30TH IEEE INTELLIGENT VEHICLES SYMPOSIUM

Survey results

TransAID

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Points for discussion

- Authorities forbid L3 vehicles? → 1 out of 4 forbids
- Provide dedicated AD-lanes? → 1 out of 3 no/unsure
- Infrastructure limit the AD level? → 50/50
- L3+ AVs need to be connected? → 1 out of 5 thinks not
- Breaking the law (road authorities/CAVs):
  - Giving conflicting advice → some said no
  - To optimise the traffic stream → mixed responses
  - To behave as others → 3 out of 4
  - To increase traffic safety → 1 out of 3 says no or is unsure
- Require back-end support → some said no or OEM-only

First session results (1/2)

- Half of the 22 participants came from academia; a fifth were OEMs
- Goals: safety → throughput → emissions
- 1 out of 4 would allow authorities to forbid L3 vehicles
- Road sections related to automated driving:
  - Over half foresee areas where AD is not allowed
  - 2 out of 3 are for dedicated lanes
- 50/50 regarding an infra. limitation on the AD level

First session results (2/2)

- 90% wants OEMs to explain their AD limitations
- 2 out of 3 want OEMs to report disengagements (1 out of 4 is unsure)
- Connectivity is perceived as a required for L3+ Avs
- 1 out of 4 wants to forbid >L3~~€~~AVs (only 4 responded)

Second session results (1/2)

- 2 out of 3 participants came from academia; others were OEMs and service providers
- Road authorities are allowed to give advice that conflicts with traffic regulations → some said no
- (C)AVs breaking the law:
  - To optimise the traffic stream: mixed responses
  - To behave as all other vehicles: 3 out of 4
  - To increase traffic safety: 1 out of 3 says no or is unsure
- 2 out of 3 does not prefer MRMs after cut-in situations

Second session results (2/2)

- Some would require no support of a back-end or from an OEM back-end only

- In case of route blockage, the responses are mixed:
  - Execute an MRM
  - Execute a ToC
  - Find another route
  - Ask for advice

Let’s stay in touch

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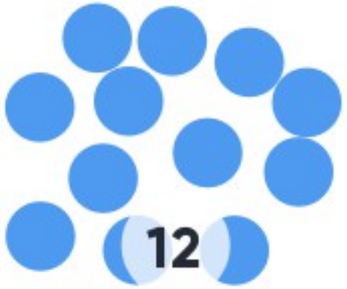
What is your background?

2

Road operator

4

OEM



12

Academia/research

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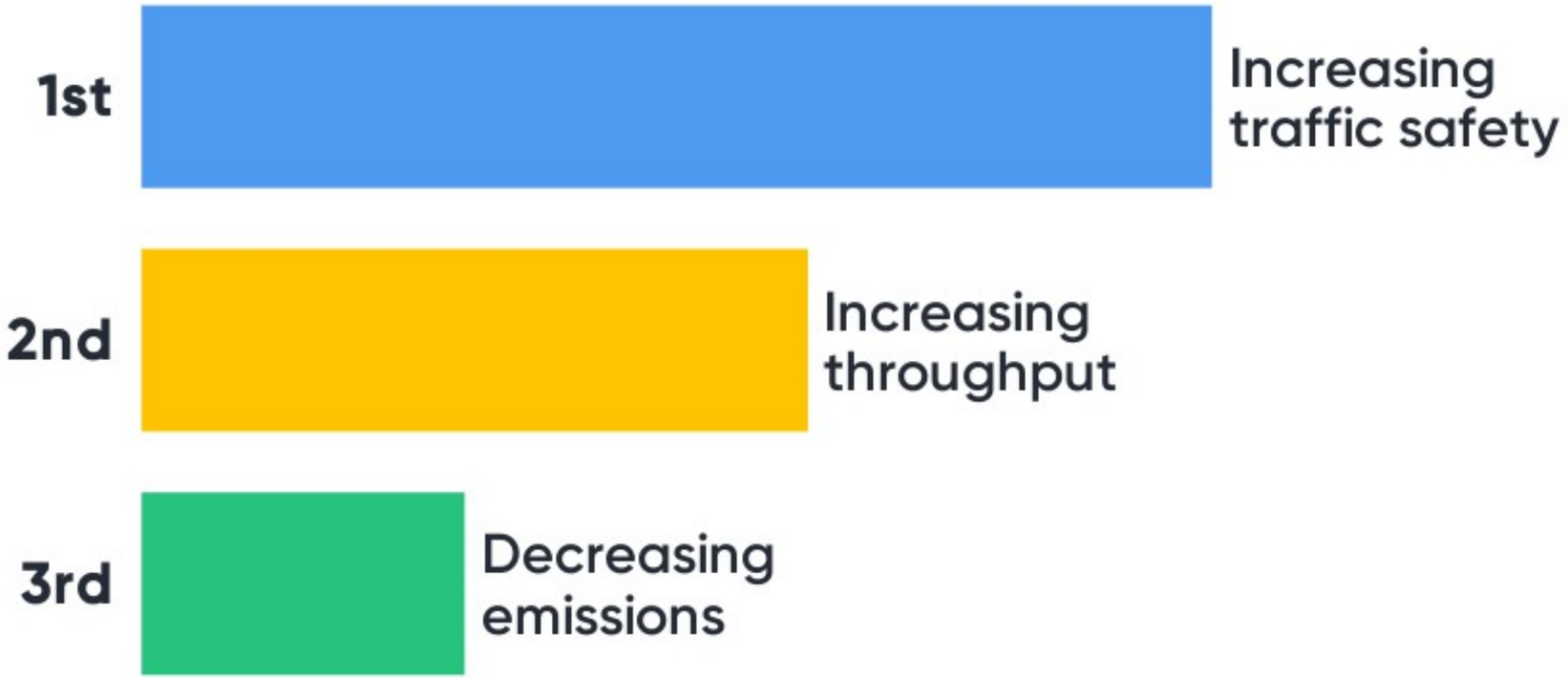
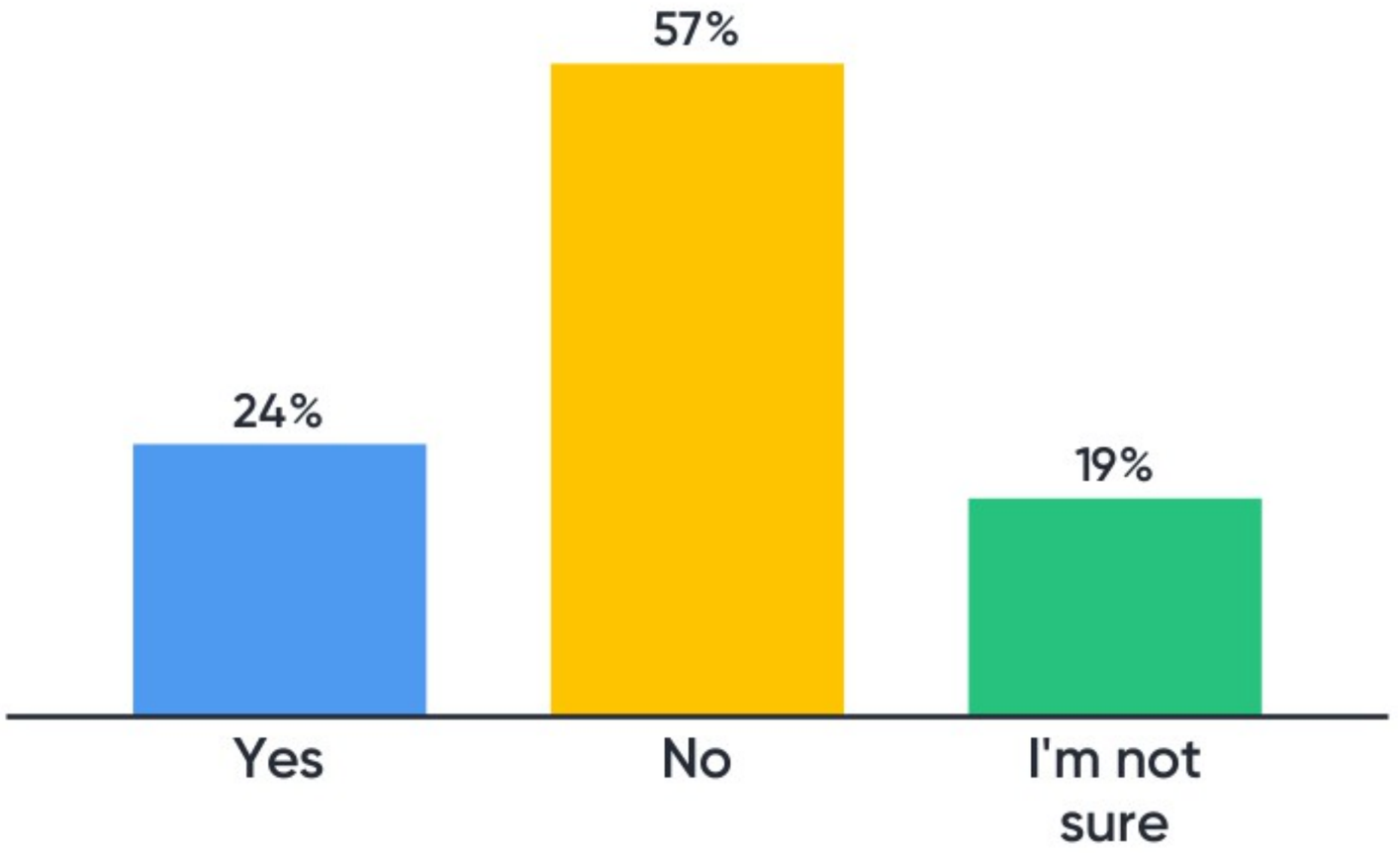
Authority

