	1.08%	1.05%	1.12%	1.17%	1.11%	1.19%	1.25%	1.19%	1.21%	1.17%
	Precision	0.38%	0.44%	0.42%	0.40%	0.41%	0.38%	0.37%	0.38%	0.36%	0.36%	0.36%	0.35%	0.34%
	Recall	7.3%	6.4%	6.7%	6.8%	7.0%	7.3%	7.7%	7.5%	7.4%	7.9%	7.7%	7.9%	7.7%
Long Stop (Courier)	Trigger rate	0.03%	0.03%	0.02%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%
	Precision	0.39%	0.34%	0.37%	0.37%	0.37%	0.37%	0.38%	0.38%	0.38%	0.41%	0.41%	0.41%	0.44%
	Recall	1.00%	0.98%	0.95%	0.90%	0.94%	0.94%	0.98%	1.00%	1.03%	0.94%	1.02%	1.09%	1.14%
Multiple Long Stop	Trigger rate	0.08%	0.07%	0.07%	0.07%	0.06%	0.07%	0.08%	0.08%	0.08%	0.09%	0.08%	0.09%	0.08%
	Precision	0.60%	0.63%	0.63%	0.63%	0.64%	0.60%	0.60%	0.58%	0.58%	0.58%	0.60%	0.58%	0.56%
	Recall	0.8%	0.6%	0.6%	0.6%	0.7%	0.7%	0.8%	0.8%	0.8%	0.9%	0.9%	0.9%	0.9%
Midway Drop-off	Trigger rate	0.85%	0.85%	0.85%	0.85%	0.88%	0.85%	0.88%	0.88%	0.85%	0.85%	0.82%	0.81%	0.81%
	Precision	0.91%	0.90%	0.91%	0.92%	0.87%	0.89%	0.87%	0.88%	0.94%	0.99%	0.94%	0.92%	0.91%
	Recall	13.1%	10.6%	11.5%	12.2%	12.5%	12.9%	13.5%	13.8%	13.8%	14.7%	13.8%	13.9%	14.3%
Route Deviation	Trigger rate	0.09%	0.11%	0.10%	0.10%	0.10%	0.09%	0.09%	0.10%	0.10%	0.09%	0.09%	0.09%	0.09%
	Precision	0.36%	0.35%	0.40%	0.41%	0.38%	0.35%	0.36%	0.36%	0.33%	0.36%	0.37%	0.35%	0.34%
	Recall	0.6%	0.5%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%
Crash	Trigger rate	0.001%	0.0008%	0.0008%	0.0009%	0.0010%	0.0011%	0.0010%	0.0010%	0.0009%	0.0010%	0.0010%	0.0009%	0.0010%
	Precision	53.3%	67.7%	65.6%	62.8%	57.1%	53.4%	51.5%	50.5%	50.8%	48.8%	48.3%	49.2%	46.8%
	Recall	13.6%	12.7%	12.0%	12.4%	13.1%	13.2%	12.3%	11.9%	10.7%	11.4%	11.3%	10.5%	11.1%

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# User Feedback

“

I trust my ride is safe because Uber is proactively looking out for me.

# User feedback shows positive perceptions of Ride Check (Route Deviation)

## Route Deviation causes more users to strongly agree that Uber is committed to safety

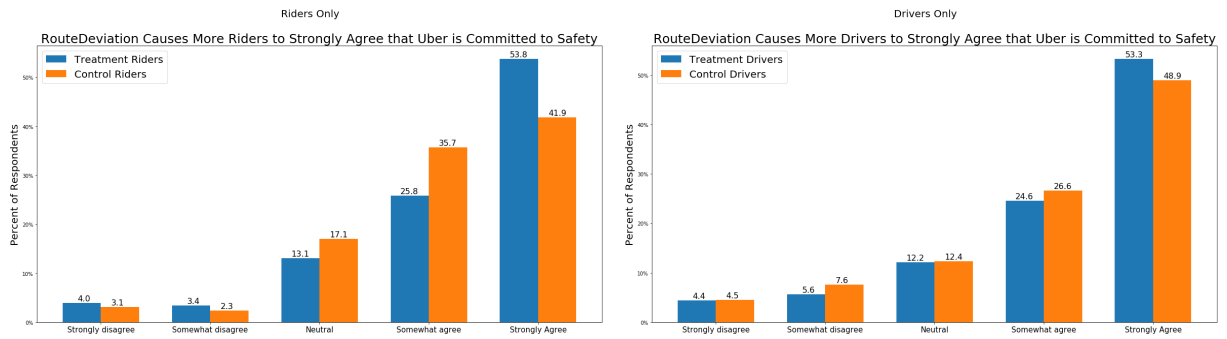
- Difference in proportion who Strongly Agree is stat sig at 95% confidence (+11.9pp)
- RD is most impactful for users who feel Uber is generally safe (i.e., Neutral or Somewhat Agree), shifting them right (towards Strongly Agree)

