

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO  
PROCEEDING NO. 23I-0047R

---

IN THE MATTER OF THE REGIONAL TRANSPORTATION DISTRICT'S CORRECTIVE  
ACTION PLAN REGARDING THE 19<sup>TH</sup> STREET AND STOUT STREET CONDEMNED  
RAIL, RULE 4 CCR 723-7-7347

---

**REGIONAL TRANSPORTATION DISTRICT'S  
NOTICE OF CORRECTIVE ACTIONS COMPLETED**

---

The Regional Transportation District ("RTD"), by and through its undersigned counsel, respectfully provides its Notice of Corrective Actions Completed for CAP02-11222022 for the November 15, 2022, condemned rail at 19<sup>th</sup> and Stout streets ("Hazard") as follows:

**I. INTRODUCTION**

1. RTD submitted its Hazard Investigation Report and proposed Corrective Action Plan ("CAP") on March 14, 2023.<sup>1</sup> The investigation found that the most probable and contributing causes of the Hazard were:

- Gaps in internal policies, procedures, and oversight
- The rail replacement program is not adequate to maintain a state of good repair within the downtown loop
- Asset management tracking is done by function and not by asset class

---

<sup>1</sup> CAP02-11222022 was originally filed on March 6, 2023, and inadvertently omitted one of the proposed final corrective measures from the CAP implementation table. A corrected version of the CAP was filed on March 14, 2023. At the request of Commission staff, the Hazard Investigation Report previously submitted to PUC staff on March 6, 2023, was also filed with the Commission on March 14, 2023.

- Cross-department coordination on rail infrastructure replacement to ensure alignment with and accountability for the Asset Management Plan and Public Transportation Agency Safety Plan is not optimized

2. The Commission approved CAP02-11222022 on March 29, 2023. On July 5, 2023, the Commission granted an extension of time until October 30, 2023, for RTD to complete two interim measures related to the utilization of Operational Risk Management (“ORM”) assessments to prioritize asset renewals and the evaluation of the downtown rail replacement project.

3. On July 12, 2023, RTD met with PUC staff to review documentation reflecting RTD’s completion of the corrective actions covering track standards and asset management bypass training. On October 31, 2023, RTD will meet with PUC staff to review documentation reflecting the remaining interim actions extended until October 30, 2023 and covered by this notice. Documentation related to completion of these corrective actions is attached hereto. Additional supporting documentation was reviewed with PUC staff and is available for inspection by the Commission.

## II. CAP02-11222022

4. This CAP addresses four interim corrective measures discussed below and four final corrective measures with implementation dates of June 30, 2024. RTD hereby provides its notice of completion of the four interim corrective actions consistent with all implementation deadlines.

### A. **Evaluation of Industry Track Standards (Completed May 10, 2023)**

5. RTD evaluated track classification systems defined by the American Public Transportation Association (“APTA”) and Federal Railroad Administration, as well as standards in use by other transit agencies for track inspection and maintenance (see **Attachment 1**, Memorandum on

Industry Track Standards). RTD adopts the APTA-RT-FS-S-002-02 Transit Track Inspection and Maintenance Standard Revision 1, which is an industry standard.

**B. Asset Management Bypass Training (Completed June 30, 2023)**

6. RTD conducted asset management bypass process training at the asset steward level, including assistant general managers, superintendents, senior managers, and managers over several weeks in June 2023. (See **Attachment 2**, Training slides).

**C. ORM Assessment for Asset Renewals (Completed October 30, 2023)**

7. RTD performed an ORM assessment (**Attachment 3**, ORM Risk Matrix) to prioritize asset renewals for the downtown loop rail replacement project. The ORM risk rating for the project was 2A. The severity was ranked as Severe with anticipated service disruption on half of the system for at least one day. The probability was ranked as Frequent with a Mean Time Between Events of one per month. The correction required was determined to be the replacement and repair of the entire downtown loop.

