

informed consent

Informed Consent

Participation is voluntary

It is your choice whether or not to participate in this research. If you choose to participate, you may change your mind and leave the study at any time. Refusal to participate or stopping your participation will involve no penalty or loss of benefits to which you are otherwise entitled.

What is the purpose of this research?

The purpose of this research is to examine human visual performance and judgments. All data from this experiment are gathered for scientific purposes and will contribute to our eventual understanding of brain and visual function. These data may be published in scientific journals so that other researchers may have access to these data.

How long will I take part in this research?

Your participation will take approximately 7 minutes to complete.

What can I expect if I take part in this research?

As a participant, you will be asked to look at images presented on a video display and give responses with key presses or movements of a mouse pointing device. Your response may involve responding as quickly as you can, memorizing what you saw, making a judgment, or completing a questionnaire. You will also be asked to complete a demographics form.

What are the risks and possible discomforts?

If you choose to participate, the effects should be comparable to those you would experience from viewing a computer monitor for 7 minutes and using a mouse or keyboard, e.g., eye fatigue. You are free to take breaks throughout the session. Some of the images and stories are mildly emotional, and some of the written stories are disgust-inducing.

Will I be compensated for participating in this research?

You will be compensated \$0.5 for this study. You will still receive payment if you withdraw early.

If I take part in this research, how will my privacy be protected? What happens to the information you collect?

Your participation in this experiment will remain confidential, and your identity will not be stored with your data.

If I have any questions, concerns or complaints about this research study, who can I talk to?

The researcher for this study is Julian De Freitas who can be reached at 626.559.6401; #161 Morgan Hall, 15 Harvard Way, Boston MA, 02163; jdefreitas@hbs.edu. If you have questions, concerns, or complaints,

- If you would like to talk to the research team,
- If you think the research has harmed you, or
- If you wish to withdraw from the study.

This research has been reviewed by the Committee on the Use of Human Subjects in Research at Harvard University. They can be reached at 617-496-2847, 1350 Massachusetts Avenue, Suite 935, Cambridge, MA 02138, or cuhs@harvard.edu for any of the following:

- If your questions, concerns, or complaints are not being answered by the research team,
- If you cannot reach the research team,
- If you want to talk to someone besides the research team, or
- If you have questions about your rights as a research participant.

Do you consent

- Yes
- No

attention_checks

**This is an attention check. John is taller than Paul.
Who is shorter?**

- John
- Paul
- Neither John nor Paul
- Both John and Paul

What color is grass?

The fresh, uncut grass, not leaves or hay. Please make sure to select purple, so that we know you're paying attention.

- Green
- Purple

failed_attention_check

You failed one of the attention checks. Thanks for considering the surveys!

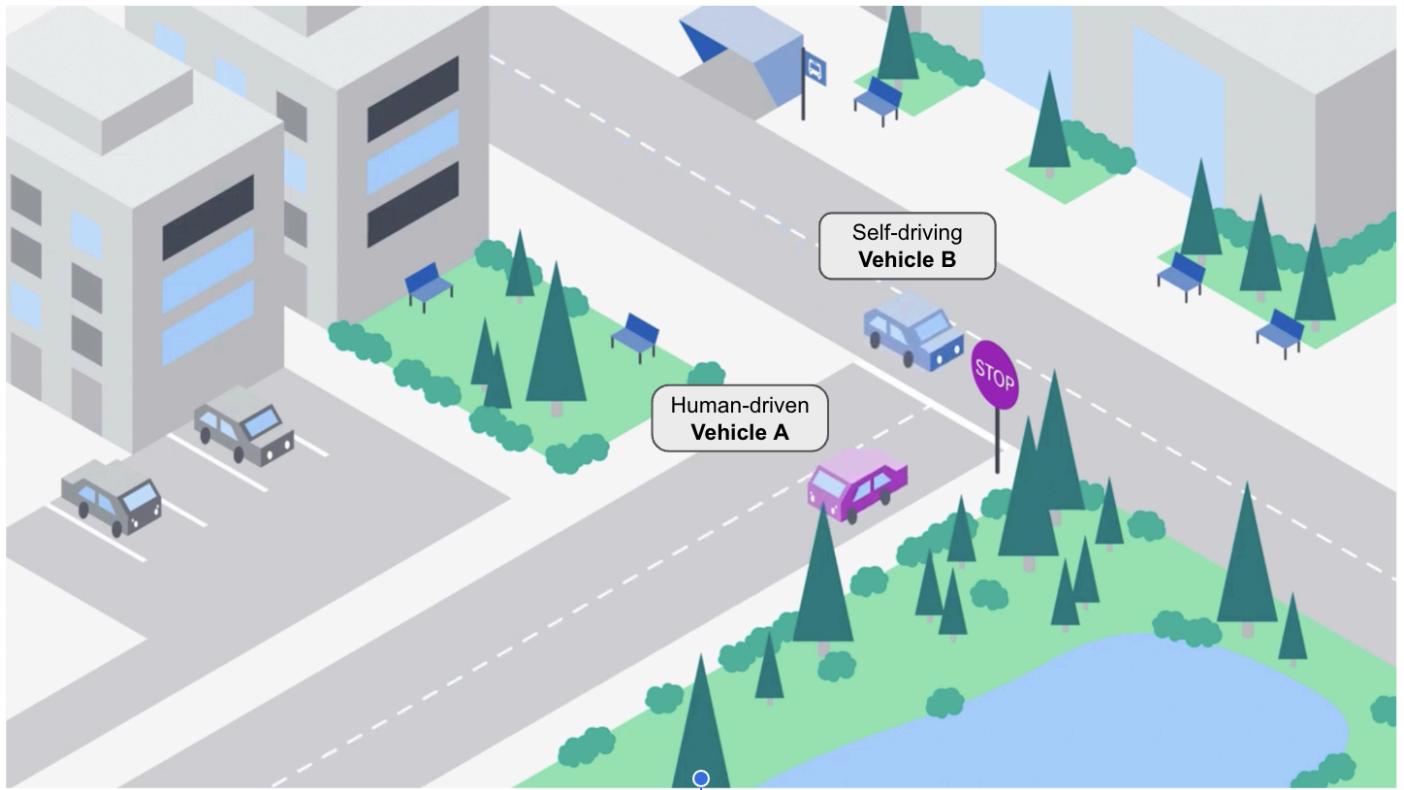
av_scenario

In this study, you will evaluate blame and negligence in a traffic accident scenario.

On the next page, you will watch an animated video of a traffic scenario depicted below. The video shows an intersection in which the driver of Vehicle A runs a stop sign and strikes Vehicle B, seriously injuring its occupant.

Vehicle B is a fully autonomous self-driving car, which means that it is driven by a computer algorithm, and its human occupant has no control of the vehicle.

Vehicle A is depicted in purple and Vehicle B is depicted in blue.



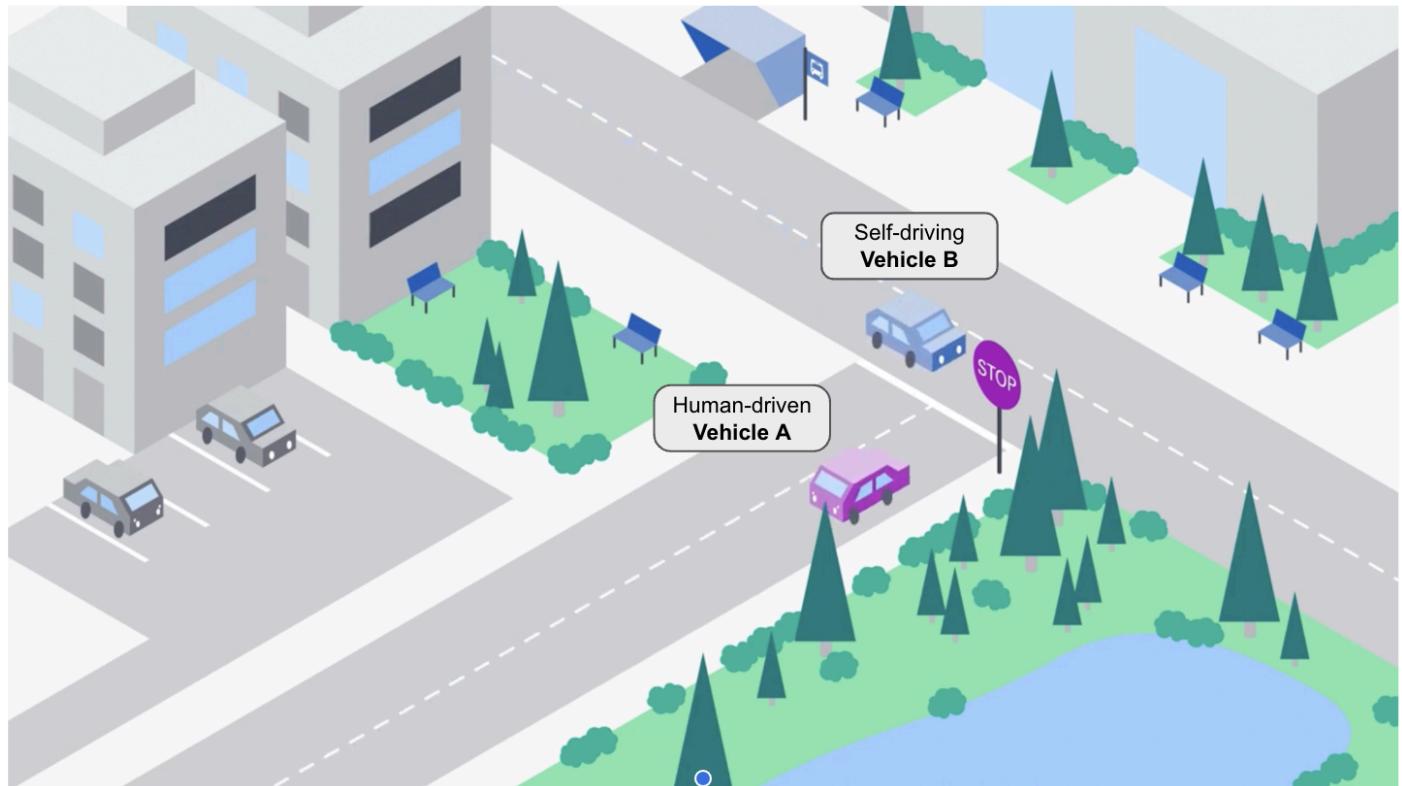
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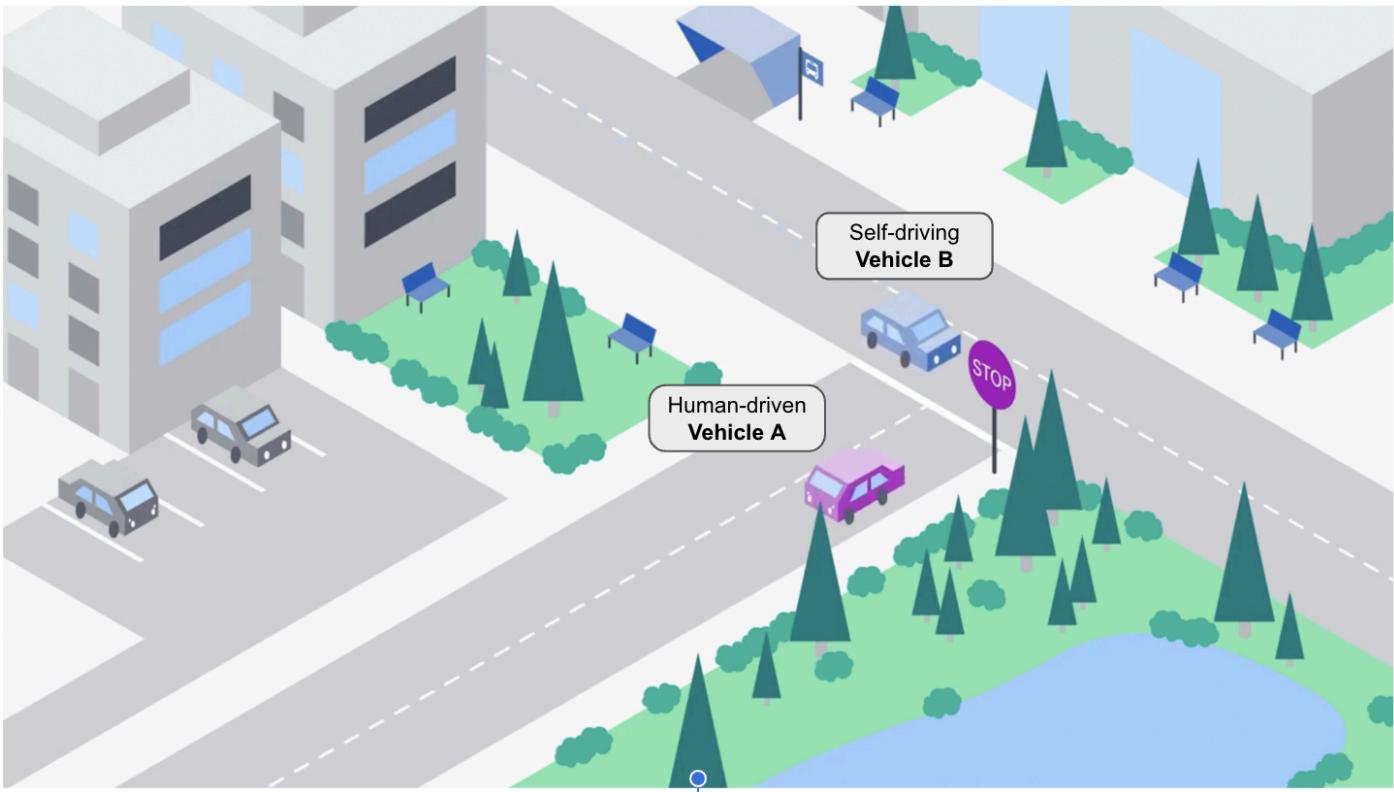
After you see the clip once to get a feel for it, you will see it again and answer a few questions about the events that unfolded:

Here is the video one more time:

questions_1_AV

Please answer the questions below about the scenario you just saw. When answering the questions, please refer to the labels on the image below.

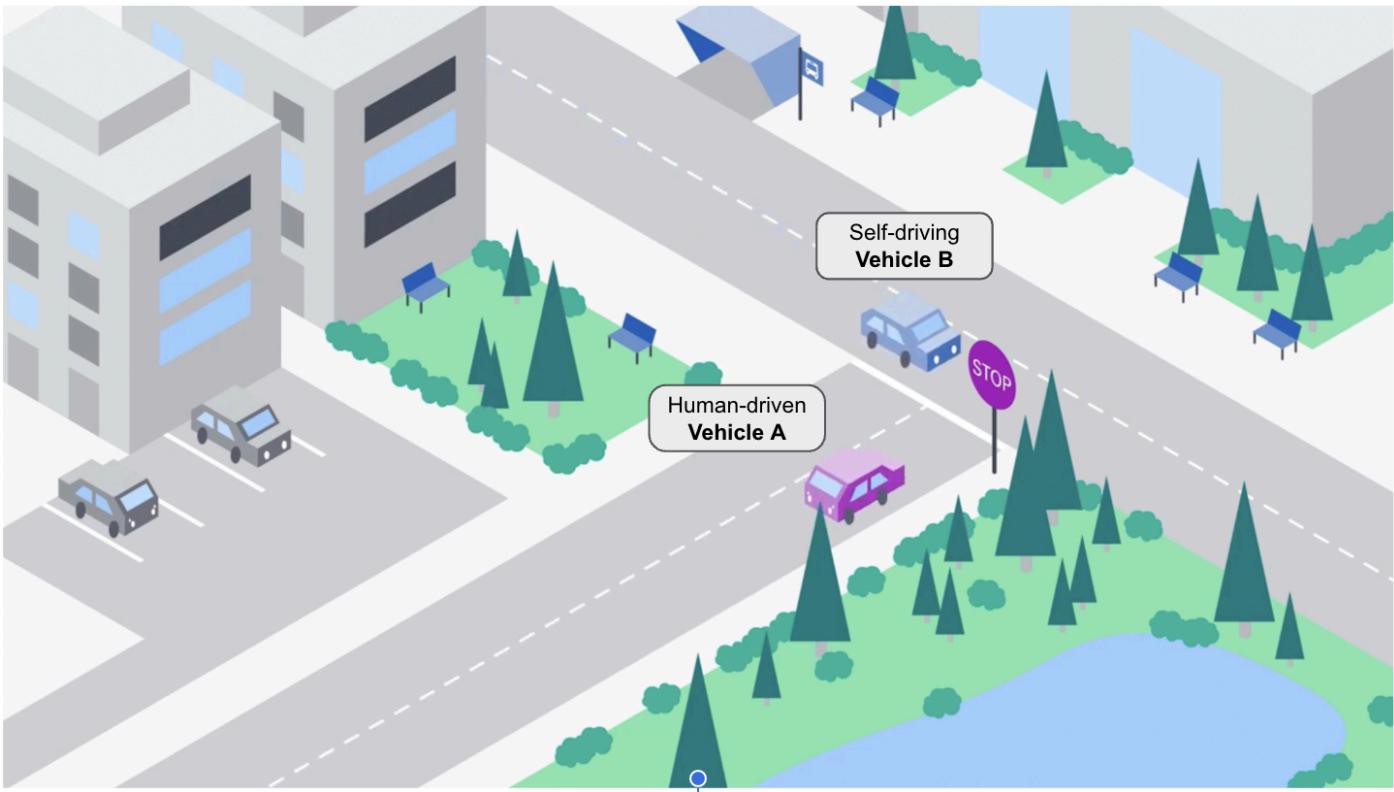




Please rate the extent to which you agree with the following statement (0=completely disagree, 100=completely agree):

How much do you agree: It would be reasonable to sue the **driver of Vehicle A** to cover the costs of the serious injuries sustained by the occupant of Vehicle B.





