



AGENDA
DRCOG Board Work Session
Wednesday, September 4, 2019
4 p.m.
1001 17th Street
Aspen/Birch Conference Room



1. Call to Order
2. Roll Call
3. Summary of March 6, 2019 Board Work Session
(Attachment A)
4. Public Comment
The chair requests that there be no public comment on issues for which a prior public hearing has been held before the Board of Directors.
5. Briefing on FasTracks Initial Unfinished Corridors Report
(Attachment B) Matthew Helfant, DRCOG – Dave Genova, RTD
6. Briefing on Reimagine RTD
(Attachment C) Matthew Helfant, DRCOG – Dave Genova, RTD
7. Briefing on Front Range Passenger Rail
(Attachment D) Jacob Riger, DRCOG – Randy Grauberger, SW Chief & Front Range Passenger Rail Commission
8. Adjourn

Persons in need of auxiliary aids or services, such as interpretation services or assisted listening devices, are asked to contact DRCOG at least 48 hours in advance of the meeting by calling (303) 480-6701

BOARD WORK SESSION SUMMARY
March 6, 2019

Directors present:

John Diak, Vice Chair	Parker
David Beacom	City and County of Broomfield
Kevin Forgett (Alternate)	City and County of Denver
Kevin Flynn	City and County of Denver
Roger Partridge	Douglas County
Bob Fifer	Arvada
Tammy Maurer	Centennial
Katy Brown	Cherry Hills Village
Steve Conklin	Edgewater
Jim Dale	Golden
Stephanie Walton	Lafayette
Wynne Shaw	Lone Tree
Ashley Stolzmann	Louisville
Joyce Palaszewski	Mead
Sandie Hammerly	Superior
Herb Atchison	Westminster
Bud Starker	Wheat Ridge

Participating via Webex:

Lynette Kelsey	Georgetown
Bill Van Meter	Regional Transportation District

Others present: Doug Rex, Executive Director; Bryan Weimer, Arapahoe County; Brad Boland, Castle Rock; Jamie Hartig, Douglas County; Colleen Whitlow, Mead; Kent Moorman, Thornton; Chris Primus, Kaia Nesbitt, HDR; and DRCOG staff.

Board Vice Chair John Diak facilitated the work session. The session began at 4:00 p.m.

Summary of October 3, 2018 Board Work Session

The summary was provided for review. No revisions to the summary were requested

Kevin Flynn introduced a new alternate for Denver, Kevin Forgett.

Public Comment

No public comment was received.

Discussion of Mobility Choice Blueprint

Jacob Riger, DRCOG Long Range Planner, provided an overview of the Mobility Choice Blueprint project and process. He introduced Chris Primus and Kaia Nesbitt, from HDR, who provided a briefing on the Mobility Choice Blueprint project. Ron Papsdorf, Director, Transportation Planning & Operations, provided additional information. Mr. Papsdorf noted a technology advisory committee will be formed to continue work on the process.

Members discussed steps that could be taken to move toward implementation. Several members expressed concern about where funding would come from.

Discussion of Metro Vision Amendments

Andy Taylor, Planner, Regional Planning & Development, provided an overview of the proposed amendments to Metro Vision. DRCOG issued a call for amendments to the *2040 Metro Vision Regional Transportation Plan* and *Metro Vision* in October 2018, with anticipated adoption of the amended plans in early 2019. Amendments are proposed for the performance measures and targets in these areas: protected open space, housing in high risk hazard areas, and person delay. Members discussed the proposed amendments and provided input on including the changes in the public review documents.

The work session ended at 5:08 p.m.

ATTACH B

To: Chair and Members of the Board of Directors
From: Douglas W. Rex, Executive Director
303-480-6701 or drex@drcog.org

Meeting Date	Agenda Category	Agenda Item #
September 4, 2019	Discussion	5

SUBJECT

RTD *FasTracks Initial Unfinished Corridors Report*.

PROPOSED ACTION/RECOMMENDATIONS

N/A

ACTION BY OTHERS

N/A

SUMMARY

RTD has completed approximately three quarters of the FasTracks program, including seven transit corridors, plus the first segment of the North Metro line anticipated to open in 2020, and the redevelopment of Denver Union Station. RTD's Board recently directed RTD staff to report on unfinished FasTracks corridors, specifically addressing the following topics:

- Investigate and research all reasonable cost-saving measures for constructing and operating the unfinished FasTracks corridors, including creative funding mechanisms
- Outline proposed steps to move forward on the unfinished corridors
- Outline proposed steps to move forward on the Northwest Rail Peak Service Plan

In response, RTD staff prepared the [FasTracks Initial Unfinished Corridors Report](#). This report is the beginning of a dialogue with its Board and the public about possibilities for advancing the unfinished corridors. This report does not contain recommendations. Rather, it provides scenarios, based on the most recent sales and use tax forecast provided by the University of Colorado Leeds School of Business (March 2019), that show options for pursuing completion of the unfinished corridors and the Northwest Rail Peak Service Plan.

