

3. As we saw in the chapter, a lot turns on elasticity. Decades ago, Washington, D.C., a fairly small city, wanted to raise more revenue by increasing the gas tax. Washington, D.C., shares borders with Maryland and Virginia, and it's very easy to cross the borders between these states without even really noticing: The suburbs just blend together.

a. How elastic is the demand for gasoline *sold at stations within Washington, D.C.*? In other words, if the price of gas in D.C. rises, but the price in Maryland and Virginia stays the same, will gasoline sales at D.C. stations fall a little, or will they fall a lot?

b. Take your answer in part a into account when answering this question. So, when Washington, D.C., increased its gasoline tax, how much revenue did it raise: Did it raise a little bit of revenue, or did it raise a lot of revenue?

c. How would your answer to part b change if D.C., Maryland, and Virginia all agreed to raise their gas tax simultaneously? These states have heavily populated borders with each other, but they don't have any heavily populated borders with other states.