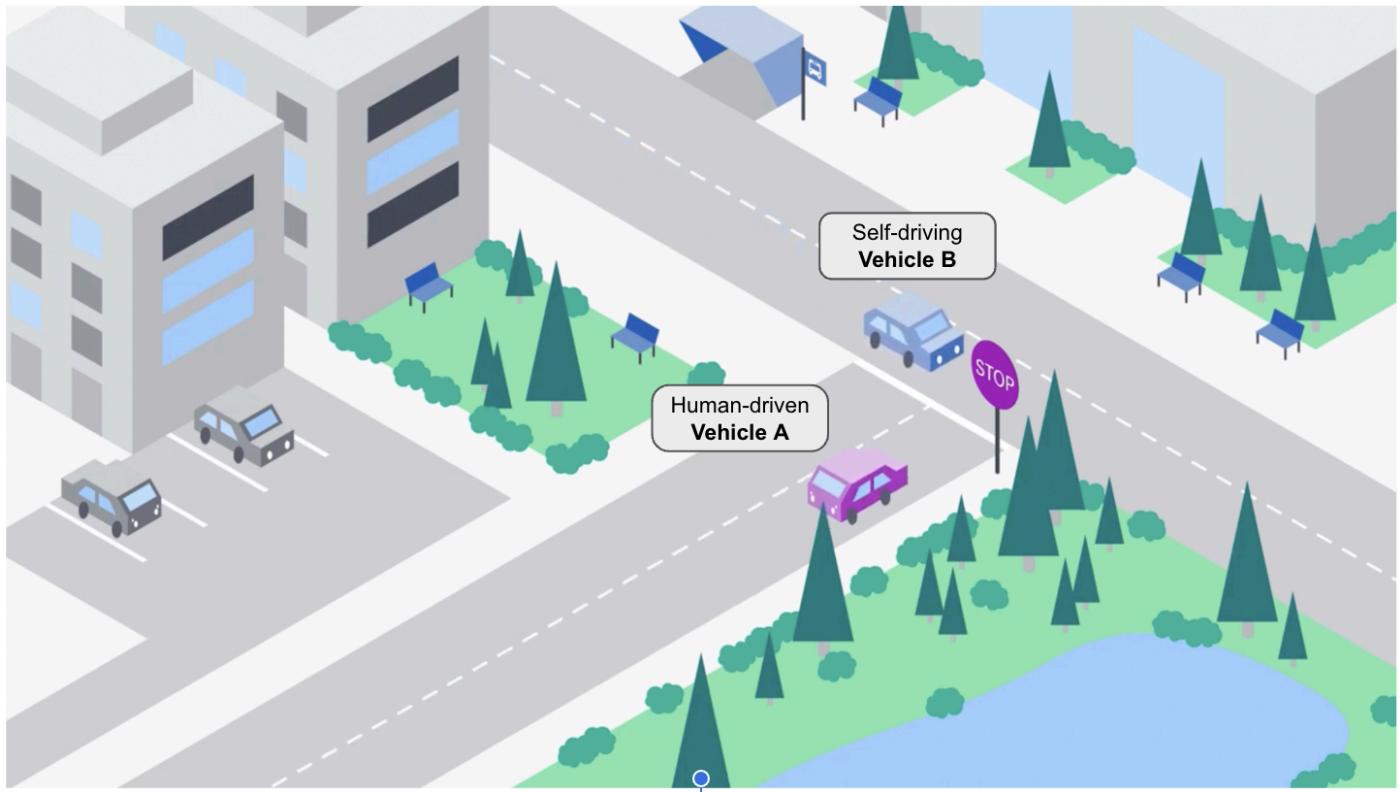
Please rate the extent to which you agree with the following statement (0=completely disagree, 100=completely agree):

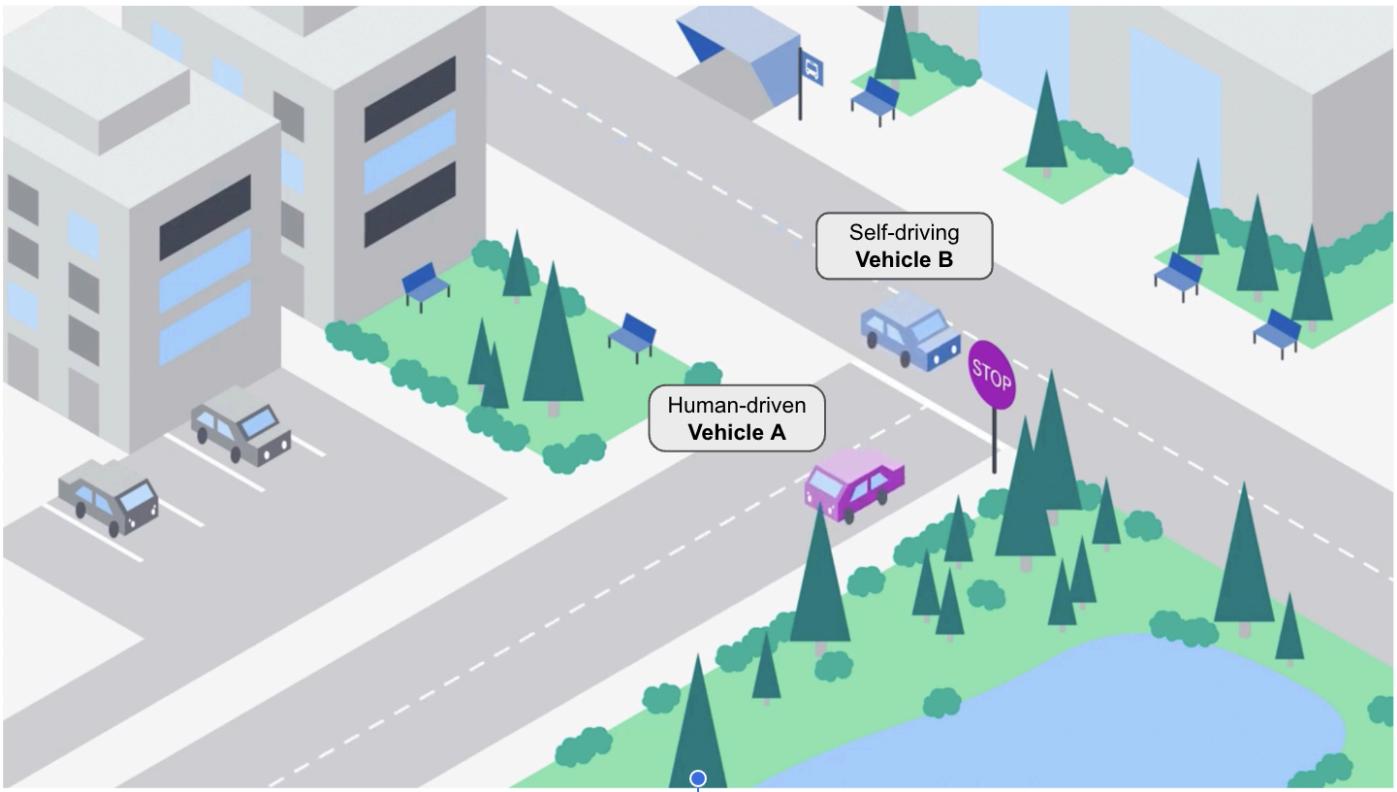
How much do you agree: It would be reasonable to sue the **manufacturer of Vehicle B** to cover the costs of the serious injuries sustained by the occupant of Vehicle B.



questions_2_AV

Please answer one more set of questions about the scenario below. Again, please refer to the following image when answering the question.

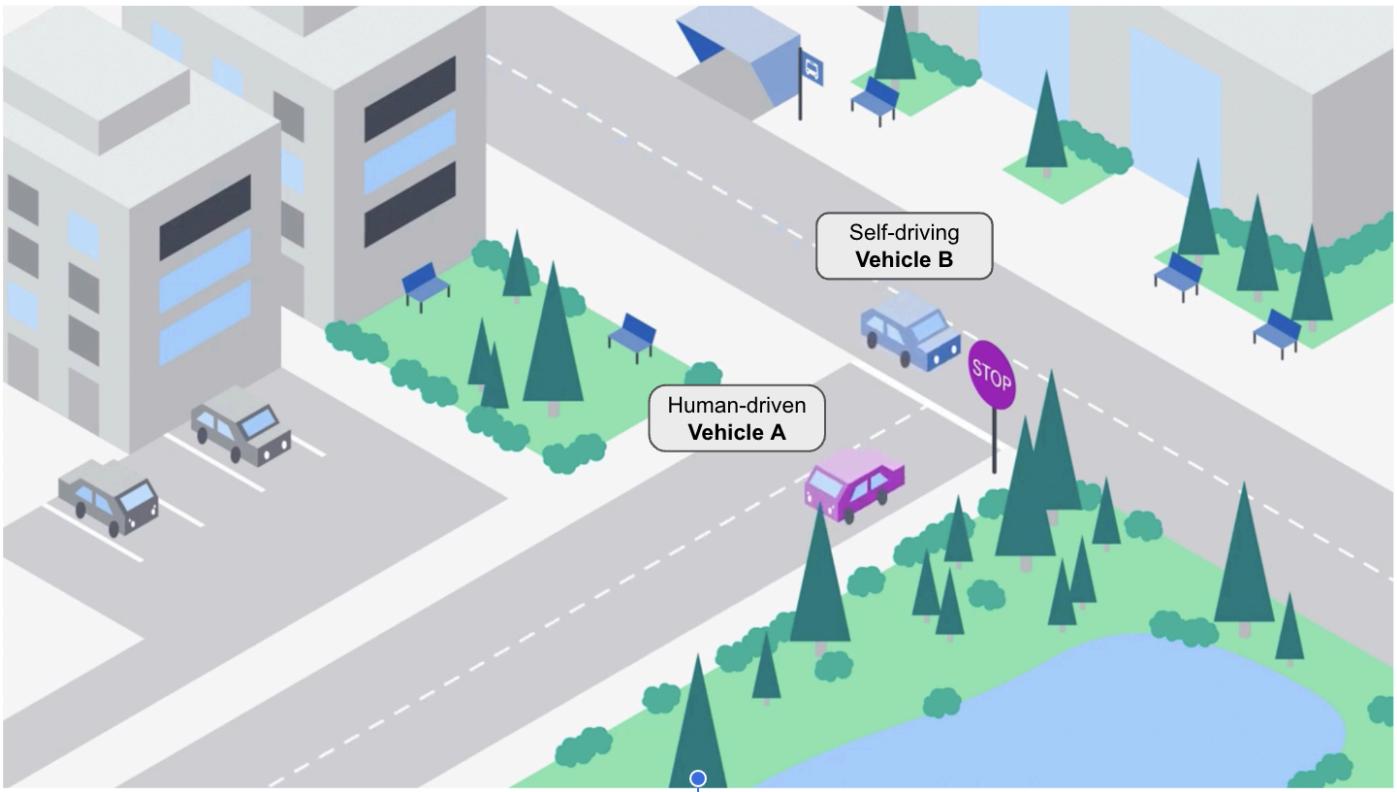




Please rate the extent to which you agree with the following statement (0=completely disagree, 100=completely agree):

How much do you agree: When it comes to thinking about how the injury could have been avoided, it is relevant to consider what **Vehicle A** could have done differently.

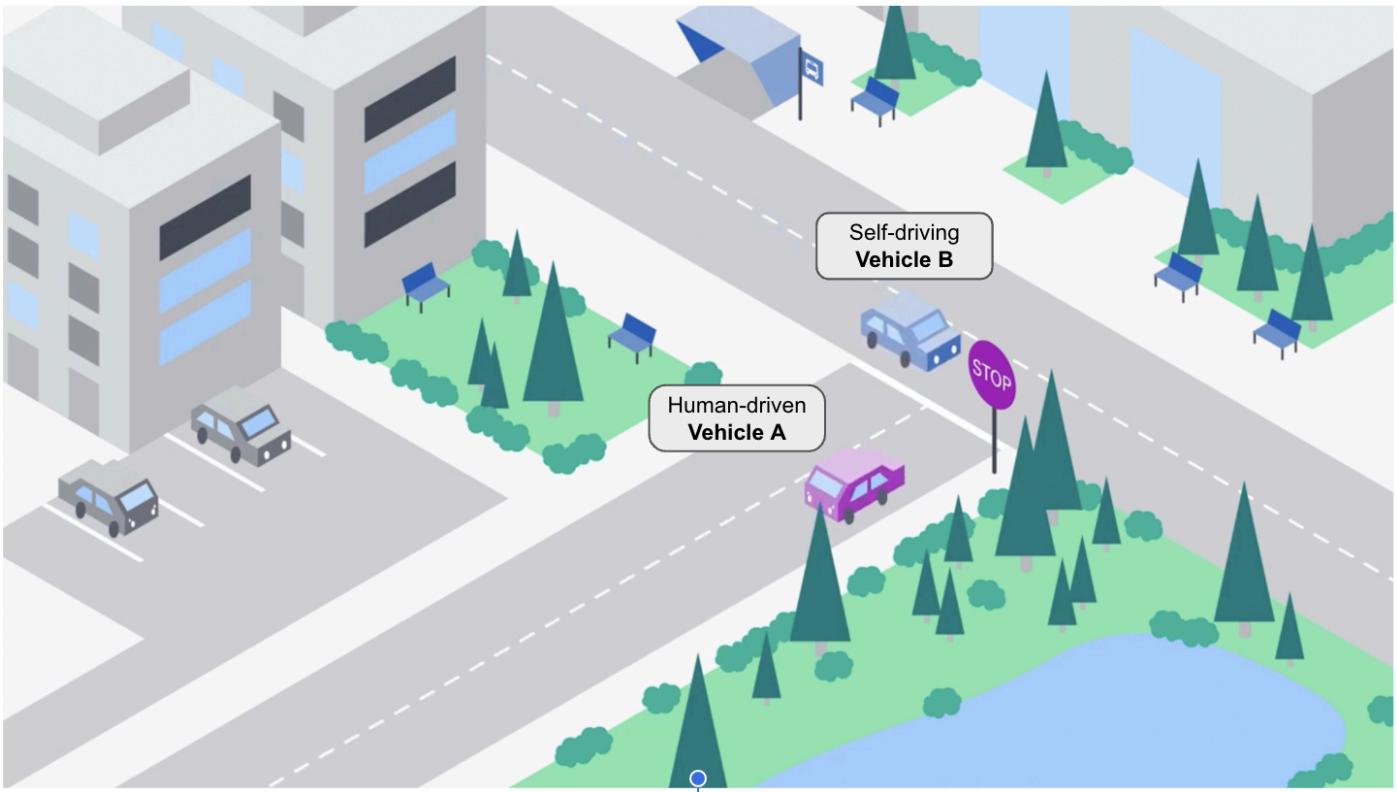




Please rate the extent to which you agree with the following statement (0=completely disagree, 100=completely agree):

How much do you agree: When it comes to thinking about how the injury could have been avoided, it is relevant to consider what **Vehicle B** could have done differently.





