

TABLE 3.—WEIGHT-BASED STANDARD (MPG) WITH “EXTRA CREDIT” FOR “WEIGHT EFFICIENCY”—Continued

Curb weight (lb)	Area (square feet)									
	60	70	80	90	100	110	120	130	140	150
4000 .....	24.7	23.5	22.7	22.1	21.7	21.3	21.0	20.8	20.6	20.4
4500 .....	23.7	22.3	21.4	20.8	20.3	19.9	19.6	19.3	19.1	18.9
5000 .....	22.9	21.4	20.4	19.7	19.2	18.7	18.4	18.1	17.9	17.7
5500 .....	22.3	20.6	19.6	18.8	18.2	17.8	17.4	17.1	16.9	16.7
6000 .....	21.9	20.1	18.9	18.0	17.4	16.9	16.6	16.3	16.0	15.8
6500 .....	21.7	19.6	18.3	17.4	16.7	16.2	15.8	15.5	15.2	15.0
7000 .....	21.6	19.3	17.9	16.9	16.2	15.6	15.2	14.9	14.6	14.3
7500 .....	21.7	19.1	17.5	16.4	15.7	15.1	14.7	14.3	14.0	13.8
8000 .....	22.0	19.0	17.2	16.1	15.3	14.7	14.2	13.8	13.5	13.2

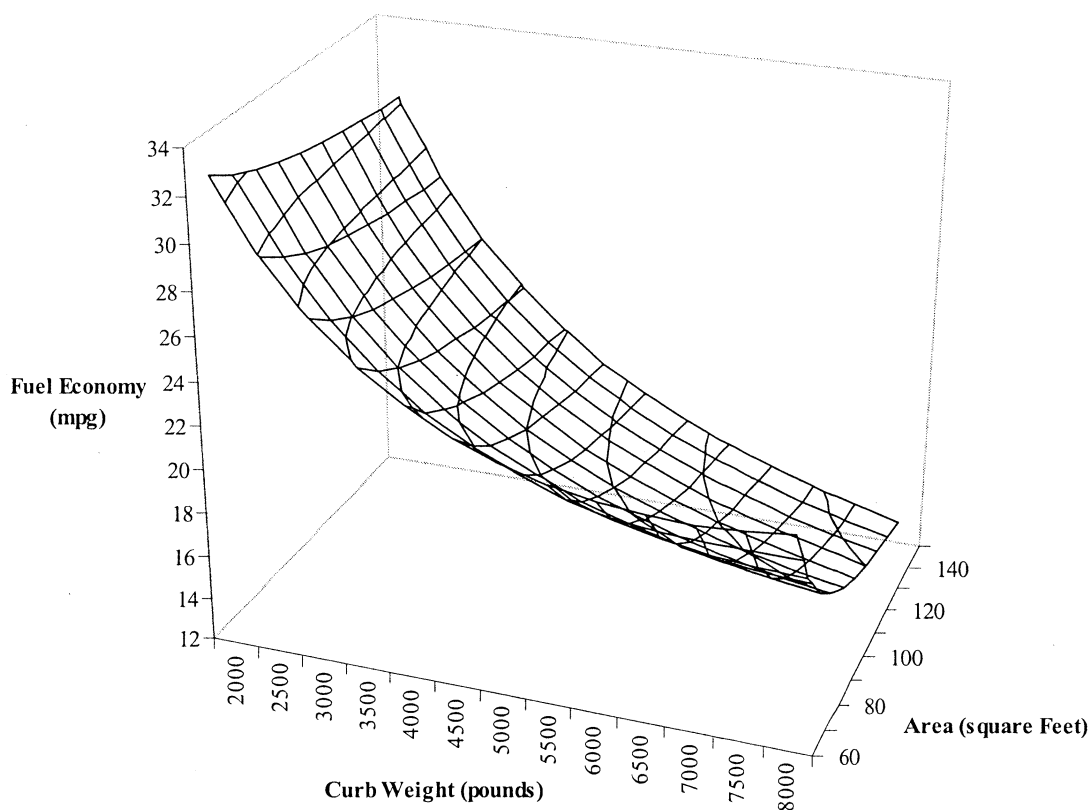


Figure 4. Weight-Based Standard with “Extra Credit” for “Weight Efficiency”

**Figure 4. Weight-Based Standard with “Extra Credit” for “Weight Efficiency”**

Similar to the weight-based standard shown in Figure 2, this standard would generally discourage weight reduction as a compliance strategy. This standard would also generally discourage size reduction, though not as strongly as the size-based standard shown in Figure 3.

Depending on the specific constants chosen, the standard could theoretically encourage compliance through weight reduction rather than other means (such as powertrain efficiency) for some vehicles. For the function shown in Figure 4, this would occur for vehicles

that are simultaneously smaller than 70 square feet and heavier than 7000 pounds. Manufacturers may opt to reduce the weight of such vehicles in order to take advantage of a lower standard at lighter vehicle weights. However, such vehicles would be both smaller and heavier than all of the vehicles in the current U.S. fleet. Thus, further weight reduction appears to be an unlikely compliance strategy. Additionally, reducing the weight of such heavy vehicles would most likely improve highway safety.

The mixed standard would also discourage weight reduction as a compliance strategy even for vehicles

with curb weights well above 5,000 pounds and, as mentioned above, would not strongly discourage size reduction. At low curb weights (less than 3,000 lbs.) and small sizes, this standard would impose class targets that exceed the existing 27.5 mpg standard for passenger cars.

We also considered a mixed standard that would combine the logistic weight- and size-based standards shown in Figure 2 and Figure 3, respectively. This approach is illustrated by the standard shown in Table 4 and Figure 5. Like the standard shown in Table 3 and Figure 4, this standard has a gradual “bowl” shape over most of the relevant region.