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# **Moving RTD from Crisis to Success**

**July 23rd, 2024**

# RTD: An Agency Stuck in Crisis Mode



**RTD has fallen behind its peers in emerging from the pandemic. Service levels and ridership recovery are stagnating and public perception of the agency is poor.**

**Management is not focused on Capital Projects, and is actively trying to offload basic transit expansion responsibilities to CDOT and / or municipalities.**

**RTD has failed to adequately prioritise the needs of its riders and deliver a system that is safe, easy and attractive to use. Safety concerns, infrequent service, reliability issues and poor information are often cited.**

**The RTD Board has come across as inept and ineffectual in situations where the public expects it to step in. It needs reform, but is not the sole cause of RTD's ongoing problems.**

**Management has failed to get on top of RTD's biggest issue - the operator / mechanic shortage, which hampers the agency's ability to provide frequent and reliable service.**

**Legislation can help direct both the RTD Board and Management to chart a new course!**

# How to Move from Crisis to Success



**RTD is a State Agency whose elected leadership (the Board) is directly answerable to the voters of the district.**

**The State Legislature should not micromanage RTD, but rather construct legislation to help deliver a safe, easy to use and reliable transit system that adequately serves the District.**

**Reforms all must be focused on long term stability and growth of ridership. RTD's current failures are often the result of short-sighted decision-making.**

**The Board exists to provide governance, determine RTD strategy via policy, and exercise oversight to ensure accountability and representation for riders and voters.**

**The Board should be fully empowered, capable, and enabled to carry out their legally required duties and responsibilities.**



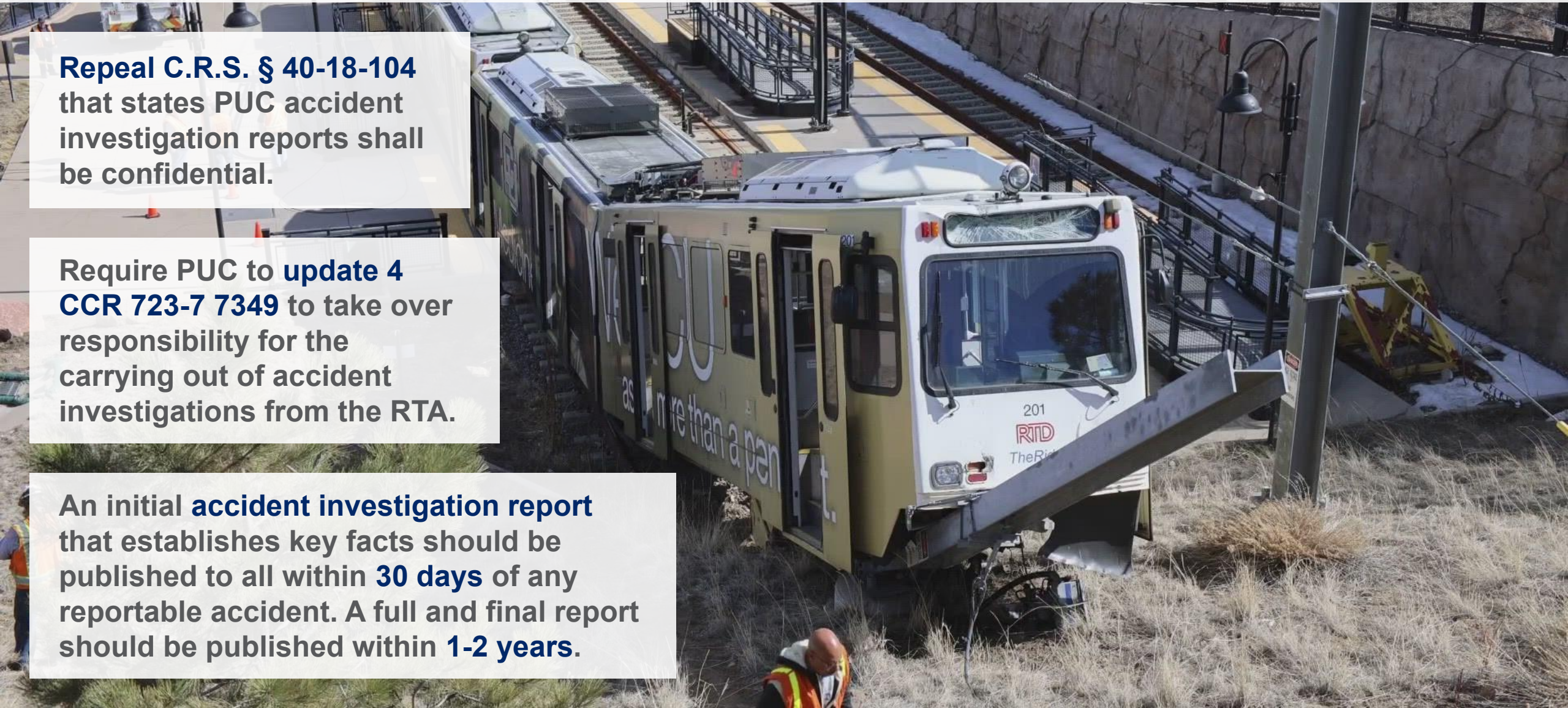
# PUC Accident Investigations Bill Proposal