## Route Deviation is a well liked feature, especially among users who have tried it

- 75%+ of Riders consider the product "Excellent" or "Good"
- 70%+ of Drivers consider the product "Excellent" or "Good"

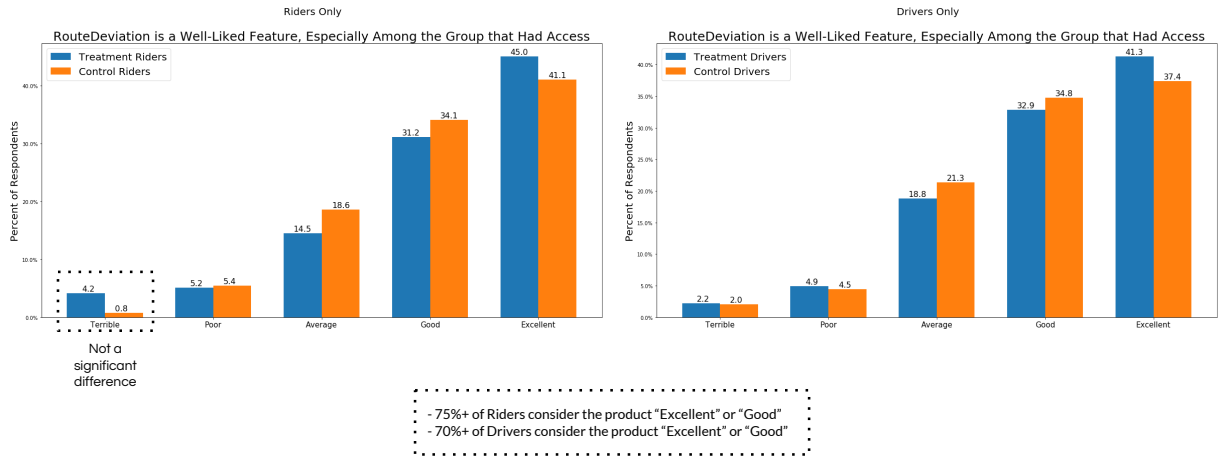
\*\* Sep, 2021 - US; These results are for Route Deviation only

In your experience using Uber, how much do you agree or disagree with each of the following statements? *Uber is committed to safety*



- Difference in proportion who Strongly Agree is stat sig at 95% confidence (+11.9pp)  
 - RD is most impactful for users who feel Uber is generally safe (i.e., Neutral or Somewhat Agree), shifting them right (towards Strongly Agree)

Uber has begun checking in on some riders and drivers through the app when a trip is taking an unexpected route. **Overall, how would you rate this new feature?**



# Drivers, on the other hand, like the concept but don't consider it always assertive on spotting unsafe situations

## Examples of false positives

“ I see this [RC notification] all the time... **it is a bit random** (...). Once an accident happened and **Waze recalculated the route, but Uber's map didn't get updated** and showed me the RC msg.  
RD

“ At night, the city of Sao Paulo changes a lot. There is a lot of construction work happening & some routes get closed. So **I end-up having to use my own routes if the GPS is not updated**.  
RD

“ **Everytime I go certain areas, I know the message is going to pop-up because I avoid the routes they recommend me.** I have been in a robbery attack in some of them, so in these situations I talk to the rider and if they are ok, I use my own route.  
RD

“ **I only work at night, and I see this message very often.** Riders ask me to stop to buy cigarettes, to buy fast food in McDonalds... it happens ALL the time.  
LS

“ During the day, riders usually ask me to stop at drug stores, ATMs... When I stop in a **known business areas,** I usually feel safe.  
LS