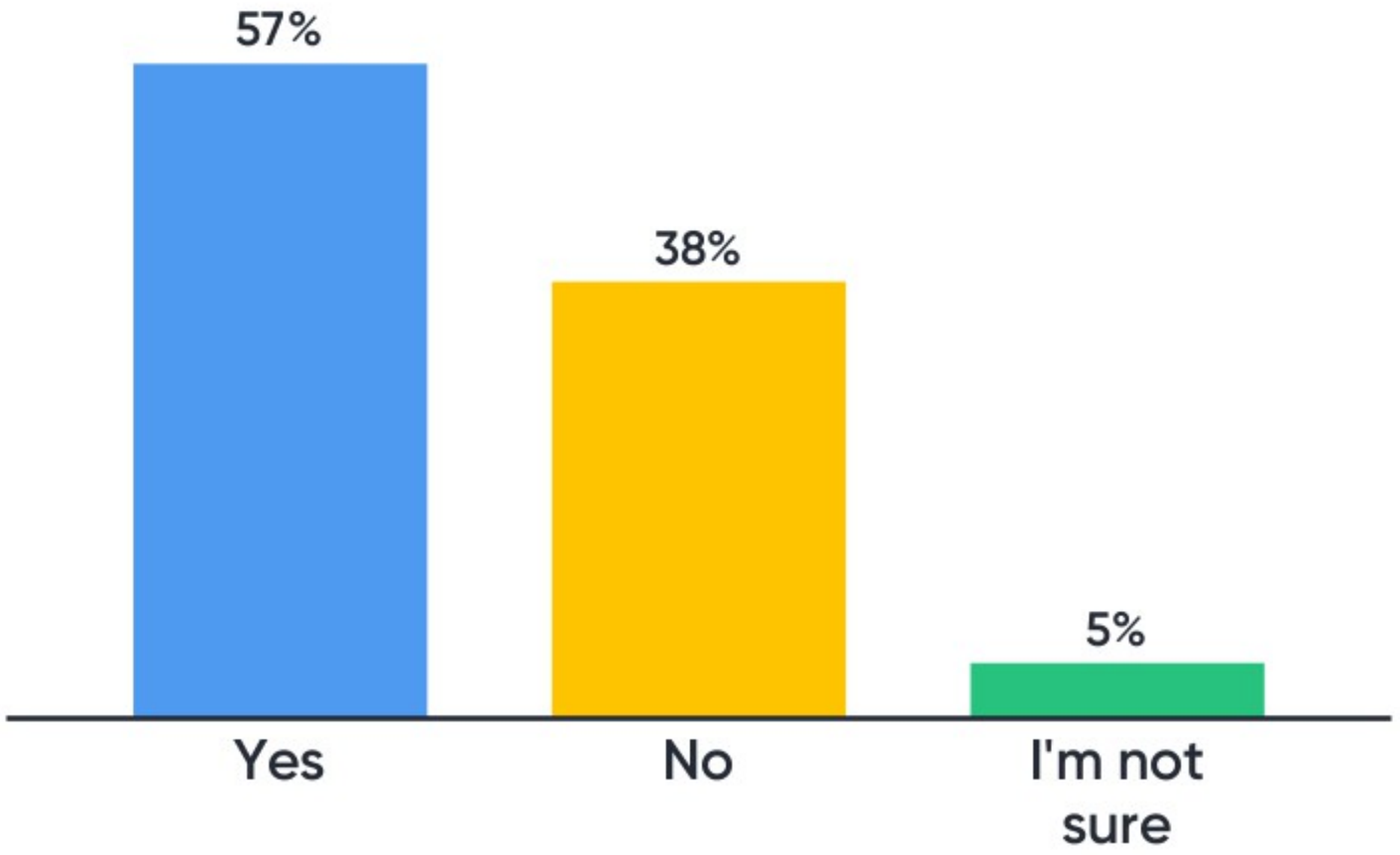
How would you rank the goals of managing traffic with (C)AVs?



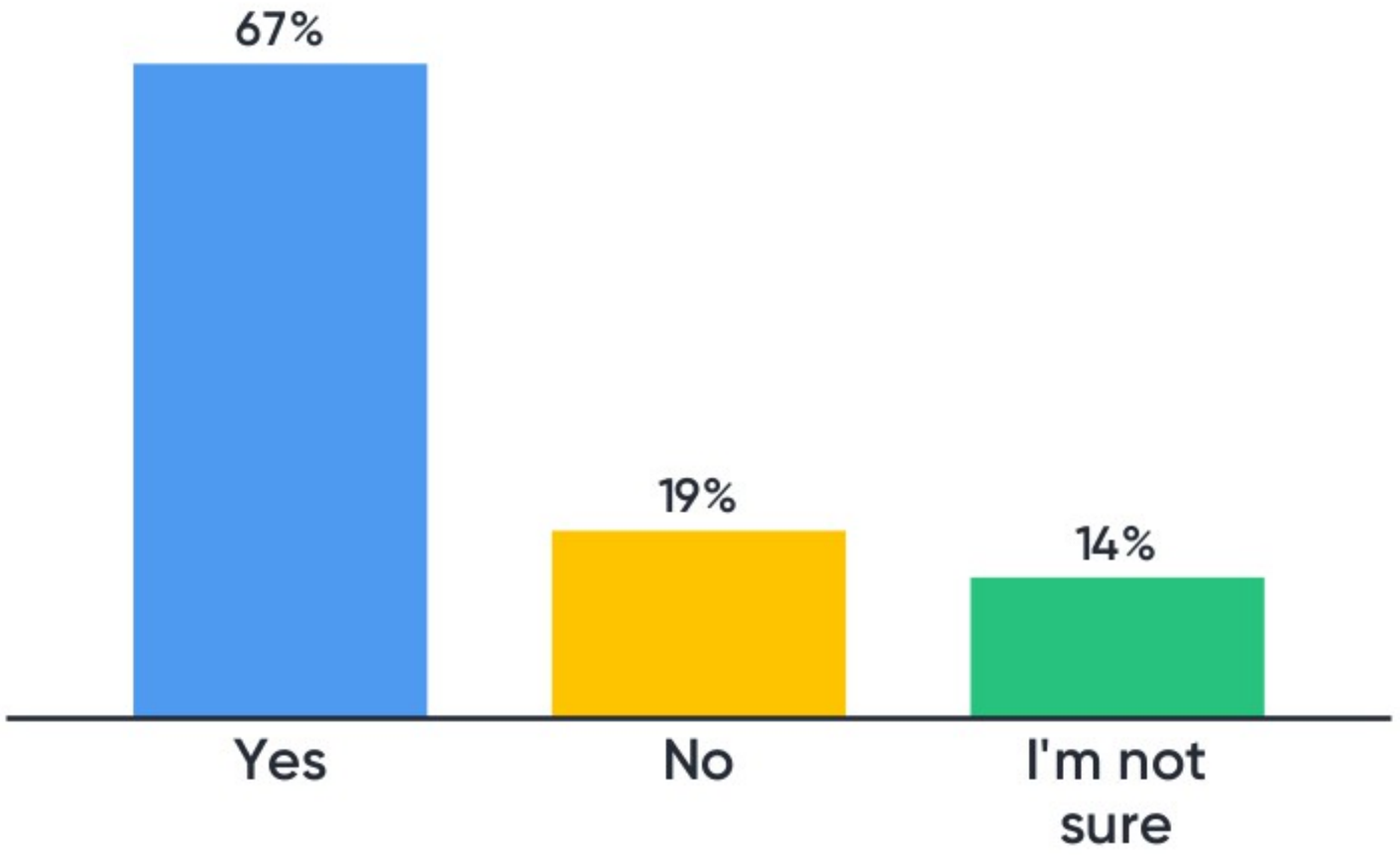
Level 3 is considered unsafe from an HMI perspective by some; should authorities forbid those vehicles?