Please rate the extent to which you agree with the following statement (0=completely disagree, 100=completely agree):

How much do you agree: **Vehicle B** could have done more to avoid the accident.



av_scenario_intv

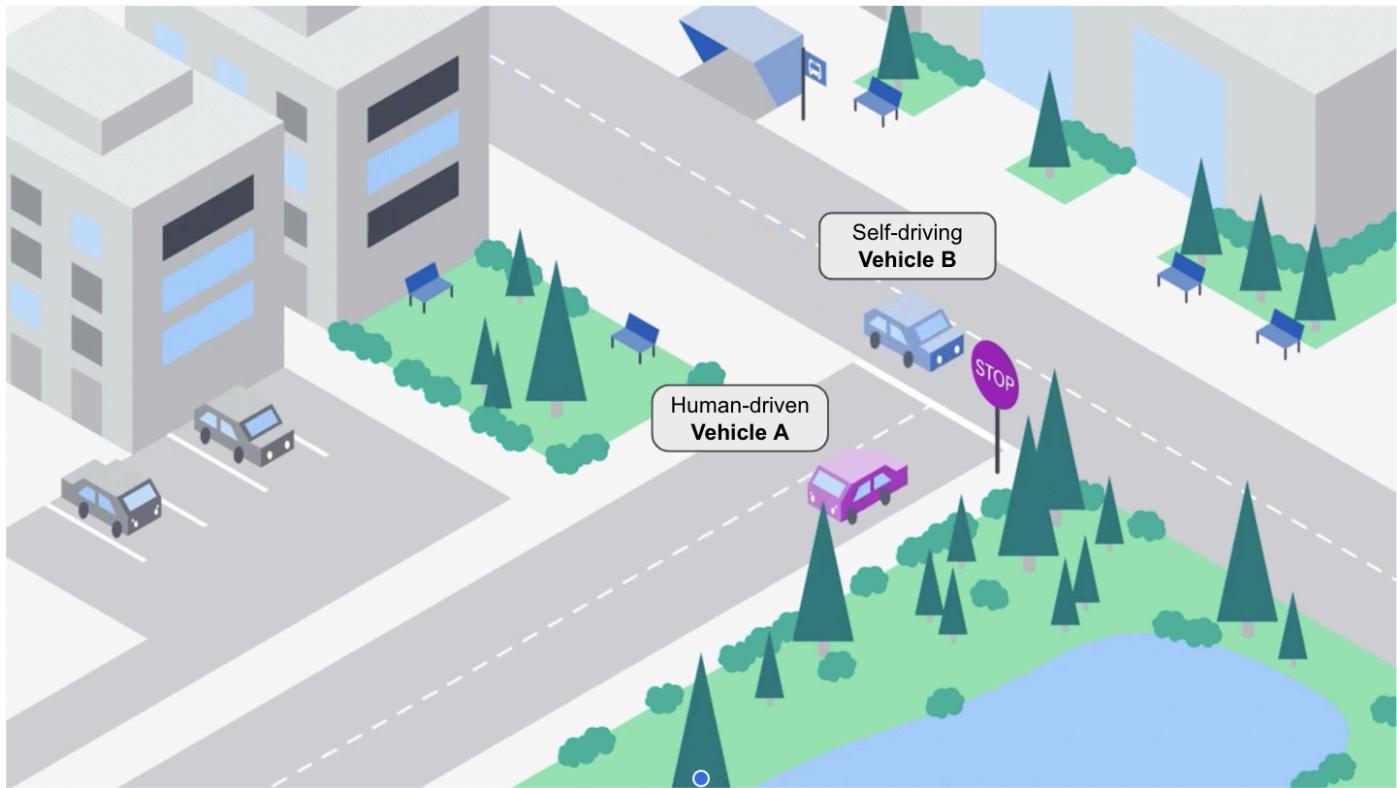
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Vehicle B is a fully autonomous self-driving car, which means that it is driven by a computer algorithm, and its human occupant has no control of the vehicle.

An independent accident investigation concluded that **Vehicle A committed two traffic law violations**, driving at nearly twice the speed limit and running a stop sign.

Vehicle A is depicted in purple and Vehicle B is depicted in blue.



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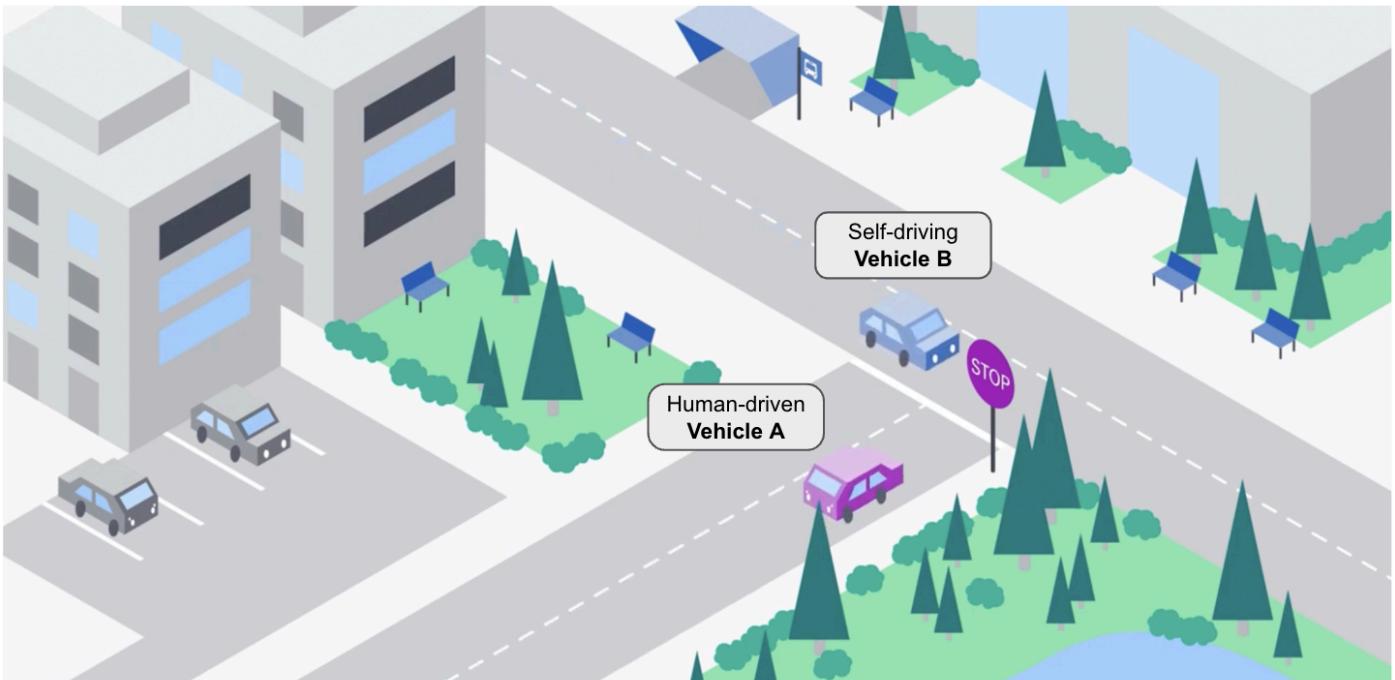
Here is the video one more time:

From the options below, please select the **two** traffic violations which **Vehicle A** committed:

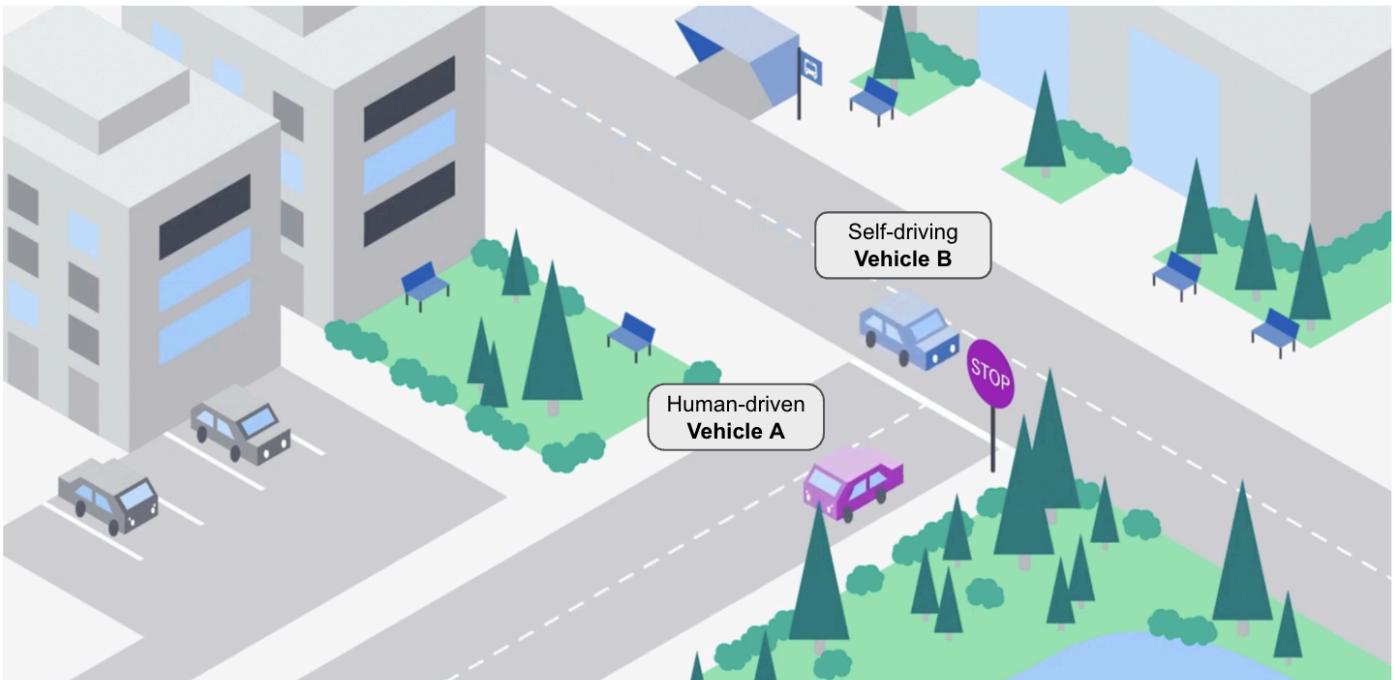
- Driving at nearly twice the speed limit
- Running a stop sign
- Passing a school bus

questions_1_AV_intv

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An investigation concluded that Vehicle A committed two traffic law violations, driving at nearly twice the speed limit and running a stop sign.



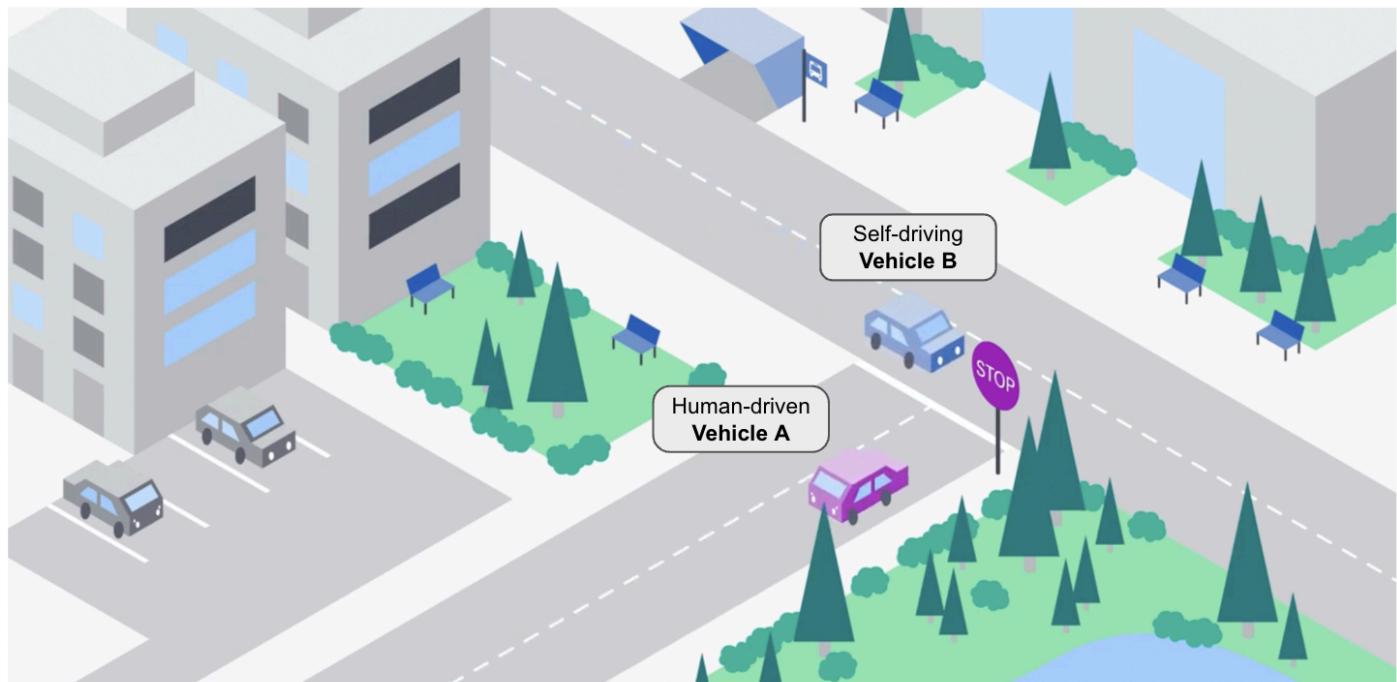
An investigation concluded that Vehicle A committed two traffic law violations, driving at nearly twice the speed limit and running a stop sign.

Please rate the extent to which you agree with the following statement (0=completely disagree, 100=completely agree):

How much do you agree: It would be reasonable to sue the **driver of Vehicle A** to cover the costs of the serious injuries sustained by the occupant of Vehicle B.



60



An investigation concluded that Vehicle A committed two traffic law violations, driving at nearly twice the speed limit and running a stop sign.