Repeal C.R.S. § 40-18-104 that states PUC accident investigation reports shall be confidential.

Require PUC to update 4 CCR 723-7 7349 to take over responsibility for the carrying out of accident investigations from the RTA.

An initial accident investigation report that establishes key facts should be published to all within 30 days of any reportable accident. A full and final report should be published within 1-2 years.



# PUC Consumer Regulations



The PUC regulates from a consumer standpoint in other industries (eg. energy).

Are there any consumer protections for transit riders that should be put into law?

Currently the only rules regarding RTD are safety related derived from applicable CFRs.

If transit rider consumer protection legislation was passed, the PUC could update its rules and be responsible for regulation.



# RTD Board Office Proposals



**Board Office employees should work at the sole discretion of the Board, to administer the operations of the Board in carrying out their responsibilities.**

**Update C.R.S. § 32-9-114 to specify the Board Office should have sole responsibility for setting its annual budget, funded by RTD. The budget should be reviewed by the Independent Audit Committee.**

**Apart from payroll and workplace safety, RTD HR staff should generally not have involvement with Board Office employees unless assistance is requested by the Board.**

# RTD Accountability Proposals

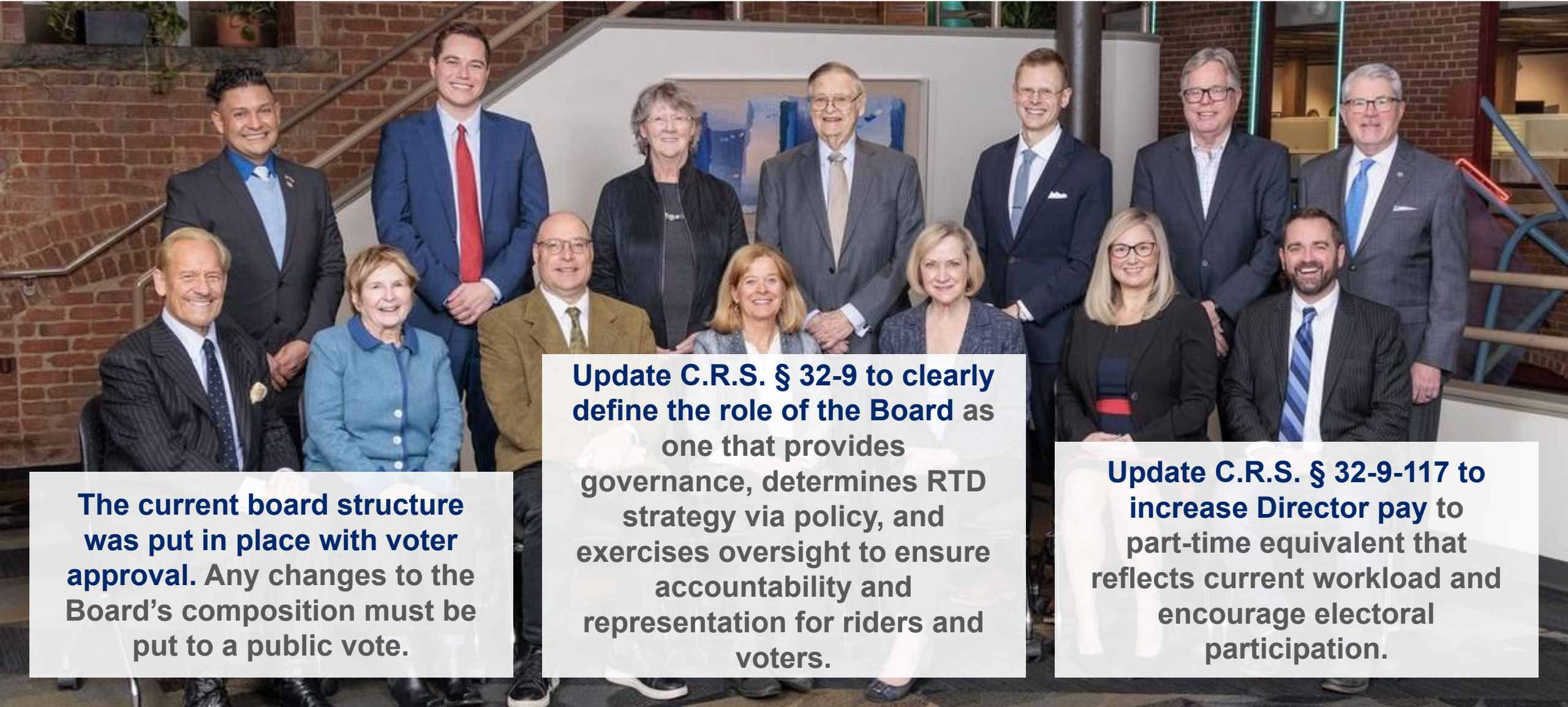


Require publishing of underlying data for dashboards and reports required in SB24-230.

As well as financial info, RTD should publish detailed safety, ridership, reliability, rider satisfaction, budget, capital project, and headcount data

**Should accountability reforms be encoded in the RTD Act (C.R.S. § 32-9), or should they be generally applicable to all transit agencies?**

# Current Elected RTD Board Proposals



**The current board structure was put in place with voter approval. Any changes to the Board's composition must be put to a public vote.