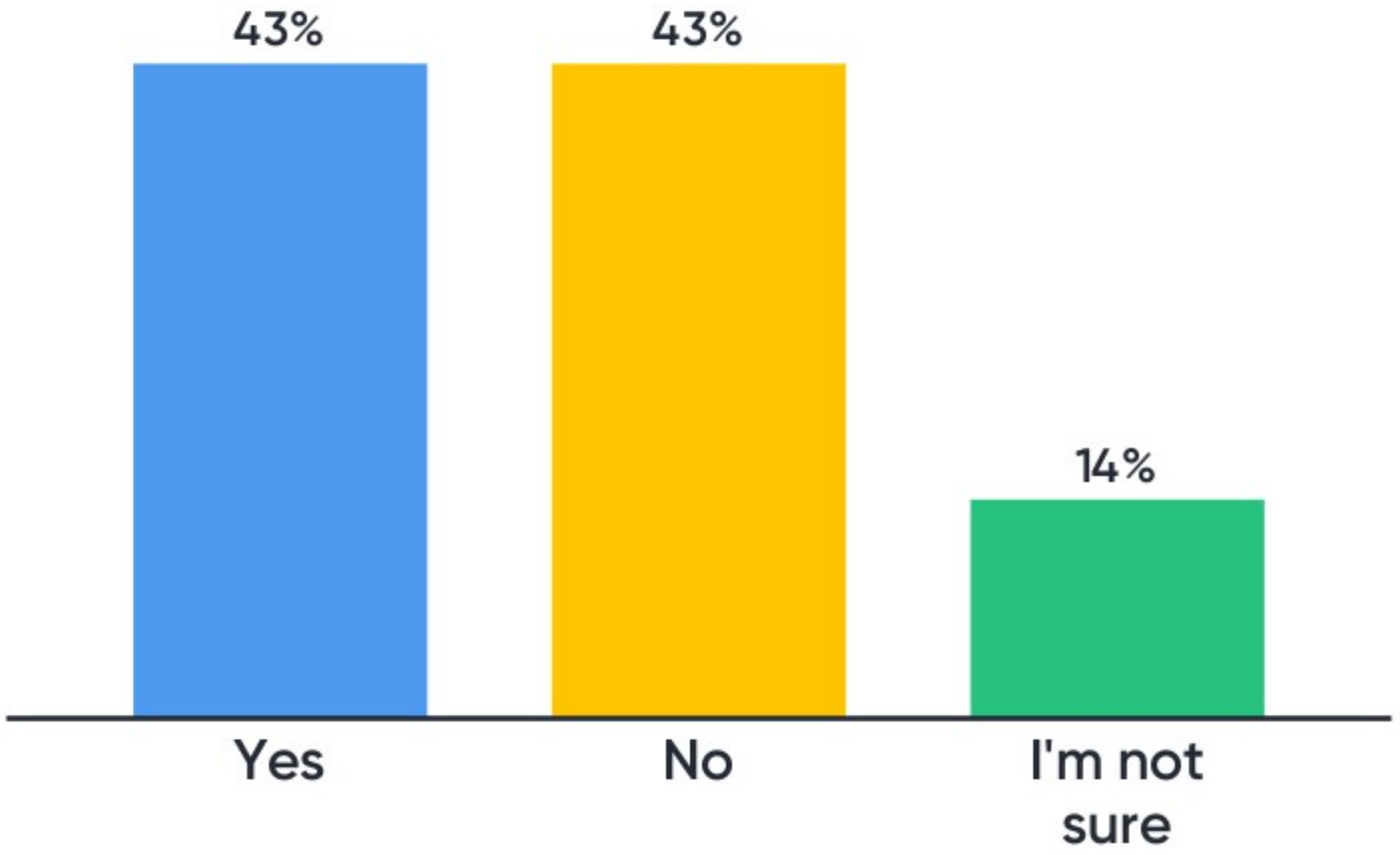
Do you foresee areas in the road network where you do *not* want to allow automated driving?



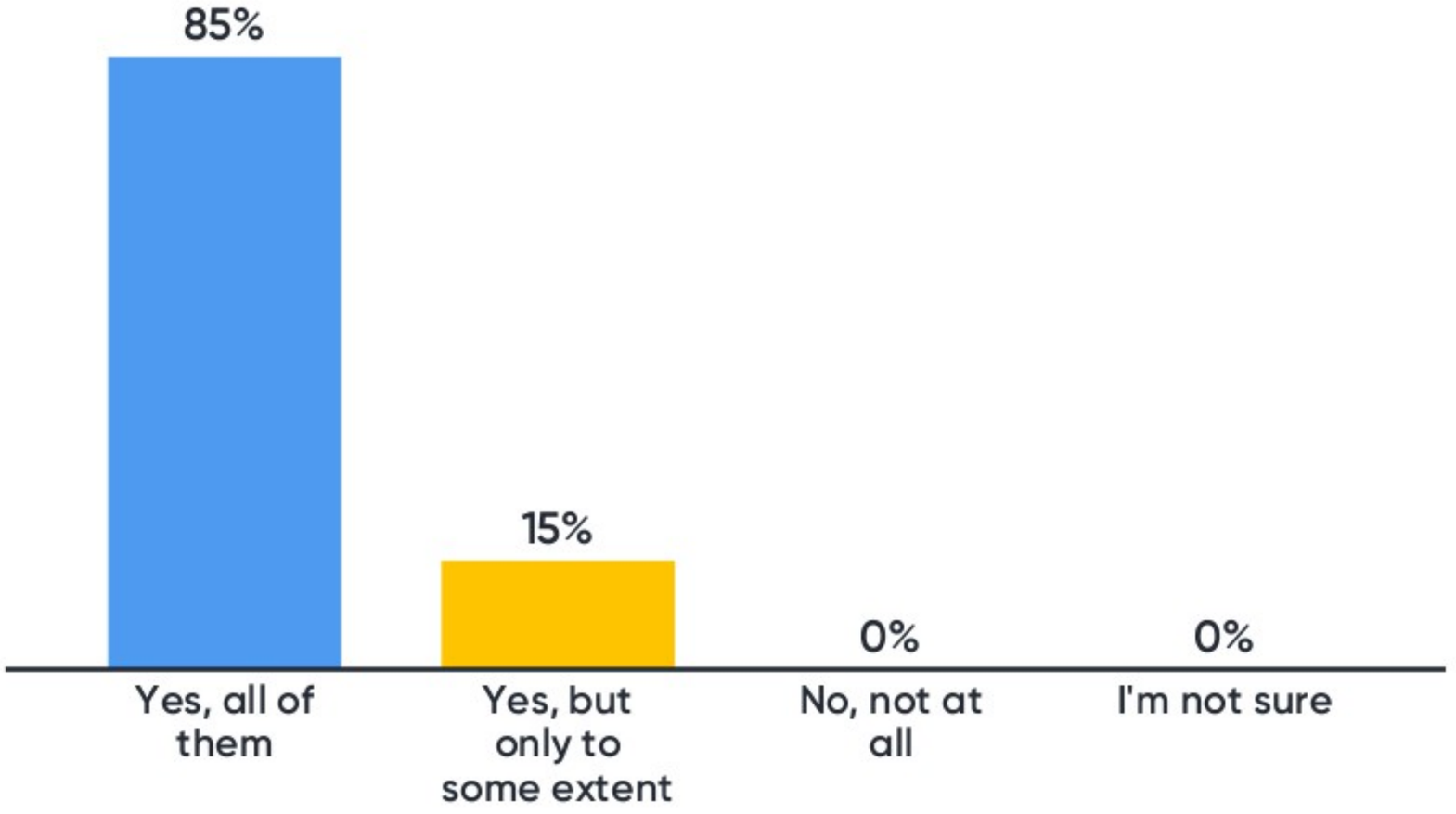
Do you foresee areas in the road network which are for *automated driving only* (dedicated lanes)?