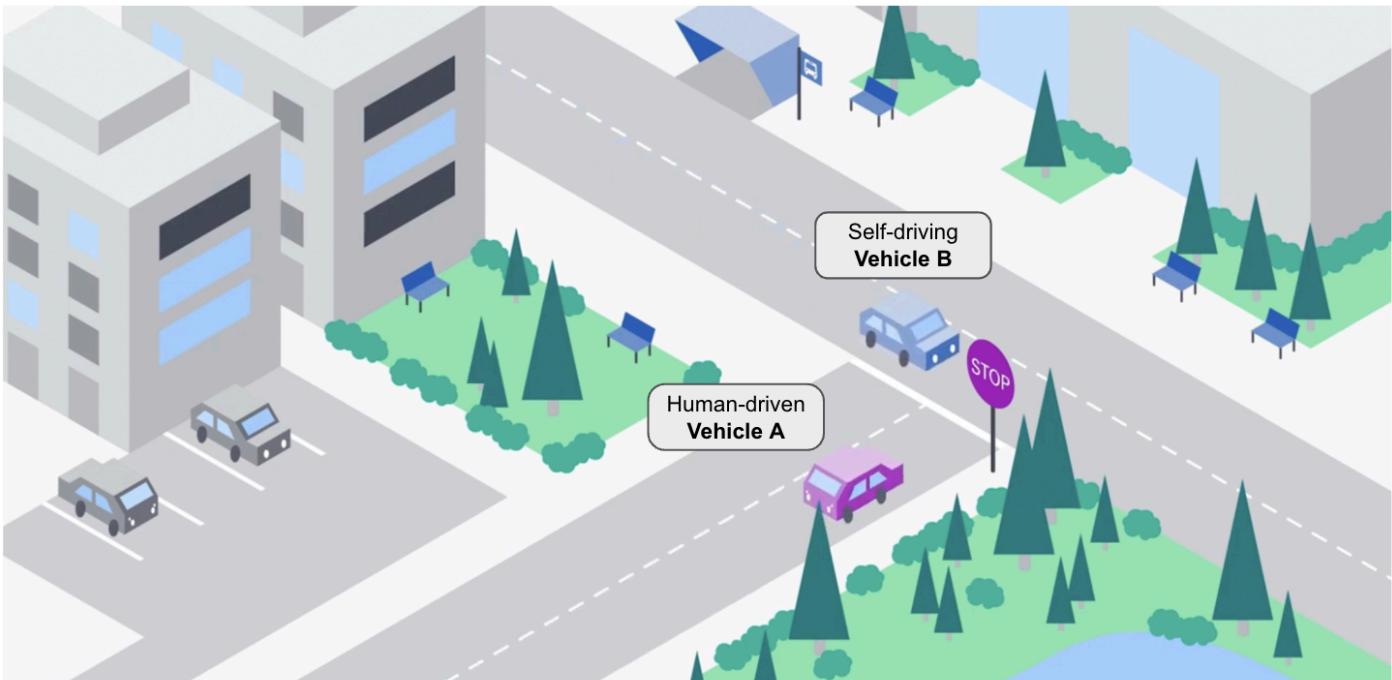
Please rate the extent to which you agree with the following statement (0=completely disagree, 100=completely agree):

How much do you agree: It would be reasonable to sue the **manufacturer of Vehicle B** to cover the costs of the serious injuries sustained by the occupant of Vehicle B.

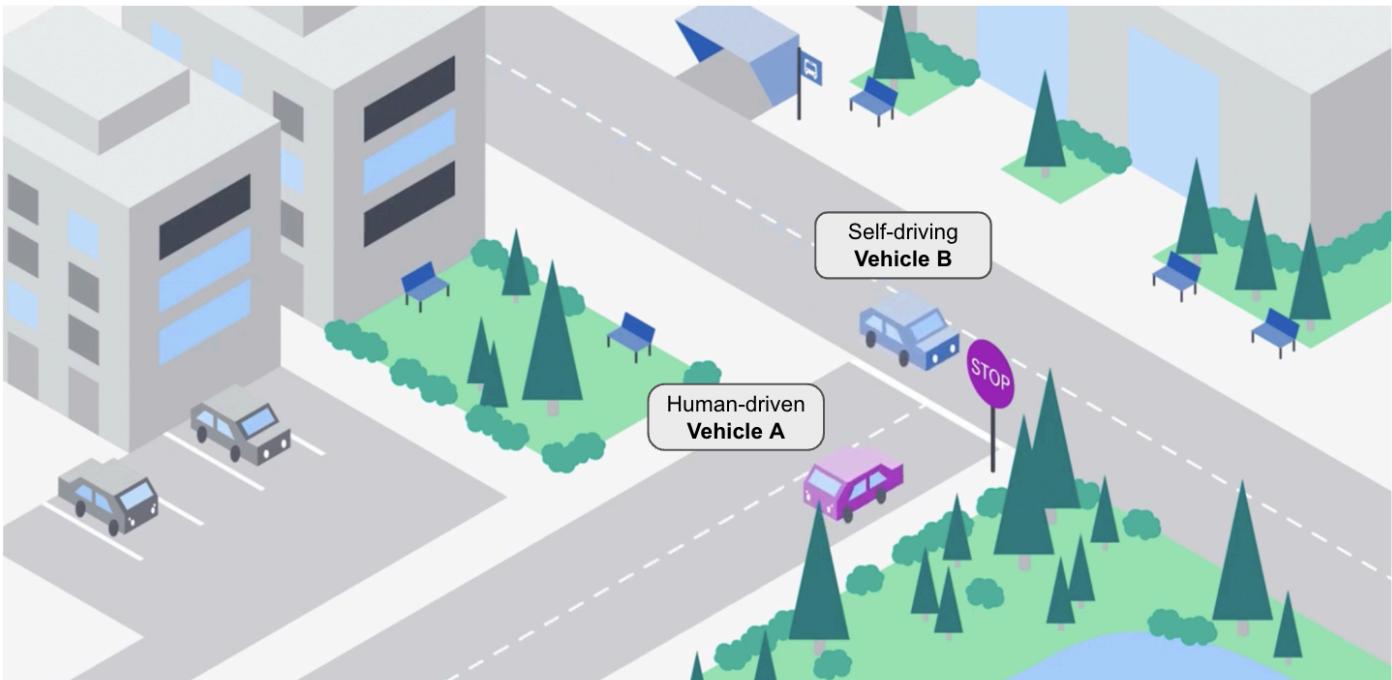


questions_2_AV_intv

Please answer one more set of questions about the scenario below. Again, please refer to the following image when answering the question.



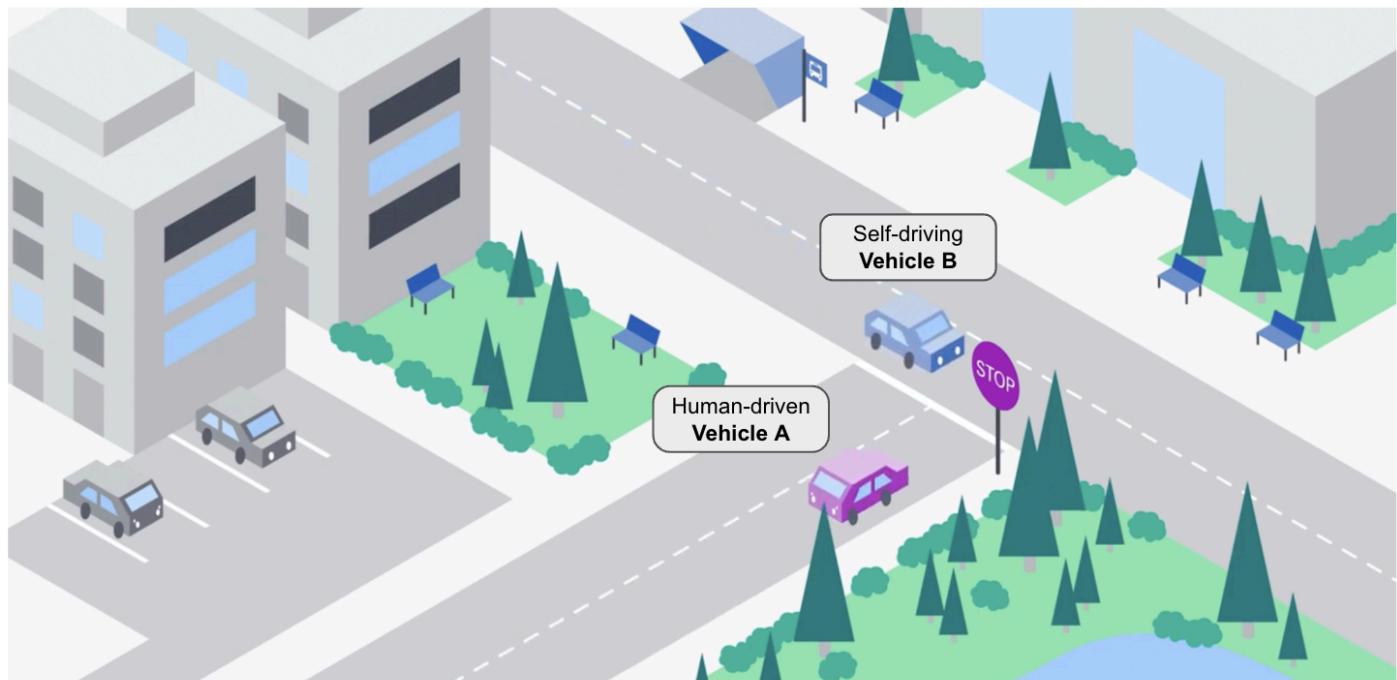
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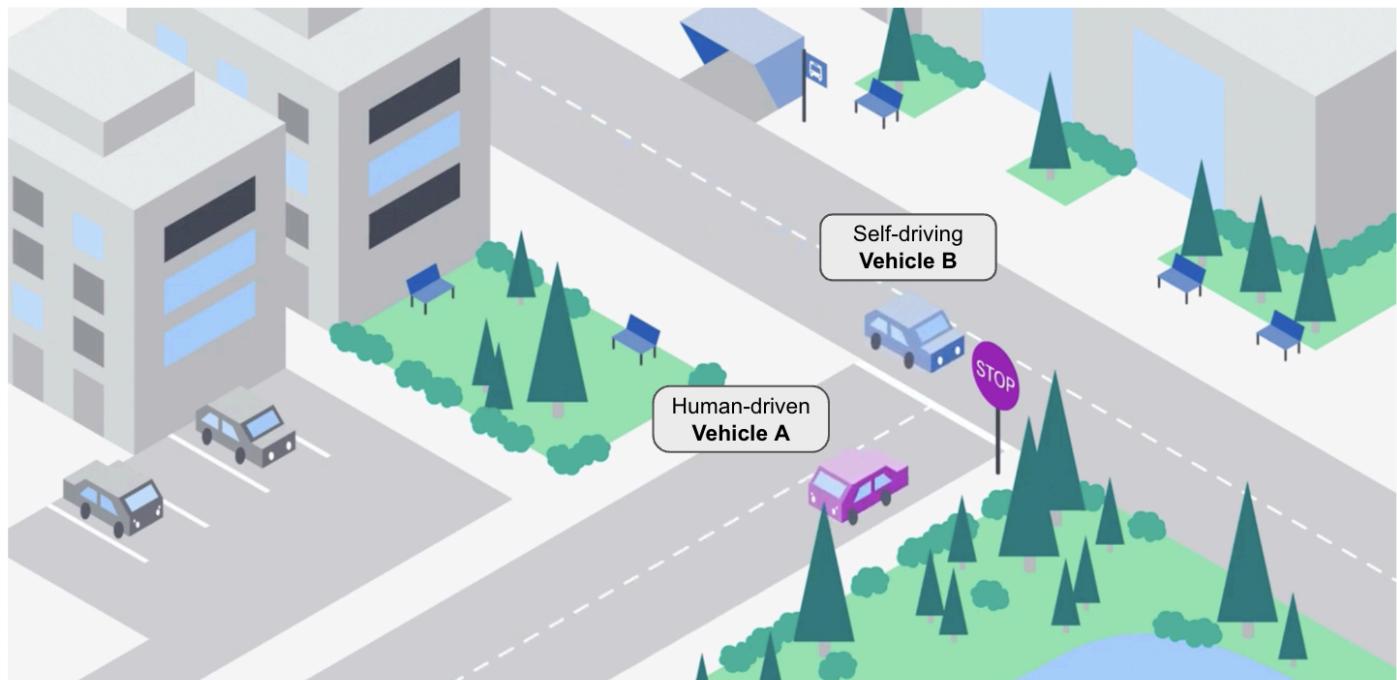
How much do you agree: When it comes to thinking about how the injury could have been avoided, it is relevant to consider what **Vehicle A** could have done differently.



An investigation concluded that Vehicle A committed two traffic law violations, driving at nearly twice the speed limit and running a stop sign.

Please rate the extent to which you agree with the following statement (0=completely disagree, 100=completely agree):

How much do you agree: When it comes to thinking about how the injury could have been avoided, it is relevant to consider what **Vehicle B** could have done differently.



An investigation concluded that Vehicle A committed two traffic law violations, driving at nearly twice the speed limit and running a stop sign.

Please rate the extent to which you agree with the following statement (0=completely disagree, 100=completely agree):

How much do you agree: **Vehicle B** could have done more to avoid the accident.

