

AGENDA

**RTD Accountability Committee
Operations Subcommittee
Wednesday, May 19, 2021
3:00p.m. - 4:00 p.m.
VIDEO/WEB CONFERENCE
Denver, CO**

1. Call to Order
2. Introductions
3. May 5, 2021 Operations Meeting Summary
(Attachment A)

DISCUSSION ITEMS

4. Recommendations on Performance Measures
(Attachment B)
5. Recommendations on Fixed Route and Paratransit Service Provision
(Attachment C)
6. Recommendations on Operator Retention
(Attachment D)

ADMINISTRATIVE ITEMS

7. Next Steps
8. Member Comment/Other Matters
9. Adjournment

ATTACH A

MEETING SUMMARY
RTD ACCOUNTABILITY COMMITTEE - OPERATIONS SUBCOMMITTEE MEETING
Wednesday, May 5, 2021
Note: Meeting held virtually via Zoom

MEMBERS PRESENT:

Deya Zavala (Chair)
Rutt Bridges
Krystin Trustman
Elise Jones
Troy Whitmore

Lynn Guissinger
Crystal Murillo
Chris Frampton

Others Present: Debra Johnson, Sarah Gosselin, Peggy Catlin, Brian Welch, Tanya Eydelman, Ala Battikhi, Anna Danegger, Luke Palmisano, Monika Treipl-Harnke, Barbara McMannus, Mac Callison, Michael Davies, Kent Moorman, Allison Crump, Alex Hyde-Wright, Natalie Shishido and DRCOG staff.

Call to Order

The meeting was called to order at 3pm.

April 21, 2021 Operations Subcommittee Meeting Summary

No comments.

Recommendations on Performance Measures

North Highland Staff presented potential performance measures based on input from previous discussions. Rutt Bridges asked about how North Highland proposes to access “age of fleet” (i.e. miles, age, etc.) Tanya Eydelman of North Highland responded that RTD measures age of fleet based on useful life, or the expected life expectancy of the vehicle, and depreciation and it makes sense to continue that practice. Debra Johnson stated transit agencies are required to have back-up vehicles. This contributes to vehicles lasting as long as possible as it allows time for routine maintenance. Elise Jones asked about including as a measure the percent of fleet that is electric and low-emission vehicles. Ala Battikhi from North Highland stated that tracking the percent of total and the trend of that percentage makes sense for this measure. Chris Frampton stated that electric buses only help with air quality if the electricity source is clean. Rutt Bridges stated that useful life should be considered differently because they are made to last longer and the cost to maintain them may be lower. Krystin Trustman stated that escalator availability at stations is interesting and useful but may be a little “in the weeds”. She went on to ask for clarification whether the zero denial performance metric measures fixed route or paratransit. Ms. Eydelman stated that it measures paratransit trip denials. Ms. Trustman said that she believes RTD is going beyond what is required during the pandemic by continuing to provide complementary paratransit in areas where fixed route service was suspended or discontinued. Ms. Trustman continued by saying that she agrees with others that customer service should be measured. Chair Zavala stated that she thinks Title VI standards are the baseline for equity and thinks RTD should go beyond those standards. Chair Zavala also stated that she thinks workforce related metrics should be considered.

Recommendations on Partnerships

Chair Zavala showed the Governance Subcommittee draft partnership recommendations to the group and asked the subcommittee for feedback. Krystin Trustman stated that accessibility should be emphasized. Otherwise, there was a consensus on keeping the recommendations the way they are.

Member Comment/Other Matters

Mr. Bridges stated that he wants to highlight the goals of the partnerships and perhaps that should be integrated into the refined performance metric recommendations that North Highland brings back to the next meeting.

Next Steps

The next meeting will take place on May 19, 2021.

Adjournment

The meeting adjourned at about 4pm.

ATTACH B

To: Members of the RTD Accountability Committee Operations

From: Matthew Helfant, Senior Transportation Planner
(303) 480-6731 or mhelfant@drcog.org

Meeting Date	Agenda Category	Agenda Item #
May 19, 2021	Discussion	4

SUBJECT

Recommendations on Performance Measures

PROPOSED ACTION/RECOMMENDATIONS

N/A

ACTION BY OTHERS

N/A

SUMMARY

As part of the Interim Report adopted on January 11, there were a set of legislative recommendations for changes to RTD statutes adopted by the full Committee for the Governor and Legislature to consider. One of the recommendations was to eliminate the requirement for RTD to meet the prescribed farebox recovery ratio. In December, the latest performance audit of RTD was presented to the Legislative Audit Committee. The audit contains a recommendation to revise the current farebox recovery ratio to make it more meaningful.

In February staff from the State Auditor's Office briefed the subcommittee on the recommendation on replacing the farebox recovery ratio. Concurrently, the Finance Subcommittee also discussed potential financial performance measures.

In March there was a joint meeting of the Operations and Finance Subcommittees that focused on this topic. On April 7th, North Highland staff facilitated a high-level conversation on possible recommendations based on dialogue at the March meeting. At the May 5th meeting North Highland presented draft recommendations for the subcommittee to consider. At the May 19th meeting, the subcommittee will finalize recommendations on this topic based on refined recommendations presented by North Highland.

PREVIOUS DISCUSSIONS/ACTIONS

N/A

PROPOSED MOTION

N/A

ATTACHMENT

Updated North Highland Recommendations

ADDITIONAL INFORMATION

If you need additional information, please contact Matthew Helfant, Senior Transportation Planner, at 303-480-6731 or mhelfant@drcog.org.