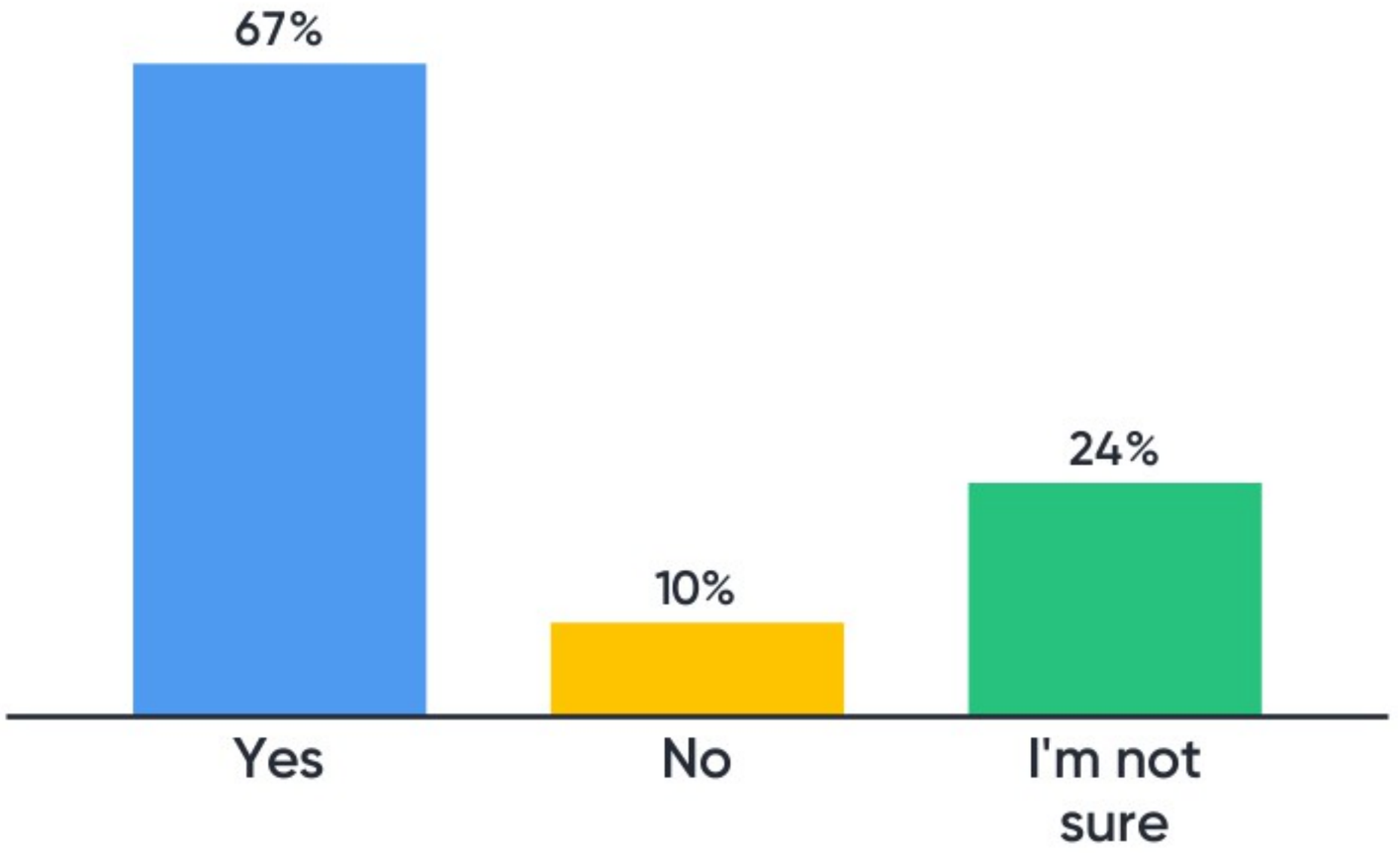
Should the infrastructure provider put a limitation on the level of automated driving that it allows?



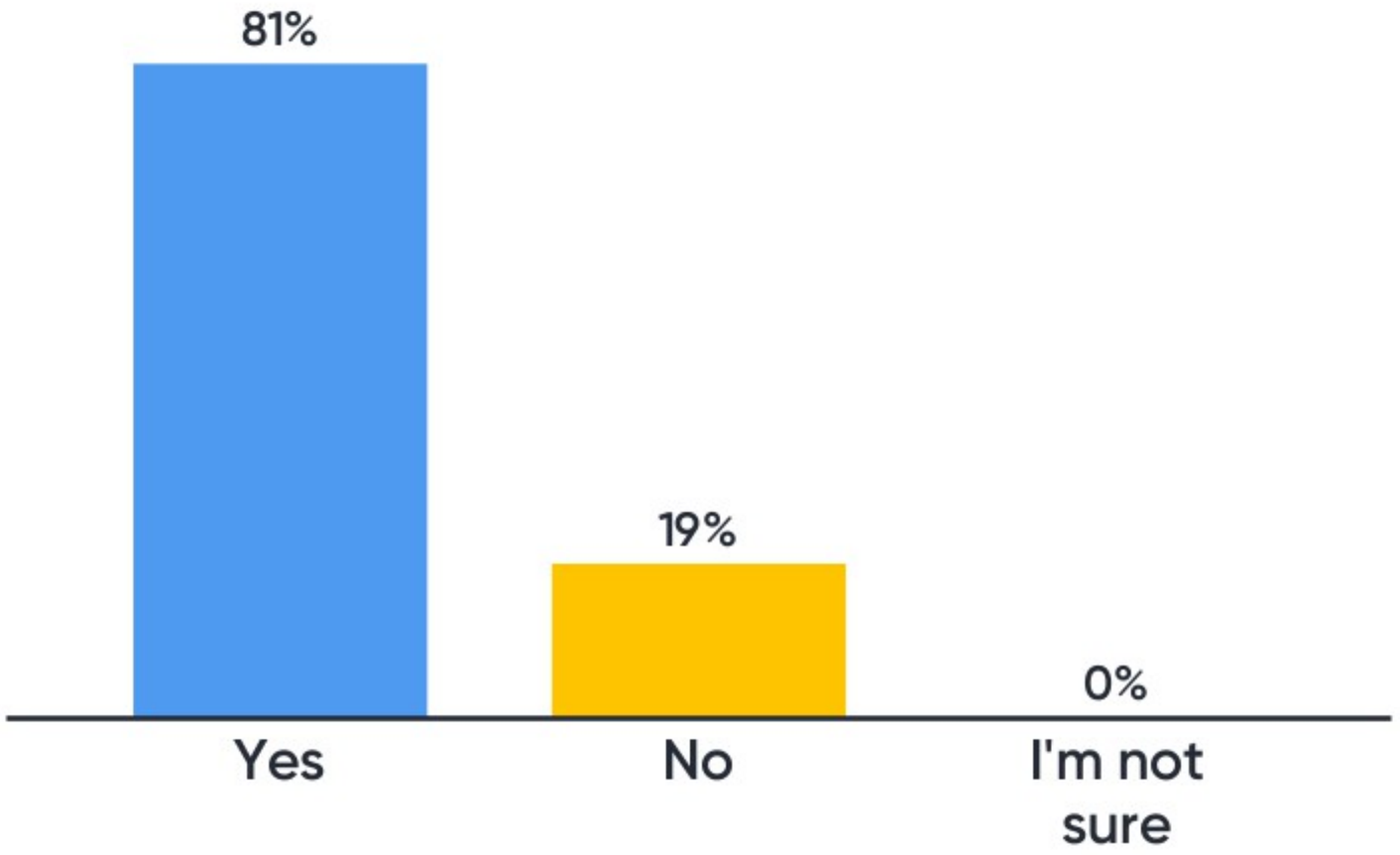
Should OEMs explain the limitations of their automation?



