

## **PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA**

**Rail Safety Division  
Rail Crossings Safety**

**Resolution SX-162  
June 12, 2025**

### **R E S O L U T I O N**

Resolution SX-162. Los Angeles County Metropolitan Transportation Authority Installation of Sound Directional Bell Shrouds and Lowering Bell Mounting Height on Automatic Warning Devices.

#### **PROPOSED OUTCOME:**

- Approves the Los Angeles County Metropolitan Authority's (LACMTA) request to install sound directional shrouds on the audible components (bell) and lower the shrouded bells location on masts of automatic warning devices at two at-grade highway-rail crossings

#### **SAFETY CONSIDERATIONS:**

- Approval of the resolution will allow LACMTA to direct the automatic warning device bell sound to the immediate crossing location for pedestrians' safety and minimize noise propagation to the surrounding community.

#### **ESTIMATED COST:**

- There are no costs associated with this resolution.
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### **SUMMARY**

This Resolution approves the Los Angeles County Metropolitan Authority's (LACMTA) request to install sound directional bell shrouds of the automatic warning devices at two at-grade highway-rail crossings to focus the bell warning sound to the crossing locations for pedestrians' safety. It also approves LACMTA's request to mount the bells at a lower location on the automatic warning device masts to minimize noise propagation to residences in the surrounding community

## **BACKGROUND**

By letter dated September 30, 2024, and pursuant to Section 13.1 of California Public Utilities Commission (Commission) General Order (GO) 75-D, the Los Angeles County Metropolitan Transportation Authority (LACMTA) requests authority to deviate from Section 9.5 of GO 75-D, which requires the installation of a bell or other audible warning device on every automatic warning device assembly that operate in conjunction with the flashing light signals.

LACMTA's request consists of installing sound directional shrouds on the bells and lowering the shrouded bell location on each warning device mast at the 20th Street and Steward Street at-grade crossings of Light Rail Transit (LRT) E Line in the City of Santa Monica. The modifications will direct the bell sound towards pedestrians within the vicinity of the crossings while minimizing noise propagation to residents in the surrounding community.

LACMTA's E Line is a 22-mile LRT service operating from the City of Santa Monica, through Culver City and City of Los Angeles, to its terminus in the City of East Los Angeles. LACMTA operates approximately 234 LRT trains on the E Line beginning at 0400 and ending at 0200 daily with extended hours on weekends.

## **DISCUSSION**

The Commission has reviewed LACMTA's request and finds that community concern regarding noise from the sounding of bells and other audible warning devices at grade crossings is not a new issue. The issue has been previously addressed by the Commission and several LRT agencies in the State. The development and expansion of LRT systems has increased this concern and the Commission's Rail Safety Division (RSD) is working with California's LRT agencies to address the concern without compromising safety at LRT grade crossings.

Commission General Order (GO) 75-D, Section 9.5 states:

*"Bells or other audible warning devices shall be included in all automatic warning device assemblies (except as provided in Section 10) and shall be operated in conjunction with the flashing light signals. See American Railway Engineering and Maintenance of Way Associations Communications and Signals Manual of Recommended Practice for reference."*

LACMTA requests an exemption from Section 9.5 of GO 75-D to install directional shrouds on the bells and mount the bells at a lower height on each warning device at the 20th Street and Steward Street crossings in the City of Santa Monica.

LACMTA's exemption request from GO 75-D consists of two specific items:

1. Install sound directional shrouds on the bells of automatic warning device assemblies at two crossings to focus the audible warning to the immediate crossing location for pedestrians' safety.

The proposed directional sound shrouds are similar in design approved by the Commission for LACMTA's use on Phase 1 of the A Line (formerly Gold Line) LRT service through Decision (D.) 05-02-032, dated February 24, 2005.

The design authorized in D. 05-02-032 was for a half-round directional shroud attached to the bell on the warning devices. The design was thoroughly tested by LACMTA at the time and witnessed by RSD to meet audible operational requirements of the American Railway Engineering and Maintenance of Way Association (AREMA), the national industry organization providing recommended practices pertaining to the design, construction, and maintenance of railway infrastructure. Additionally, during field implementation and testing, the directional shrouds provided a noticeable reduction in bell noise at residences near at-grade crossings, while meeting the minimum AREMA sound level requirements of 75 dBA.

