

1. Suppose the government is considering an increase in the toll on a certain stretch of highway from \$.40 to \$.50. At present, 50,000 cars per week use that highway stretch; after the toll is imposed, it is projected that only 45,000 cars per week will use the highway stretch.

Assuming that the marginal cost of highway use is constant (i.e., the supply schedule is horizontal) and equal to \$.40 per car, what is the change in social surplus attributable to the increase in the toll? (Hint: The toll increase will cause the supply schedule, not the demand schedule, to shift.)

1. The net cost to society is the deadweight loss caused by the increased toll and the resulting fall in the number of cars using the highway. The value of this deadweight loss is $(.5)(.50-.40)(50,000-45,000) = \250 . The increased toll paid by the remaining drivers – $(.50-.40)(45,000)$ – can be viewed as a transfer from the drivers to the government.