**

**Update C.R.S. § 32-9 to clearly define the role of the Board as one that provides governance, determines RTD strategy via policy, and exercises oversight to ensure accountability and representation for riders and voters.**

**Update C.R.S. § 32-9-117 to increase Director pay to part-time equivalent that reflects current workload and encourage electoral participation.**



# RTD GM & CEO Performance Proposals



The GM & CEO is the Board's sole employee with delegated authority under C.R.S. § 32-9-109.5(4) and is therefore a key lever to successfully enacting the Board's decisions and policies.

Update C.R.S. § 32-9 to specify that the Board is fully responsible for setting the performance criteria for any District official or employee with delegated authority.



# RTD Service Planning Proposals



**Require Office of the State Auditor to make recommendations on RTD's service planning process.**

**Update C.R.S. § 32-9 to establish minimum service standards based upon route characteristics, including transit dependent population, destinations, current ridership, etc.**



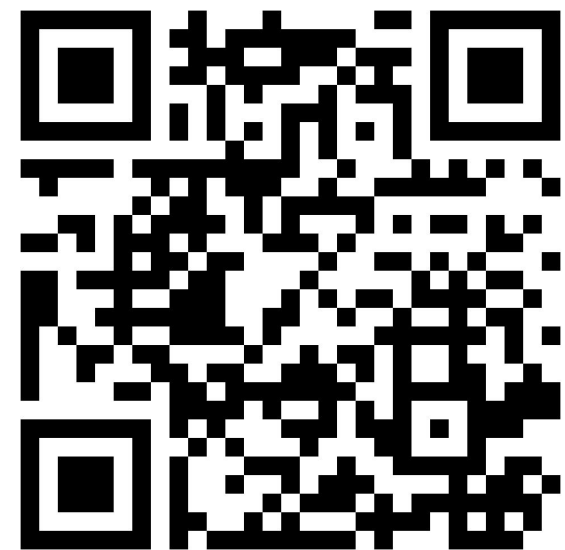
**RTD limits themselves to three schedule changes per year, making service planning inflexible around construction and maintenance.**

**Update C.R.S. § 32-9 to require that regular schedule changes be published at least 30 days in advance and planned temporary service changes be published at least 14 days in advance**



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Office of Governor Jared Polis



# RTD's Light Rail Crisis

# Nov 22 - 19th & Stout Condemned Rail



19<sup>th</sup> & Stout – Risk Assessment is High, Catastrophic and Probable without mitigation. Rail is in an Unacceptable Condition, Corrective Action Required. Recommend a 3MPH Slow Zone in this area until rail is replaced.



RTD team finds rail  
“below industry  
acceptable  
conditions”

Colorado law required  
RTD to report rail  
situation to the PUC.

Condemned rail  
replaced over 10 days  
in December 2022.