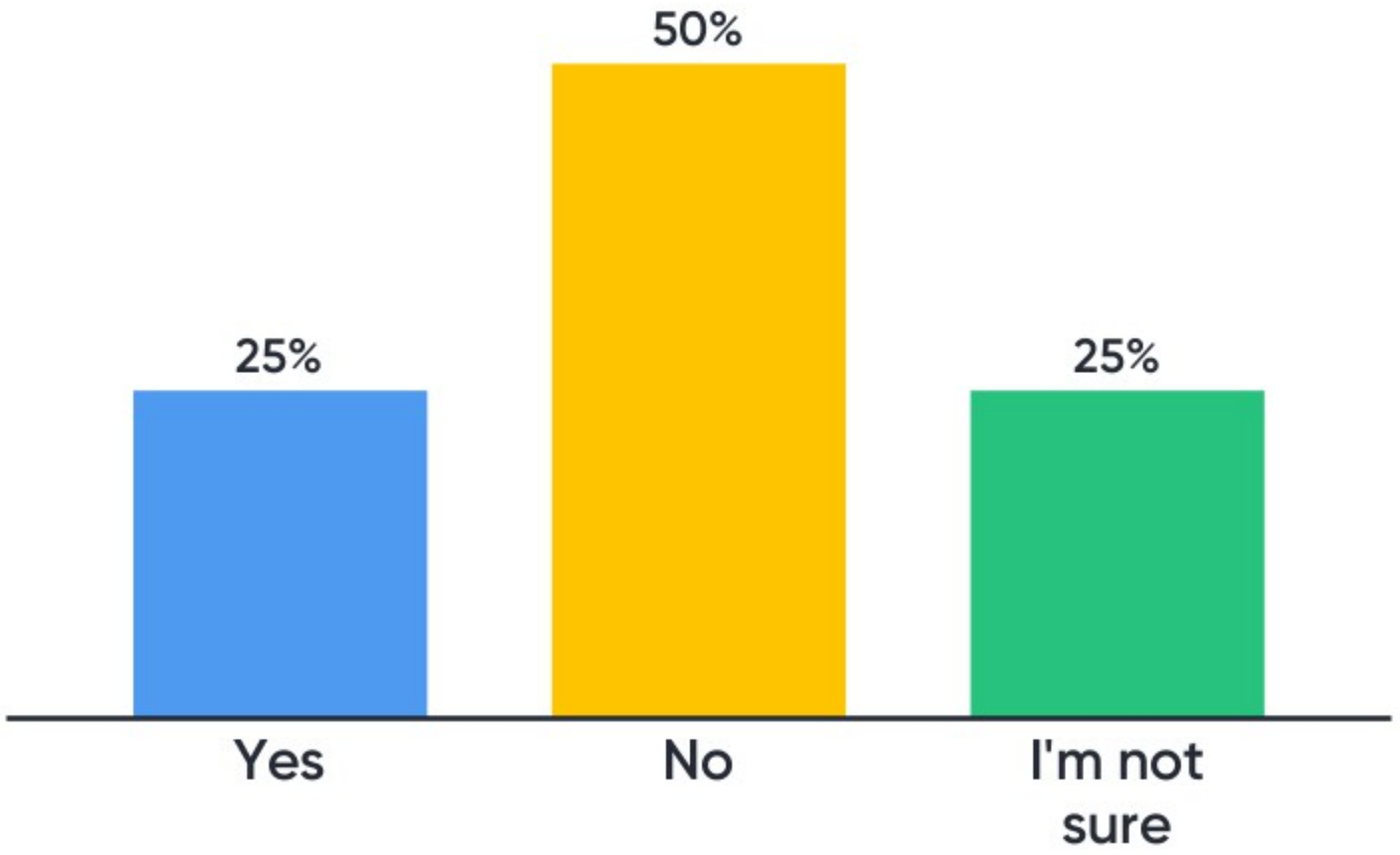
Should OEMs be forced to report disengagements (ToCs) from automated driving to a road authority?



Is connectivity required for some levels of automation (cf. L3 and higer)?



Should authorities forbid AVs of Level 3 and higher that are not connected?

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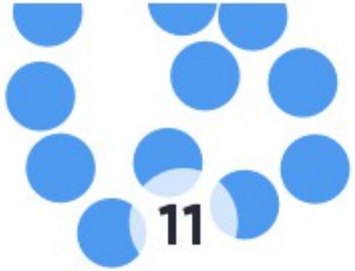
What is your background?