“ I work at Rio and there are areas of the city that I avoid. Still, [harmless] people who live there **choose a safe destination and then ask me to go to these unsafe areas after the trip started.**  
RD

“ I only work as Uber Black and pick-up a lot of elderly riders. They sometimes **ask me to wait to go to the pharmacy and don't know how to add stops in the app.** It also common for me to drive **babysitters [guest rides] and wait for them while they take the kid inside the schools/nursery** and then drive them back.  
LS

Drivers say analysing **time of day** & businesses should be analysed closely since:

- During day trips, riders may request more LS that are harmless (stops at pharmacy, ATMs, etc); and RD may be more common due to
- During night trips, drivers say RD may be common due to construction work, avoiding unsafe zones of the city; , only show the message once the route is

# Survey Results

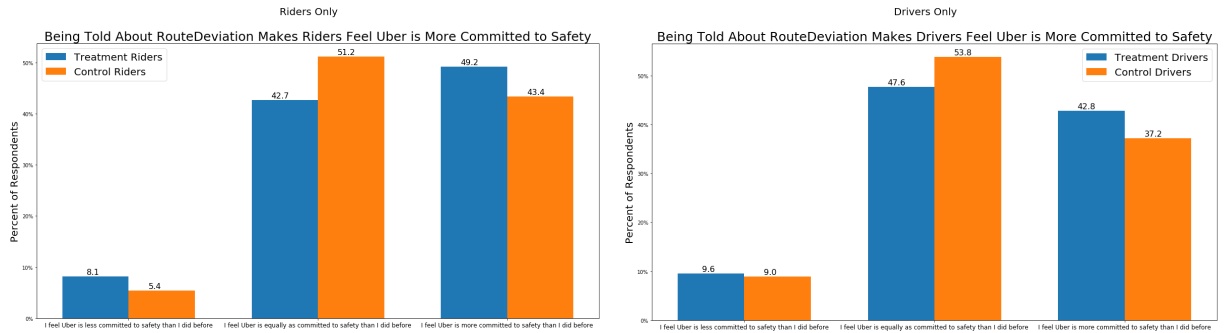
There is clear evidence that Route Deviation and its associated messaging increases safety sentiment, while there is no discernible impact (positive or negative) on incident rates or severity.

- When subsetting the treatment group to include only the set of drivers and riders who remember seeing the notification regarding deviation from the expected route, the impact on safety sentiment is even greater.

Experimentation Metrics	Level Effects	
	Point Estimate	95% Confidence Interval
"Strongly Agree" that Uber is Committed to Safety rate (drivers and riders)	+5.48pp	+1.72pp to +9.24pp
"Strongly Agree" that Uber is Committed to Safety rate (drivers only)	+4.35pp	+0.26pp to +8.43pp
"Strongly Agree" that Uber is Committed to Safety rate (riders only)	+11.91pp	+2.35pp to 21.47pp
Overall IPC Rate	-8.53/M	-193.56/M to 176.50/M

Stat sig.

Uber has begun checking in on some riders and drivers through the app when a trip is taking an unexpected route. **How does knowing about this feature impact your opinion that Uber is committed to safety?**



- 90%+ of all users (Treatment or Control)
- Primary reason for "I feel Uber is less committed than I did before": Users expected RD to already exist

# What we tried and is not live?

# Feedback Form

## XP details

- We added a feedback form for riders to give feedback for RideCheck interventions

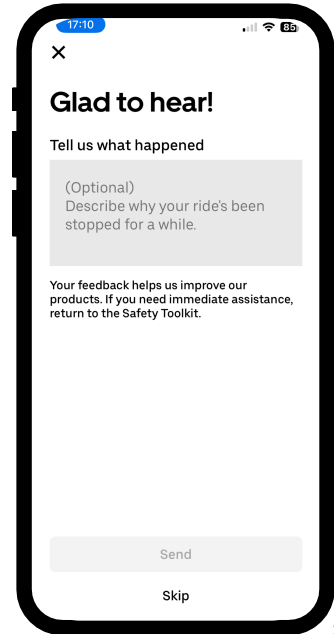
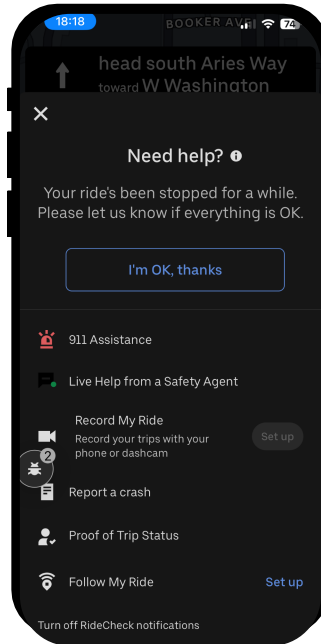
## XP results

