

1125-D5-2844 **James P. Howard, II***, jh@jameshoward.us, jphoward@faculty.umuc.edu. *And Behind Door #3...*

In 2016, the web comic Saturday Morning Breakfast Cereal by Zach Weinersmith presented a problem as a comic, naming this “The Monty Hall Trolley Problem:”

Imagine you’re in an out-of-control trolley. You’re headed toward three buildings, and you control which you slam into. Two buildings contain five people one building contains online one person. You randomly select a building to slam into. Then, one of the other buildings is revealed to contain five people. Should you switch tracks?

Combing the elements of the ethical staple, “The Trolley Problem,” with the historical statistical trauma of “The Monty Hall Problem,” the Monty Hall Trolley Problem presents a relatively simple analytical challenge. However, the applications of this problem and its solutions transcend comic-inspired classroom problems. The fundamental question will be faced by autonomous machines, including the rising class of self-driving vehicles.

This presentation will investigate the problem presented by Weinersmith, generalize it, and show the connections to modern systems design. (Received September 20, 2016)