

MAJOR REGULATIONS STANDARDIZED REGULATORY IMPACT ASSESSMENT SUMMARY

DF-131 (NEW 11/13)

STANDARDIZED REGULATORY IMPACT ASSESSMENT SUMMARY

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<p>1. Statement of the need for the proposed major regulation.</p> <p>Section 7323 of the Labor Code specifically requires the Division of Occupational Safety and Health (Division) to propose to the Occupational Safety and Health Standards Board (Board) for review and adoption, provisions at least as effective as the American Society of Mechanical Engineers (ASME) A17.1 (Safety Code for Elevators and Escalators - Includes Requirements for Elevators, Escalators, Dumbwaiters, Moving Walks, Material Lifts, and Dumbwaiters With Automatic Transfer Devices), ASME A17.3 (Safety Code for Existing Elevators and Escalators), and ASME 18.1 (Safety Standard for Platform Lifts and Stairway Chairlifts).</p> <p>This proposal adopts, by reference, provisions of ASME A17.1-2013 and ASME 18.1-2011, the most recently adopted versions of those consensus standards. The Division reviewed ASME A17.3 which is addressed in Labor Code sections 7300 and 7323 and concluded that the Title 8 Elevator Safety Orders are at least as effective as, or more protective than, the provisions of ASME A17.3. Therefore, the Division believes adoption of ASME A17.3 is not necessary.</p>		
<p>2. The categories of individuals and business enterprises who will be impacted by the proposed major regulation and the amount of the economic impact on each such category.</p> <p>The proposed regulation would require modifications in elevator system designs and thus will impact the elevator installation and maintenance sector. A certain fraction of the current and future elevator stock will need to be replaced and/or reconfigured, requiring changes to the baseline costs of the elevator installation and maintenance sectors. Costs and cost savings in this sector are assumed to be passed through to purchasers of elevator services, notably the non-residential building sector.</p> <p>The proposed ESO is meant to reduce the risk of (i) incidents related to accessing elevator equipment for maintenance purposes, (ii) incidents involving exposed live parts that present a significant electrical hazard to workers and the public, and (iii) incidents involving shearing and crushing hazards in elevator hoistways. Individuals likely to be impacts by the proposed ESOs are therefore elevator installation and maintenance workers and the general public elevator users.</p>		
<p>3. Description of all costs and all benefits due to the proposed regulatory change (calculated on an annual basis from estimated date of filing with the Secretary of State through 12 months after the estimated date the proposed major regulation will be fully implemented as estimated by the agency).</p> <p>The proposed ESO is expected to result in both direct costs and cost savings to the elevator installation and maintenance industry. The cost categories include (1) inspections, (2) installation of new elevators, (3) control space conversions, (4) rentable space impacts, (5) maintenance costs, (6) firefighter testing, (7) reduction in variances, and (8) reduction in testing requirements, and (9) plan checks. Upon full implementation, total direct additional costs across these 9 categories are estimated to be \$21.0 million per year. Total direct cost savings across the 9 categories are estimated to be \$30.3 million per year.</p> <p>DIR's proposed safety order is also expected to result in improved worker safety benefits. The monetary value of these benefits were not directly quantified due to data limitations.</p>		
<p>4. Description of the 12-month period in which the agency estimates the economic impact of the proposed major regulation will exceed \$50 million.</p> <p>Once fully implemented in 2020, the proposed Elevator Safety Orders are expected to result in annual direct costs and cost savings of \$21.0 million and \$30.3 million, respectively. In addition to the benefits to worker safety, the ESO will result in aggregate economic impacts exceeding \$50 million, once fully implemented in 2020.</p>		

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5. Description of the agency's baseline:

The DIR baseline assumption assumes that existing elevator safety orders remain in place and the proposed regulation is not implemented. Elevator growth trajectories are assumed to remain constant over the analysis period. These growth trajectories are also assumed in the baseline.

The BEAR model's 2016-2030 baseline is calibrated to California Department of Finance economic and demographic projections. The baseline economy grows at the long-term real Gross State Product growth rate projected by DOF. The labor force is also projected to change according to the DOF's demographic forecast.

6. For each alternative that the agency considered (including those provided by the public or another governmental agency), please describe:

- a. All costs and all benefits of the alternative
- b. The reason for rejecting alternative

More Stringent Alternative: The more stringent safety standard is based on the Navy and Army Corps of Engineers (NAVAC) design guide. This standard prohibits the use of machine room-less elevators and controllers in the hoistway and thus imposes a higher compliance cost on the industry. This alternative is estimated to impose direct costs of \$27.8 million and direct cost savings of \$44.3 million. DIR is rejecting this alternative because it is intended to serve the needs of a very specific entity, the U.S. military.