- Feedback analysis:
  - Traffic - 46%
  - Gas - 10%
  - Intended change - 8%
  - Road situation - 4%
  - Railway - 3%

## Decision

- We decided to put a hold to the product until we fix the underlying issues

identified  
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# SMS

## XP details [XP plan](#)

- XP ran in UK and Mexico for both riders and drivers.
- SMS notifications were tested as part of escalation process as illustrated below:



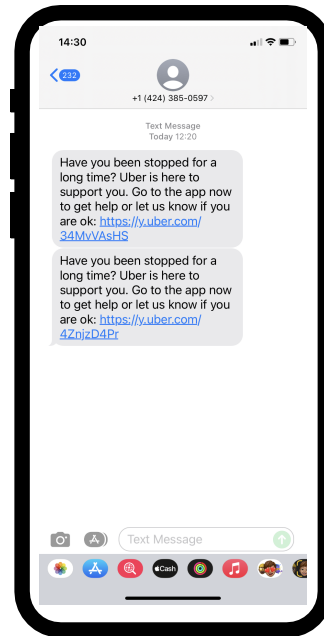
## XP results [Readout](#)

- No significant increase in overall engagement was observed
- Increase in opt-out rates was observed, especially among riders

## Decision

- We decided not to launch the sms

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# What's Next?

# RideCheck - Gaps and Opportunities

- ③ Increase precision - would help improve safety perception
  - Progress Detection
  - Multiple Anomalies (Different)
  - Incorporate other safety signals like SRAD
- Build a new anomaly
  - Destination Lingerin
- Build escalations
  - Safety Agents

## Slide 30

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- 3 Should highlight that precision is a key element that would allow us to increase/improve safety perception  
Mariana Esteves; 2/21/2024 7:40:39 PM
- 4 @bajaj@uber.com is there anything else as a gap? Is the co-presence idea built-in destination lingering?  
\_Reassigned to bajaj@uber.com\_  
Mariana Esteves; 2/21/2024 7:49:38 PM
- 2 We are not using the copresence signal for destination lingering. We are using the regional monitoring signal from the maps team.  
  
cc @shahd@uber.com Would you like to add anything?  
Srishti Bajaj; 2/21/2024 7:49:38 PM
- 5 Is the idea here to trigger Live agents like ADT?  
Mariana Esteves; 2/21/2024 7:48:15 PM
- 3 Yes, we could do it for specific use case like Crash  
Srishti Bajaj; 2/21/2024 7:48:15 PM

# Deep Dive

# Mobility - Long Stop

## Heuristics

- Available after pickup and before drop off (only P3)
- For most cities - 5-min stop
- For dense cities - 8-min stop

## Metrics

Trigger rate	Precision	Recall
1.14%	7.33%	0.38%



# Courier - Long Stop

## Heuristics

- Available @ trip start and before drop off (P2 & P3)
- Push notification only sent to courier
- Car: 12-min stop
- Motorcycle: 13-min stop
- Bike: 13-min stop

## Metrics

Trigger rate	Precision	Recall
0.35%	1.00%	0.39%



# Enhanced RideCheck

## Heuristics

Safety Preferences and Teens

- Long stop - 4-min stop

## Metrics

Teens

Trigger rate	Precision	Recall
0.81%	0.67%	13.5%

Safety Preferences (Dec/23)

Trigger rate	Precision	Recall
1.6%	0.67%	8.28%

# Mid-way Drop off

## Heuristics

Triggered when a trip that ended at a different destination.

### Short trips (<=1.3 Mile)

- Day time - Midway distance > 0.6 \* trip length
- Night time - Midway distance > 0.2 \* trip length

### Long Trips (>1.3 Mile):

- Day time - Midway distance > 1 mile
- Night time - Midway distance > 0.5 mile

Midway distance: distance between actual drop off location and destination.

