In 2009, the Department of Transportation has determined that the best current estimate of the economic value of preventing a human fatality is $6.0 million (in 2009 dollars). However, new relative value coefficients for preventing injuries of different severity have not been developed. NHTSA is conducting research to revise the previously developed estimates. The revised estimates will be published when they become available. In the interim, we have adjusted the current estimates to reflect the revised $6.0 million[1] statistical life for both crash avoidance and crashworthiness Federal Motor Vehicle Safety Standards resulting in new comprehensive costs of $6.3 million (2009 dollars) per fatality. Table 1 shows the comprehensive values used for each injury severity level, as well as the relative incident-based weights for nonfatal injuries, MAIS 1-5. For this analysis, the estimates were inflated to 2009 dollars, resulting in $6.3 million per statistical life.

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[1] "Treatment of the Economic Value of a Statistical Life in Departmental Analyses – 2009 Annual Revision", Memorandum from Lindy Knapp, General Counsel and Joel Szabat, Assistant Secretary for Transportation Policy, March 18, 2009.

Table 1

Comprehensive Costs and Relative Value Factors
Reflecting $6.3 million Value of a Statistical Life (VSL)
in 2009 Economics

	MAIS1	MAIS2	MAIS3	MAIS4	MAIS5	Fatal
Medical	$3,427	$22,504	$66,964	$189,111	$478,816	$31,822
EMS	$121	$264	$458	$1,034	$1,061	$1,038
Market Prod	$2,324	$33,246	$94,959	$141,452	$583,016	$791,199
Household Prod	$760	$9,730	$28,007	$37,222	$198,423	$254,548
Ins. Adm.	$923	$8,607	$23,538	$40,285	$84,964	$46,246
Workplace	$335	$2,595	$5,670	$6,243	$10,886	$11,565
Legal	$187	$6,206	$19,695	$41,967	$99,490	$127,250
Travel Delay	$1,033	$1,124	$1,249	$1,327	$12,157	$12,157
Property Damage	$4,789	$4,926	$8,471	$12,250	$11,768	$12,798
QALYs	$9,423	$192,756	$270,949	$810,994	$2,763,979	$5,053,153
New Comprehensive Costs, 2009$	$23,321	$281,958	$519,960	$1,281,886	$4,244,560	$6,341,776
Injury Subtotal	$17,500	$275,908	$510,240	$1,268,308	$4,220,635	$6,316,821
QALY Relatives	0.0019	0.0381	0.0536	0.1605	0.5470	1.0000
Comprehensive Relatives (Crash Avoidance)	0.0037	0.0445	0.0820	0.2021	0.6693	1.0000
Comprehensive Relatives (Crashworthiness)	0.0028	0.0437	0.0808	0.2008	0.6682	1.0000

QALYs: Quality-Adjusted Life-Years

Note that the $6.3 million value of a statistical life contains elements found in three of the factors in the above table (QALY's, household productivity, and the after-tax portion of market productivity). The value of statistical life is thus represented within these three factors and is not shown separately. For this analysis, we will use the comprehensive relative costs for crashworthiness, since the proposed rule is a crashworthiness countermeasure.

Injury values were taken from the most recent study of vehicle crash-related economic impacts published by NHTSA[2] and adjusted to reflect the current guidance on the value of a statistical life.[3] Table 2 shows the comprehensive costs for each MAIS injury level.

Table 2

Calculation of Fatal Equivalents

	Comprehensive Cost (2009 $)	Relative Fatality Ratio
MAIS 1	$17,500	0.0028
MAIS 2	$275,908	0.0437
MAIS 3	$510,240	0.0808
MAIS 4	$1,268,308	0.2008
MAIS 5	$4,220,635	0.6682
Fatal	$6,316,821	1.0000

Data source: Updated according to current DOT guidance from Blincoe, et al (2002)

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[2] Blincoe, L., *et al.*, (2002). The Economic Impact of Motor Vehicle Crashes 2000. DOT HS 809 446. Washington, Dc: National Highway Traffic Safety Administration. Available from: http://www-nrd.nhtsa.dot.gov/Pubs/809446.pdf

[3] "Treatment of the Economic Value of a Statistical Life in Departmental Analyses – 2009 Annual Revision", Memorandum from Lindy Knapp, General Counsel and Joel Szabat, Assistant Secretary for Transportation Policy, March 18, 2009.