

be trained within three months of issuance of a final rule.

Commenters generally support the proposal to require hazmat employee training to include a security component. However, commenters suggest that three months is not sufficient to implement and conduct training programs, particularly for hazmat employees of companies subject to the requirement for security plans. ARequiring security training for each hazmat employee within three months of the final rule effective date will be very difficult to implement. Once the requirements are published by DOT, companies will then be able to finalize development of their security training by combining components of the final rule with other requirement[s] of the hazmat employer's circumstances. Subsequently, training must be approved, disseminated within the company, trainers educated on the module's requirements, and hazmat employees scheduled for training." (Air Products) Some commenters suggest that security training should be required on a schedule consistent with current 3-year training cycles for hazmat employees. Others request implementation periods ranging from 6 months to one year.

We do not agree with commenters that development and implementation of transportation security awareness training will require a lengthy period for development and implementation. As we stated in the NPRM, to assist hazmat employers to meet any new security training requirements, we are developing a Hazardous Materials Transportation Security Awareness Training Module directed at law enforcement, industry, and hazmat personnel. Imminently, this training module will be available for distribution and use, free of charge. The module takes one hour to complete. This training module or similar training programs that may be developed by commercial vendors or hazmat employers will be sufficient to meet the security awareness training requirement in this final rule. However, we are sympathetic to the industry's concerns about the time required to complete training for all affected hazmat employees. Therefore, this final rule permits hazmat employers to provide security awareness training on the same 3-year schedule as other types of required hazmat training; thus, security awareness training must be provided at employee's next scheduled retraining at or within the 3-year training cycle. However, we strongly encourage hazmat employers to provide security awareness training to hazmat employees

on an accelerated schedule wherever possible.

We agree with commenters that 3 months from the effective date of a final rule does not provide sufficient time for training of hazmat employees by hazmat employers who are subject to the new requirement for security plans. However, once a security plan is implemented, we believe that employee training about its provisions should be completed no later than 3 months after the plan's implementation. Therefore, in this final rule, we are providing up to 9 months (6 months to develop and implement a security plan plus 3 months to train employees) for completion of training for these hazmat employees. As with the new requirement for security awareness training, it is not necessary to test or retain records concerning this new security plan training requirement until an employee's next scheduled retraining at or within the 3-year training cycle.

### III. Regulatory Analyses and Notices

#### A. Executive Order 12866 and DOT Regulatory Policies and Procedures

This final rule is a significant regulatory action under Executive Order 12866 and the regulatory policies and procedures of the Department of Transportation (44 FR 11034) because of substantial public interest. The Office of Management and Budget reviewed this final rule.

Compliance costs resulting from this final rule are associated with the new requirements for certain shippers and carriers to implement security plans and for hazmat employee training to include a security component. An analysis of the costs and benefits of this final rule is included in the rulemaking docket. The cost-benefit analysis also addresses comments we received on the estimates included in the May 2, 2002 NPRM.

**Costs.** We estimate that companies subject to the security plan requirement in this final rule will incur first-year compliance costs totaling about \$54.3 million to develop and implement security plans and subsequent-year costs totaling about \$11 million/year for annual updates to the plans. Each security plan will be unique; thus, it is difficult to develop cost estimates for the measures that companies may implement to enhance hazardous materials transportation security. Ultimately, we expect each company to make reasonable decisions on measures it can take to improve security. Because companies will set security priorities and factor costs into their decisions, we believe the measures they choose will be cost-effective. Accordingly, we have

not attempted separately to cost out or justify these actions as part of this rulemaking.

For the security training mandated in this final rule, we estimate that companies will incur first-year compliance costs totaling about \$34 million, with subsequent-year costs totaling about \$18 million/year for recurrent training.

**Benefits.** Safety benefits of regulatory changes frequently can be estimated with some degree of precision. Incident and accident history often provide a basis for estimating fatality, injury, property damage, environmental damage, and similar costs to society that can be avoided by the implementation of new requirements. Models can even estimate the costs to society of high consequence, low probability accidents. Benefit estimates can then be balanced against the estimated costs of new requirements to determine whether the changes are justified.

Estimating the security benefits of new requirements is much more challenging. Accident causation probabilities, based on previous accident histories and analysis, can be estimated in a way that the chances of a criminal or terrorist act cannot. Indeed, the threat of attack is virtually impossible to assess from a quantitative standpoint. That hazardous materials in transportation are a possible target of terrorism or sabotage is undeniable; the probability that hazardous materials in transportation will be targeted is, at best, a guess. Similarly, the projected outcome of a terrorist attack cannot be precisely estimated. Given a decision to attack the system, one must assume that choices will be made to maximize consequences and damage.

It is possible to envision scenarios where hazardous materials in transportation could be used to inflict hundreds or even thousands of fatalities. Direct costs and those attributable to transportation system disruption that would surely result could easily total in the billions of dollars. We are operating under the premise that, in today's environment, it is necessary to take reasonable measures to reduce the likelihood that such events will be successful. The presence of such measures should, in fact, help deter potential attacks. The provisions we are adopting have been crafted with this in mind.

If the measures adopted by this rule have the potential of reducing the likelihood of success of such an attack, we believe they are worthwhile. Moreover, the American public has an expectation that reasonable measures will be taken to help ensure the security