## Metrics

Trigger Rate	Precision	Recall
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0.85%		0.91%
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13.12%

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# Mid-way Drop off - Exceptions

[Source](#)

	A	B	C	D	E	F	G	H	I
1	<b>Anomaly</b>								
2	<b>Day / Night</b>	<b>Day: 6:00 - 20:59, rest of day is night</b>							
3			<b>Long Trip Distance</b> if longer than this distance, apply absolute threshold otherwise apply ratio threshold	<b>Day / Night</b>	<b>Long Trip</b> Absolute Distance to Destination	<b>Short Trip</b> Ratio of Dropoff-Destination to Pickup-Destination			
4	<b>Region</b>	<b>Marketplace</b>							
5	India Pakistan United Arab Emi Bangladesh Ecuador Guatemala Dominican Repu Sri Lanka El Salvador	personal transport	>= 3.21869 KM	Night	>= 0.804672 KM	>= 0.2			
6	Egypt Jordan Nigeria Uganda Saudi Arabia			Day	>= 3.21869 KM	>= 0.8			
7	Turkey Tanzania Paraguay Ghana Kenya Bolivia	personal transport	>= 8.04672 KM	Night	>= 1.60934 KM	>= 0.6			
8		personal transport	>= 2.09215 KM	Day	>= 0.804672 KM	>= 0.2			
9	All other regions	personal transport	>= 2.09215 KM	Night	>= 0.804672 KM	>= 0.2			
10									
11	<b>No Enhanced r</b>								
12									
13									

# Route Deviation

## Heuristics

Leverages 4 variables to determine whether a trip is deviating excessively from the specified route; available after pickup is complete and before drop off:

1. Time of day (binary: day or night)
2. Distance from the (original) route line
3. Increase in estimated time to arrival
4. Reroute events over the previous 30 seconds

Additional requirements: distance from route line and distance from destination has been increasing.

## Metrics

Trigger rate	Precision	Recall
0.09%	0.58%	0.36%

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# Route Deviation - Threshold Details

Source

Country UUID	RouteDeviation Model	Threshold Update Date								
5ce97963-62c9-41e4-a721-5ad8918181ff	v2.0 US	2021-05-10								
9917036c-d83f-42c9-83a1-9964cad9967a	v2.0 US	2021-06-09								
94ea05db-38e2-43e8-986e-486e1824dc9	v2.0 US	2021-06-23								
666ca90b-ed0e-4701-a556-0773376e9308	v2.0 US	2021-06-23								
77aade6b-4ecd-41ea-b951-505834b733f0	v2.0 US	2021-06-09								
4fba27d3-4f28-43b6-b54d-6bd8dc0b66b1	v2.0 US	2021-06-23								
13c309a2-2674-4cd1-b84d-88f75b77e550	v2.0 US	2021-06-23								
ae5cd90e-6a65-49ab-9d8f-b0567c321af6d	v2.0 US	2021-06-23								
078a2bec-d1fe-44ac-b29c-803b86a1c996	v2.0 US	2021-06-23								
93c0a72e-5982-48e0-87aa-cf6808cd7a1	v2.0 US	2021-06-23								
...	v2.0 default	2022-05-24								

Day/Night	Nighttime Designation (localHour)	Reroute Param (reroute30SecRate)	ETA Change (etaDeltaSeconds)	Deviate from route (distanceToRoutineAbsolute)	Extra condition
Day	5am-8pm	>=4	>=200	>=1600	distanceToRoutineDelta >= 0 OR distanceToDestinationDelta >=0
Night	8pm-5am	>=4	>=104	>=660	distanceToRoutineDelta >= 0 OR distanceToDestinationDelta >=0
Day	5am-8pm	>=4	>=320	>=4500	distanceToRoutineDelta >= 0 OR distanceToDestinationDelta >=0
Night	8pm-5am	>=3	>=105	>=640	distanceToRoutineDelta >= 0 OR distanceToDestinationDelta >=0
Day	5am-8pm	>=4	>=320	>=4500	distanceToRoutineDelta >= 0 AND distanceToDestinationDelta >=0
Night	8pm-5am	>=3	>=105	>=640	distanceToRoutineDelta >= 0 AND distanceToDestinationDelta >=0
Day	5am-8pm	N/A	>=300	>=2000	distanceToRoutineDelta >= 0 OR distanceToDestinationDelta >=0
Night	8pm-5am	N/A	>=180	>=500	distanceToRoutineDelta >= 0 OR distanceToDestinationDelta >=0

Country UUID	SpeedThreshold	SpeedLastDuration	RerouteInLast4min
N/A	>= 10mph (4.47m/s)	4minutes	0 reroutes

# Multiple Long Stop

[PRD](#)

## Heuristics

We send push notifications to Riders and Drivers for the first long stop. By tapping on the notification, they will be able to see the button "I am OK, thanks" and have easier access to the safety tools.