# Mar 23 - Corrective Action Plans (CAPs)



**“Evaluate industry track standards, including FRA standards, to determine whether a more robust classification method exists to document wear.”**

**1st CAP covers emergency rail work (CAP01-11222022).**

**2nd CAP covers hazard assessment (CAP02-11222022).**

**All submitted CAPs approved by the PUC by Mar 30th, 2023.**

# Mar 23 - W Line Crash



**“RTD determined that the train operator likely fell asleep before impact and that excessive speed and inattention of the train operator are the causal factors of the accident,”**

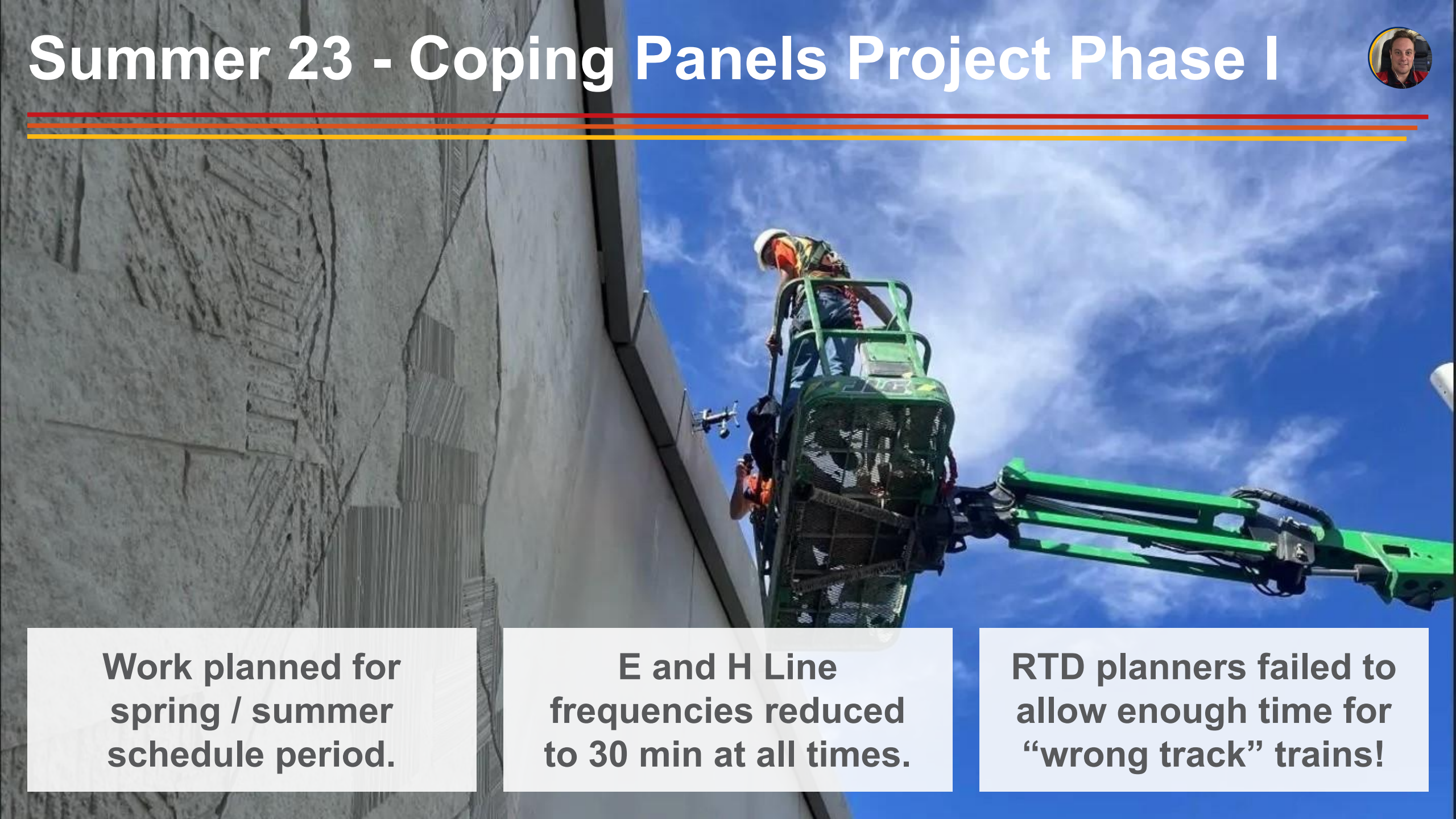
**Light rail train crashes into bump stop at Jeff Co Gvt Center station.**

