

turnover (*i.e.*, drivers switching trucking companies), 35,000 (or 8 percent) would need to be hired due to industry growth, and 48,000 (or 12 percent) would need to be hired due to attrition, retirement, and external turnover (*i.e.*, drivers leaving trucking for alternative industries).

We anticipate that this proposed rule would alter some portion of the 403,000 driver hiring decisions made each year within the trucking industry. Because hiring managers will have additional accident and alcohol/controlled substance test data with which to select drivers for positions, it is likely that the new data would result in some drivers (who previously would have been hired) not being hired because of this rule. In this analysis, we estimated that roughly 16,000 of the 403,000 commercial drivers hired annually by the industry would now be denied employment because of the new accident and alcohol/controlled substance test data becoming available to prospective employers. Of these 16,000 total commercial driver applicants, 14,300 would not be hired because of the new accident data and 1,300 would not be hired because of the new alcohol/controlled substance test and program data. When rounded to the nearest 1,000 (our standard practice in this analysis), it yields 16,000 total driver applicants likely to be denied employment each year as a result of this proposed rule. Therefore, we estimated the total number of drivers being considered/hired for positions each year within the trucking industry at 419,000 (403,000 + 16,000).

To calculate the new accident records that would likely need to be stored and reported on as part of this rule, we used the average annual total for truck-related accidents for 1999 and 2000, which is equal to 445,000 (includes all truck-related fatal, injury, and property-damage-only accidents). Using an estimate of 3 million as the total existing driver population, we estimated the number of annual accidents per driver at 0.148 (*i.e.*, 445,000/3 million). In this analysis, we assumed drivers being hired due to internal turnover (*i.e.*, 320,000 positions) would be experienced drivers (*i.e.*, with accident records) and the remainder (*i.e.*, those hired due to attrition, retirement, and industry growth) would be new drivers (*i.e.*, those without previous accidents). As such, the number of accidents for which the number of drivers being hired each year would be responsible is equal to 47,500 (*i.e.*, 0.148 × 320,000).

Over three years, the number of reportable accidents these drivers would be involved in would total 143,000. We

assumed for 10 percent of these accidents (or almost 14,300 cases, after rounding), the driver would not be hired as a result. Assuming one accident per driver, we estimate this new data would reverse 14,300 of the 403,000 hiring decisions made each year within the industry. We believe the 10-percent assumption is reasonable, given the importance of accident data in determining insurance rates and forecasting potential liability costs for trucking companies. For example, of the average 445,000 truck-related annual accidents reported in calendar years 1999 and 2000, one percent (or 4,450) were fatal, 22 percent (or 98,000) were injury-related, and 77 percent (or 343,000) were property-damage-only (PDO).<sup>1</sup> Also, FMCSA research into NHTSA's Fatal Accident Reporting System (FARS) database reveals in almost 30 percent of two-vehicle accidents involving a large truck and passenger vehicle, the driver of the truck exhibited behavior that may have contributed to the accident.<sup>2</sup>

Since the literature carefully notes a "contributing factor" cannot be equated with crash causation (and FMCSA does not yet have definitive data on crash causation factors), we must assume that in only a certain percentage of these crashes did the truck driver's behavior actually cause the crash. We assume a prospective employer would use "cause" as the primary criterion in deciding whether to hire a driver or not. In this analysis, we assumed that in only one-third of these "contributing factor" crashes, or 10 percent of all crashes (*i.e.*,  $\frac{1}{3}$  of 30% of all crashes = 10%), did the truck driver's behavior cause of the crash. In the other two-thirds of "contributing factor" crashes, we assumed the truck driver's behavior either did not in fact cause the crash or that further investigation on cause was inconclusive and the driver was hired.) Therefore, in 14,300 of the cases where three years of new accident data would be made available the hiring decisions would be reversed, *i.e.*, the driver would be denied employment. The FMCSA invites comments regarding the accuracy of these assumptions.

Regarding retention costs for this new accident data, employers would be required to store an additional two years of all truck-related accidents, or 890,000 records, at an average of \$0.15 per record (according to the Association for

Records Management Activities (ARMA)).

Regarding new data reporting requirements for the 419,000 drivers being considered/hired annually within the industry, 143,000 records (47,500 annual accident records × 3 years) will now have to be reported annually by previous employers to prospective employers. Since each inquiry requires a search (whether it yields past accidents or not), 419,000 record searches will have to be completed per year (@ \$1.57 per search according to the ARMA). For the 143,000 cases where an accident is discovered within the preceding three years, duplication of the record will have to be performed (@ \$1.33 per record according to ARMA) and the original record will have to be refiled in the driver's file (@ \$1.84 per record according to ARMA). Lastly, we assumed one letter would be mailed (@ \$0.37 per letter via first-class mail) for each of the 419,000 driver record searches conducted annually (with the letter either containing the data investigated or a statement indicating that no accidents were found). Multiplying the cost per record for each activity by the number of records handled under each activity, total first-year costs from (a) storing/retaining two additional years of driver accident data, (b) searching/retrieving, duplicating, and refiled three years of accident data in preparation for mailing, and (c) mailing out the information are \$1.4 million.

#### Alcohol and Controlled Substances Test-Related Data

Using data from the 2001 FMCSA Drug and Alcohol Testing Survey, we estimated that an average of 5,100 of the 403,000 drivers hired annually within the industry will fail random and non-random alcohol/controlled substances tests each year and will be referred to a rehabilitation. This proposed rule requires one additional year of such data to be reported to prospective employers on the 419,000 drivers considered/hired annually. Since each inquiry requires a search (whether it yields past data or not), 419,000 record searches will have to be completed per year (@ \$1.57 per search according to the ARMA). Also, in the 5,100 cases where a violation/referral is discovered for reporting the additional year's results, duplication of the record will have to be performed (@ \$1.33 per record according to ARMA) and the original record will have to be refiled in the driver's file (@ \$1.84 per record according to ARMA). Lastly, we assumed one letter would be mailed (@ \$0.37 per letter via first-class mail) for

<sup>1</sup> "Large Truck Crash Facts 2000", Federal Motor Carrier Safety Administration, Analysis Division, March 2002.

<sup>2</sup> "Large Truck Crash Profile: The 1997 National Picture", by the Analysis Division, Office of Motor Carriers, Federal Highway Administration, September 1998.