PERFORMANCE METRICS ASSESSMENT

Draft Recommendations

RTD Accountability Committee
May 13, 2021

RTD Metrics Assessment

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RTD Metrics Assessment

EXECUTIVE SUMMARY

At the request of the Denver Regional Transportation District (RTD) Accountability Operations and Finance Subcommittees, North Highland is pleased to submit this report summarizing the findings of an assessment of peer agency performance metrics. The RTD Accountability Operations and Finance Subcommittees requested an independent assessment to identify potential performance metrics that may reflect RTD's performance.

To do this, North Highland reviewed Subcommittee meeting materials to determine priority areas for the focus of the research. This review identified seven key areas which were of interest to the Subcommittees. These are:

- Operational Effectiveness
- Financial Performance
- Customer Experience
- Community Engagement
- Equity & Accessibility
- Environmental Impact
- Safety

Next, North Highland conducted peer agency evaluations, facilitated discussions with the Operations and Finance Subcommittees, and sought to develop recommendations for consideration by the Subcommittees. The purpose of this report is to inform the Subcommittees of the findings of the assessment and provide recommendations for the Subcommittees consideration following a facilitated feedback session. Through this assessment North Highland:

- Proposes 24 metrics that may be applicable to measure RTD performance.
- Outlines four priority areas that the Subcommittees may wish to suggest RTD considers while developing the strategic plan.

RTD Metrics Assessment

OVERVIEW

I. Scope and Project Objectives

North Highland, as part of its on-call consulting service contract with the RTD Accountability Committee and coordinated through the Denver Regional Council of Governments (DRCOG), was asked to conduct a high-level assessment of peer agency's performance measures to inform performance measures developed for public reporting. One goal of the RTD Accountability Committee is to increase transparency in RTD's performance reporting. The following subsections define the performance metrics assessment scope key objectives, and findings.

The RTD Accountability Committee sought recommendations for performance metrics to describe the RTDs performance and increase transparency. Key activities within the project scope include the following:

- Peer Agency Evaluations – Conduct research of peer transit agencies to understand publicly available performance metrics. Meet with an RTD representative to learn RTD's current access to data, capability in analyzing data, and future state plans for dashboard reporting.
- Facilitated Discussion with RTD Accountability Committee – Conduct a facilitated discussions with joint members of the Operations and Finance Subcommittees to understand what the Committee seeks to learn from the established performance metrics.
- Study collected information – Analyze the findings from the peer agency evaluations and the Subcommittee's input to determine what metrics in use at other agencies may be applicable to RTD.
- Propose Performance Metrics for use by RTD - Based on the results of the peer agency evaluation and metric analysis completed, propose a series of performance metrics, inclusive of goals for consideration by the RTD Accountability Committee.

Measuring Performance

The purpose of performance metrics is to provide a fact-driven approach to measuring project success and objectively show actual performance over time. Performance metrics align an organization to its strategic goals and initiatives and measure the degree of success in meeting those goals. When determining performance metrics, knowing what to measure and how to measure it can simplify the most complex business problems of an organization.

Best practice in metrics generation requires accomplishing the following:

- Ensure every metric ties to the business drivers and strategic priorities of the organization.
- Establish a clear metrics generation approach based on best practices.
- Foster metrics that allow for detailed analysis and decision making
- Mature analytics capabilities to move beyond understanding what happened to (descriptive) to learning why something happened (diagnostic) to what will happen (predictive) to ultimately what should be done to prevent future problems (prescriptive)

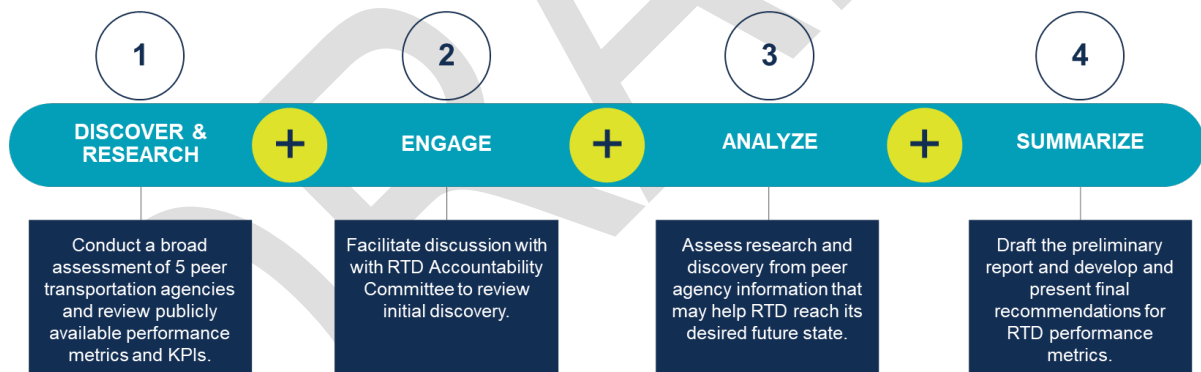
RTD Metrics Assessment

A good metric should provide an accurate representation of project or organizational success. North Highland's utilizes best practices which include:

1. Brainstorm the potential Business Decisions that need to be made, based on:
 - a. Future state use cases
 - b. Strategic priorities
 - c. Analysis of business insights, KPIs and dimensions
 - d. Business stakeholders' expertise/feedback
2. Identify the business insights relevant to major initiatives and strategic priorities.
3. Define metrics that trace to the business insights.
4. List the dimensions at which the metrics can be sliced.
5. Establish a hierarchy to the business insights and associated metrics.
6. Design the dashboards and analytics outputs that support the top-down framework.