**Behind closed door investigation blames operator for sleeping.**

**Key questions such as why train speed up not answered.**



# Summer 23 - Coping Panels Project Phase I



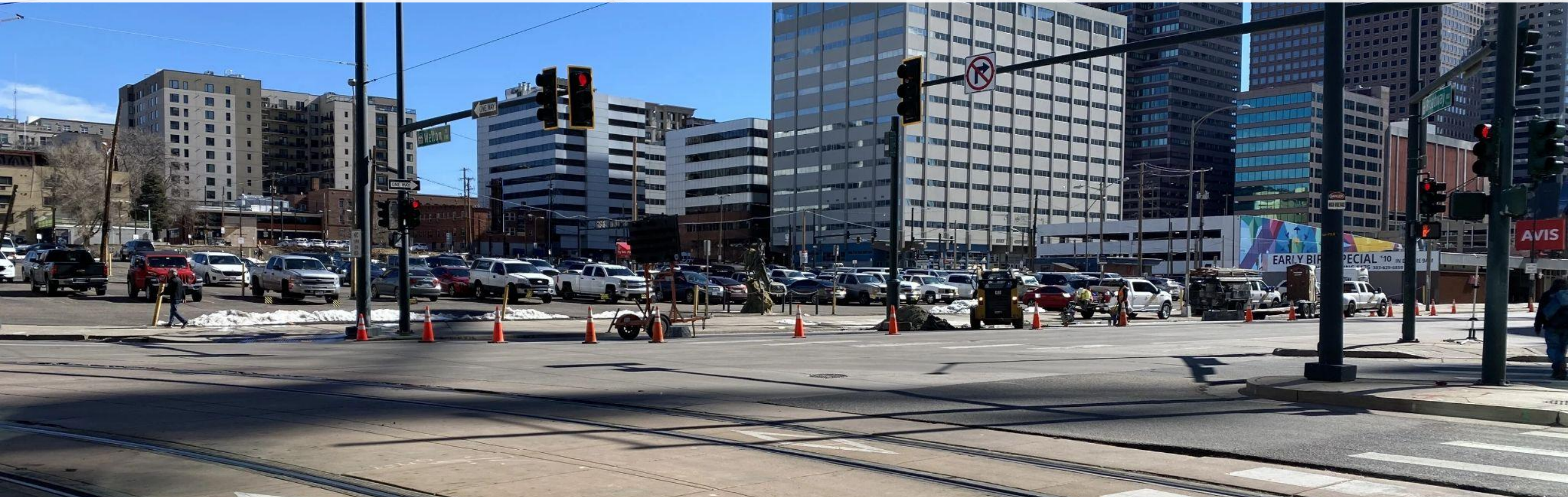
**Work planned for  
spring / summer  
schedule period.**

**E and H Line  
frequencies reduced  
to 30 min at all times.**

**RTD planners failed to  
allow enough time for  
“wrong track” trains!**



# Summer 23 - Piecemeal Projects



**May 25th, 2023**  
17th & Stout  
2 day closure

**Jul 10th, 2023**  
30th & Welton  
21 day L Line closure

**Sep 26th, 2023**  
14th & California  
9 day closure

# Oct 23 - RTD Declares CAPs Complete



**“The current RTD MOW Track Safety Standards 2021 is a direct adaptation of the APTA-RT-FS-S-002-02 Rail Transit Track Inspection and Maintenance Standard, Revision 1, published in 2017.”**

**Staff Memo to Jyotsna Vishwakarma  
RTD Chief Engineer**

**Track standards, asset bypass training, risk matrix submitted.**

**Details of rail replacement program beginning 2024.**

**“Five [Downtown] locations with heavy cross-traffic.”**

# Nov 23 - Budget



**This is the first time the RTD Board of Directors found out about the condemned rail at 19th & Stout, the involvement of the PUC, the Corrective Action Plans or the plans to close the Downtown Light Rail Loop for major reconstruction.**

1st edition of budget had just 21 pages.  
2nd edition had 46.

\$150m line item in 2nd edition for “Light Rail Track Replacements”.

Approx. \$500m of budgeted projects not carried out.

# Jan 24 - Light Rail Train Derails at Southmoor



Light rail train derails at Southmoor on January 24th.

Train shed wheel / tire components from Louisiana / Pearl.

Info trickling out way too slowly. Could events be linked?