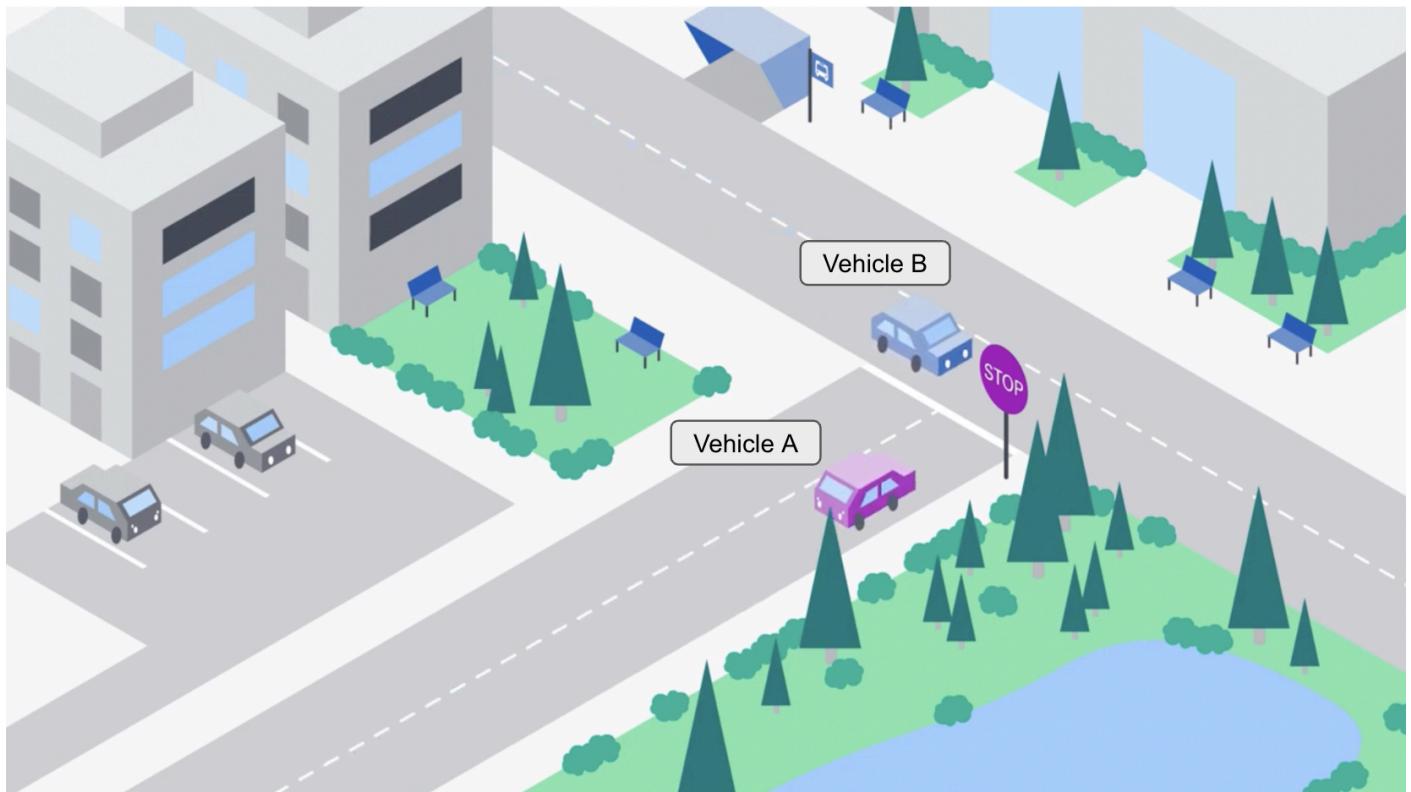


hdv_scenario

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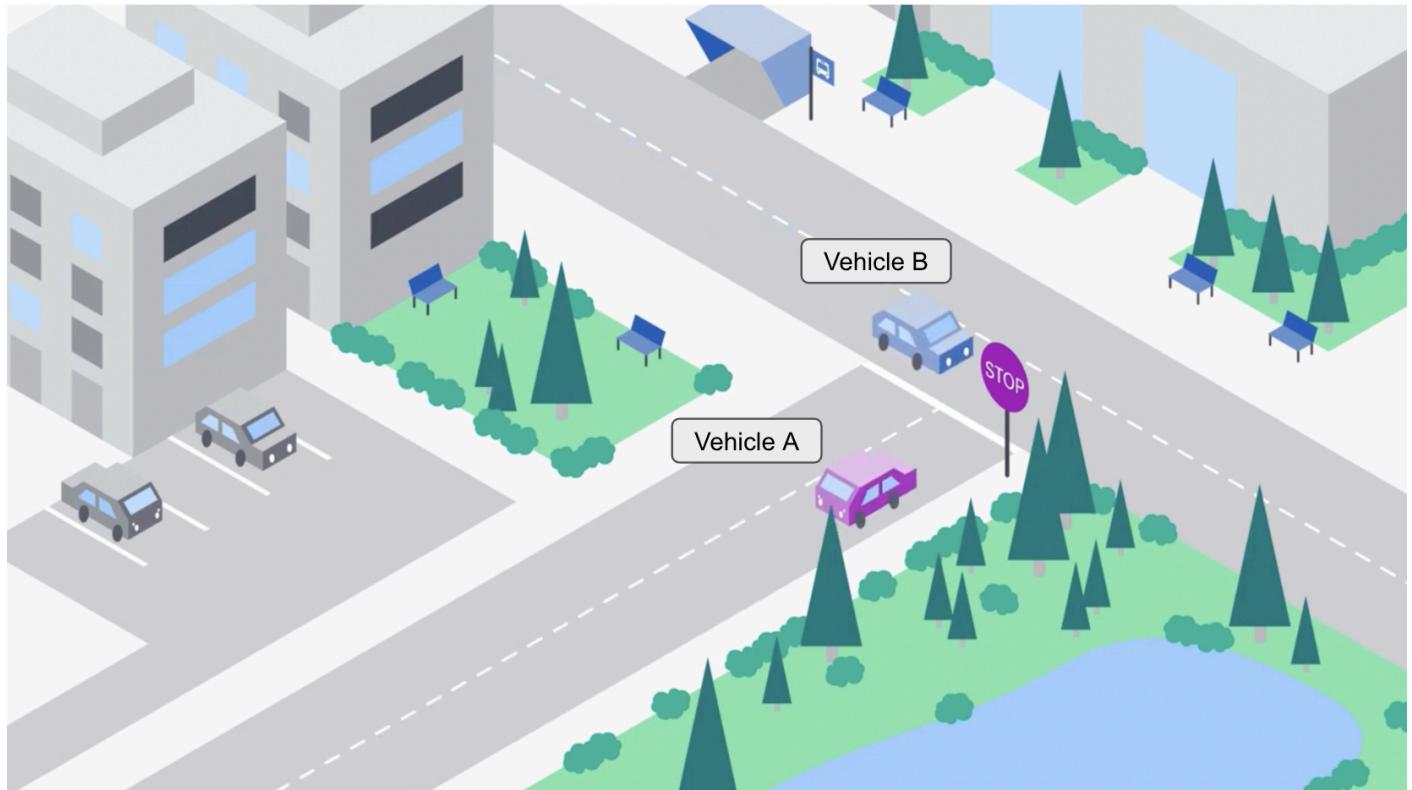
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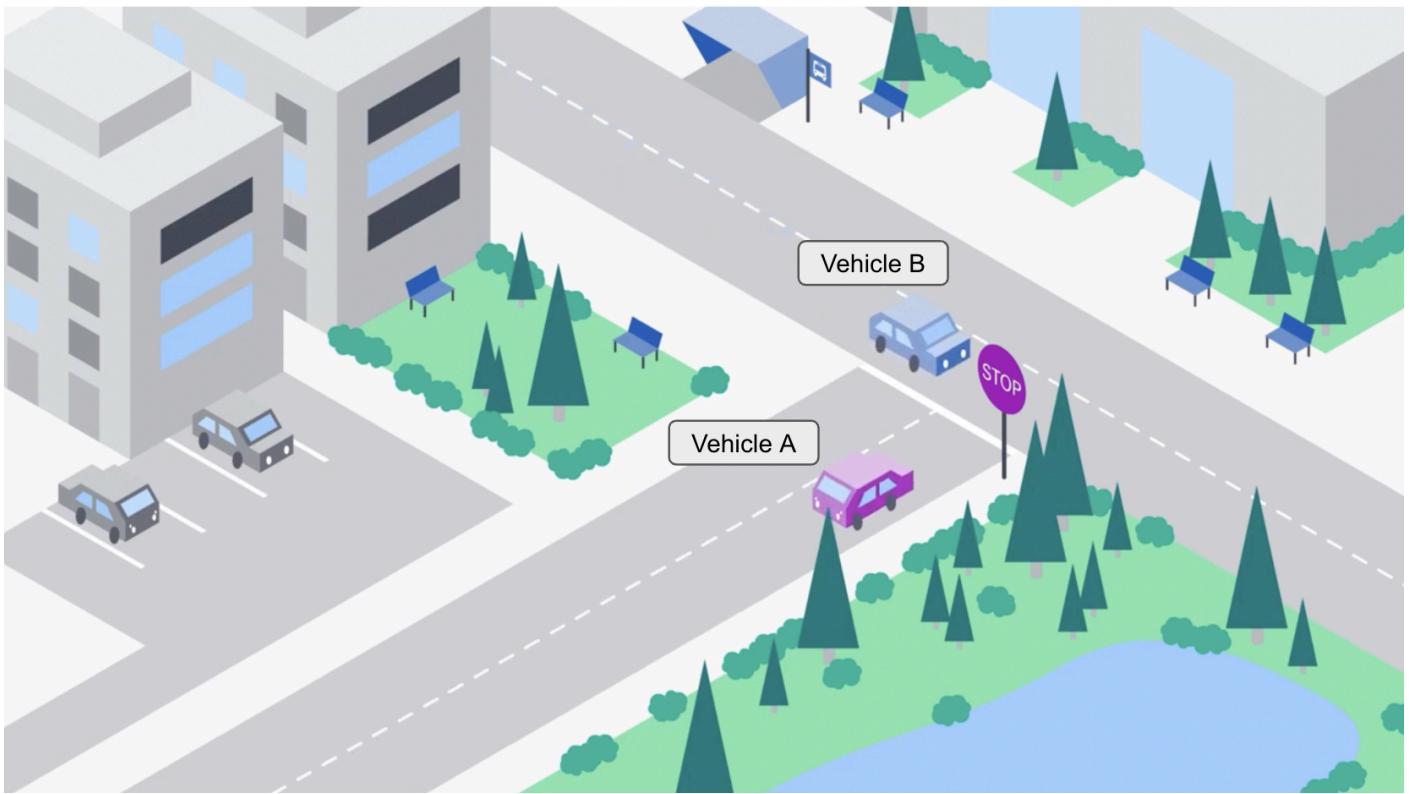
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questions_1

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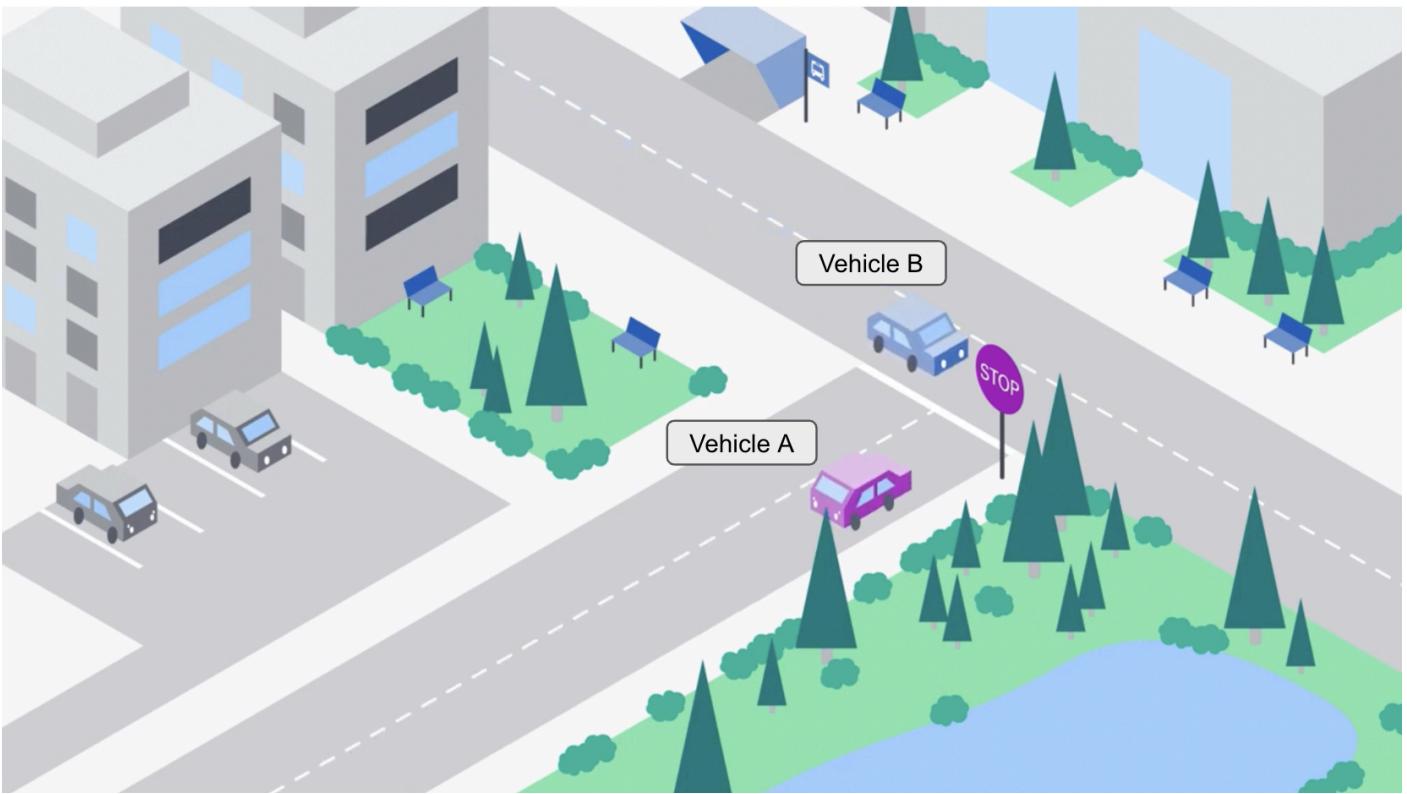




Please rate the extent to which you agree with the following statement (0=completely disagree, 100=completely agree):

How much do you agree: It would be reasonable to sue the **driver of Vehicle A** to cover the costs of the serious injuries sustained by the occupant of Vehicle B.

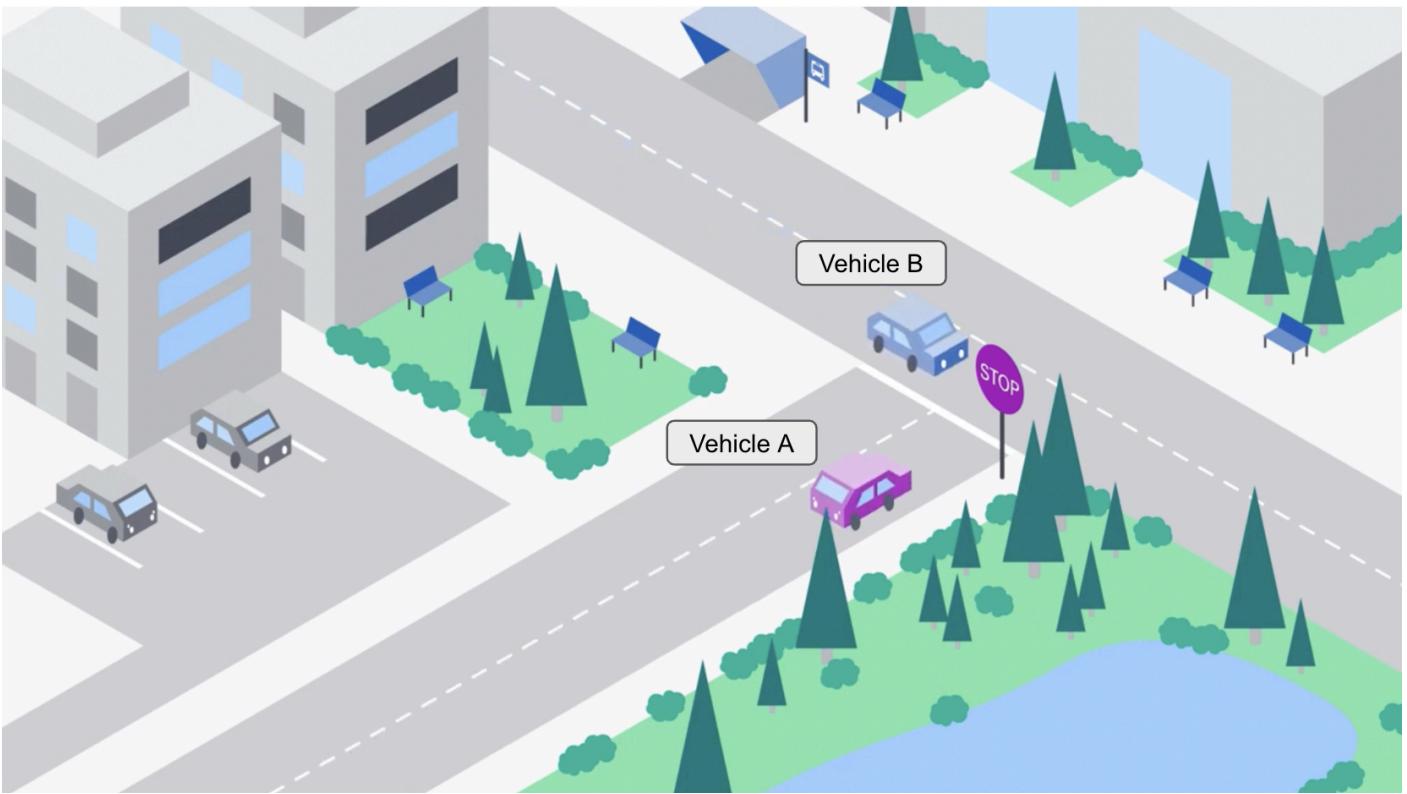




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How much do you agree: It would be reasonable to sue the **driver of Vehicle B** to cover the costs of the serious injuries sustained by the occupant of Vehicle B.