II. Approach

To complete this assessment, North Highland followed the approach portrayed below:



The following sections describe the four project phases in further detail, describing the key tasks for each activity.

Discover and Research:

- Determine five peer transit agencies to include in research and assessment.
- Review publicly-available information about the each of the five identified peer agencies for KPIs and performance metrics.
- Gather and document the following information regarding peer agencies (as available):
 - Strategic plans
 - KPI dashboards/reporting mechanisms

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- Annual reports

Engage:

- Facilitate discussion with the RTD Accountability Subcommittee to present high level findings of peer agency research for input to the final recommendations for performance metrics.

Analyze:

- Assess research and discovery from peer agency information that may help RTD reach its desired future state. Review feedback from RTD committee and incorporate it into the analysis.

Summarize:

- Draft a preliminary report outlining peer agency research and initial findings.
- Following feedback from the RTD Accountability Committee, develop and present recommendations for further consideration. The RTD Accountability Committee will determine the final performance metrics they choose to put forth in the final report.

As part of the summarize phase of work North Highland brought its own best practice approach to the development of metrics. North Highland's approach to generating impactful metrics ensures that the dashboards and reports built ultimately align to a strategic priority of the organization. North Highland brings this expertise to RTD to develop recommended KPIs.

III. Summary of Other Agencies

The research component of this work included collecting and organizing data related to current RTD and peer-agency metrics and strategic priorities. The following table presents the five peer agencies assessed as part of North Highland's research efforts.

PROPERTY	CITY	STATE
Dallas Area Rapid Transit (DART)	Dallas	Texas
Utah Transit Authority Board of Trustees (UTA)	Salt Lake City	Utah
Los Angeles County Metropolitan Transportation Authority (LA METRO)	Los Angeles	California
Washington Metropolitan Area Transit Authority (WMATA)	Washington	District of Columbia
Portland Tri-County Metropolitan Transportation District of Oregon (TriMet)	Portland	Oregon

Table 1: Selected Peer Agencies

RTD Metrics Assessment

North Highland aligned its research of these agencies with the established scope of work in conjunction with a review of RTD's current performance metrics. The research of the peer agencies focused on seven key themes discussed in further detail below.



Operational Effectiveness

Operational effectiveness represents performance metrics that are inclusive of RTD's service delivery. RTD provides a variety of transit services and measuring how well and effective the delivery of those services is key to their success. Examples of operational effectiveness measures included on-time performance of vehicles, distance between vehicle failures, ridership metrics, and capacity. North Highland found that each of the peer agencies are currently measuring and reporting on operational effectiveness metrics.

Financial Performance

Financial performance metrics are indicators of the organization's financial success. Operational budget, capital budget, asset management, costs of operations, as well as bond rating are all examples of financial performance measures. Each of the five peer agencies had variations in what financial performance metrics that they were collecting and reporting. The most common financial performance metric is operating cost, measured by three of the five agencies.

Customer Experience

Customer experience metrics are an indicator of overall customer satisfaction. Customer satisfaction for each of the agencies differs based on their strategic plans, however most of the agencies reporting on customer satisfaction measured complaints or issues reported. Other examples of customer satisfaction metrics from the five peer agencies include call volume and answer rate, percent of issues resolved, ticket vending machine repairs, crowding, and average time to resolve issues.

Community Engagement

Many transit agencies are finding ways to engage with their communities and its stakeholders. Community engagement metrics are measures that indicate the extent to which RTD is partnering with the surrounding community. North Highland's review the five agencies for indicators of community engagement such as number of outreach events, current community partnerships, and board/committee representation of the breadth of the organizations service area. Similarly, to customer experience, one organization chose to measure community engagement through surveys.

RTD Metrics Assessment

Other organizations measure social media posts, follows, engagements, or partnerships with local governments.

Equity and Accessibility

Equity and accessibility metrics indicate the extent to which RTD services are available to all riders, particularly the disadvantaged populations such as ADA or minority/low-income people. Equity and accessibility metrics include number of accessible stations, streamlined routes, and paratransit operations. Only one of the five agencies collect numerous metrics related to equitable service accessibility specifically measuring the number of lines serving areas with higher-than-average population of persons of color and low-income persons, stop amenities, percent of housing within walking distance of stations and stops, percent of employment accessible by all transit, and on-time performance for lines serving areas with higher-than-average percentage of disadvantaged persons. Other metrics related to ADA accessibility such as availability of high-quality mobility options and elevator/escalator availability.

Environmental Impact

Environmental impact measures indicate the impact RTD has on the environment. Examples could include total annual emissions and the agency's contribution to the regional economy. Measuring environmental impact was not common among the five peer agencies and only two are currently reporting on environmental impact metrics. While these metrics are not commonly reported on, they are an important for the overall transit industry. North Highland found that the metrics currently being reported included pounds of seasonal air pollutants prevented, total building energy use, percent of low emission vehicles in the fleet, options for electric and alternative fuel, and progress of climate change initiatives.