# Apr 24 - Service Changes Re-written



**Light rail midweek service cuts walked back by staff.**

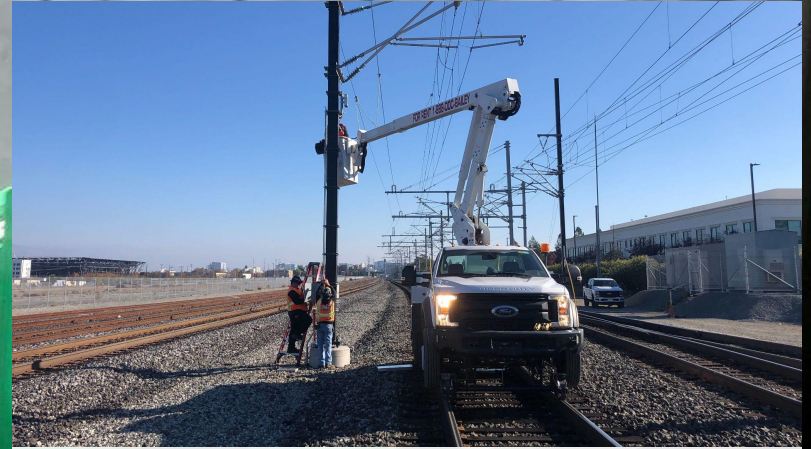
**But... early morning light rail service cuts remain.**

**Incident demonstrated major issues with service planning.**

# Summer 24 - Coping Panels Project Phase II



**Should we use this?**



**Or is this better?**

**We now know that RTD chose a cheaper, but technically inferior bid.**

**Work planned for summer schedule period.**

**E and H Line frequencies reduced to 60 min at all times.**

**Contractor hours upped to 7am - 7pm and 6 days a week.**

# Jun 24 - 10 mph “Slow Zones” on Light Rail



**“Trains that run 10 mph are not considered transportation in my opinion,” said board member Jaime Lewis. “My wheelchair operates at 7 mph.”**  
**Jaime Lewis, RTD Director**

**10mph “Slow Zones” imposed on SE Light Rail Corridor.**

**Journeys extended by up to 45 mins. Schedule unworkable.**

**Frustrations grow from operators and riders alike.**

# Jun 24 - “It’s Rail Burn”



RTD beefs up webpage relating to maintenance projects.

In May 2024, RTD staff began using an “enhanced inspection methodology”.

**“RTD follows APTA’s standards to assess and verify that its tracks are operating safely and as designed.”**



# Jun 24 - Those APTA Standards Again...



**TABLE 11c**  
Rail Defect Remedial Action

Other Rail Defects	Depth	Size	Priority	Minimum Remedial Action <sup>1</sup>
Flattened rail	Greater than or equal to 3/8 in.	Greater than or equal to 8 in.	2	H
Ordinary break	n/a	Any	1	A or E
Damaged rail	n/a	Any	2	D
Base-corroded rail	Medium (moderate)		2	A2; see section 10.1.7
	Severe (significant)		1	Replace rail; see section 10.1.7
Short wave rail corrugation	Over 1/8 inch deep		2	Grind rail
Wheel burn, "squat" or shell	Less than 1/8 inch	Less than 3 inches		A2
	Equal to or larger than 1/8 inch	Equal to or larger than 3 inches	1	Replace rail

1. Minimum remedial actions are coded as follows:

- A A qualified person shall supervise each operation over defective rail at a speed not to exceed 15 mph.
- A2** A qualified person shall make visual inspection. The qualified person may determine that operation may continue without continuous visual supervision at a maximum of 10 mph for up to 24 hours. If the rail is not replaced within that 24-hour period, then inspections by a qualified person shall continue, not more than 24 hours apart, until the rail is replaced or a determination is made requiring a more restrictive action.
- B Apply joint bars within 20 days after it is determined to keep the track in use and limit operating speed over defective rail to a maximum of 30 mph until joint bars are applied; thereafter, limit speed to 60 mph. When a search for internal rail defects is conducted and defects are discovered in tracks with operating speed over 60 mph, then the operating speed shall be limited to 60 mph for a period not to exceed four days. If the defective rail has not been removed from the track or a permanent repair made within four days of the discovery, then the maximum operating speed shall be limited to 30 mph until joint bars are applied; thereafter, limit speed to 60 mph.