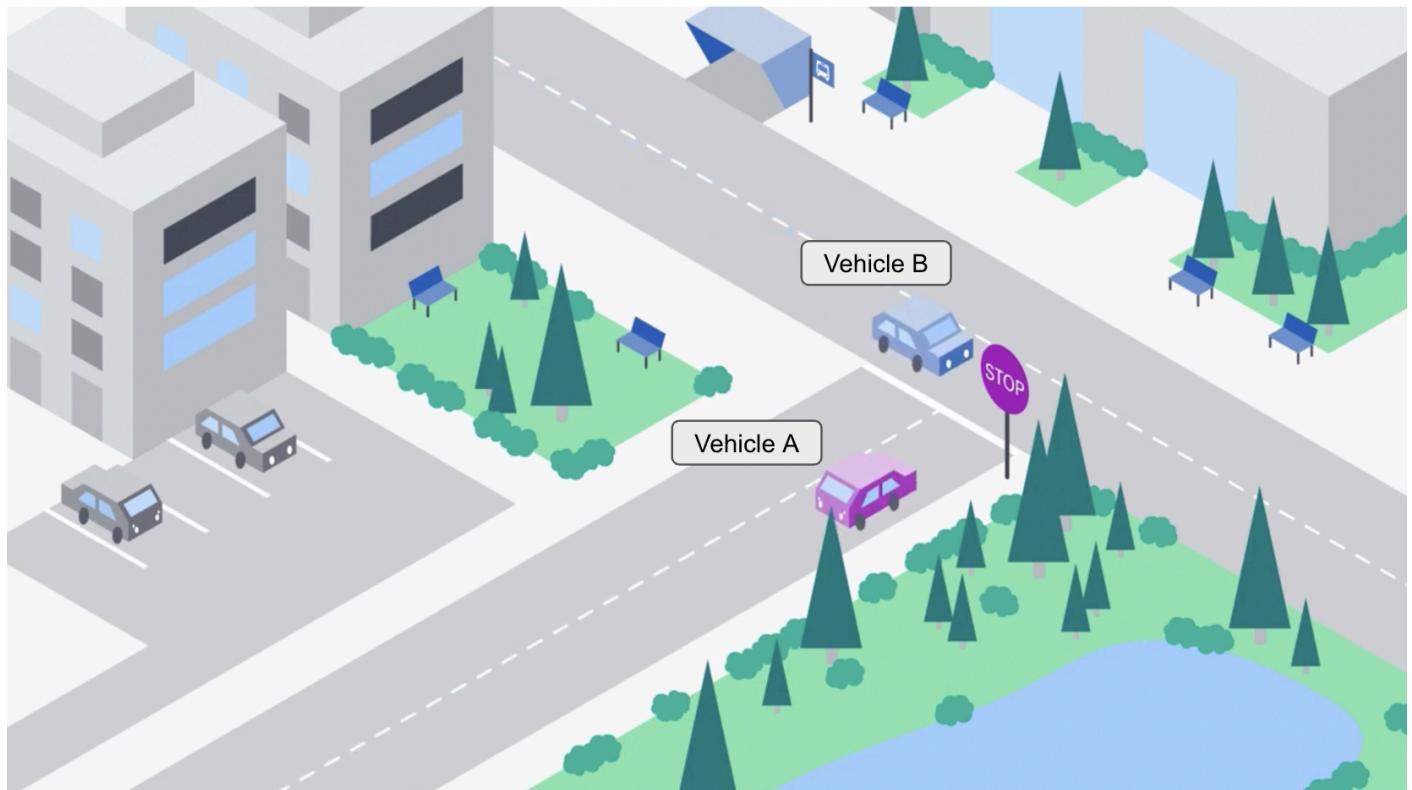
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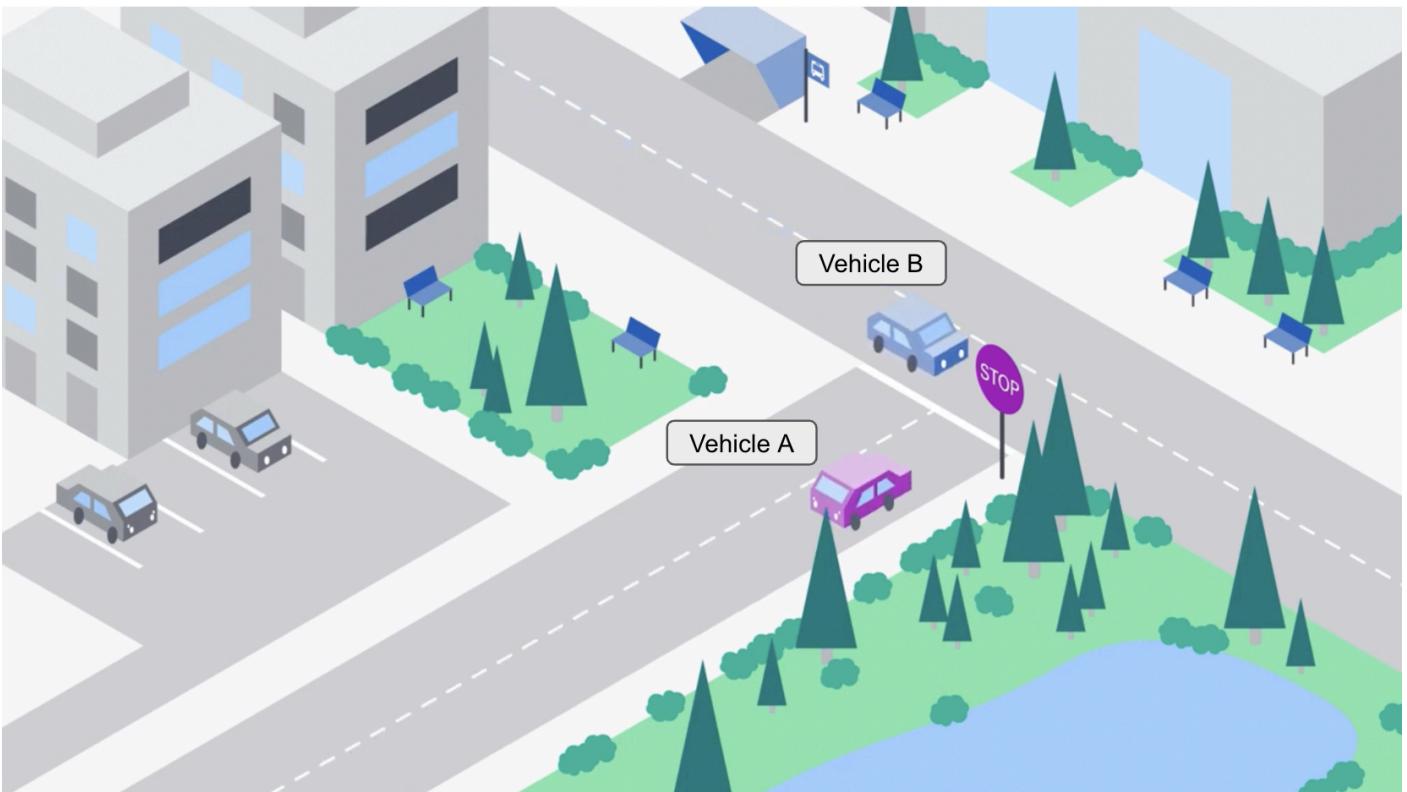
How much do you agree: It would be reasonable to sue the **manufacturer of Vehicle B** to cover the costs of the serious injuries sustained by the occupant of Vehicle B.



questions_2

Please answer one more set of questions about the scenario below. Again, please refer to the following image when answering the question.

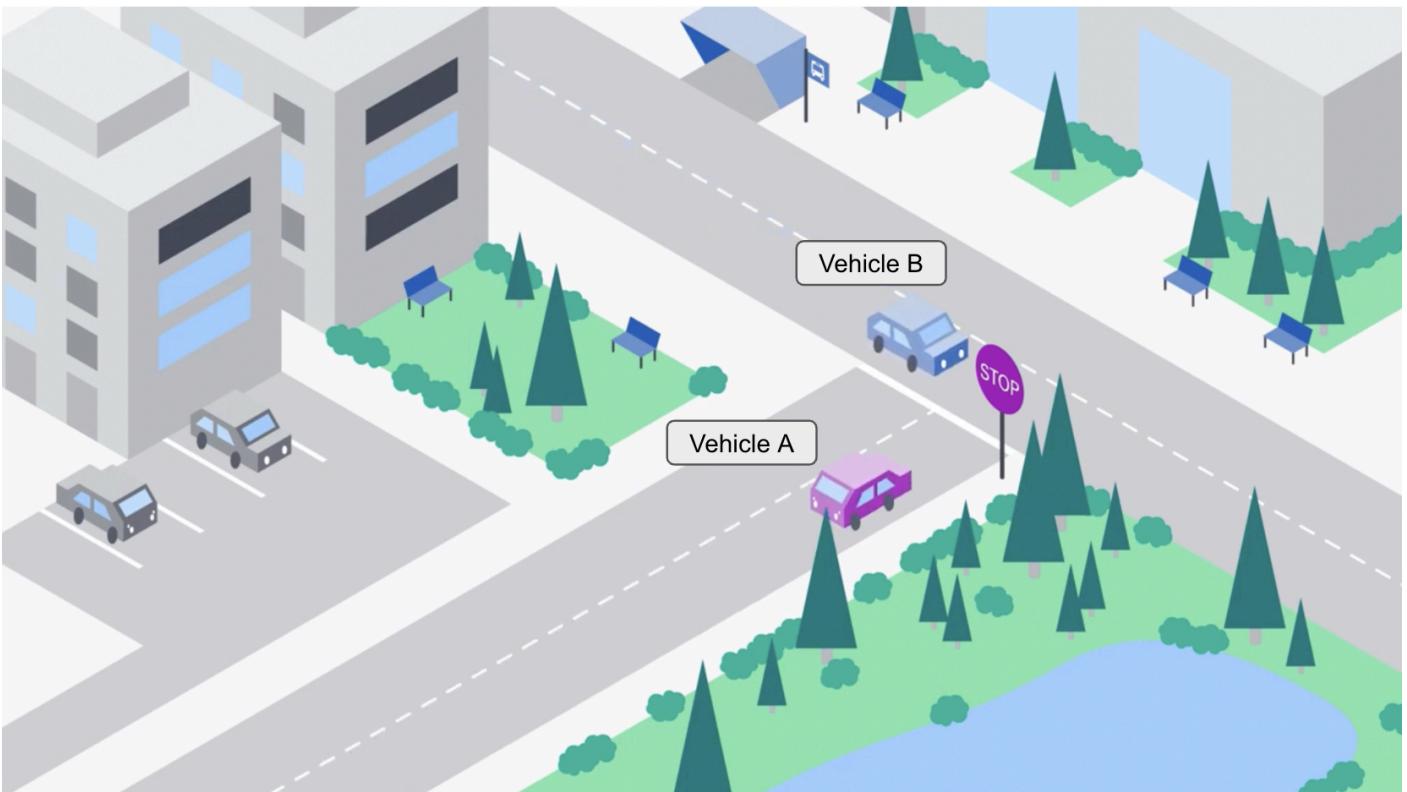




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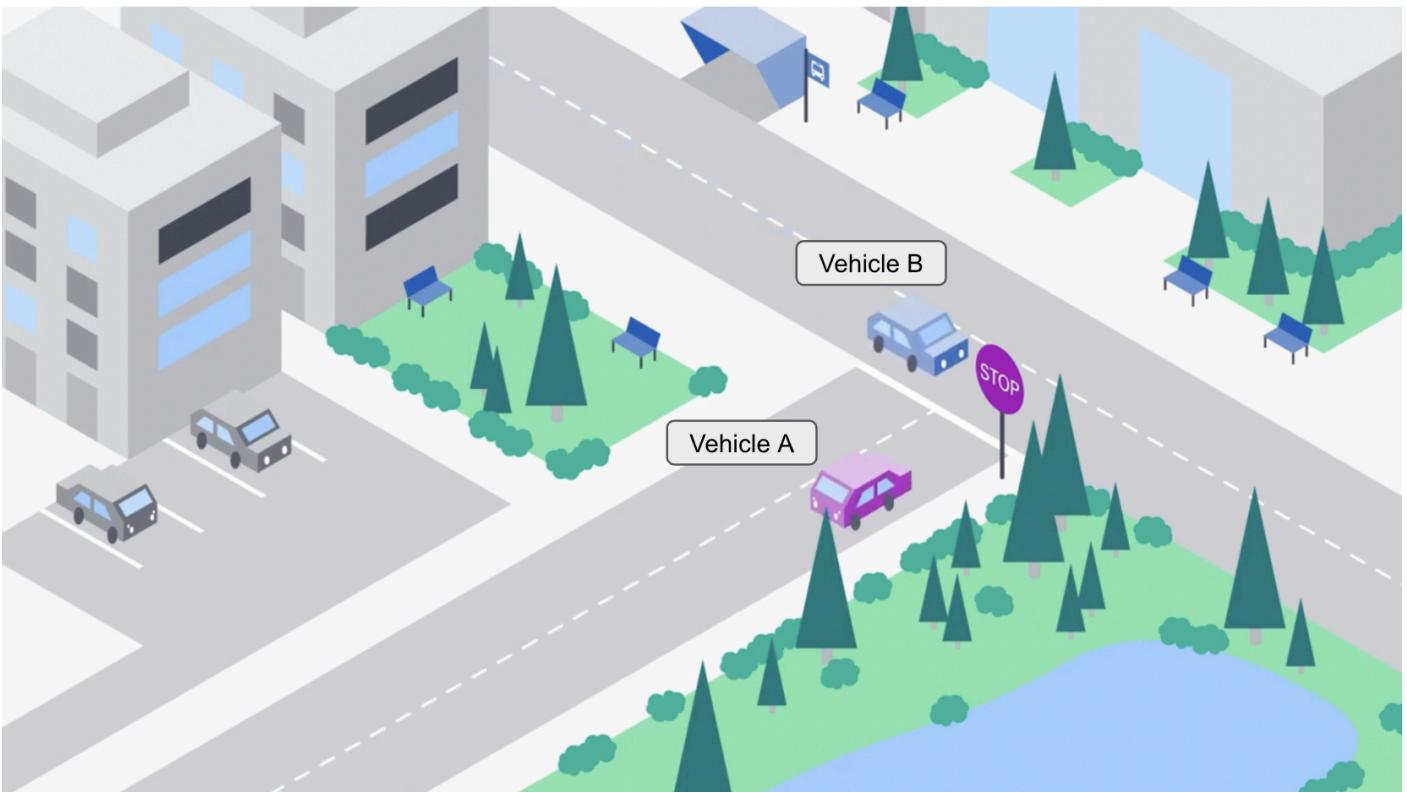




Please rate the extent to which you agree with the following statement (0=completely disagree, 100=completely agree):

How much do you agree: When it comes to thinking about how the injury could have been avoided, it is relevant to consider what **Vehicle B** could have done differently.





Please rate the extent to which you agree with the following statement (0=completely disagree, 100=completely agree):

How much do you agree: **Vehicle B** could have done more to avoid the accident.