Safety

Safety should always be a priority and is a good indicator for understanding how well an agency is keeping its passengers and employees safe. All five peer agencies report various safety metrics publicly. The most common safety metrics include passenger or employee injuries, number of reportable accidents, crime rates, and number of preventable accidents. Other examples of safety measures include collisions, lost time per employee (injuries on duty), derailments, fire incidents, and number of signal violations.

RTD Metrics Assessment

RECOMMENDATIONS AND FINDINGS

Within the seven metric areas, North Highland heard fourteen (14) major objectives from the Operations Subcommittee. Connecting metrics to these objectives will prioritize action on these objectives. The right metrics will provide leading and lagging indicators for further analysis and resolution.

Note: We understand RTD is in the process of developing a new strategic plan and is seeking to implement a more robust performance measurement system. The Subcommittee may wish to put forth the recommendations in this report to supplement RTD's ongoing work in concert with the efforts of the Accountability Committee.

The pages that follow outline 24 proposed metrics. The metrics proposed were created with the intent that they could be reasonably captured by RTD (e.g., they should not require additional studies or extraneous work effort to ascertain). In some instances, RTD is regularly reporting the metric as outlined, or some variation thereof, in quarterly Board Reports. It is possible RTD may be reporting on other metrics through internal reporting or dashboard. For each recommendation, the following detail is outlined:

- Metric: The proposed measure to be captured
- Calculation: A description of how to compute the proposed metric
- Goal: The target of the metric
- Frequency: The cadence with which the metric should be reported
- Notes: Important notes, including assumptions, data sources, and definitions were applicable

A comprehensive summary of these metrics can be found in Appendix 1.

A Note About Goals

For metrics which RTD is currently shared within RTD's quarterly Board Report, the goals provided here have come directly from RTD. In cases where RTD does not capture a comparable metric in the Board Report, sample goals are provided based on the project team's research. Sample goals are intended to demonstrate what the result of the calculation might look like. Actual goals will need to be defined by RTD based on the collection and analysis of baseline data in order to ensure the goals are meaningful and achievable for RTD.

Further, it should be noted that RTD, like all transit agencies, will face a long-term post-pandemic recovery. As such, certain metrics, such as cleanliness, will remain important in the coming years. Other metrics, such as ridership, will remain important but will be harder to influence in the near-term. As such, existing goals may need to be reevaluated to ensure RTD can be successful and focus on the most important aspects of its business during the recovery period.

A Note About Frequency

In the tables below, the recommended frequency ranges from quarterly to triennially. This is in keeping with RTD current practice of reporting to the Board quarterly. As RTD seeks to implement a new performance management system, the frequency with which these metrics are updated should be revisited, as the new system should allow more timely information sharing. Additionally, all metrics

RTD Metrics Assessment

should be included when reporting performance, regardless of the frequency with which the metric is updated. For example, an annual update of RTD's bond rating is recommended, though it should not be excluded from quarterly reports. The report should include the date in which the metric was last captured.

Operational Effectiveness

The metrics outlined below focus on the objectives outline under Operational Effectiveness. These include:

- Increase ridership
- Provide dependable service
- Ensure fleet reliability

OBJECTIVE: INCREASE RIDERSHIP

Metric	Percent boarding change by mode
Calculation	$\frac{[(\text{Boardings on Bus FY2021 YTD}) - (\text{Boardings on Bus FY2020 YTD})]}{\text{Boardings on Bus FY2020 YTD}}$
RTD Goal	+2.10% each fiscal year
Frequency	Quarterly
Notes	<ul style="list-style-type: none"> • It is assumed RTD's Automatic Passenger Counting (APC) System can capture boardings. • This metric should be reported quarterly and compared to the Fiscal Year to Date from the prior Fiscal Year to Date so as to capture the seasonal fluxes in ridership. • RTD currently captures this metric in quarterly Board Reports.

OBJECTIVE: PROVIDE DEPENDABLE SERVICE

Metric	Percent of on-time performance by mode
Calculation	$\frac{\text{Number of on-time departures}}{\text{Total number of departures}}$

RTD Metrics Assessment

RTD Goal	86%
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Frequency	Quarterly
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Notes

- This metric should be reported quarterly and compared to the Fiscal Year to Date from the prior Fiscal Year to Date so as to capture the seasonal fluctuations in road conditions.
- RTD currently captures this metric in quarterly Board Reports.
- RTD defines on-time as follows:
 - Bus and Light Rail are considered on-time if departure occurs no more than one minute early or five minutes after the scheduled departure time
 - Commuter Rail is considered on-time if departure occurs no more than zero minutes early or five minutes after the scheduled departure time

Metric	Percent of employee vacancies
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Calculation	Number of vacant positions ÷ Authorized headcount
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RTD Goal	5%
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Frequency	Quarterly
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Notes

- This metric should be reported quarterly and compared to the Fiscal Year to Date from the prior Fiscal Year to Date.
- RTD currently captures this metric for Bus Operators, Bus Mechanics, and Light Rail Operators in quarterly Board Reports with goals ranging between 5% and 7.5%.

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OBJECTIVE: ENSURE FLEET RELIABILITY

Metric	Percent of vehicles over their useful life
Calculation	Number of vehicles over their useful life ÷ Total number of vehicles
Sample Goal	15%
Frequency	Quarterly
Notes	<ul style="list-style-type: none"> RTD currently captures the average age of the bus fleet. Goals have not been adopted. Useful life is defined through RTD's asset management system and depreciation tables. It is common practice for agencies to have a certain percentage of vehicle over their useful life for contingency purposes.