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Road operator

2

OEM

11

Academia/research

0

(Local) Authority

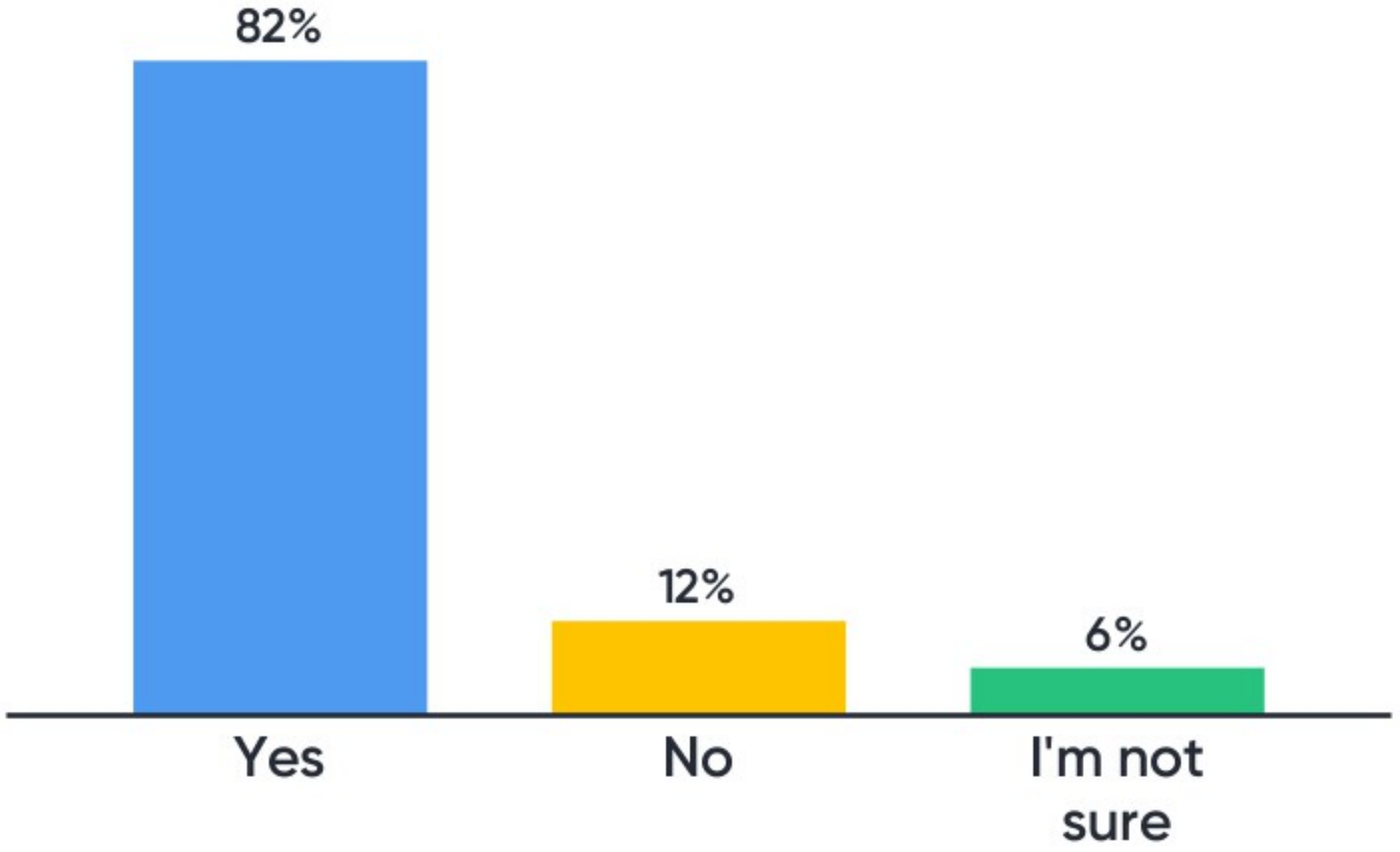
2

Service provider

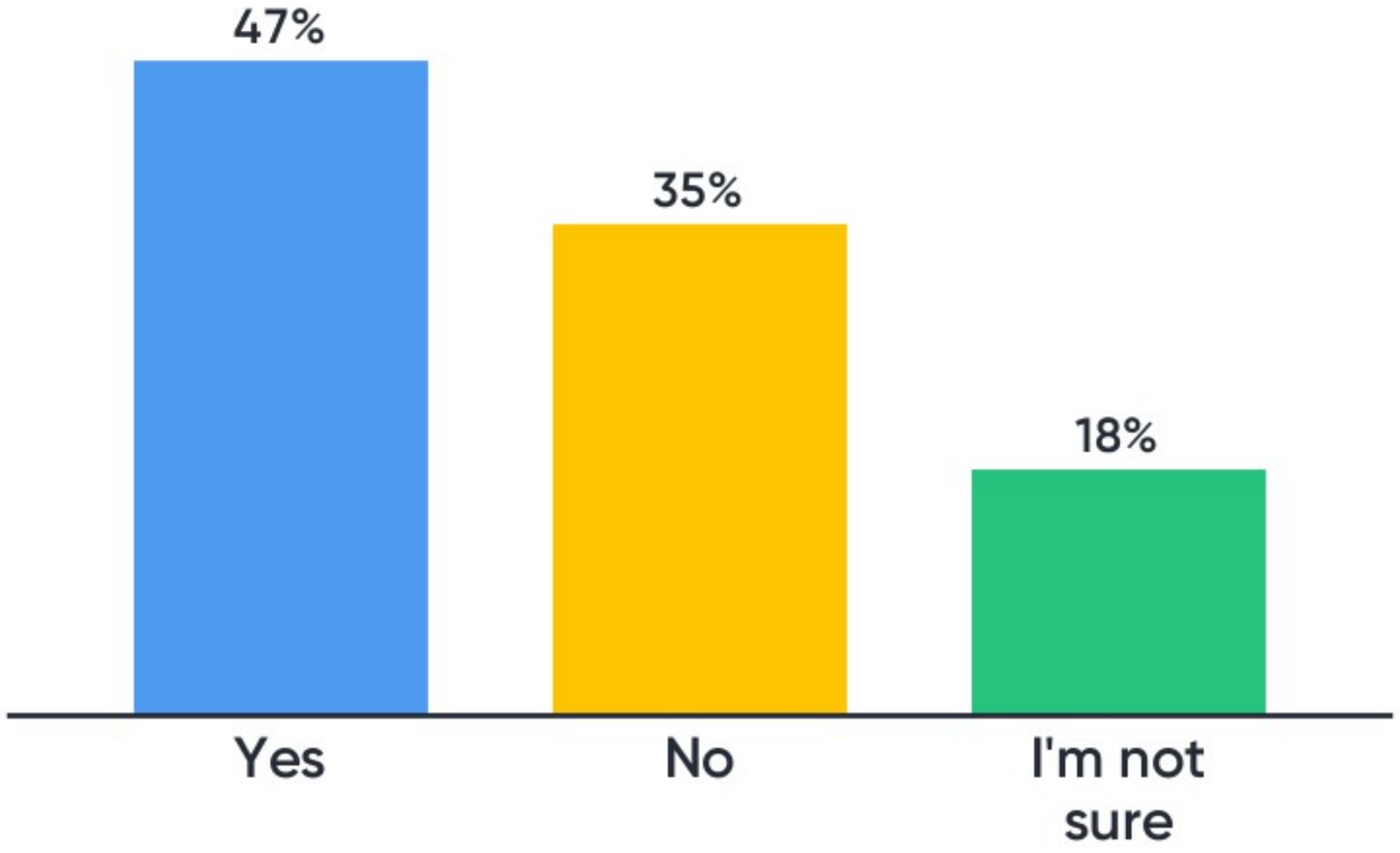
2

Other

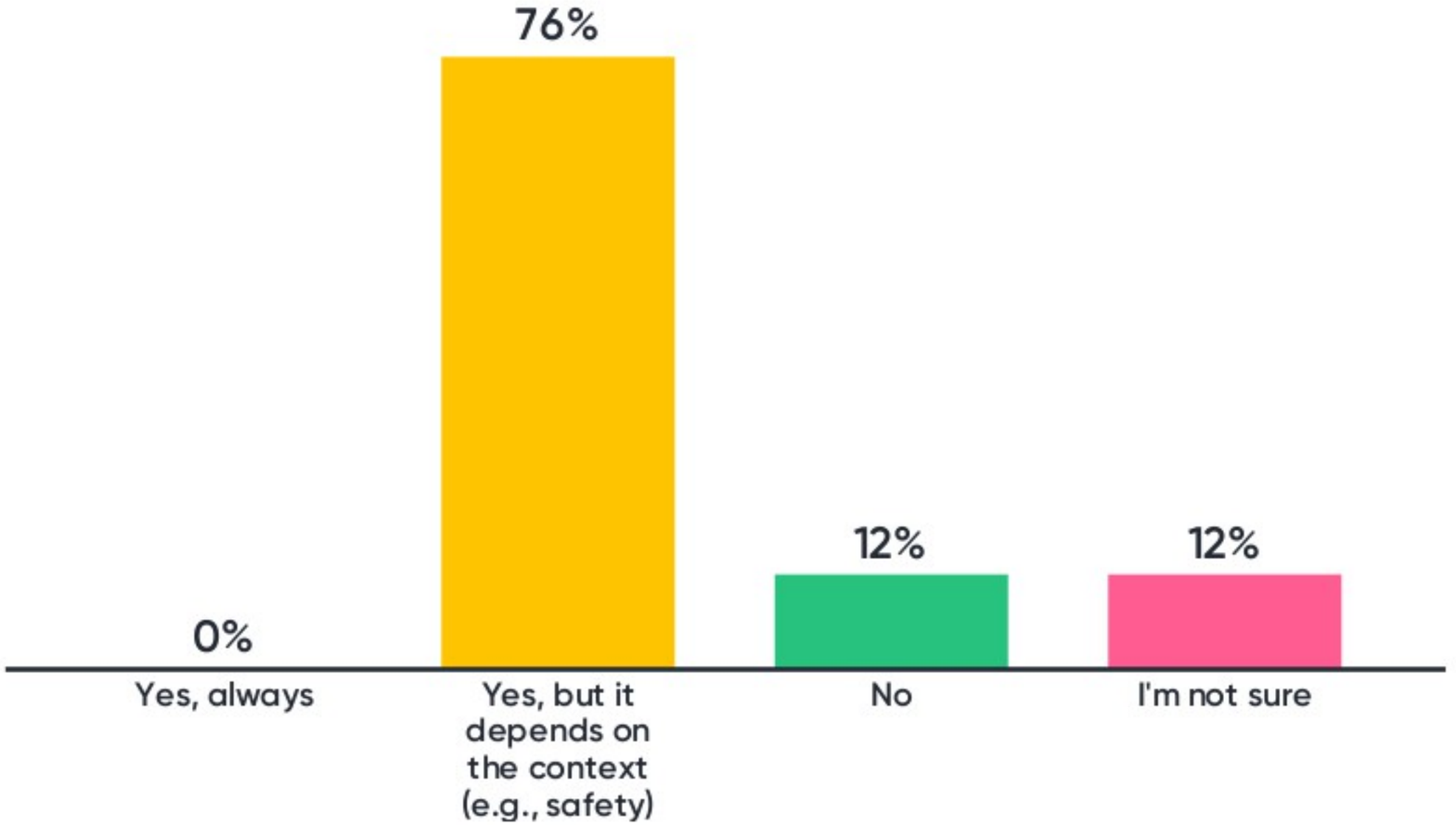
(1/7) Are road authorities allowed to give advice that will conflict with traffic regulations?