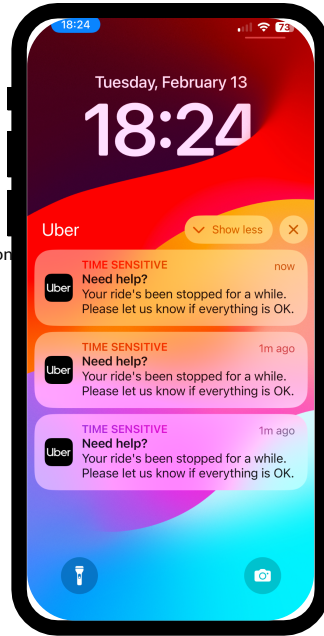
If we identify multiple long stops during the same trip, we will send another push notification to users. We have set a threshold limit:

- When user responded I'm okay, we mute same type of anomaly for following 10 minutes
- In extreme cases that we have 4+ triggers, we will stop sending push notifications after 3 positive replies from the user.

## Metrics

Trigger rate	Precision	Recall
0.08%	0.78%	0.60%

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Crash

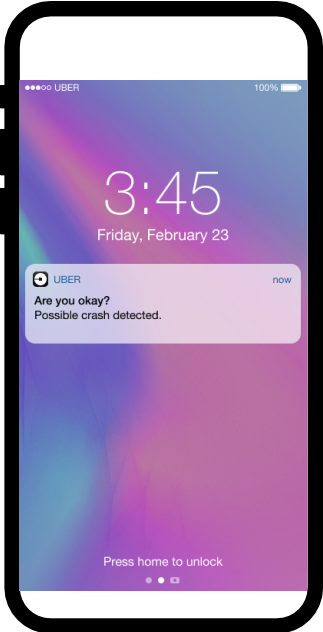
# SMS

## Heuristics

Triggered when - The trip continues to be in anomaly state + User did not response for 3 minutes.

Rolled back after XP for no obvious impact and budget concerns.

## Where is it live?



# Triggers are across the journey; most arise from Driver interaction on trip

Source / Moment	Trip request	Pick-up	On route	Payment & Drop-off
Uber platform	<ul style="list-style-type: none"> <li>• <b>Unexpected delay</b> due to GPS and navigation limitations</li> <li>• <b>Inexperienced driver</b> (eg. 5 star)</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Pick-up directions mismatch</b> (usability/gps problems)</li> <li>• <b>Car/driver information mismatch</b> (due to outdated information in app)</li> <li>• <b>Driver limits/denies special uses</b> (rider don't select appropriate category, stretches use cases)</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Unsafe/unknown location</b> (these can suggest an unsafe/unknown route)*</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Discussions over payment</b> (chose the wrong payment option)</li> </ul>
Driver interaction	<ul style="list-style-type: none"> <li>• <b>Unexpected delays</b> due to drivers' actions</li> <li>• <b>Atypical information request</b> by chat/call (destination, payment method, etc)</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Lack of greet, odd tone and questions</b></li> <li>• <b>Driver limites/denies specific uses cases</b> (extra passengers, adding shopping bags, carrying pets, etc)</li> <li>• <b>Driver refuses trip in person</b> (may also refuse to cancel it)</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Inappropriate conversation</b> (too personal, sensitive topic)</li> <li>• <b>Dangerous driving</b> (fast, texting)</li> <li>• <b>Driver's body language and actions</b> (inappropriate looking)</li> <li>• <b>Unrequested stops</b> (gas stops)</li> <li>• <b>Driver diverges</b> from the route</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Discussions over payment</b> (eg. lack of change, rider has no cash)</li> <li>• <b>Driver stops before destination</b></li> <li>• <b>Driver limites/denies specific uses</b> (parking in forbidden areas, help unloading the car)</li> <li>• <b>Driver doesn't end the trip</b></li> </ul>
Environment	<ul style="list-style-type: none"> <li>• <b>Late night trips</b></li> <li>• <b>Unsafe pick up location</b></li> <li>• <b>Rider travelling alone</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Vehicle characteristics</b> (tinted windows, child locks on)</li> <li>• <b>Vehicle conditions</b> (dirty, smelly, crashed car)</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Radio content or volume</b></li> <li>• <b>Unsafe/unknown route</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Unsafe destination</b></li> </ul>

