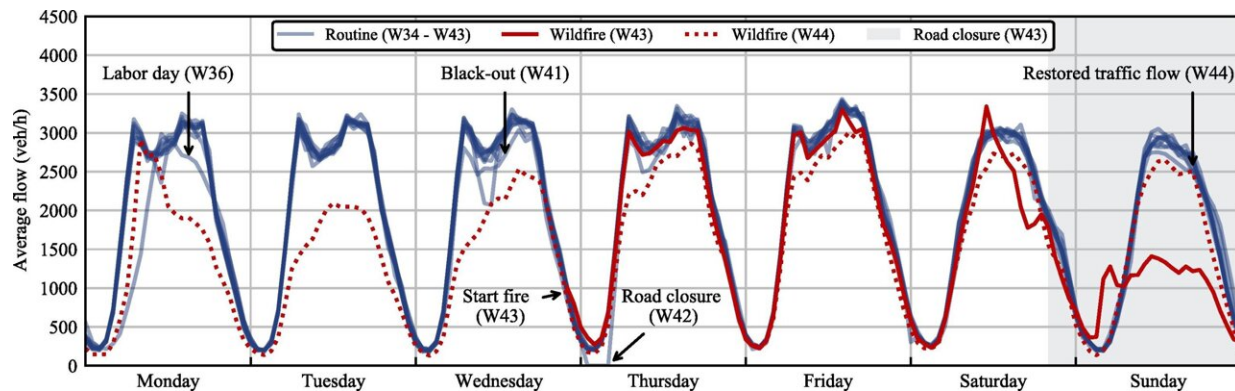


People drive more slowly than usual during wildfire evacuations, study finds

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Average traffic flow before, during, and after the wildfire. Credit: *Transportation Research Part D: Transport and Environment* (2023). DOI: 10.1016/j.trd.2023.103610

During extensive wildfires, residents may need to evacuate to stay safe, but knowing when to leave is sometimes unclear. A new study from Lund University in Sweden, among others, shows that people fleeing their homes drive more slowly than usual, despite time being crucial.

Enrico Ronchi conducts fire research at Lund University in Sweden, and is an expert on evacuations during [wildfires](#)—how people behave and how various government agencies can inform the public. Together with colleagues from other universities, he has closely studied several fires as well as developed simulation tools that can be used by municipalities, for

example.

"Wildfires with fatal outcomes are often the result of information being provided too late," he says.

Information being communicated quickly is important for reasons beyond the fact that fire develops rapidly. In many [small communities](#), there is only one [road](#) in and out, which means there is a great risk of traffic jams. The road being blocked by fire is an even worse scenario.

"Calculations up to this point have been based on existing [traffic conditions](#), with the assumption that people will behave as usual," says Ronchi.

However, the researchers' analysis of traffic data shows that motorists drive slower than they normally do, regardless of whether traffic is heavy or light. Ronchi says the difference is significant since every minute can be crucial.

"Our interpretation is that they are afraid of being involved in a [traffic accident](#) and consequently drive slower, which in a way is a rational response. There is a false notion that people panic in situations like these and behave irrationally, and that they don't help one another. Previous studies have shown this is not the case. Receiving information early on is crucial, and preferably in as many ways as possible," he concludes.

The work is published in the journal *Transportation Research Part D: Transport and Environment*.

More information: Arthur Rohaert et al, Traffic dynamics during the 2019 Kincadee wildfire evacuation, *Transportation Research Part D: Transport and Environment* (2023). [DOI: 10.1016/j.trd.2023.103610](https://doi.org/10.1016/j.trd.2023.103610)

Provided by Lund University

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