8. Beyond the downtown loop, RTD will utilize an “Age Minus” approach in the prioritization of assets to prioritize the renewal/replacement efforts for light rail infrastructure assets. This approach uses the age of assets relative to their expected useful life (“EUL”) and an assessment of condition.

9. The agency will utilize an age-based scoring methodology aligned to the scale used in the Federal Transit Administration (“FTA”) Transit Economic Requirements Models (“TERM”).<sup>2</sup> Using the year in which an asset went into service, and the EUL of the asset, a score between 1 and 5 is calculated where each integer signifies the expected condition based on its age relative to EUL.

---

<sup>2</sup> Accessible at: <https://www.transit.dot.gov/sites/fta.dot.gov/files/2022-11/TERM-Federal-User-Guide.pdf>.

10. Paired with the age-based TERM score will be a qualitative assessment of condition to further differentiate between like assets that have the same or similar age-based TERM scores. RTD is working to develop and document a more robust condition assessment methodology. Future condition assessments will be modeled on the FTA Facilities Condition Assessment methodology<sup>3</sup> that also incorporates a TERM scale. It is expected that by using this model the agency will be successful in developing a methodology that provides a valid, reliable, and transparent condition assessment methodology that will improve asset management.

11. Because all downtown assets requiring replacement are the same age, the Age-Minus approach does not assist with the prioritization. The current asset breakdown structure (ABS) does not support the level of granularity needed to reliably document condition assessments. For these reasons, condition assessments were not used to prioritize the downtown rail replacements. Instead, the condition assessments will only be done as a postmortem activity to better understand wear for future improvements.

12. Once an ABS is finalized and loaded in the system of record, the age-based scoring methodology will be used to forecast replacement beyond the scope of the downtown rail replacements. This ABS will also support the documentation of the condition assessments results against the appropriate assets after the standards and procedures are finalized.

#### **D. Evaluation of Downtown Rail Replacement Project (Completed October 30, 2023)**

13. The RTD Central Corridor extends 5.3 miles from the I-25•Broadway Station to 30<sup>th</sup> and Downing streets and is the oldest trackway segment in the RTD system, opened in 1994. See **Attachment 4** (Geographic Extent map). To date, repair and replacement projects have prioritized curved rail, switches, and at-grade crossings, with the replacement of all but four intersections and

---

<sup>3</sup> Accessible at:

<https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/Facility%20Performance%20Assessment%20Guidebook.pdf>

one curved section completed. Since 2012, RTD has completed three repair and fourteen replacement projects at a cost of approximately \$19 million.

14. RTD has reevaluated the downtown rail replacement project and anticipates a phased replacement of all remaining rail that has met its EUL with the first phase commencing in late Spring/Summer 2024. The project will occur over four phases (see **Attachment 5**, Replacement overview):

- Phase 1: Downtown Loop remaining crossings, curve, and mid-block tangents
- Phase 2: Colfax Avenue improvements between Kalamath and 7<sup>th</sup> streets
- Phase 3: Welton Street improvements between 19<sup>th</sup> Street and 30<sup>th</sup> and Downing streets
- Phase 4: Improvements between I-25•Broadway Station and Colfax Avenue

15. The project will include full depth replacement of track to subgrade for Phases 1 through 3 (see **Attachment 6**, Replacement diagram). RTD is currently preparing procurement solicitation documents and budget for Phase 1 of the project.

## **V. CONCLUSION**

11. RTD is committed to maintaining its assets in a state of good repair, adhering to its asset management plan, and completing all outstanding CAPs. RTD hereby provides notice of completion of all four interim corrective actions by the approved deadlines for CAP02-11222022. Notice of completion of the four final corrective actions will be filed with the Commission consistent with the approved implementation schedule for each.

Respectfully submitted this 30th day of October, 2023.

Regional Transportation District

*/s/ Melanie J. Snyder*

Melanie J. Snyder, #35835

General Counsel

1660 Blake Street

Denver, CO 80202

(303) 299-2203

[melanie.snyder@rtd-denver.com](mailto:melanie.snyder@rtd-denver.com)