

July 24, 2023

Paolo Solorzano

paolo.c.solorzano@gmail.com

Dear Mr. Solorzano,

This letter serves as RTD staff's response to the concerns raised in your email to the Board of Directors sent Thursday, July 20, 2023, subject line "RTD R Line Network Failures Injuries." Said email was forwarded to me for my situational awareness. Due to the nature of your concerns being focused on operational considerations rather than policy or governance matters, staff is best situated to respond.

Background

Supervisory Control and Data Acquisition (SCADA) is a control system architecture comprised of computers, networked data communications, and graphical user interfaces for high-level supervision of machines and processes, which in RTD's case is utilized for managing the rail system.

The agency recently migrated to new SCADA servers. In early June 2023, following the server migration, RTD suffered a SCADA network communications failure, thereby impacting certain crossings along the R Line alignment. In those locations, the crossing arms entered into safe mode, causing the gate crossing arms to lower and remain lowered until such time as they could be restored to automated operation.

Railroad crossing design has strict engineering requirements that must be followed and approved by a state safety regulatory body. This requires appropriate interface with city traffic signals when applicable. Should a malfunction occur, one of the engineering requirements is that a railroad crossing fail in a safe condition. In other words, when a malfunction occurs (such as the SCADA network communication failure), the crossing mechanism moves to a safe position. Generally, this means that the gates come down and stay down until it can be verified that there are no trains in, or on approach to, the crossing. This is to prevent vehicular and pedestrian traffic from coming into contact with a train. This fail-safe mode can be overridden manually but only after appropriate operational protocols are put in place to ensure safety. Additionally, the rail system interfaces with the automobile traffic signals in order to prevent green traffic signals erroneously indicating that vehicles are safe to travel into the path of an oncoming train.

During the time the gate crossings were malfunctioning, the traffic lights located at the impacted gate crossings were set to four-way flashing red signals. RTD does not provide traffic control and is not equipped or staffed to do so. Rather, the local police jurisdiction's traffic division provides this service in locations where traffic signals are impacted. In this instance, RTD provided flaggers to monitor and regulate train movement, not to provide traffic control for vehicles or pedestrians. The Aurora Police Department was contacted and made aware of the traffic conditions at the impacted gate crossings.

The Colorado Public Utilities Commission (CPUC) acts as the state safety regulatory body pursuant to the Federal Transit Administration with respect to light rail operations. The CPUC, which approved and certified RTD's crossing



design and functions and is aware of the agency’s operational protocols at crossings, was made aware of the gate crossing malfunction in Aurora, and the commission was provided with periodic updates. RTD was not made aware of any operational concerns from the CPUC regarding the agency’s response in this instance.

The gate crossing malfunction was resolved on Tuesday, June 20, 2023, and normally scheduled light rail service resumed Wednesday, June 21, 2023.

Staff Response

In order to render responses to the specific concerns raised in your email, staff has addressed each concern in turn via the following table.

Statements Made by Mr. Solorzano	Staff Responses
<p><i>According to reports in the media and per the recent conversations I've had with several business owner's near the 30th and Peoria intersection, there were ongoing life-endangering conditions as well as several major car accidents during the first week of June 2023.</i></p>	<p>During the period when the gate crossing signal malfunction occurred, all trains were required to stop and only proceed when safe. RTD is not aware of any incidents related to train movement during the time when the gate crossings were impacted.</p>
<p><i>This includes a report of a man that was paralyzed June 2nd riding a motorcycle at the 30th & Peoria crossing.</i></p>	<p>The article linked here states the motorcycle operator involved in the incident himself indicated that the accident was due to careless driving by another motorist, rather than due to train movement.</p>
<p><i>Another individual, a frequent RTD rider Mr. Morado reported "death trap" conditions in a Fox 31 news article dated June 12th. There is also a Denver 7 June 3rd news article that includes witness reports of multiple accidents in the days prior to June 3rd, the article also includes a major accident involving an Aurora Police Department cruiser during an emergency response.</i></p>	<p>Again, RTD is not aware of any incidents related to train movement during the time when the gate crossings were impacted. Traffic control at the impacted locations would have been under the auspices of City of Aurora/Aurora Police Department.</p>
<p><i>There are also multiple reports covering the issues along other sections of the R Line. The Colorado Anschutz Medical Campus suffered due to traffic jams related to RTD crossing gates. The Denver Post article dated June 15th includes leaders at the medical campus complaining of crossing gates issues occurring for weeks.</i></p>	<p>On Wednesday, June 14, 2023, RTD received an email from Neil Krauss, Assistant Vice Chancellor of Initiatives and Community Engagement, representing the collective concerns of Anschutz Medical Campus personnel. Staff responded to Mr. Krauss directly to relay the status of the rail crossing signal malfunction and apprised the Board of Directors of this communication the following day, Thursday, June 15, 2023.</p>



