1200 New Jersey Avenue, SE Washington, DC 20590



Federal Railroad Administration

SEP 2 8 2017

Mr. Henry Stopplecamp Assistant General Manager, Capital Programs Regional Transportation District 1560 Broadway, Suite 700 Denver, CO 80202

Re: Docket Number FRA-2016-0028

Dear Mr. Stopplecamp:

This letter responds to Denver Regional Transportation District's (RTD) September 8, 2017, letter to the Federal Railroad Administration (FRA). In that letter, RTD requested FRA grant relief from the operational restrictions in the current FRA waivers applicable to the Eagle Project University of Colorado A-Line and B-Line. RTD also requested "the alternative establishment of a permanent waiver as policy guidance for FRA inspectors in the application of 49 CFR 234.225."

In a series of letters dating from April 19, 2016, FRA granted RTD permission, subject to certain conditions, to temporarily operate passenger trains along the A- and B-Lines, while the highway-rail grade crossings (including the BNSF Fuel Road crossing) provide longer-than-designed warning times, in non-compliance with 49 CFR § 234.225. FRA conditioned its approval, in part, on requiring RTD to provide grade crossing attendants (flaggers) at each A- and B-Line highway-rail grade crossing to provide for the safety of the public and all employees at the crossings. In these previous approvals, FRA acknowledged RTD's and Denver Transit Partner's efforts to make the software and hardware modifications necessary to bring the PTC Wireless Crossing Activation System (WCAS) and Conventional Track Circuit Warning System (CTWS) at each crossing into compliance with FRA's regulations regarding crossing activation times. FRA remains concerned, however, with the excessively long activation warning times that result when the CTWS is relied on.

The Board recognizes the CTWS along the A- and B-Lines is in place to provide warning to the public in the event of a WCAS failure. As such, the CTWS must independently meet the requirements of 49 CFR § 234.225, and when crossing circuit plans show standby/backup train detection equipment installed at the crossing, such equipment shall be operational and function as intended. Section 234.225 requires a grade crossing warning system to (1) be "maintained to activate in accordance with the design of the warning system" (i.e., to activate at specific prescribed warning times); and (2) to provide at least 20 seconds warning time for the normal operation of trains through the crossing.

The integrity of any railroads' highway-rail grade crossing warning systems is of the utmost importance. Highway users should experience warning times near or equal to industry standards, or the specific prescribed (programmed) warning times. Thus, it is imperative that RTD identify the specific warning time that should result when the CTWS is operating as designed (to comply with § 234.225, that warning time must be at least 20 seconds).

RTD's September 8, 2017 letter asks FRA to consider as acceptable "activations that occur within a 20 second window, with activation occurring within '5 seconds before and 15 seconds after' the programmed warning time."

After review of RTD's September 8, 2017, letter and all available safety data, FRA's Railroad Safety Board determined that, subject to certain conditions, granting further relief to RTD on the A- and B-Lines is in the public interest and consistent with railroad safety. Accordingly, subject to the following conditions, the Board grants RTD's request for relief from the operational restrictions in the current FRA waiver applicable to the A-Line and B-Line for purposes of compliance with 49 CFR § 234.225, and subject to the requirement for a minimum 20 second warning time, FRA does not object to a warning occurring within 5 seconds before and 15 seconds after the relevant programmed warning time:

- 1. Before discontinuing the implementation of RTD's existing "Grade Crossing Attendee Plan," RTD must develop, draft, and submit to FRA for approval, a plan for gradually removing the crossing attendants (flagmen) from each of the grade crossings along the A-and B-Lines at which attendants are currently stationed. The plan must include public outreach (e.g., media, public service announcement campaign) designed to inform the public, community leadership, law enforcement and motorists of the removal of the crossing attendants. This plan must provide clear notice that longer warning times may occur and clearly describe the dangers of disregarding any warning provided by the grade-crossing warning system.
- 2. This relief only applies along the corridor known as the University of Colorado A-Line and the Northwest Electrified Segment (NWES/B-Line) including the "BNSF Fuel Road" crossing (DOT No. 966881H). Any further expansion of this system will require FRA review and approval. RTD must prepare a monthly report of all crossing performance including malfunctions occurring at A- and B- Line crossings and submit a copy to Region 6 no later than thirty calendar days after the expiration of the month in which they occur.
- 3. Nothing in this decision letter preempts any other FRA regulation, order, or requirement (including 49 CFR § 234.225's twenty second minimum required warning time) or a regulation, order, or requirement of another regulatory agency (e.g., the Colorado Public Utilities Commission).

 RTD must report immediately to FRA's Office of Railroad Safety any accident, incident, or injury that occurs at any grade crossing along the A- and B- Lines (including the "BNSF Fuel Road" crossing).

Special Condition Applicable to the Conventional Warning system

1. For the CTWS in use on the A- and B-Line, in normal day to day train operations, FRA expects the CTWS to provide warning times at no more than the upper limits of the design of the WCAS. FRA understands there can be longer warning times for trains operating with the CTWS for a special reason (e.g., red signal, employee work zone, mechanical equipment or highway grade crossing failure). Highway users should experience warning times near or equal to industry standards, or the programmed warning times established by the Colorado Public Utilities Commission when the CTWS is relied on. Therefore, train movements relying on the CTWS system must comply with 49 CFR § 234.103, Timely Response to Report of Malfunction.

FRA's grant of relief and approval in this letter supersedes all previous waivers and approvals issued in this docket.

This waiver is granted for a period of 5 years from the date of this letter. At the conclusion of the 5-year period, FRA reserves the right to extend the waiver if conditions warrant and RTD has made a written request for an extension to FRA's Office of Railroad Safety at least 6 months prior to the expiration date. Any request for extension must comply with the filing requirements of 49 CFR §§ 211.7, Filing requirements, and 211.9, Content of rulemaking and waiver petitions.

FRA reserves the right to amend or revoke this waiver upon receipt of information pertaining to the safety of railroad operations or in the event of noncompliance with any condition of this waiver.

In any future correspondence regarding this waiver, please refer to Docket Number FRA-2016-0028. If you have any questions, please contact Mr. Steven Fender, Regional Administrator, at (816) 329-3840, or Steven.Fender@dot.gov.

Sincerely,

Robert C. Lauby

Associate Administrator for Railroad Safety

Robert E Lauly

Chief Safety Officer