Financial Performance

The metrics outlined below focus on the objectives outlined under Financial Performance. These include:

- Efficiently manage finances
- Achieve outstanding financial performance

OBJECTIVE: EFFICIENTLY MANAGE FINANCES

Metric	Operating cost recovery ratio
Calculation	$\frac{(\text{Farebox revenue (excluding ADA)} + \text{Advertising revenue} + \text{Other revenue})}{(\text{Operating cost} + \text{Administrative costs} + \text{Depreciation of bus operations assets})}$
RTD Goal	20%
Frequency	Quarterly

RTD Metrics Assessment

Notes	<ul style="list-style-type: none"> This metric should be reported quarterly and compared to the Fiscal Year to Date from the prior Fiscal Year to Date.
	<ul style="list-style-type: none"> Costs exclude ADA costs, rapid transit planning costs, and interest payments on rapid transit assets.
	<ul style="list-style-type: none"> RTD currently captures this metric in quarterly Board Reports as well as SB154 Cost Recovery.

Metric	Percent increase in fare revenue
Calculation	$\frac{[(\text{Revenue collected FY2021 YTD}) - (\text{Revenue collected FY2020 YTD})]}{\text{Revenue collected FY2020 YTD}}$
RTD Goal	2.6%
Frequency	Quarterly
Notes	<ul style="list-style-type: none"> This metric should be reported quarterly and compared to the Fiscal Year to Date from the prior Fiscal Year to Date to capture any seasonal fluctuations in ridership. RTD currently captures this metric in quarterly Board Reports.
Metric	Percentage of cost per mile as compared to peer agencies
Calculation	$\frac{(\text{Average peer operating expenses per vehicle revenue mile} - \text{RTD operating expenses per vehicle revenue mile})}{\text{Average peer operating expenses per vehicle revenue}}$
Sample Goal	$\leq 20\%$
Frequency	Annually
Notes	<ul style="list-style-type: none"> Operating expenses per vehicle revenue mile as reported by the National Transit Database (NTD).

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- This metric should be reported annually and coincide with the release of refreshed NTD data.
- Peer agencies should be determined by RTD and be inclusive of agencies with similar modes to reflect the higher cost associated with rail operations.

OBJECTIVE: ACHIEVE OUTSTANDING FINANCIAL PERFORMANCE

Metric	Bond Rating
Calculation	N/A
Sample Goal	AA
Frequency	Annually
Notes	<ul style="list-style-type: none"> • As reported by Moody's. • This metric should be reported for multiple years to allow for trend analysis.

Customer Experience

The metrics outlined below focus on the objectives outlined under Customer Experience. These include:

- Provide an excellent rider experience
- Engage with customers

OBJECTIVE: PROVIDE AN EXCELLENT RIDER EXPERIENCE

Metric	Percent of time passengers are in crowded conditions
Calculation	Total duration of time in which vehicles are classified as crowded ÷ Total revenue hours
Sample Goal	≤ 0.1%

RTD Metrics Assessment

Frequency	Quarterly
Notes	<ul style="list-style-type: none"> This metric should be reported quarterly and compared to the Fiscal Year to Date from the prior Fiscal Year to Date to capture any notable trends. RTD will need to define crowded conditions according to the appropriate number of riders per vehicle type. These numbers may change post-pandemic. It is assumed RTD's APC system can capture vehicle load and duration between stops and stations.
Metric	Average facility and vehicle cleanliness complaints per month
Calculation	$\frac{(\text{Total number of facility and vehicle cleanliness complaints Month 1} + \text{Total number of facility and vehicle cleanliness complaints Month 2} \dots \text{Total number of facility and vehicle cleanliness Month N})}{N}$
Sample Goal	≤ 15
Frequency	Quarterly
Notes	<ul style="list-style-type: none"> This metric should be reported quarterly and compared to the Fiscal Year to Date from the prior Fiscal Year to Date to capture any notable trends. RTD currently captures graffiti and facility maintenance complaints. It is assumed RTD will be able to isolate cleanliness complaints within their current customer service management system.
Metric	Overall customer satisfaction
Calculation	Average satisfaction rating based on a survey that asks "On a scale of 1 (not at all satisfied) to 5 (completely satisfied) how satisfied are you with RTD's service?"
Sample Goal	≥ 3.5

RTD Metrics Assessment

Frequency	Every two years
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Notes	<ul style="list-style-type: none"> RTD conducts customer service surveys every two years. As a component of future surveys, the customer satisfaction question should be asked in that survey This metric should be reported for multiple years to allow for trend analysis.
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OBJECTIVE: ENGAGE WITH CUSTOMERS

Metric	Call answer rate efficiency (in seconds)
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Calculation	Total wait time for call answer \div Total number of calls
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RTD Goal	≤ 65 seconds
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Frequency	Quarterly
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Notes	<ul style="list-style-type: none"> This metric should be reported quarterly and compared to the Fiscal Year to Date from the prior Fiscal Year to Date to capture any notable trends. RTD currently captures this metric as Average Telephone Information Center Speed of Answer within quarterly Board Reports.
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Metric	Average time to resolve customer issues
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Calculation	Total duration of customer issues \div Total number of complaints
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RTD Goal	≤ 10 Days
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Frequency	Quarterly
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Notes	<ul style="list-style-type: none"> This metric should be reported quarterly and compared to the Fiscal Year to Date from the prior Fiscal Year to Date to capture any notable trends.
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RTD Metrics Assessment

- RTD currently reports this data quarterly to the board as average response time to customer complaints. However, the description of the metric indicates resolution is being captured. In which case, RTD is currently reporting this metric.
- RTD captures this data through their TrapezeCOM system.