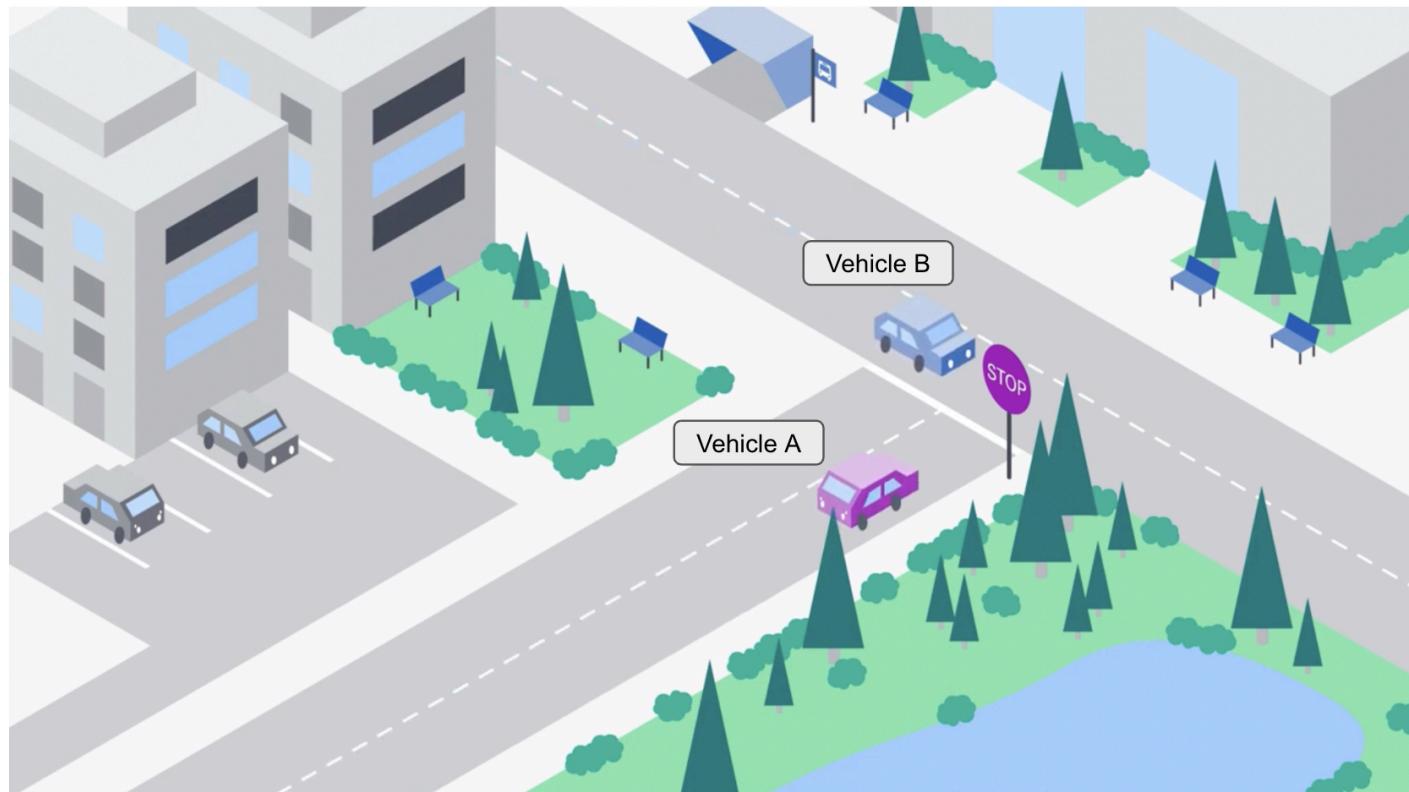
hdv_scenario_intv

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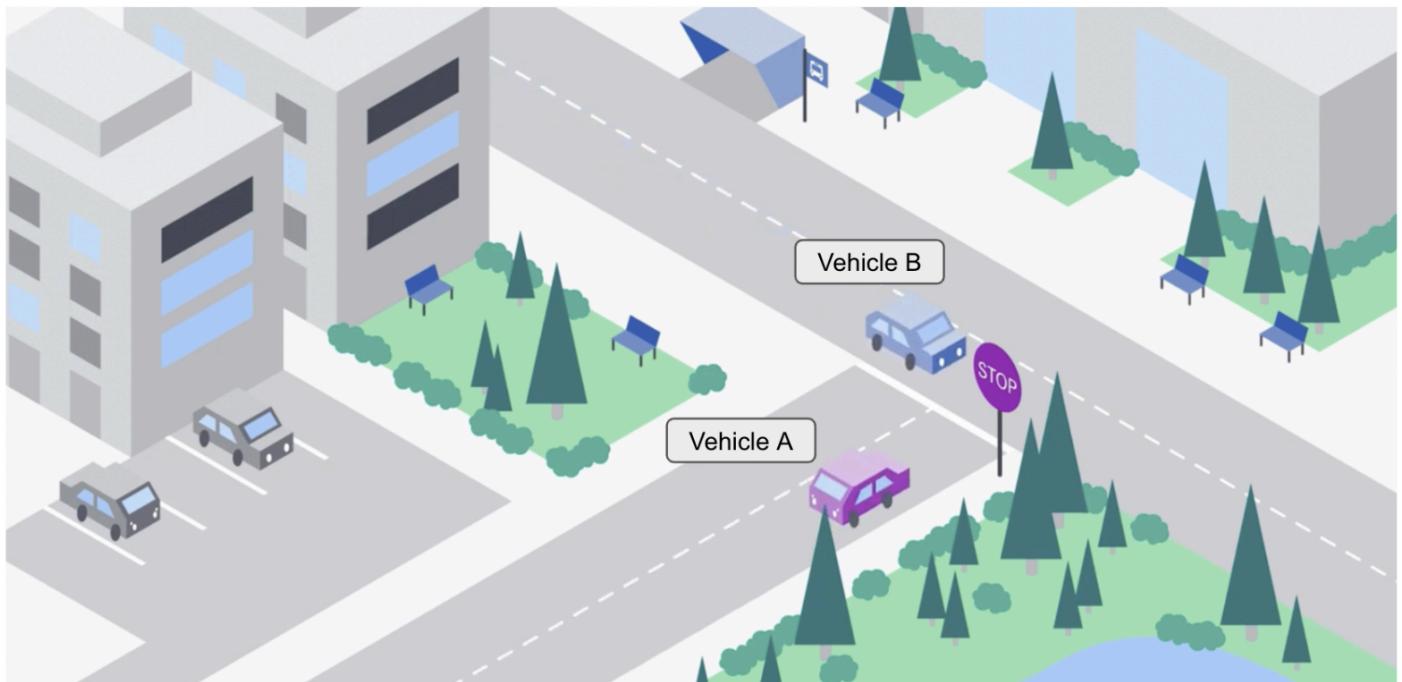
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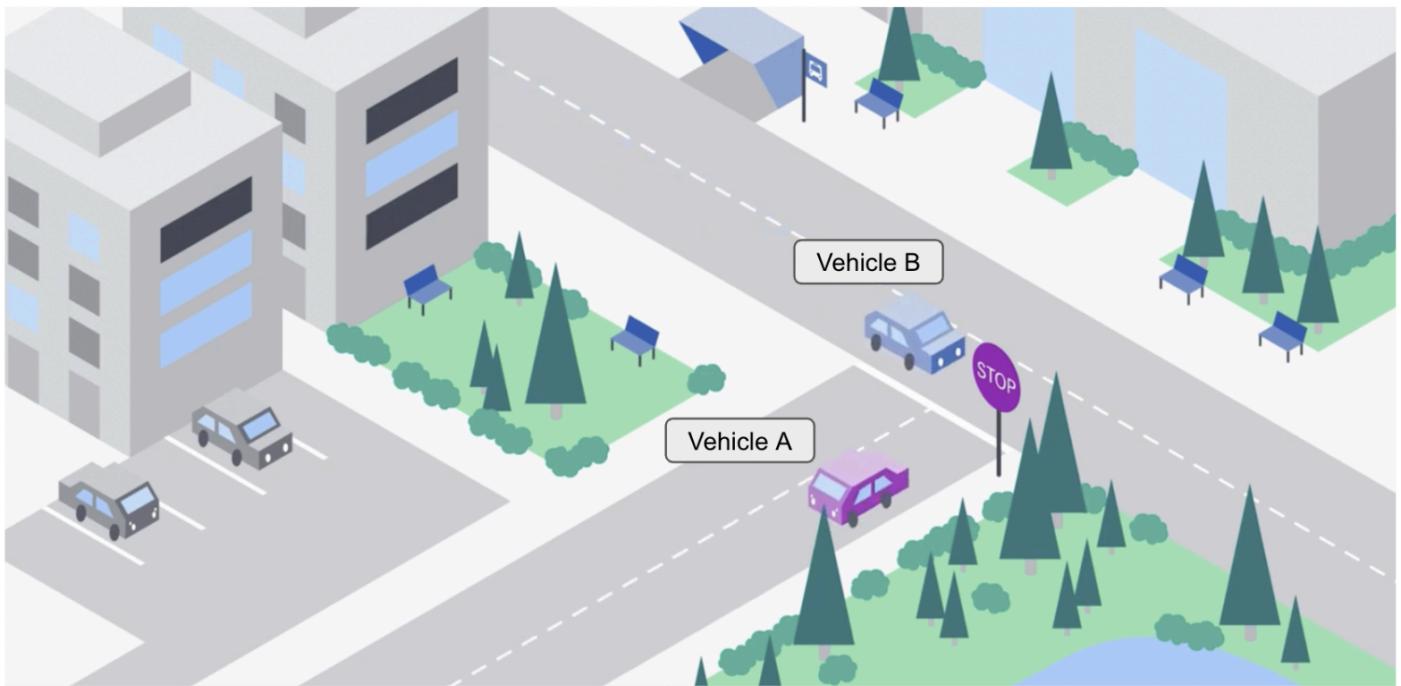
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questions_1_intv

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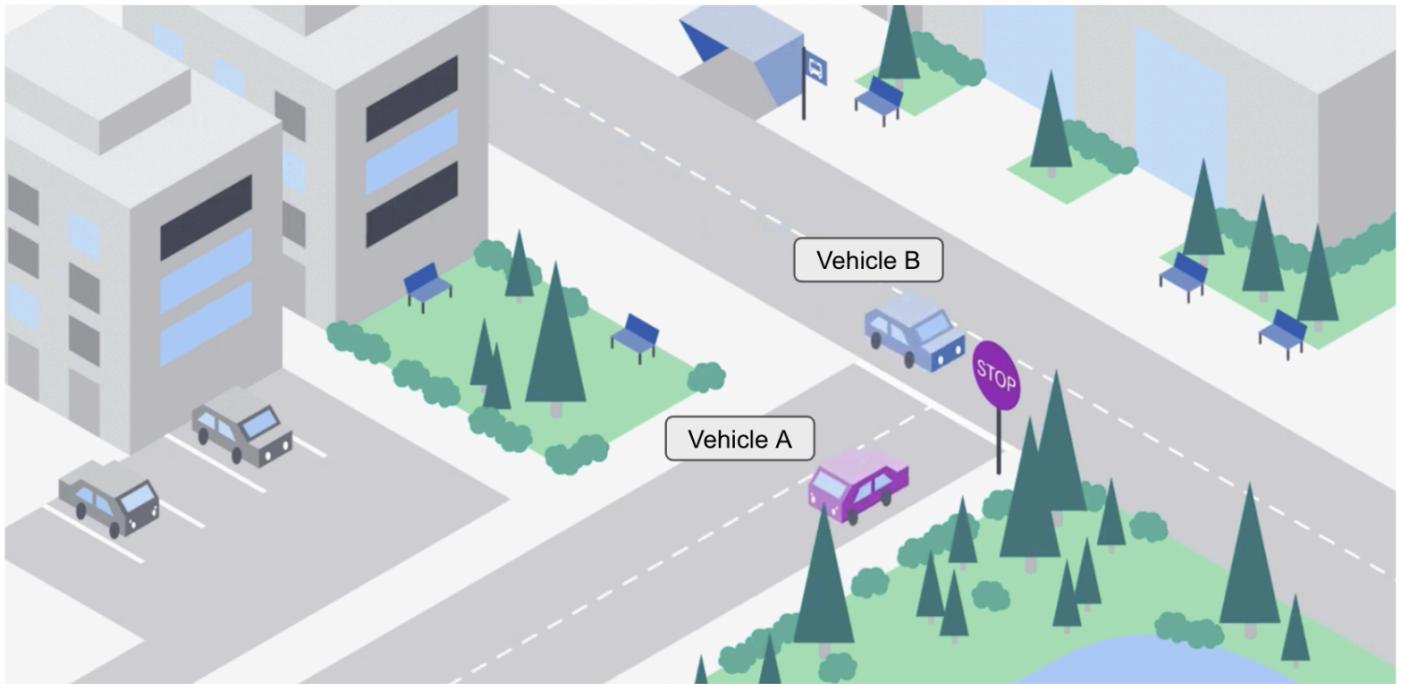


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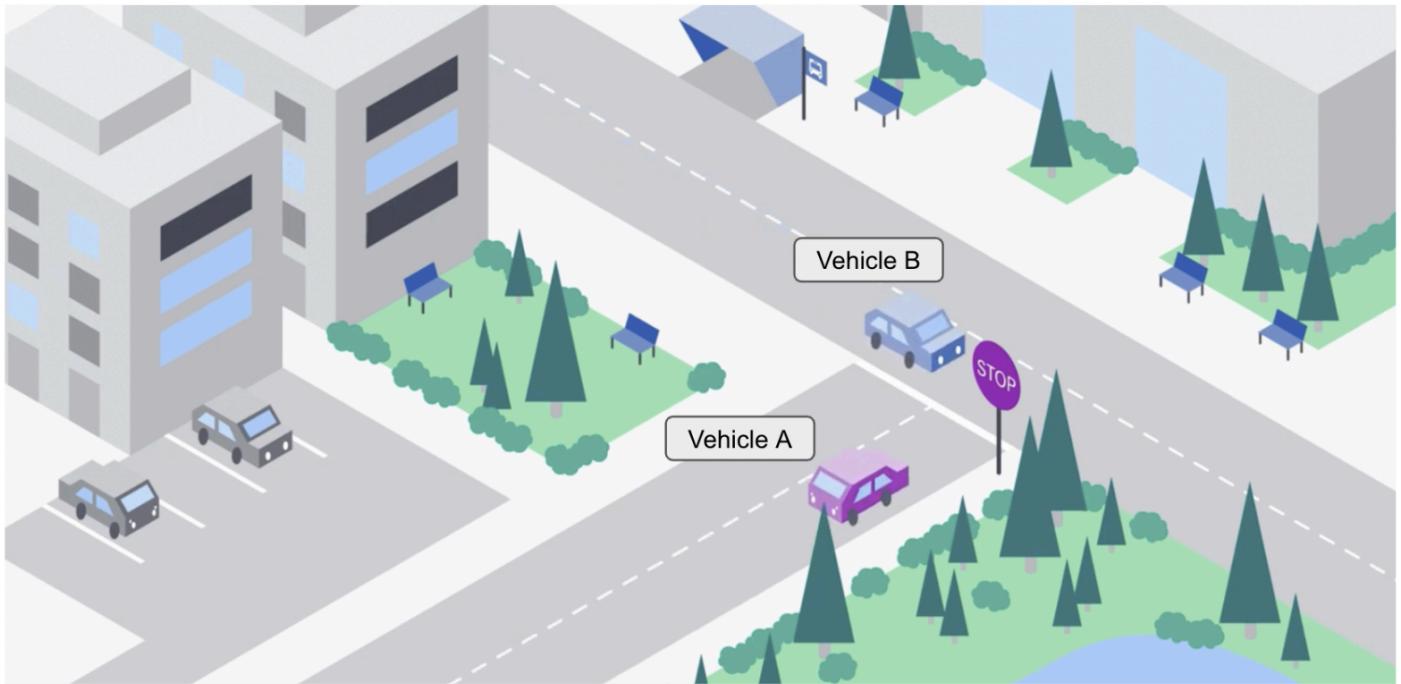


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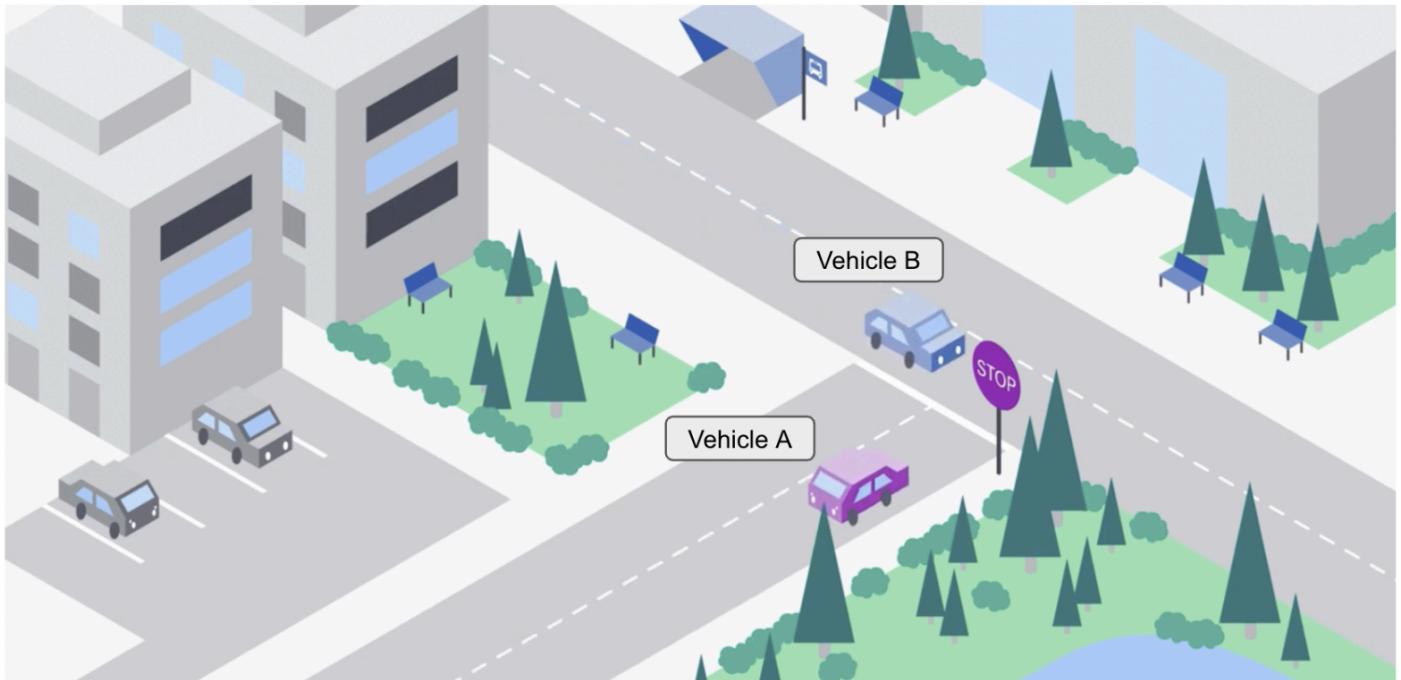
Please rate the extent to which you agree with the following statement (0=完全ly disagree, 100=完全ly agree):

How much do you agree: It would be reasonable to sue the **manufacturer of Vehicle B** to cover the costs of the serious injuries sustained by the occupant of Vehicle B.

