

## Regional Differences in the Value of Statistical Life

Hedonic estimates for the value of a statistical life vary significantly across census divisions.

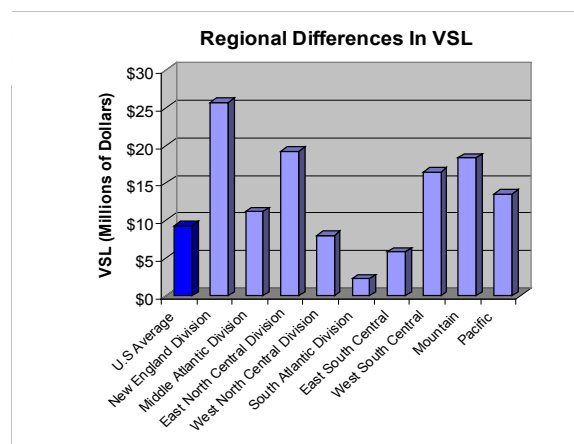
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Estimates for the value of a statistical life (VSL) are increasingly being used in health-related policy analyses. OMB Circular A-4 (a best practices guidance document for U.S. executive branch agencies) explicitly endorses the use of such estimates in regulatory analyses for the Federal government. A-4 also suggests that VSL values are likely to vary across subpopulations, but notes that, in most cases, there is not enough independent research available to justify using differential estimates for distinct populations. In this study, I conduct a hedonic wage study to investigate whether VSL values vary by geographic region within the United States.

Typically, labor market studies examining tradeoffs between employee compensation and job risk are the basis for VSL estimates. Viscusi and Aldy (2003) critique more than sixty such studies from ten countries and find results that vary across nations, with studies conducted in developed countries yielding higher VSL values than studies performed in developing countries. This is consistent with the economic premise that health is a normal good valued more by those with higher incomes and wealth. In accord with this theory, given that the richest state in the United States (Connecticut) has a per capita income that is almost twice as high as the poorest state (Mississippi), the value for safety, as measured by VSL, would also be expected to differ across the states.

Using multiple years of data from the Current Population Survey (CPS), combined with fatality data from the National Traumatic and Occupational Fatality (NTOF) surveillance system, I empirically estimate a hedonic wage model to test the proposition that VSL values vary across regions. Preliminary results suggest that there are significant differences in VSLs across geographic census divisions. Most notably, the average individual in the southeast has a significantly lower VSL than the average individual in the rest of the United States, while persons in the northeast have the highest VSLs.

The implications of these results are evident. When a policy designed to reduce mortality in particular region (i.e. state-based regulation) is evaluated using a VSL measure derived for the nation as a whole, the value of the policy may be under- or over-estimated, depending upon where the benefits are expected to accrue. Use of regionally specific VSL measures can help government agencies tailor more efficient rules.



### Reference

Viscusi, W. K. and J. E. Aldy. "The Value of a Statistical Life: A Critical Review of Market Estimates Throughout the World." *Journal of Risk and Uncertainty* 27(1), 2003, 5-76.

### Endnotes

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