# Jun 14 - PUC Sends RTD a Letter (1)



**“Customers and the general public must be confident that the RTD transit system is a safe system. Recent events have shaken that confidence along the SE Corridor.”**

**“The poor condition of the downtown rail lines and the deterioration of the SE line indicate that the PTASP has not been adequate to identify these conditions ahead of time so that repairs can be made in a measured way that minimizes impacts to the traveling public.”**

# Jun 14 - PUC Sends RTD a Letter (2)

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**“These gaps suggest that the PTASP has failed in its objective to “Provide a comprehensive risk management program to effectively identify and resolve issues.”**

**“...effective safety and asset management strategies would have prevented the need for these emergency actions and the significant disruption to the many Coloradans who depend on RTD light rail service.**

# Jun 24 - RTD Press Conference



**‘The tracks are safe’**  
**Dave Jensen**  
**RTD Rail Ops AGM**

Cannot give date  
when repairs are  
complete.

Apart from Bustang  
fare acceptance, no  
further plans.

# GDT Letter and Press Release



**“As a rail transit professional, I cannot emphasize enough how serious this letter is. The Colorado PUC have been absolutely scathing in their assessment of RTD’s asset management, safety plans and maintenance planning procedures. Riders on the E, H & R lines have born the brunt of these failures.”**

**Richard Bamber, Greater Denver Transit Co-founder**

**GDT writes letter to RTD on Jun 19th requesting action.**

**Press release issued to multiple news outlets.**

**Denver7, Fox 31 and CBS Colorado ran the story!**

# Jun 24 - RTD Responds to the PUC's Letter



**“RTD has not historically notified the PUC when speed restrictions are implemented in connection with preventative maintenance. Such notification is not required.”**

**“Regarding your assertion that the Joint Labor Management Safety Committee, RTD Board, and PUC approved Public Transportation Agency Safety Plan (PTASP), which documents the processes and procedures to implement a Safety Management System (SMS), is not adequate, I firmly disagree.”**

# Jul 24 - What Standards Were RTD Using?



APTA RT-FS-S-002-02, Rev. 1  
First Published: Sept. 22, 2002  
First Revision: April 7, 2017  
Rail Transit Fixed Structures Inspection and Maintenance Working Group

## Rail Transit Track Inspection and Maintenance

**Abstract:** This standard provides minimum requirements for inspecting and maintaining rail transit system tracks.

**Keywords:** fixed structures, inspection, maintenance, qualifications, rail transit system, structures, track, training

**Summary:** This document establishes a standard for the periodic inspection and maintenance of fixed structure rail transit tracks. This includes periodic visual, electrical and mechanical inspections of components that affect safe and reliable operation. This standard also identifies the necessary qualifications for rail transit system employees or contractors who perform periodic inspection and maintenance tasks.

**Scope and purpose:** This standard applies to transit systems and operating entities that own or operate rail transit systems. The purpose of this standard is to verify that tracks are operating safely and as designed through periodic inspection and maintenance, thereby increasing reliability and reducing the risk of hazards and failures.

This document represents a common viewpoint of those parties concerned with its provisions, namely operating/ planning agencies, manufacturers, consultants, engineers and general interest groups. The application of any standards, recommended practices or guidelines contained herein is voluntary. In some cases, federal and/or state regulations govern portions of a transit system's operations. In those cases, the government regulations take precedence over this standard. The North American Transit Service Association (NATSA) and its parent organization APTA recognize that for certain applications, the standards or practices, as implemented by individual agencies, may be either more or less restrictive than those given in this document.  
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2021 RTD Track Safety Standards

2017 APTA Track Inspection & Maintenance

In a memo sent to the PUC in May 2023, RTD described the 2021 standards as “current”.

But RTD told GDT in July 2024 “Following the development of standard operating procedures and training materials, and upon the completion of required employee training, the standard was fully implemented May 1, 2024.”

# Jul 24 - RTD Edited the Inspection Method



## 3. Inspection (APTA Version)

### 3.1 Track inspection

- a. Tracks used by revenue trains shall be inspected weekly on foot, or by riding over the track in a vehicle at a speed that allows detection of noncompliance with these standards. In the unusual event that a walking or riding inspection cannot be performed, a qualified person must inspect the track from a revenue vehicle in a position that allows full view of the roadbed. Inspections must be performed by a qualified person as prescribed by Section 2. An interval of at least three but not more than 11 calendar days must elapse between inspections.

