

it was unclear how frequently the driver or the employer might secure the services of an attorney to either prosecute or defend against such protests. Presumably the hourly cost of attorneys would exceed the cost assumed for trucking managers of \$35.94. If this should occur very often, it could alter the assumed costs. However, because of the uncertainty costs associated with possible attorney services were not included in this analysis. The agency invites comments regarding this approach and encourages commenters to provide data to support their position.

Costs to Prospective Employers To Collect/Review Additional Data

As discussed, the new driver performance data required under this proposed rule would expand the investigative data collection and review process currently being practiced by prospective employers as part of the hiring process. To determine the cost per hiring decision, we estimated the prospective employer's review of driver performance data would be expanded by an additional one-half hour per hiring decision. Using the average 2001 hourly wage rate for a trucking company manager of \$35.94 and 320,000 experienced drivers (*i.e.*, those who will have performance histories for these employers to review), total annual costs of this activity amount to \$5.8 million (undiscounted).

Costs to Prospective Employers To Interview "Replacement Hires"

There will also be new costs to prospective employers to interview the approximately 16,000 replacement drivers for those applicants now rejected for positions because of the newly available accident and alcohol/controlled substance data. We assumed one additional hour per prospective employer to interview each "replacement driver". At an hourly wage rate of \$35.94 per hour per trucking company manager and 16,000 applicants, total annual costs of this activity amount to \$0.6 million (undiscounted).

Total Costs

Total first-year costs to implement this proposed rule amount to approximately \$10 million (after rounding). Total discounted costs over the 10-year analysis period (2003–2012) are \$76 million, using a discount rate of seven percent.

III. Benefits

Societal benefits associated with this proposed rule would accrue from the

expected reduction in accidents resulting from the use of safer drivers by industry. Specifically, additional driver safety performance data used in the hiring decision should result in denying positions to the less safe drivers who prior to this proposed rule would have been hired. Additionally, it is reasonable to assume this proposed rule would generate a deterrence effect, since studies of similar social problems and policy approaches have quantified such impacts (*i.e.*, reducing alcohol-related accidents via changes in penalties and public attitudes). In this analysis, we quantified the "direct" benefits resulting from a reduction in accidents due to changes in driver hiring decisions. To estimate "indirect" benefits associated with a deterrence effect, we conducted a sensitivity analysis by assuming that the benefits from a deterrence effect could range anywhere from zero, 10 percent, 25 percent, or 50 percent of the direct accident reduction benefits associated with this rule.

Benefits Resulting From Newly-Available Accident Data

The first source of direct benefits expected from this proposed rule would occur as a result of trucking company managers using driver accident data from the three preceding years in their hiring decisions. A study conducted by the Volpe Center examined the difference in accident rates for motor carriers with a high number of previous accidents versus those with a low number of previous accidents. We used the results of this study as a proxy for the direct accident reduction potential of this rule, under the logic that if a hiring manager, using the new accident data provided to him under this rule, ends up hiring an applicant with a low previous accident rate (or no accidents in the recent past) in lieu of the applicant with a high previous accident rate, then accident reduction benefits would accrue from this rule.

Using the study conducted by the Volpe National Transportation Systems Center, we discovered that motor carriers identified as high-risk (based on accidents experienced during a 36-month period prior to identification) had a post-identification accident rate of 81.4 accidents per 1000 power units versus only 29.9 accidents per 1000 power units by carriers identified as low-risk (based on the absence of past accidents and hence no Accident Safety Evaluation Area (SEA) score). Under the premise that a motor carrier's accident profile is a direct extension of his drivers' profiles and is a result of that carrier's commercial driver hiring and

screening process, then we can use these results to examine differences in drivers.

At a post-identification accident rate difference of 51.5 accidents per 1000 power units between high- and low-risk carriers, we converted this accident rate difference to a per-driver rate by assuming two drivers per power unit on average within the industry (based on information obtained at the Hours-of-Service Roundtables, July 2000). Therefore, the difference in accidents per driver is .026 (*i.e.*, $51.5 / (1000 \times 2)$) over the 18-month post-identification analysis period examined in the study. Assuming an equal distribution of this accident involvement differential over the 18-month period following identification, we estimated the annual difference in accidents between drivers with and without accidents within the preceding 18 months to be 0.017 accidents per driver per year. Assuming drivers not hired as a result of this proposed rule would find alternative employment as drivers after an average of six months of searching, the accident reduction differential used to calculate benefits in this analysis was 0.0085 per driver. By using such a conservative estimate (*i.e.*, it is likely that drivers with a high number of past accidents or alcohol/controlled substance violations would find it difficult to secure alternative positions within six months), we are ensuring that our estimates of accident reduction benefits will not be overstated.

Using an average cost per truck-related accident of \$79,873 in 2002 dollars (taken from Zaloshnja, Miller, and Spicer, and updated using the Gross Domestic Product (GDP) Price Deflator), we can estimate the value of accident reduction benefits.

In the first year of the analysis period (2003), one year of accident data (or 47,500 accident records) would be available to prospective employers. Based on an assumption that in 10 percent of these cases, the driver hiring decision would be reversed, then 4,750 drivers would be denied employment because of the newly-available accident data. In the second year of the analysis period (2004), two years of accident data (or 95,000 records) are collected on drivers and the number of hiring decisions reversed rises to 9,500 (or 10 percent of the 95,000 records). In 2005 and thereafter, when this proposed rule would be fully implemented, the number of hiring decisions reversed because of the new accident data would rise to 14,300 (or 10 percent of the 143,000 newly-available accident records for the 419,000 experienced drivers hired each year).