2. Mount bells at a lower location on the automatic warning device assembly mast to minimize noise propagation to the surrounding community.

The bell is used to alert roadway users to an approaching train. There are no regulatory requirements for the mounting location of bells on automatic warning devices. Some designs include the bell at the top of the mast; however, they can be mounted at a lower point to better direct the sound. To discourage vandalism, bells should not be mounted lower than the lowest pair of flashing light signals, which is required by the California Manual on Traffic Control Devices (CAMUTCD) to be at least 7.5 feet above the ground.

LACMTA requests the exemptions to mitigate the noise to adjacent residential neighborhoods. Single and multi-family residential areas are in proximity to the crossings.

RSD has reviewed LACMTA's request for exemption from GO 75-D, Section 9.5 and recommends that the exemption be granted for LACMTA to install sound directional bell shrouds and mount the bells at a lower height no less than 7.5 feet above ground.

## **COMMENTS**

Public Utilities Code section 311(g)(1) provides that this Resolution must be served on all parties and subject to at least 30 days public review. Any comments are due within 20 days of the date of its mailing and publication on the Commission's website and in accordance with any instructions accompanying the notice. Section 311(g)(2) provides that this 30-day review period and 20-day comment period may be reduced or waived upon the stipulation of all parties in the proceeding.

The 30-day review and 20-day comment period for the draft of this resolution was neither waived nor reduced.

\_\_\_\_\_ comments were received.

## **FINDINGS AND CONCLUSIONS**

1. LACMTA requests authority to deviate from the requirements of Commission GO 75-D, Section 9.5 to install directional bell shrouds and mount the bells at a lower height on the crossing warning devices at 20th Street and Stewart Street crossings of the LACMTA E Line in the City of Santa Monica, Los Angeles County.
2. Commission GO 75-D, Section 9.5 requires that a bell be included as part of an automatic warning device assembly and operate in conjunction with the flashing light signals.
3. Commission D. 05-02-032, dated February 24, 2005, authorized LACMTA's use of directional shrouds on Phase 1 of the LACMTA A Line.
4. To discourage vandalism, bells should not be mounted lower than the lowest pair of flashing light signals, which is required by the CAMUTCD to be at least 7.5 feet above the ground.
5. LACMTA will test the bell shrouds, in the presence of RSD, to confirm they meet the minimum AREMA sound level requirements of 75 dBA.
6. RSD has reviewed LACMTA's request for exemption from GO 75-D, Section 9.5 and finds that the request is a practical and reasonable approach for mitigating noise in the community and will not compromise safety.
7. RSD recommends that this resolution be adopted.

**THEREFORE, IT IS ORDERED THAT:**

1. The request of the Los Angeles County Metropolitan Transportation Authority to install sound directional shrouds on the bells and mount the bells at a lower height on each automatic warning device assembly at the 20th Street and Steward Street crossings in the City of Santa Monica, Los Angeles County, is approved.
2. The Los Angeles County Metropolitan Transportation Authority shall mount the bells on the automatic warning device mast no lower than 7.5 feet above the ground.
3. The Los Angeles County Metropolitan Transportation Authority shall ensure the bells meet the minimum American Railway Engineering and Maintenance of Way Association sound level requirements of 75 dBA.
4. The Los Angeles County Metropolitan Transportation Authority shall coordinate with the California Public Utilities Commission Rail Safety Division for testing the bells. Rail Safety Division shall witness testing and compliance with the applicable California Public Utilities Commission requirements and this Order.

This Resolution is effective today.

Commissioner Signature blocks to be added  
upon adoption of the resolution

The foregoing resolution was duly introduced, passed and adopted at a conference of the Public Utilities Commission of the State of California held on June 12, 2025; the following Commissioners voting favorably thereon:

Dated \_\_\_\_\_, at San Francisco, California