<p><i>On June 8th I myself, Paolo Solorzano, personally witnessed people getting out their cars to physically lift the crossing gates at 30th and Peoria. The crossing gates were not raising and the red lights stayed flashing and the bell sounded as well. I called RTD onsite as well as the Aurora Police but my phone was dying so I wasn't able to make more calls onsite. Fortunately an RTD field supervisor and his team showed up in about 10 mins and they were able to fix the problem. To me it very much seemed that the people lifting the gates had gotten used to these ongoing issues at a very dangerous intersection.</i></p>	<p>Lifting gate crossing arms is an incredibly unsafe act, which places individuals at risk. This should not have happened.</p> <p>Once staff is aware of a gate crossing malfunction, an order goes out to all trains to stop short of the gate and only proceed when safe.</p> <p>It should be noted that 10 minutes is a rapid response time for an RTD employee to arrive on site given the considerable size of RTD's service area.</p>
<p><i>Cars seemed to be driving 30-50mph at the intersection when I was there on the 8th.</i></p>	<p>RTD is not responsible for careless or reckless driving by members of the public or willful disregard for traffic laws.</p>
<p><i>These are extreme reports detailing life-threatening conditions but there is also an untenable equity issue.</i></p>	<p>Qualification is warranted related to the assertion of inequity, as RTD did not purposefully or willfully select a specific area of its light rail system for the malfunction to occur.</p>
<p><i>Many of the businesses and residents in this area are Latinos and many Latino small businesses have been put at risk, this should never have never persisted for so long. I have contacted several businesses near the 30th and Peoria crossing:</i></p> <p><i>On 6/26/23 I spoke to a business owner that stated he called RTD for about 3 weeks regarding the R Line. His business has suffered since people were not able to get through, "they will just choose to go elsewhere".</i></p> <p><i>On 7/3/23 I contacted a business owner that has suffered as a result of the issues. She mentioned that one day the crossing gates were down all day.</i></p> <p><i>On 7/3/23 I also spoke to a business that stated that their employees are missing their work assignments and that "some people</i></p>	<p>Crews worked as quickly and safely as possible to restore functionality to the gate arms.</p>



<p><i>can figure it out but that others simply decide to leave after not being able to cross.</i></p> <p><i>On 7/16/23 I contacted another business owner who reported having to close down his business for two days. Apparently the crossing gates were down and signaling red two days in a row and his regular clients were not able to get through. This business owner also mentioned that his clients were ticketed for attempting to park in unfamiliar areas to avoid the unsafe conditions at 30th and Peoria.</i></p>	
<p><i>An RTD spokesperson released this statement to Denver7 in a news article dated 6/3/23:</i></p> <p><i>'Crews are investigating, and it appears related to a networking or electronic communications issue. My colleagues have confirmed there are four gates affected between Colfax Station and Peoria Station. Attendants are present at each of the crossings and customers can expect minor delays as trains may be moving more slowly through the area. There is no estimated time for resolution at this point.'</i></p>	<p>RTD staff was in frequent communication with representatives from the City of Aurora during the period of time when the gate crossings were malfunctioning. RTD issued service alerts, sent news releases, and posted on social media about the situation. Additionally, Customer Care employees were apprised of the situation so that they could respond to customer concerns.</p> <p>To reiterate, RTD provided flaggers to monitor and regulate train movement, not to provide traffic control for vehicles or pedestrians.</p>
<p><i>Most worrisome is that June 8th, when I personally witnessed people lifting the crossing gates at 30th and Peoria, there were no attendants or flaggers present. Concerned residents, riders and business owners called RTD Customer Care at 303-299-6000 several times regarding these crossing gate issues but it seemed to persist for several weeks or more.</i></p>	<p>See prior response to this concern. Staff is looking into this particular instance. Any additional details, such as the specific time of day when this was witnessed, would be helpful and appreciated.</p> <p>In the future, any unsafe activity such as this can be reported to the RTD Transit Police and Emergency Management Department through the Transit Watch app, available via the Apple and Google app stores, or via telephone at 303.299.2911.</p>
<p><i>The RTD Rider's Alliance is asking for immediate and solution-based follow-up from RTD Board Members regarding these failures.</i></p>	<p>Components of RTD's SCADA system are nearing the end of their useful life and are in the process of being replaced.</p>

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Should you have additional questions or concerns regarding this matter, please contact me directly at generalmanager@rtd-denver.com or 303.299.2300.

Sincerely,

A handwritten signature in blue ink, appearing to read "Debra A. Johnson", with a long horizontal flourish extending to the right.

Debra A. Johnson
General Manager and CEO