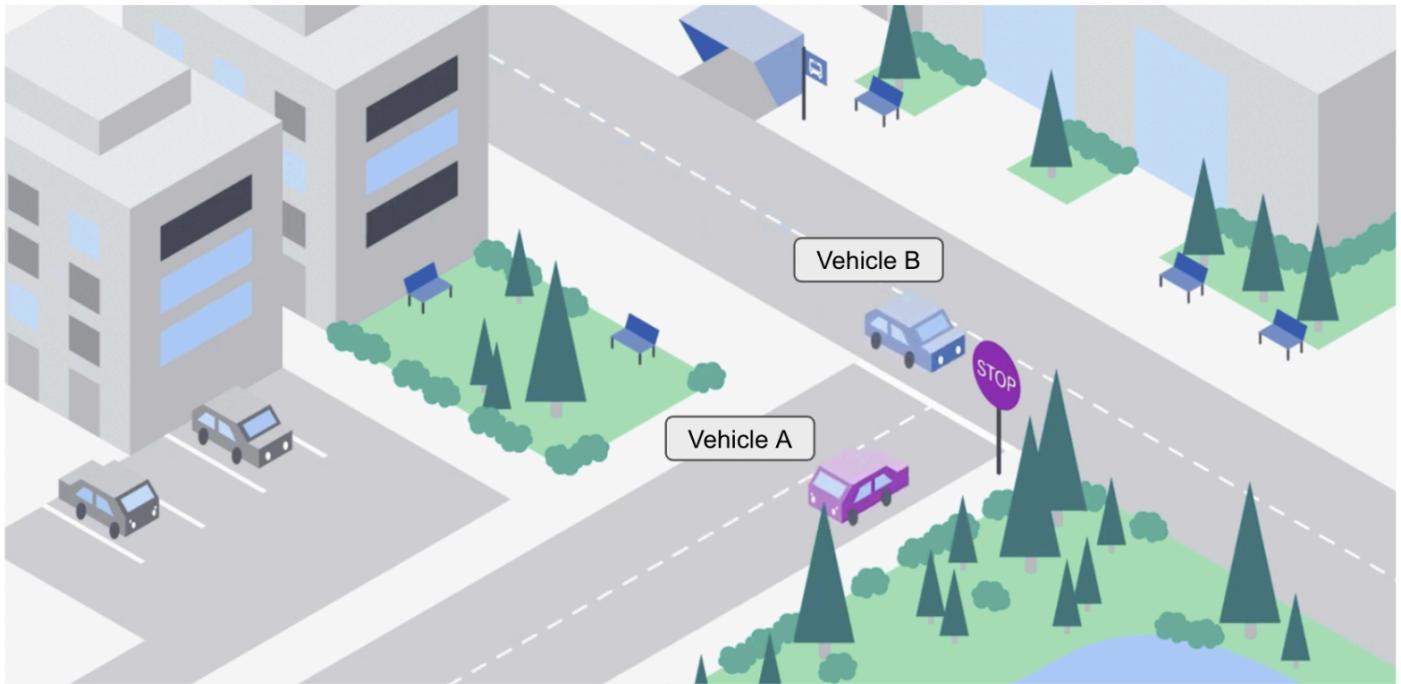


questions_2_intv

Please answer one more set of questions about the scenario below. Again, please refer to the following image when answering the question.



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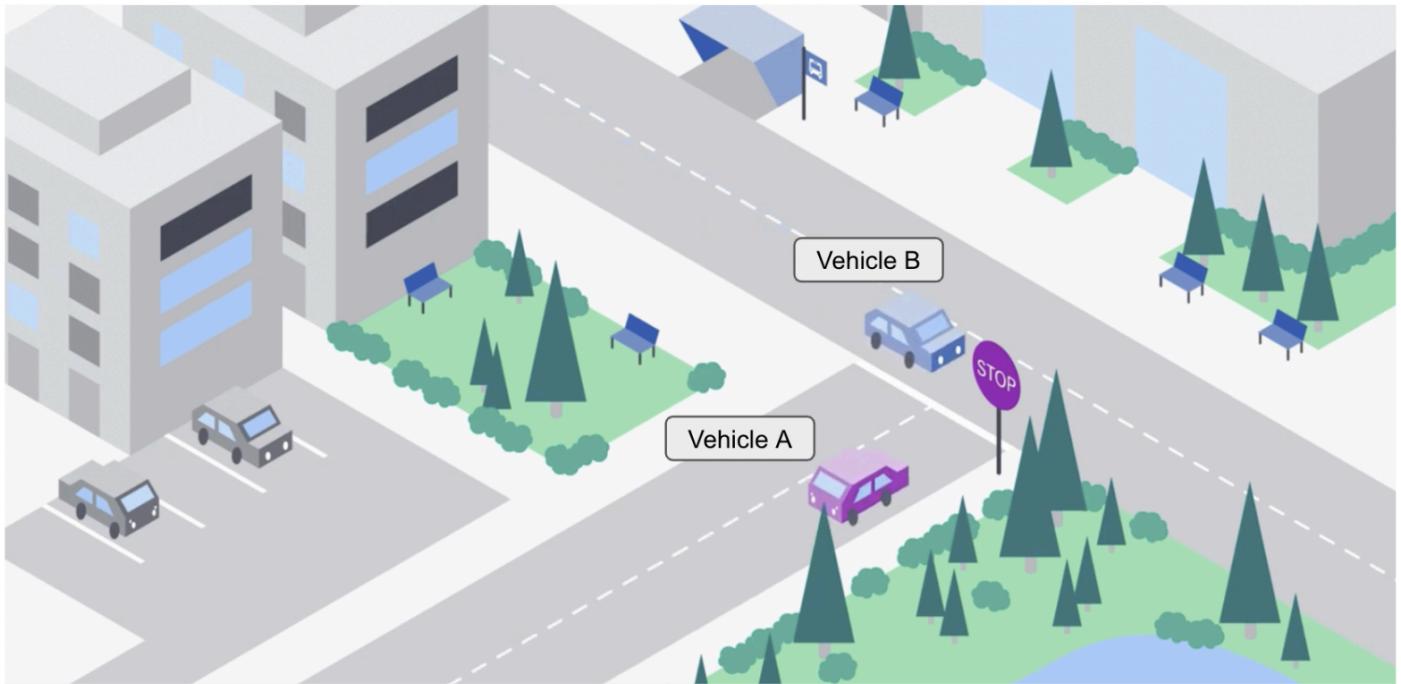


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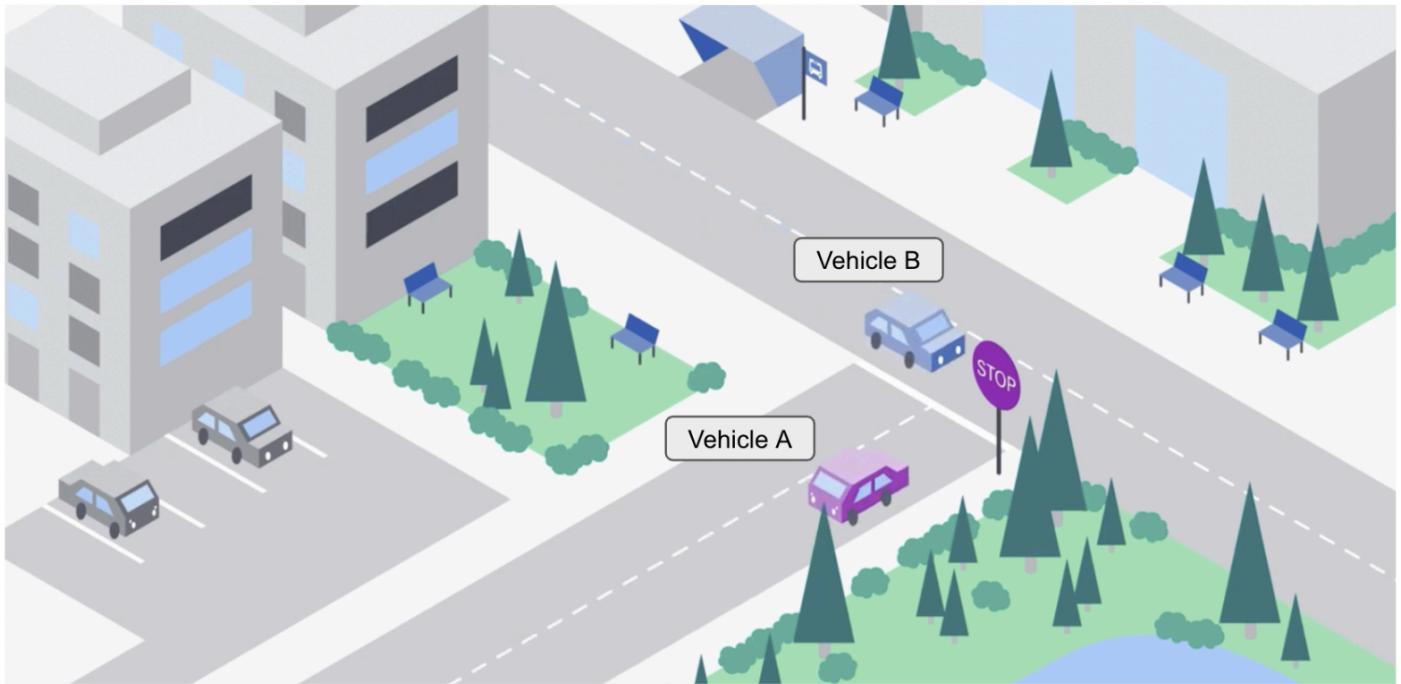


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How much do you agree: **Vehicle B** could have done more to avoid the accident.



comprehension

Which of the following was true about Vehicle B?

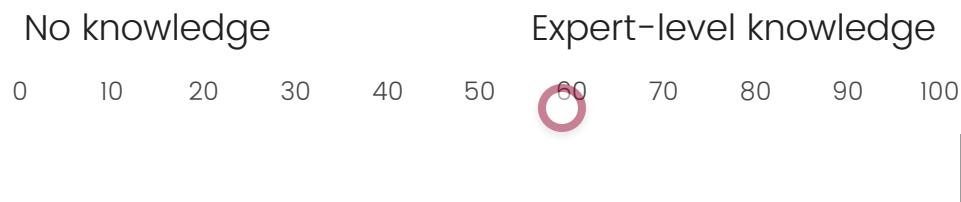
- Vehicle B was a self-driving car, which means that it was driven by a computer algorithm rather than a human being.
- Vehicle B is a regular human-driven car.

Which of the following was true about the video?

- Vehicle A ran a stop sign
- Vehicle B ran a stop sign

demographics

Before this survey, how familiar were you with autonomous vehicle accident prevention algorithms?



What is your gender?

- Male

- Female
- Prefer not to disclose
- Other (please specify)

What is your age (in years)?

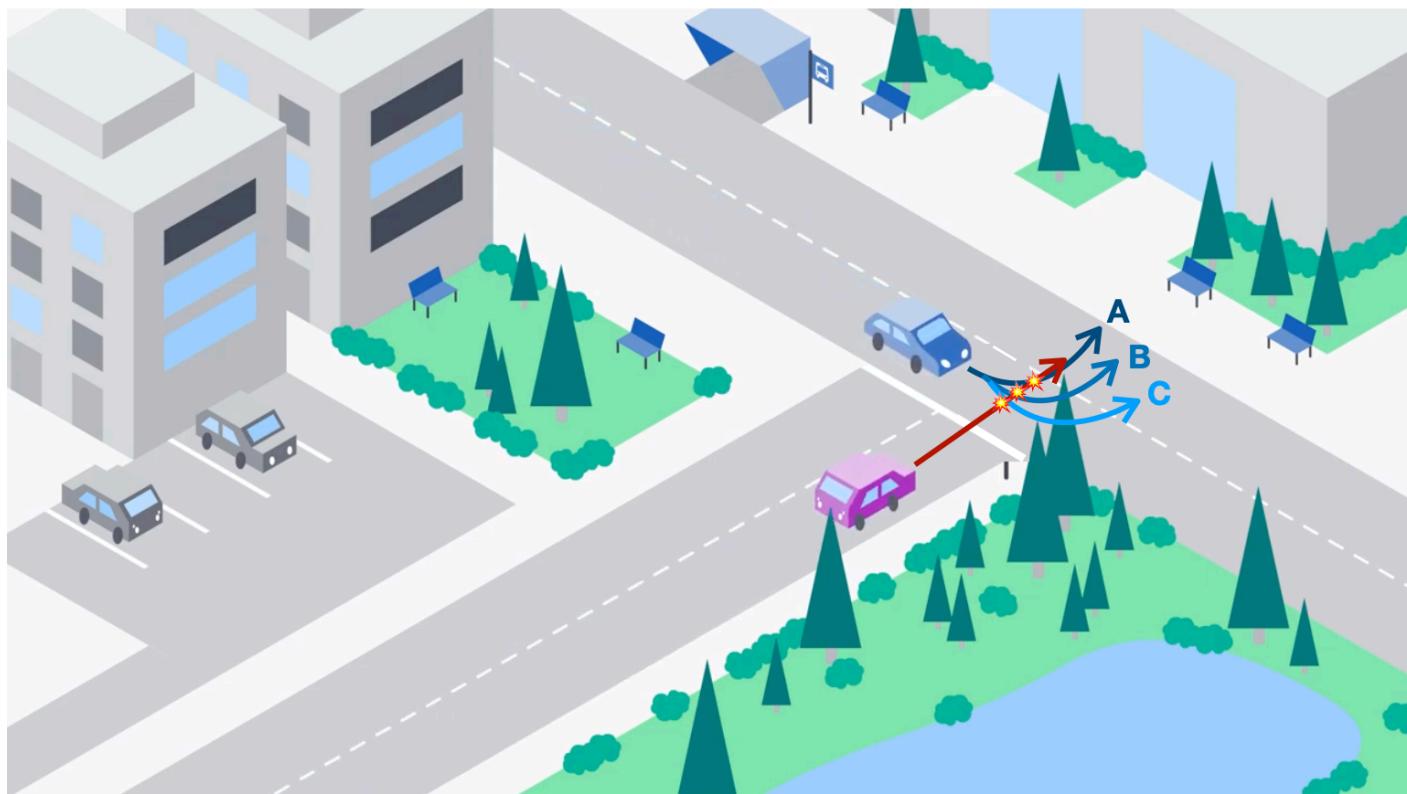
What is the highest level of education you have completed?

- High School or Equivalent
- Vocational/Technical School (2 year)
- Some College
- College Graduate (4 year)
- Masters Degree (MS)
- Doctoral Degree (PhD)
- Professional Degree (MD, JD, etc.)
- Other (please specify)

hdv_intervention

After the collision, an accident reconstruction expert analyzed how the scenario could have gone differently. The expert analyzed **all possible paths that a human driver in Vehicle B's position** could have taken once it became clear that Vehicle A would not stop at the intersection.

The results of this analysis are shown below. The blue arrows depict alternative Vehicle B paths, and the red arrow depicts the true path of Vehicle A. The orange bursts indicate a predicted collision between Vehicle A and Vehicle B.



Powered by Qualtrics