Less Stringent Alternative: The less stringent safety standard assumes the adoption of the American Society of Mechanical Engineers (ASME) 17.1 safety code for elevators. This standard would not provide the same safety benefits as the proposed ESOs, but would also not require the same number of installations and maintenance modifications, resulting in lower compliance costs. This alternative is estimated to impose direct costs of \$2.1 million and direct cost savings of \$8.2 million. DIR is rejecting this alternative because it is less protective than the ESOs that are currently in place.

7. A description of the methods by which the agency sought public input. (Please include documentation of that public outreach).

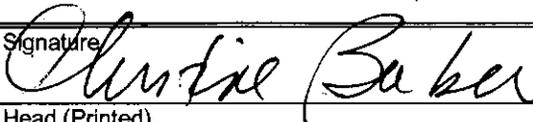
Publicly noticed Advisory Committee Meetings (12/18/12 and 4/22/14); Meetings with National Elevator Industry, Inc. (NEII) representatives (2/6/13 and 9/8/15); Subcommittee Meeting with stakeholders who design, manufacture, and construct elevators (6/26/13); Meetings with large and small elevator company engineers and representatives (4/17/14, 10/9/14, 2/3/15, 2/4/15, 4/9/15, 4/10/15, 6/9/15); Meetings with Building Owners and Managers Association (BOMA) (7/14/14, 6/10/15, 1/27/16, 2/22/16, 11/10/16); Meetings with Elevator Consultants (Edgett Williams 1/6/16, Lerch Bates 1/20/16, HKA 9/2/16, Richard Blaska 9/30/16); Meeting with the Occupational Safety and Health Standards Board (OSHSB) staff (1/14/16); Meeting with the Northern California Elevator Industry Group (2/17/16); Meeting with the Elevator Industry Group of Southern California (4/12/16); Meeting with the American Institute of Architects (AIA) Los Angeles Chapter (7/7/16); Informal meetings with general contractors, firefighters, first responders, the International Union of Elevator Constructors (IUEC) representatives and members, and the riding public. A Survey on the subject of "testing requirements included in current elevator maintenance contracts" was conducted with a select list of BOMA members.

8. A description of the economic impact method and approach (including the underlying assumptions the agency used and the rationale and basis for those assumptions).

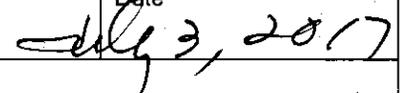
The direct economic costs and benefits were estimated by DIR staff. Conveyance data was obtained from PSSIMS (Public Safety State Inspection Management System) and LADBS (City of Los Angeles Department of Building and Safety). This data was utilized to determine the number of existing affected conveyances and to project future annual conveyance installations. 2015 DIR Prevailing Wage Determination labor costs were used as a basis to project labor cost impacts. Estimates for all of the identified impacts included projected costs provided by large and small conveyance business representatives, general contractors, consultants, BOMA (building owners and managers) members, and various publications.

(Continued on attached sheet.)

Agency Signature



Date



Agency Head (Printed)

Christine Baker, Director of Industrial Relations

Standardized Regulatory Impact Assessment Summary

Attachment

8. A description of the economic impact method and approach (including the underlying assumptions the agency used and the rationale and basis for those assumptions).

(Continued)

Assumptions included the following:

- Future annual installations were projected to be equal to the actual number of installations for calendar year 2015, which was a robust year for new construction.
- When the proposed regulations are fully implemented, the elevator product mix will be changed as follows: Machine room traction elevator installations will increase from 260 units to 680 units; Machine room-less (MRL) traction elevator installations will decrease from 830 units to 240 units; Machine room hydraulic elevator installations will increase from 1050 units to 1220 units.
- Labor wage and benefit costs were marked up by a factor of 300% to represent a competitive bid labor price for the Periodic Testing of existing Group II elevators.
- 50% of the Group II elevators already have Periodic Testing requirements as part of the existing maintenance agreement.
- The positive economic benefit associated with the reduction in the frequency of Firefighters' Emergency Operation Testing was estimated at labor cost (no markup).

The direct cost and benefits data were used as the inputs for the macroeconomic analysis. The economy-wide economic impacts of the proposed ESO were estimated using the Berkeley Energy and Resource (BEAR) model, developed by researchers at the University of California, Berkeley. BEAR is a dynamic computable general equilibrium model calibrated to the California economy. The model generated the following outputs for each regulatory scenario: Gross State Product, employment, business impacts, statewide investment, and household income.