

What's On
Tonight
TV Schedule

Shop
Discovery
Store
Go Now



Discovery Channel
TLC
Animal Planet
Travel Channel
Discovery Health

discoverytimeschannel

Search



December 24, 2007

Driving America

Expert Q&A

Truck Timeline

Video Interviews

What Makes a
Traffic Jam

Traffic Trivia Quiz

Driving America

What Makes a Traffic Jam

ANATOMY OF A TRAFFIC JAM

For commuters, perhaps the most maddening situations on the road are the mysterious traffic jams that seem to develop spontaneously, even when there's no accident or construction to create a bottleneck.

One of the nation's foremost traffic researchers, University of Maryland engineering professor Hani S. Mahmassani, explains that these "phantom jams" are caused by a combination of physics and human nature. "If we didn't have to deal with drivers' reaction times," he explains, "we could fit four times as much traffic on the highways."

continue >

Advertisement

What's On Tonight
TV Schedule

Shop Discovery Store
Go Now



Discovery Channel
TLC
Animal Planet
Travel Channel
Discovery Health

discoverytimeschannel

Search



December 24, 2007

Driving America

Expert Q&A

Truck Timeline

Video Interviews

What Makes a Traffic Jam

Traffic Trivia Quiz

Driving America

What Makes a Traffic Jam

ANATOMY OF A TRAFFIC JAM

3 p.m. Situation Normal

Traffic is flowing smoothly, with random fluctuations as drivers vary their speed and change lanes. But the number of vehicles is increasing, spelling trouble ahead.

Stage 1

continue >

traffic stage one

traffic

Advertisement

What's On Tonight
TV Schedule

Shop Discovery Store
Go Now



Discovery Channel
TLC
Animal Planet
Travel Channel
Discovery Health

discoverytimeschannel

Search



December 24, 2007

Driving America

Expert Q&A

Truck Timeline

Video Interviews

What Makes a Traffic Jam

Traffic Trivia Quiz

Driving America

What Makes a Traffic Jam

ANATOMY OF A TRAFFIC JAM

3:05 p.m. The Tipping Point

The number of vehicles has exceeded the limit that the highway can handle (usually somewhere in the vicinity of 2,400 drivers per lane per hour). Drivers continue to do the same random maneuvers, but they have less room.

Stage 2

continue >

traffic stage two

traffic

Advertisement

What's On Tonight
TV Schedule

Shop Discovery Store
Go Now



Discovery Channel
TLC
Animal Planet
Travel Channel
Discovery Health

discoverytimeschannel

Search



December 24, 2007

Driving America

Expert Q&A

Truck Timeline

Video Interviews

What Makes a Traffic Jam

Traffic Trivia Quiz

Driving America

What Makes a Traffic Jam

ANATOMY OF A TRAFFIC JAM

3:10 p.m. The Trigger

When someone switches lanes or changes speed, the driver behind that car momentarily taps his brakes. The drivers behind that car see the brake lights. They take a fraction of a second to react, and then begin to brake as well.

Stage 3

continue >



Advertisement

What's On Tonight
TV Schedule

Shop Discovery Store
Go Now



Discovery Channel
TLC
Animal Planet
Travel Channel
Discovery Health

discoverytimeschannel

Search



December 24, 2007

Driving America

Expert Q&A

Truck Timeline

Video Interviews

What Makes a Traffic Jam

Traffic Trivia Quiz

Driving America

What Makes a Traffic Jam

ANATOMY OF A TRAFFIC JAM

3:15 p.m. The Slowdown

The slowing effect rolls down the highway in a wave, so that within five minutes, the jam-up already may extend for nearly a mile. Once the reaction starts, the route's capacity to handle traffic may diminish by 40 percent.

Stage 4

continue >



Advertisement

What's On
Tonight
TV Schedule

Shop
Discovery
Store
Go Now



Discovery Channel
TLC
Animal Planet
Travel Channel
Discovery Health

discoverytimeschannel

Search



December 24, 2007

Driving America

Expert Q&A

Truck Timeline

Video Interviews

What Makes a
Traffic Jam

Traffic Trivia Quiz

Driving America

What Makes a Traffic Jam

ANATOMY OF A TRAFFIC JAM

3:20 p.m. An Escalating Mess

With the jam approaching 2 miles in length, other cars keep trying to get on the road from ramps, further aggravating the situation. The jam won't dissipate until drivers are warned by radio traffic reports or road signs that they should divert to an alternate route.

Stage 5

start over >



Advertisement

Picture(s): DCI |

[Discovery Channel](#) | [TLC](#) | [Animal Planet](#) | [Discovery Health](#) | [Science Channel](#) | [Planet Green](#)
[Discovery Kids](#) | [Military Channel](#) | [Discovery Times](#) | [Discovery Home](#) | [HD Theater](#) | [Turbo](#) | [FitTV](#)

[HowStuffWorks](#) | [TreeHugger](#) | [Petfinder](#) | [PetVideo](#) | [Discovery Education](#)

Visit the [Discovery Store](#): [Toys & Games](#) | [Telescopes](#) | [DVD Sets](#) | [Planet Earth DVD](#) | [Gift Ideas](#)

By visiting this site, you agree to the terms and conditions
of our [Visitor Agreement](#). Please read. [Privacy Policy](#).
ATTENTION! We recently updated our privacy policy. The changes are effective as of Tuesday,
October 30, 2007.

To see the new policy, [click here](#). Questions? See the policy for the contact information.

Copyright © 2007 [Discovery Communications, LLC](#).

The leading global real-world media and entertainment company.