Effects of Drinking and Driving

New Mexico Supercomputing Challenge

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Team #: 059

Shiprock High School

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Executive Summary

We went out and we got some information on the effects of drinking and driving in San Juan County. We also collected some data and some other useful facts from the internet. Some other resources we used with our project were the newspapers and the news. So far, we do not have any resources for our result. However, we are going to try our best to make what we want to happen.

Right now, we are doing more research, trying to get more information on how many people in San Juan County drink and drive. We are also trying to find out what their penalties are. With this information, we will consider what we will do next. So far, we have gathered information on how many people live in San Juan County. Right now, we know that there are approximately about 91,605 people in San Juan County. With this information, we want to conduct a model of the average amount of people who drink and drive in San Juan County.

The history of drinking and driving is rooted in the abuse of alcoholic beverages. Alcohol is just not a substance that is bad but was once a substance that was used for a good reason. It was used in ceremonial traditions of ancient times, starting back in the days before Christ and it continues to be used in certain ways. Now people use alcohol just to have a good time, and they say they do it because they are depressed and give other reasons.

Introduction

Hypothesis:

We as a team want to increase the penalty of drinking and driving in the state of San Juan County. We also wanted to increase the age limit of purchasing alcohol in San Juan County. We were going to evaluate the effects of drinking and driving in the state of New Mexico, but we thought we would narrow it down to the effects of drinking and driving in San Juan County.

We do not exactly think that we are going to be able to get the age limit of purchasing alcohol to increase. We do not think we are going to get the penalties of drinking and driving any higher because from what we heard on the news, the penalties of drinking and driving had already increased.

Project Description

Method

       We both did some research, and we found out that there are about 91,605 people living in San Juan County. We also found out of that, 77% drink and drive in San Juan County. Of that 77%, most of them are males.

Implementation

       We would like to implement our project to be used in most of this country. We would like to be used in other counties and states because they might be having the same problem with drinking and driving in their county or state, and they might want to do something about it to decrease the rate of fatalities caused by drunk drivers.

Results

Our results were very inconclusive because we did not really have anything to solve. If we had attempted to increase the age limit of purchasing alcohol beverages, and increasing the penalties of drinking and driving, we don't think we would have gotten far enough to get them increased, nor did we didn't get the age limit of purchasing alcohol beverages to increase or we didn't get the penalties of drinking and driving to increase. But we heard on the news that the penalties was going to increase.

Conclusion

We think our conclusion was inconclusive because we did not really have anything we could do about increasing the age limit of purchasing alcohol beverages or getting the penalties to increase. In conclusion, we think that people go out and drink and drive just because they want to. They also give other reasons like those who say they do it because they are depressed and they need something to help them.

Recommendations

We recommend that people try to take drinking and driving more seriously and try to help us get the age limit of purchasing alcohol beverages higher and get the penalties of drinking and driving in San Juan County to increase. Right now, we don't think everyone is taking drinking and driving seriously.

Acknowledgements

References

1. Internet

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- http://alcoholism.about.com/cs/drive/

- http://www.glennsmithvaldez.com/

- http://www.nmdwilaw.com/

- http://www.mrtraffic.com/dui.htm

- http://www.dwiresourcecenter.org/driving_alternatives/

- http://alcoholism.about.com/library/blnaa31.htm

- http://alcoholism.about.com/library/weekly/aa082797.htm

- http://alcoholism.about.com/library/glos/bldef27.htm

- http://www.nhtsa.dot.gov/people/outreach/safedige/fall2000/fal00-17.html

- http://www.infoimagination.org/ps/foxes/

- http://www.edd.state.nm.us/COMMUNITIES/ShowCounty.php?CommID=29

- http://www.digital-neighbors.com/county/nm/sanjuan747.htm

- http://www.digital-neighbors.com/states/nm.htm

2. Newspaper

- *Gallup Independent*
  Monday February 3, 2003
  #28 volume 16   Page 10
  Bill increases DWI penalties

Appendix A – Code

{NOTE: Code is a work in progress.}


```
breeds [lefts rights swans polices]
turtles-own [speed SpeedLimit intox]

to setup-cars
  if breed = rights [
    setxy (random (screen-width)) -1
    seth 90
    setspeed ((random 10) / 10) + 0.1
    setSpeedLimit 1
    setshape right-car-shape]
  if breed = lefts [
    setxy random (screen-width) 3
    seth 270
    setspeed ((random 10) / 10) + 0.1
    setSpeedLimit 1
    setshape left-car-shape]
end

to swim      ;swams follow the river when they swim
          ;they don't actually flock
  if breed = swans
    [ifelse xcor < -18
      [seth 85 + random 10]
      [ifelse xcor < 5
        [seth 58 + random 10]
        [seth 115 + random 10]]
    jump (random 500) / 10000]
end

to drive
  if breed = rights
   [ifelse (count-turtles-at 1 0) > 0    ;if there is a turtle 1 space ahead, decelerate
     [setspeed speed-of one-of-turtles-at 1 0
      decelerate]
     [ifelse lookahead = 2      ;if lookahead=2, check 2 spaces ahead also
       [ifelse (count-turtles-at 1 0) > 0
         [setspeed speed-of one-of-turtles-at 2 0
          decelerate]
         [accelerate]]   ;else accelerate
       [accelerate]]
  if speed < 0.01 [setspeed 0.01]   ;also adjust speed based on SpeedLimit and radar
```

```
    if speed > SpeedLimit [setspeed SpeedLimit]
    if radar = true [setspeed .10]
    jump speed]

  if breed = lefts
    [ifelse (count-turtles-at (-1) 0) > 0      ;if there is a turtle 1 space ahead, decelerate
      [setspeed speed-of one-of-turtles-at (-1) 0
       decelerate]
      [ifelse lookahead = 2      ;if lookahead=2, check 2 spaces ahead also
       [ifelse (count-turtles-at (-2) 0) > 0
         [setspeed speed-of one-of-turtles-at (-2) 0
          decelerate]
         [accelerate]]   ;else accelerate
       [accelerate]]
  if speed < 0.01 [setspeed 0.01]      ;also adjust speed based on SpeedLimit and radar
  if speed > SpeedLimit [setspeed SpeedLimit]
  if radar = true [setspeed .03]
  jump speed]

  if count-turtles-here > 1 [die set crashes crashes + 1]
end

to accelerate
  setspeed (speed + (speedup / 10000))
end

to decelerate
  if intox < 4 [setspeed speed - (slowdown / 1000)]
end
```