Community Engagement

The metric outlined below focus on the objective outlined under Community Engagement, specifically, Partner with the Community.

OBJECTIVE: PARTNER WITH THE COMMUNITY

Metric	Number of civic engagement presentations
Calculation	Total number of civic and neighborhood presentations within a quarter
Sample Goal	≥ 50
Frequency	Quarterly
Notes	<ul style="list-style-type: none"> • This metric should be reported quarterly and compared to the Fiscal Year to Date from the prior Fiscal Year to Date to capture any notable trends. • RTD reports this metric in quarterly Board Reports by depart and/or purpose. Currently, the metric is intended to serve informational purposes. Accordingly, no goal has been established.

Equity & Accessibility

The metrics outlined below focus on the objectives outlined under Equity and Accessibility. These include:

- Serve all populations
- Serve all customers

RTD Metrics Assessment

OBJECTIVE: SERVE ALL POPULATIONS

Metric	FTA Title VI Triennial review compliance
Calculation	Independent review
Sample Goal	Yes
Frequency	Triennial
Notes	<ul style="list-style-type: none"> The Federal Transit Administration conducts a thorough triennial review of recipients of Urbanized Area Formula Program funds meet statutory and administrative requirements. This includes a Title VI review to ensure transit services and benefits are distributed in an equitable manner. More details about the Title VI review can be found here. In addition to the Triennial review, RTD completes an equity assessment with each major service change and shares the results with the Board for approval. RTD completed a recent equity assessment of COVID-19 Service Changes which was presented at the April 20th Board Meeting. The Board Agenda Packet contains the full assessment.
Metric	Percent of customers indicating service frequency meets their needs
Calculation	Number of customer responding “yes” to the question “Does the frequency of service meet your needs?” ÷ Total number of respondents
Sample Goal	≥ 90%
Frequency	Every two years
Notes	<ul style="list-style-type: none"> RTD conducts customer service surveys every two years. As a component of future surveys, RTD may wish to ask “Does the frequency of service meet your needs?” (Response options would be either “yes” or “no.”) This metric should be reported for multiple years to allow for trend analysis

RTD Metrics Assessment

OBJECTIVE: SERVE ALL CUSTOMERS

Metric	Adherence to ADA zero denials service request mandate
Calculation	Number of service requests that were not denied ÷ Number of service requests
RTD Goal	100%
Frequency	Quarterly
Notes	<ul style="list-style-type: none"> This metric should be reported quarterly and compared to the Fiscal Year to Date from the prior Fiscal Year to Date to capture any notable trends. RTD is required to honor all paratransit service requests within ¾ mile of services. RTD currently captures within quarterly Board Reports.

Metric	Average ADA complaints per boarding
Calculation	Number ADA boarding complaints ÷ Total number of boardings
RTD Goal	0.001
Frequency	Quarterly
Notes	<ul style="list-style-type: none"> This metric should be reported quarterly and compared to the Fiscal Year to Date from the prior Fiscal Year to Date to capture any notable trends. RTD currently captures within quarterly Board Reports for the Bus Operations Department.

Environmental Impact

The metric outlined below focus on the objective outlined under Environmental Impact, specifically, Protect the Environment.

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OBJECTIVE: PROTECT THE ENVIRONMENT

Metric	Percent increase of low emission vehicles in fleet
Calculation	$\frac{[(\text{Number of low emission vehicles FY2021 YTD}) - (\text{Number of low emission vehicles FY2020 YTD})]}{\text{Number of low emission vehicles FY2020 YTD}}$
Sample Goal	5%
Frequency	Annually
Notes	<ul style="list-style-type: none"> This metric should be reported quarterly and compared to the Fiscal Year to Date from the prior Fiscal Year to Date so as to allow for trend analysis. RTD may wish to consider a goal in alignment with any planned vehicle procurements.

Safety

The metrics outlined below focus on the objectives outlined under Safety. These include:

- Operate a safe system
- Keep employees safe
- Keep the system secure

OBJECTIVE: OPERATE A SAFE SYSTEM

Metric	Number of preventable accidents per 100,000 miles
Calculation	$(\text{Preventable Accidents} \div \text{Actual Revenue Miles}) \times 100,000$
RTD Goal	≤ 2
Frequency	Quarterly

RTD Metrics Assessment

Notes	<ul style="list-style-type: none"> This metric should be reported quarterly and compared to the Fiscal Year to Date from the prior Fiscal Year to Date so as to capture the seasonal fluctuations in road conditions.
	<ul style="list-style-type: none"> RTD currently captures this metric in quarterly Board Reports.
	<ul style="list-style-type: none"> RTD defines preventable accidents are those in which an operator was not driving in full compliance with applicable laws and regulations and in such a manner as to avoid involvement despite adverse conditions of road, weather, traffic, or errors of pedestrians of other drivers.