## 3.1 Track inspection (RTD Version)

- a) Tracks used by revenue trains shall be inspected twice weekly by riding over the track in a vehicle at a speed that allows detection of noncompliance with these standards. In the unusual event that a walking or riding inspection cannot be performed, a qualified person must inspect the track from a revenue vehicle in a position that allows full view of the roadbed. Inspections must be performed by a qualified person as prescribed by Section 2. An interval of at least two but not more than 11 calendar days must elapse between inspections.

**“Staff walk the entire system every 90 days to take additional measurements and carefully document anomalies. The quarterly walking inspections allow the agency to take measurements, collect thousands of data points, identify recurring issues, and analyze patterns. The actual month of an inspection may be adjusted within a quarter.”**



# Jul 24 - Table 11c is the same...



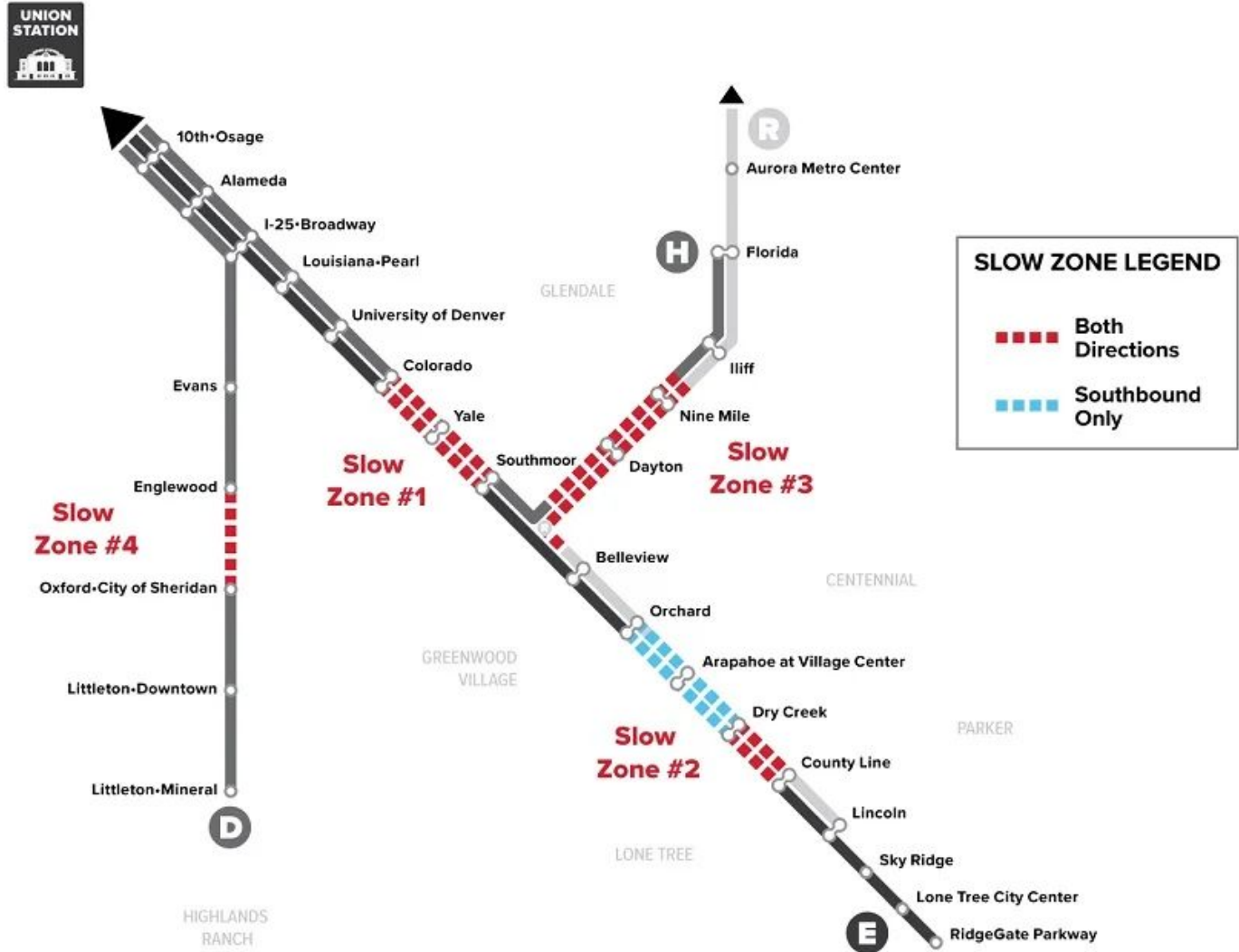
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# Jul 24 - More Slow Zones, More Muddling





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