

Crash Trends in Commercial Vehicles in Virginia

- Consultants: Students of Practice and Application 4001
- Client: Commonwealth of Virginia-Department of Motor Vehicles
- Description: Crashes involving commercial motor vehicles have increased substantially, especially on certain roadways, in the past five years. The Virginia Department of Motor Vehicles is interested in learning about trends in those crashes and what they can tell us about potential driver training.
- Objective: Determine factors involved in increasing commercial motor vehicle crashes. Identify trends that can alert us to additional training needs for Commercial Drivers License holders that could then be provided to Commercial Driver Training Schools.

Group Activity 1

You have 20ish minutes for this exercise. Read through the project summary again, assign a timekeeper, a note taker, and a presenter then consider and answer the following:

1. What is the current situation? Would you like to know more? What would you ask your client if you could?
2. Define a solid, measurable goal that you think would satisfy your client. What is your metric of success?
3. What data would you like to have (think big)? How would you get this data? How would it have been gathered (sensors, cameras, etc.)? Would retrospective data likely all have been in the same spot?
4. What deliverable would you like to hand over to your client at the end of the project (you can think big here – be creative)?

Stop Here for Now...

Answer the Four Questions

American Pharaoh won the Triple Crown. He won the Belmont, a 12 furlong track, with a time of 2:26.65, the Kentucky Derby, a 10 furlong track, with a time of 2:03.02, and the Preakness Stakes, a 9.5 furlong track, with a time of 1:58.46. What was his average speed in mph?

1. What do I know?
2. What am I looking for?
3. What else do I need to find it?
4. What do I expect?

Now Solve the Problem

- Work in your Lab Teams to code the solution with an output that reads “[Horse’s Name] averaged [x] mph across the three triple crown races.”
- Psuedo Code the framework of the function using a google doc then code the answer together sharing one person's screen.

American Pharaoh won the Triple Crown. He won the Belmont, a 12 furlong track, with a time of 2:26.65, the Kentucky Derby, a 10 furlong track, with a time of 2:03.02, and the Preakness Stakes, a 9.5 furlong track, with a time of 1:58.46. What was his average speed in mph?