Metric	Number of signal violations
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Calculation	Number of signal violations
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Sample Goal	0
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Frequency	Quarterly
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Notes	<ul style="list-style-type: none"> This metric should be reported quarterly and compared to the Fiscal Year to Date from the prior Fiscal Year to Date.
	<ul style="list-style-type: none"> Signals may be defined as wayside, cab, traffic bar, flagging, interlocking. RTD will need to define signal violations as appropriate for the system/s in place.

OBJECTIVE: KEEP EMPLOYEES SAFE

Metric	Number of reported employee equipment accidents
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Calculation	Number of reported employee equipment accidents
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Sample Goal	2 per 100 employees
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Frequency	Quarterly
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Notes	<ul style="list-style-type: none"> This metric should be reported quarterly and compared to the Fiscal Year to Date from the prior Fiscal Year to Date to allow for trend analysis.
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RTD Metrics Assessment

- It is assumed RTD captures Injured on Duty data and is able to isolate those instances in which the injury was the result of operating equipment such as tools, revenue vehicles, and non-revenue vehicles.

OBJECTIVE: KEEP THE SYSTEM SECURE

Metric	Offenses per 100,000 riders
Calculation	$(\text{Number of offenses} \div \text{Ridership}) \times 100,000$
Sample Goal	≤ 0.10
Frequency	Quarterly
Notes	<ul style="list-style-type: none"> This metric should be reported quarterly and compared to the Fiscal Year to Date from the prior Fiscal Year to Date to allow for trend analysis. Offenses include any citations written by RTD Transit Police
Metric	Average response time to emergency dispatch calls
Calculation	$[(\text{Response time to Call 1} + \text{Response time to Call 2} + \dots \text{Response time to Call N})] \div N$
RTD Goal	≤ 20 seconds
Frequency	Quarterly
Notes	<ul style="list-style-type: none"> This metric should be reported quarterly and compared to the Fiscal Year to Date from the prior Fiscal Year to Date. RTD currently captures this metric in quarterly Board Reports.

Other Potential Valuable Measures

The Operations Subcommittee noted that some proposed measures (or combination of measures) did not capture the level of import of certain topics. This three-week study was intended to evaluate what

RTD Metrics Assessment

other agencies were doing and draft recommendations based on those findings. This effort was not intended to develop a full waterfall of metrics aligned to the strategic plan, as that is currently being undertaken by RTD. As such, we have captured the feedback of the Operations subcommittee in this section for further consideration.

- Customer Experience – Net Promoter Score: The Operations Subcommittee is interested in seeing a net promoter score as a part of metric reporting. It is our understanding the RTD does not currently have the systems and staff capability to report this metric. As such, RTD may wish to consider beginning to report this metric when the proper systems/capability are in place to capture and analyze the data.
- Community Engagement – The Operations Subcommittee wishes to measure community engagement. The sample metric captured within this report, *number of civic engagement presentations*, measures activity, a stepping stone to measuring success once success has been defined. Other sample metrics, but not suggested to be appropriate for RTD at this time include:
 - Partnerships: The RTD Accountability Committee will be putting forth a recommendation to RTD to expand new and existing partnership with local governments, institutions, Transportation Management Organizations, and employers to improve service efficiency and increase ridership. At this time, what the success of these partnerships looks like has not been defined. In addition, the extent to which RTD will be able to impact the success of those partnerships is unclear. As such, it is recommended that a measure related to partnerships we defined through RTD's strategic planning processes.
 - Positive contribution to the region: there is no clear way to capture this measure at this juncture.
 - Percent increase in positive public impressions (multi-media) there is no clear way to capture this measure at this juncture.
- Equity & Accessibility
 - Serving all populations: The Operations Subcommittee has noted the role RTD plays in improving equity within the region. This study found that while other agencies were seeking to understand their own impact on equity, current measures are often flawed. For example, a measure noting walk-time to services can not measure for individual capability of walking certain distances within a certain amount of time. Additionally, by not having a clear goal for RTD to achieve, and having few meaningful examples to call upon, it is suggested RTD consider how equity can best be measured through the development of their strategic plan. Sample metrics included:
 - Percent of minority / low-income people with access to system: there is no clear definition of access.
 - Percent of households within 10-minute walk or roll of high-quality mobility options: this measure fails to account for individual capability
 - Average wait time for services by mode: there is no clear way to capture this metric at this juncture.

RTD Metrics Assessment

- Ratio of average fare to national average: fares of peer agencies are impacted by local factors, such as funding, resulting in a metric RTD has little ability to influence.
- Average number of transfer per trip: there is no clear way to capture this metric at this juncture.
- Accessibility: The Operations Subcommittee wished to see accessibility measures that indicates the extent to which RTD goes above and beyond mandated requirements to service all customers. This study was unable to find examples of such measures. Additionally, the objective to provide services beyond current requirements is an agency strategic decision, which should be addressed through the Strategic Planning process. Beyond those metrics proposed herein, sample metrics included:
 - Percent of time elevator/escalator availability: this is not applicable to RTD.
 - Calls answered for paratransit: this metric does not provide meaningful information.
- Environmental Impact: The Operations Subcommittee wishes to see more extensive reporting on the environmental impact of RTD. Our study found few measures which could easily be replicated by RTD. RTD's ability to select energy sources and directly impact the individual vehicle use, particularly post COVID, means that developing metrics for this topic could result in recommendations which RTD can not directly impact. Beyond the metric proposed herein, sample metrics included:
 - Pound of seasonal air pollutant prevented (NOX in summer and PM 2.5 in winter): there is no clear way to capture this metric at this juncture.
 - Pounds of CO2 per passenger miles traveled: there is no clear way to capture this metric at this juncture.
 - Total facility energy use: there is no clear way to capture this metric at this juncture.