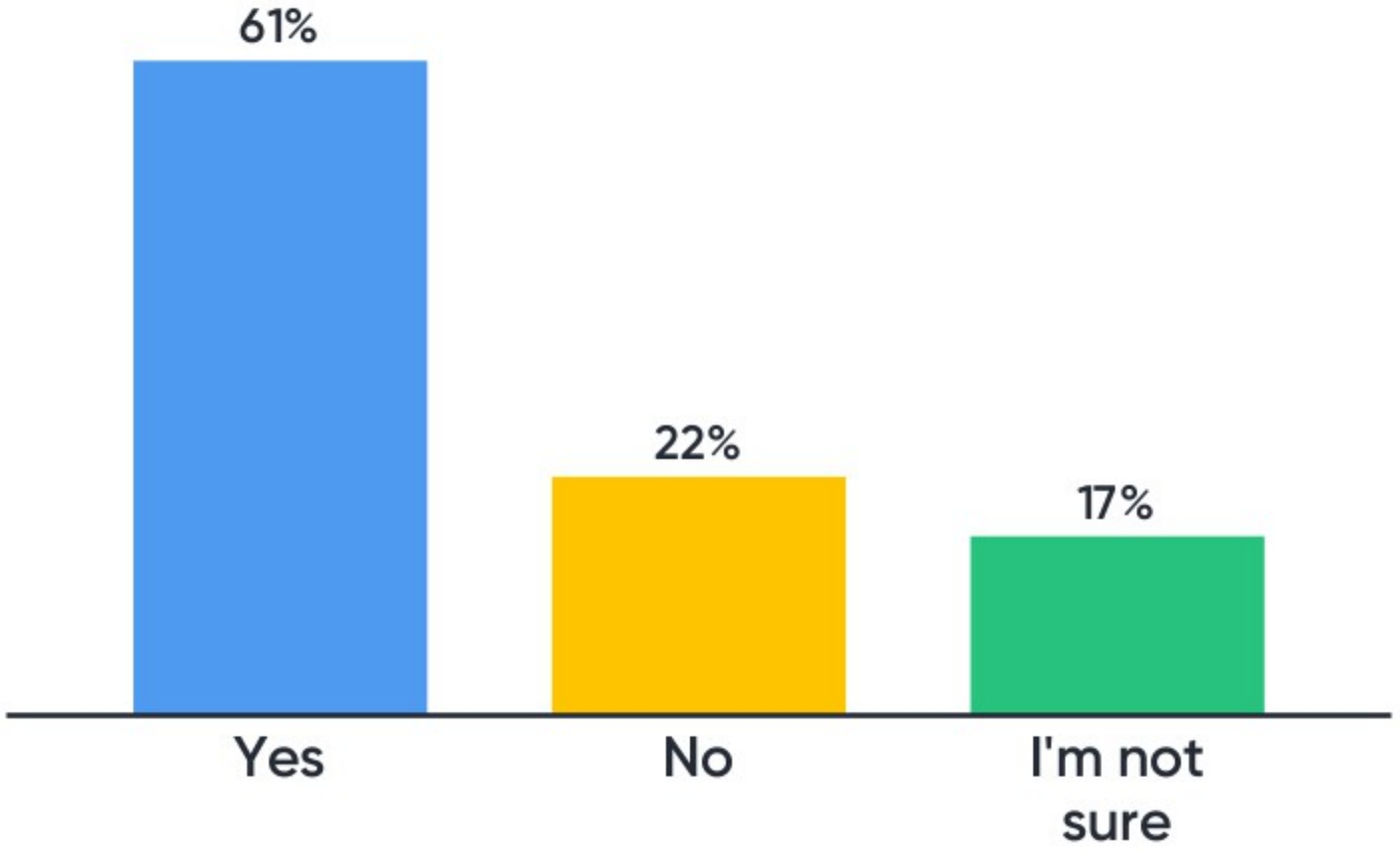
(2/7) Would (C)AVs be allowed to 'break the law' if the traffic manager wants to optimise lane changing or merging?



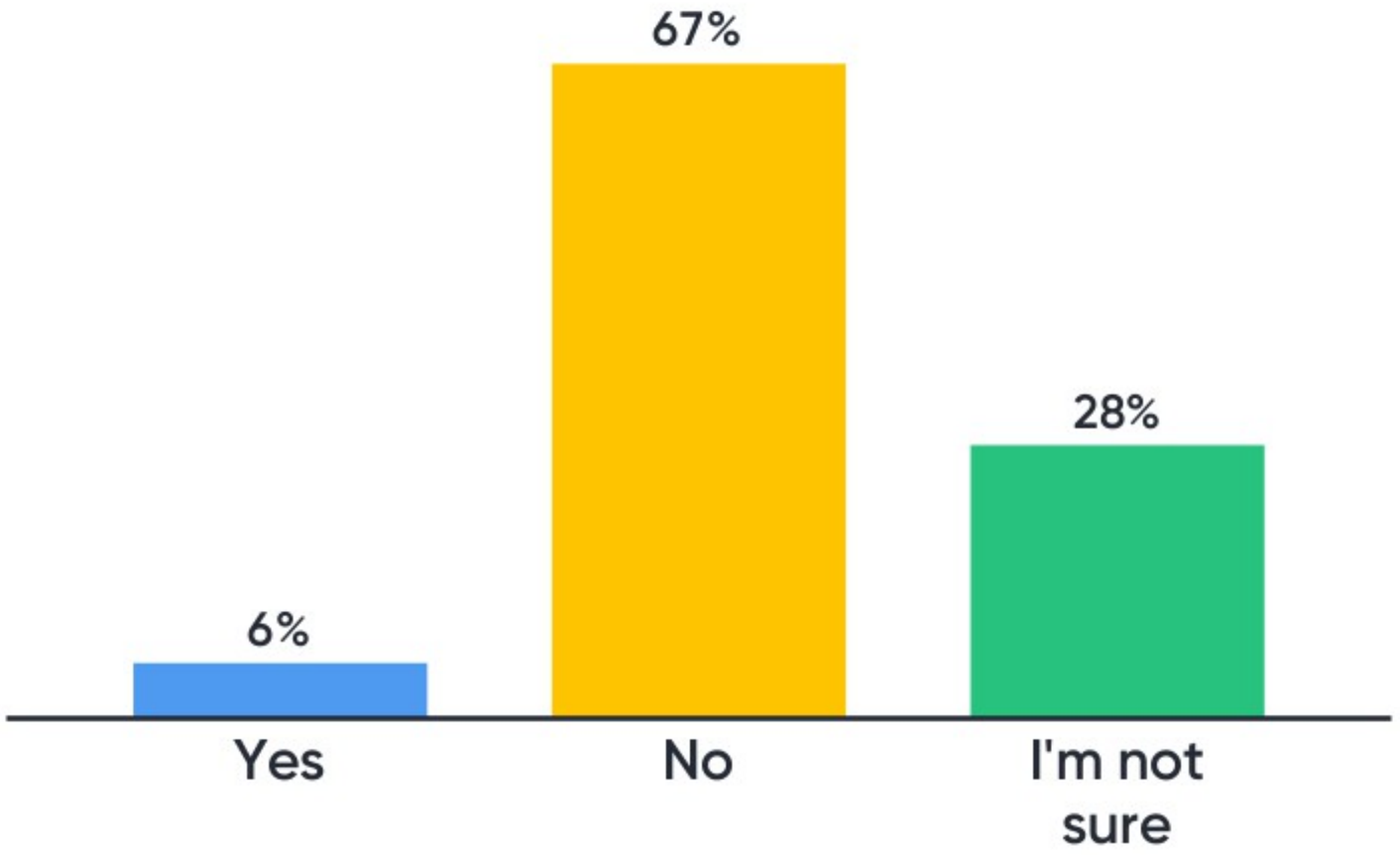
(3/7) Would (C)AVs be allowed to 'break the law' in order to behave as all other road users?



