

Vehicle Fatalities in Delaware (Policy Analysis): Instructor Guide

Title

Vehicle Fatalities in Delaware (Policy Analysis)

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Discipline

Public policy; public administration; political science; statistics; economics

Target Audience

Intermediate - undergraduate - public policy majors/minors

Keywords

Policy analysis, quantitative literacy, transportation policy, public safety

Length of Time/Staging

One week - instructor-assigned groups - mostly in-class but some out-of-class work involved

Abstract

This week-long, group-based activity explores policy-relevant information on vehicle fatalities in the state of Delaware. Students are provided external resources and a series of questions that prompt them to review the provided information critically and form an assessment of the problem, its primary causes, and possible solutions to address the problem. Students must then communicate their problem statement and recommended solutions in a succinct memo to a key policy-maker: the Governor. Appropriate responses to the activity will require critical thinking,



quantitative literacy, teamwork, and communication skills. This activity is designed for intermediate level undergraduates in public policy and related disciplines.

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Format of Delivery

I designed this week-long, stand-alone activity to be used at the end of the semester as a refresher before the final exam. The activity includes written prompts for three 50-minute class meetings plus external links for information and data files I prepared that students can access from the course site. I pre-select groups of 3-4 students for the activity that combine students not otherwise working together and that reflect a mix of gender, race/ethnicity, major, and year.

As instructor, I circulate between groups to facilitate progress through the activity. Some groups take too much time at the start and need to be encouraged to move on. Some groups need reassurance that their interpretation of the data is appropriate. After the activity, I do a full-class debrief (What did they recommend? Why? What information did they retain? What new information did they need to find?), and I provide written feedback on their final deliverables.

Student Learning Objectives

This activity most clearly connects with the following course objectives:

- Collect, evaluate, and make appropriate use of information on public policy issues
- Assess the likely outcomes of a proposed policy
- Develop a recommendation for policy action
- Communicate effectively ideas and findings with respect to public policy issues

This activity requires critical thinking, quantitative literacy, and teamwork.

Student Resources

All necessary resources are provided in the handout or course site.

Instructor Resources

I prepared two Excel files for the students' use. My idea here was to compile basic information they would need in one place so that they would not have to take the time to find the information. Further information could be provided and additional questions added.

Author's Teaching Notes

My students are not required to have taken statistics, data analysis, or microeconomics before taking this 300-level public policy analysis course. As a result, I get many students that need practice understanding and using quantitative information for policy-making. The full semester works through a problem-solving frame: *What is the problem (homelessness, poverty, etc.)? Why*



is it a problem? What causes the problem? What are we doing currently to solve the problem? What else could we do to solve the problem? What would happen if we do those other things? How do we handle trade-offs? How do we best communicate the information to policy-makers?

By the end of the semester, the students have learned about where to find policy-relevant information, about assessing information quality, and about policy communication. They have also applied these skills to a topic of their choice in a semester-long group project. But the students with the “I’m not a math person” mentality tend to avoid engaging on the quantitative assignments and need additional practice. This activity provides all students with more confidence in their overall analytic skills moving into the final exam.

I could see using this assignment at the beginning of the semester at the graduate level with my students who are required to have taken courses in statistics and microeconomics, to test their retention and facility with the applied skills on an instructor-assigned topic. I could also see using this assignment with an undergraduate public health or criminal justice class, as these students may have more quantitative literacy coming into the class.

If used with students outside of public policy programs, it may be necessary to provide some additional introduction on professional public policy analysis and the types of information and ways to communicate that are appropriate to use in their project. Perhaps a lecture in the class before and a required reading that uses the techniques. I do not provide this background here as my students in this course have good working knowledge on these points.

Assessment Strategies

Grades are based on effort rather than substance, forming part of their semester’s participation grade. Students that miss class must complete the work on their own. I find that the structure of the activity reinforces the learning objectives on its own, with little assessment required.

Questions could be asked in an exam to probe the choices they made during the activity as I currently do in the debrief, such as: What was the trend in traffic fatalities in Delaware over the past 10 years? Which classes of vehicles were most often involved in accidents? Why is this a problem? Which intervention - among those provided - was most (or least) cost-effective at reducing fatalities? What other evaluative criteria might policy-makers consider besides cost and effectiveness? What additional information would you want to have to make a recommendation?

Solution Notes

At a basic level, the problem here is traffic accidents. But there are some subtleties that are important to understand before selecting policy interventions. For instance, the differences by age of driver is very important. And the differences in accident costs for motorcycles vs. cars is very important. I teach my students to dig into these points as they suggest different causes of the problem and then craft their own statement of what they see as “the problem.” Not every group will come up with the same problem statement, but whatever they choose, the logic must flow the rest of the way through the activity so that solutions address the underlying causes. For instance, students focusing on teen drivers should select solutions aimed at reducing crashes from teen drivers; students focusing on alcohol should select solutions aimed at preventing impaired driving.