RTD Metrics Assessment

APPENDIX 1: SUMMARY OF METRICS

METRIC AREA	OBJECTIVE	MESAURE	FREQUENY	GOAL
Operational Effectiveness	Increase ridership	Percent boarding change by mode	Quarterly	RTD Goal = 2.10%
	Provide dependable service	Percent of on-time performance by mode	Quarterly	RTD Goal = 86%
		Percent of employee vacancies	Quarterly	Sample Goal = 5%
	Ensure fleet reliability	Percent of vehicles over their useful life	Quarterly	Sample Goal = 15%
Financial Performance	Efficiently manage finances	Operating cost recovery ratio	Quarterly	RTD Goal = 20%
		Percent increase in fare revenue	Quarterly	RTD Goal = 2.6%
		Percentage of cost per miles efficiency as compared to peer agencies	Annually	Sample Goal ≤ 20%
		Achieve outstanding financial performance	Annually	Sample Goal = AA

RTD Metrics Assessment

Customer Experience	Provide an excellent rider experience	Percent of time passengers are in crowded conditions	Quarterly	Sample Goal $\leq 0.1\%$
		Average facility and vehicle cleanliness complaints per month	Quarterly	Sample Goal ≤ 15
		Overall customer satisfaction	Every 2 years	Sample Goal ≥ 3.5
	Engage with customers	Call answer rate efficiency	Quarterly	RTD Goal ≤ 65 seconds
		Average time to resolve customer issue	Quarterly	RTD Goal ≤ 10 Days
	Partner with the community	Number of civic engagement presentations	Quarterly	Sample Goal ≥ 50
Equity & Accessibility	Serve all populations	FTA Title VI Triennial report compliance	Triennially	Sample Goal = Yes
		Percent of customers indicating service frequency meets their needs	Every 2 years	Sample Goal $\geq 90\%$
	Serve all customers	Adherence to ADA zero denials service request mandate	Quarterly	RTD Goal = 100%

RTD Metrics Assessment

		Average ADA complaints per boarding	Quarterly	RTD Goal = 0.001
Environmental Impact	Improve the environment	Percent increase of low emission vehicles in fleet	Quarterly	Sample Goal = 5%
	Operate a safe system	Number of preventable accidents per 100,000 miles	Quarterly	RTD Goal ≤ 2
		Number of signal violations	Quarterly	Sample Goal = 0
Safety	Keep employees safe	Number of reported employee equipment accidents	Quarterly	Sample Goal = 2 per 100 employees
		Offenses per 100,000 riders	Quarterly	Sample Goal ≤ 0.10
	Keep the system secure	Average response time to emergency dispatch calls	Quarterly	RTD Goal ≤ 20 Seconds

ATTACH C

To: Members of the RTD Accountability Committee Operations

From: Matthew Helfant, Senior Transportation Planner
(303) 480-6731 or mhelfant@drcog.org

Meeting Date	Agenda Category	Agenda Item #
May 19, 2021	Discussion	5

SUBJECT

Recommendations on Fixed Route and Paratransit Service Provision

PROPOSED ACTION/RECOMMENDATIONS

N/A

ACTION BY OTHERS

N/A

SUMMARY

At the January 20th meeting, the Operations Subcommittee began discussing service delivery. That discussion was focused on fixed route service. At the March 3rd meeting the subcommittee was provided an overview on paratransit and human service transportation service delivery. At this meeting, the subcommittee will discuss any draft recommendations it would like to submit for full committee consideration on this topic.

PREVIOUS DISCUSSIONS/ACTIONS

N/A

PROPOSED MOTION

N/A

ATTACHMENT

N/A

ADDITIONAL INFORMATION

If you need additional information, please contact Matthew Helfant, Senior Transportation Planner, at 303-480-6731 or mhelfant@drcog.org.

ATTACH D

To: Members of the RTD Accountability Committee Operations

From: Matthew Helfant, Senior Transportation Planner
(303) 480-6731 or mhelfant@drcog.org

Meeting Date	Agenda Category	Agenda Item #
May 19, 2021	Discussion	6

SUBJECT

Recommendations on Operator Retention

PROPOSED ACTION/RECOMMENDATIONS

N/A

ACTION BY OTHERS

N/A

SUMMARY

Prior to the Covid-19 pandemic, significant bus and train operator turnover forced regular delays and cancelations. On December 21st, the latest state performance audit of RTD was published and presented (Attachment 1) to the Legislative Audit Committee. The audit contains recommendations on improvements that can be made to try to reduce operator turnover. On February 3rd, Jenny Paige from the Office of State Auditor office provided an overview of the recommendations related to operator retention (link included). At this meeting, the subcommittee will discuss any draft recommendations it would like for submit for full committee consideration on this topic.

PREVIOUS DISCUSSIONS/ACTIONS

N/A

PROPOSED MOTION

N/A

ATTACHMENT

Link: [Colorado Office of the State Auditor RTD Performance Audit December 2021](#)

ADDITIONAL INFORMATION

If you need additional information, please contact Matthew Helfant, Senior Transportation Planner, at 303-480-6731 or mhelfant@drcog.org.