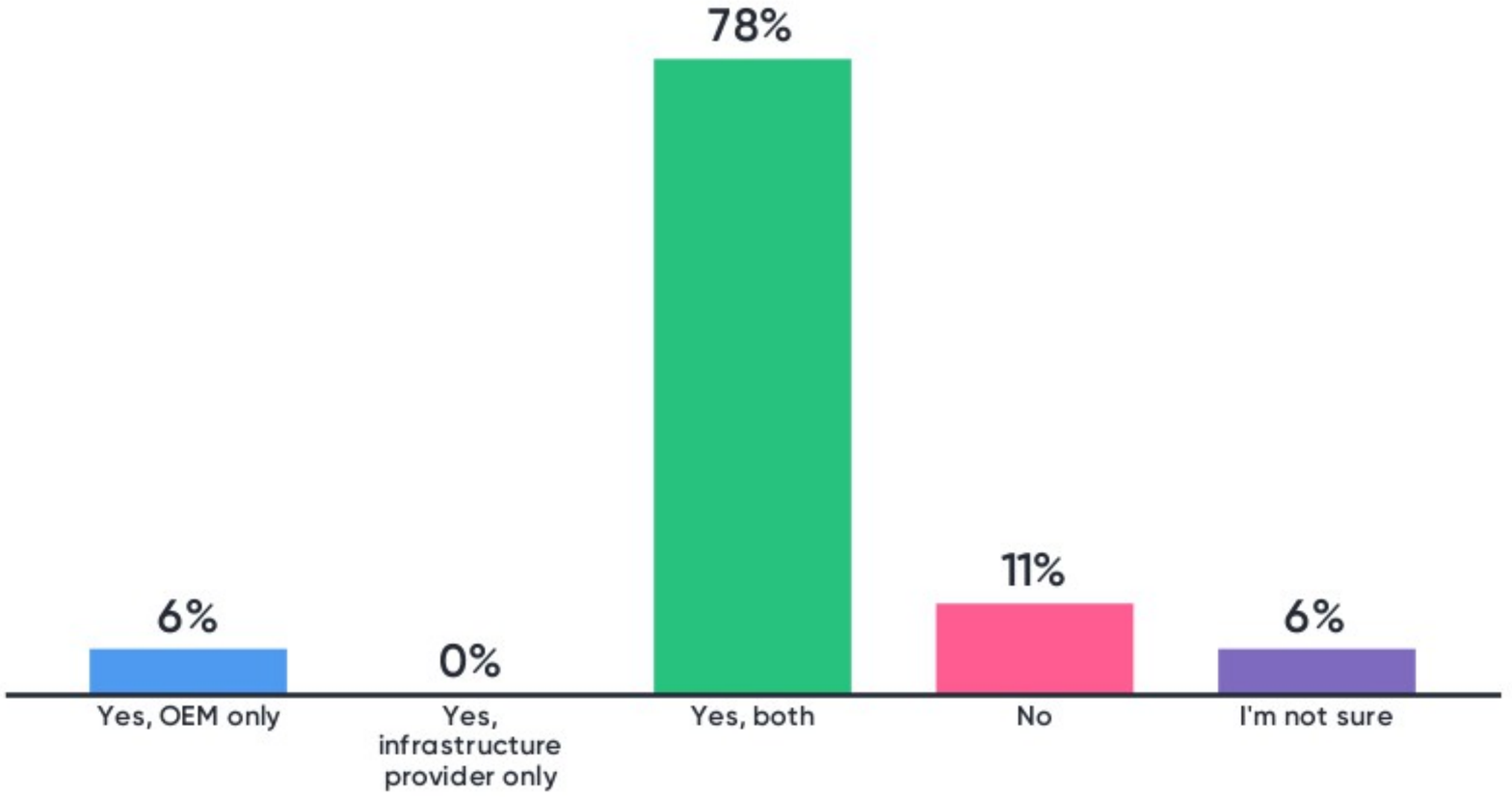
(4/7) Would (C)AVs be allowed to 'break the law' if this results in a safer situation on the road?



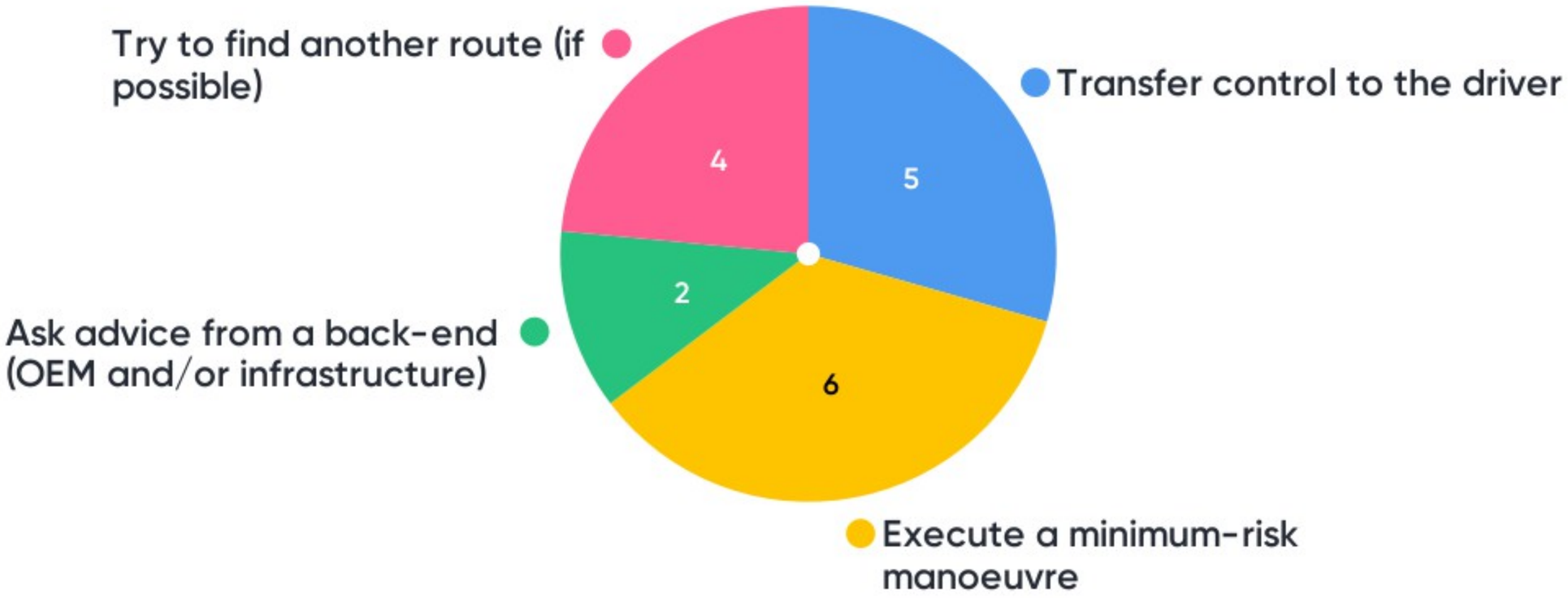
(5/7) Is a ToC needed when another vehicle cuts in and triggers emergency braking?



(6/7) Would automated driving require the support of some sort of back-end?



(7/7) What should a (C)AV do in case its route is blocked?



Thank you for your participation!