\*A minority of drivers use Uber's app as their main navigation tool, still this problem can occur while using it or any other solution (Waze, Google Maps etc)

# SOT

[https://docs.google.com/document/d/1\\_vRIfalEhrXcehSH2oXQPE3t5pYWkHFbacEdFkQH-jw/edit](https://docs.google.com/document/d/1_vRIfalEhrXcehSH2oXQPE3t5pYWkHFbacEdFkQH-jw/edit)

Version 1.3 - April 2022

**Uber**

# Return to Normal

## Heuristics

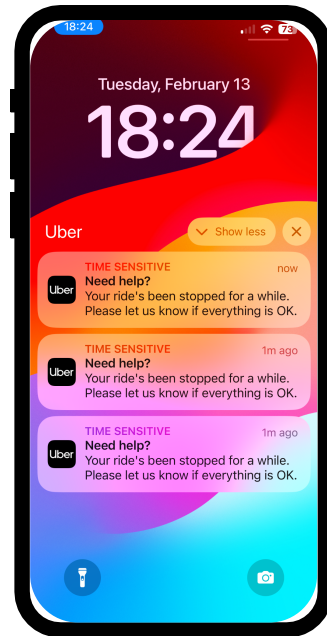
Return to normal is a part of the multiple long stop, in the return to normal, we take three sources:

- User reply I'm okay to In-App push
- User received robocall and keypad select I'm okay digit option
- Detected the on going anomaly (long stop) as ended, and next one (long stop) would be treated as 2nd/multiple anomaly.

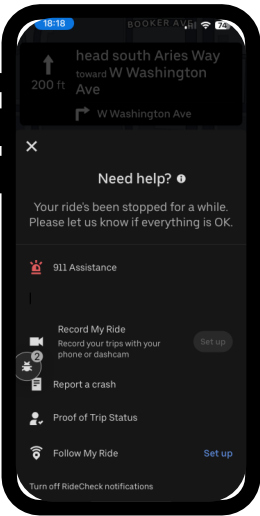
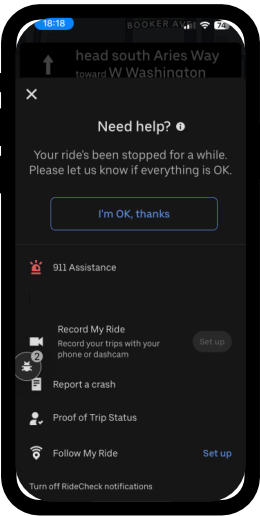
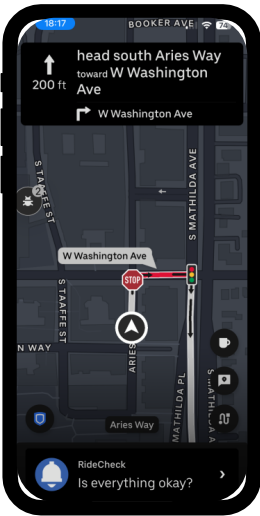
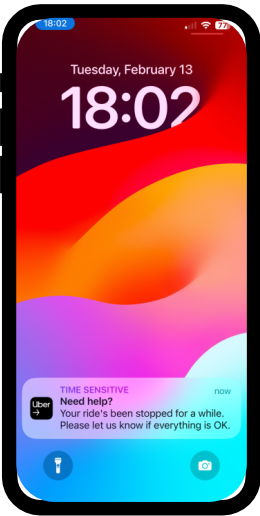
Detected long stop return normal criteria: speed over 10 mph for over 4minutes.

Also built for Route Deviation (speed over 10mph + no resoutes over 4minutes), not rolled out - DS help needed for RD.

Note: metrics for RTN and multiple LS are the same



# Courier Experience



Safety agents is not enabled for couriers