PREVIOUS DISCUSSIONS/ACTIONS

N/A

PROPOSED MOTION

N/A

ATTACHMENTS

1. RTD presentation
2. 2019 Unfinished Corridors Report Questions and Answers July 1, 2019

ADDITIONAL INFORMATION

If you need additional information, please contact Douglas W. Rex, Executive Director, at 303-480-6701 or drex@drcog.org; or Matthew Helfant, Senior Planner, Long Range Transportation Planning, at 303-480-6731 or mhelfant@drcog.org; or Dave Genova, RTD General Manager, at 303-299-2448 or david.genova@rtd-denver.com.



Staff Draft Initial Report – Board Resolution on Finishing FasTracks and NW Peak Service Plan

DRCOG Board Work Session
September 4, 2019



Board Resolution – April 16, 2019



Directed RTD staff to:

- Investigate and research all reasonable cost-saving measures for construction and operation of the unfinished FasTracks corridors including creative funding mechanisms
- Outline proposed steps to move forward on the unfinished corridors
- Outline proposed steps to move forward on the Northwest Rail Peak Service Plan
- Report back to the Board within 60 days



Draft Initial Report



- Draft Initial Report represents the beginning of an iterative process with the Board regarding possibilities for the advancement of the unfinished corridors – it does not contain recommendations
- The ideas, opportunities and approaches outlined in this report are illustrative and conceptual and will provide a framework to facilitate constructive dialogue with the Board, stakeholders and the public
- Staff approached this report in a forward-thinking manner, exploring various possibilities in meeting the Board’s directive

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Assumptions in FasTracks Funding Scenarios



- The financial scenarios are based on the most recent sales and use tax forecast provided by the CU Leeds School of Business (March 2019)
- The forecasts provided by the CU Leeds School of Business will change as future updates are prepared
- The forecasts and conclusions presented focus on the FasTracks financial plan
- Financial scenarios are subject to change with Board adoption of RTD mid-term Financial Plan, long range plan (2050 horizon) and 2020 budget
- All scenarios assume year of expenditure dollars and ongoing operations, maintenance and vehicle replacement costs

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Observations

- No Base System funds are available to support the unfinished corridors
- No Base System Funds are available to loan to the unfinished corridors
- There is no capacity to support Base System bus or rail service increases at this time
- The Base System unrestricted fund balance under all scenarios presented is negative between the years 2021 and 2049

The FasTracks Investment

- RTD has completed approximately 75% of the FasTracks program
 - 7 transit corridors, plus 1 opening in 2020
 - Denver Union Station redevelopment
- The original FasTracks budget was \$4.7 billion
- RTD has actually invested more than \$5.6 billion after enduring much higher construction materials costs and much lower-than-projected sales tax revenues (approximately \$1 billion) due to the Recession
- Established the FasTracks Internal Savings Account (FISA) in 2013, capped bus service increase in 2013



Snapshot of Unfinished Corridors



- Capital and Annual O&M Costs, and Ridership of Unfinished Corridors

Corridor	Project Description	Daily Ridership Opening Year Forecast* (see report)	Capital Cost (millions in 2018 dollars)	Annual O&M (millions in 2018 dollars)
Central Rail Extension	30 th & Downing – 38 th & Blake	3,200	\$140.0	\$2.6
North Metro Completion	124 th Ave – SH 7	3,100	\$280.0	\$3.6
Northwest Rail (Westminster – Longmont)	Peak Service Plan** (see report)	800	\$708.2	\$14.0
	Full Service	4,100	\$1,500.0	\$20.6
Southwest Extension	Mineral Ave – C-470 & Lucent Blvd.	3,700	\$170.0	\$3.2

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FasTracks Funding Scenarios



- Three concepts modeled, each with various scenarios, no recommended priorities
 - 1) No New Bonding Authority or Funding
 - 2) TABOR Election for Additional Bonding
 - 3) TABOR Election with Bonding and Sales and Use Tax Increase

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Funding Scenarios – Concept 1



1) No New Bonding Authority or Funding

- Certificates of Participation (COPs) used to fund replacement of vehicles
- **Scenario 1a** sequences Unfinished Corridors starting with least expensive corridor first in order to accelerate as many projects as possible (C 2039, SW 2040, NM 2041)
 - Does not finish NWR Peak Service Plan or NWR Full Service Plan before 2050 horizon
- **Scenario 1b** sequences the NWR Peak Service first in 2042; no other corridor complete by 2050 horizon

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Funding Scenarios – Concept 2



2) TABOR Election for Additional Bonding

- TABOR election held prior to 2032 authorizing additional bonding authority; COPs to fund replacement of vehicles
- **Scenario 2a** sequences the Unfinished Corridors starting with least expensive corridor first (C 2037, SW 2038, NM 2039, NWR Peak 2048)
 - Does not finish NWR Full Service Plan by 2050 horizon

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Funding Scenarios – Concept 2



2) TABOR Election for Additional Bonding

- **Scenario 2b** completes NWR Peak Service Plan first in 2042; other corridors by 2049 (C 2047, SW 2048, NM 2049)
 - Does not finish NWR Full Service Plan by 2050 horizon
- **Scenario 2c** tests capacity to finish NWR Full Service Plan by 2046
 - Does not finish any other Unfinished Corridors by 2050 horizon

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Funding Scenarios – Concept 3



3) TABOR Election with Bonding and Sales Tax Increase

- TABOR election held in 2021 authorizing both additional sales and use tax and additional bonding authority; no need for COPs
- All scenarios finish all Unfinished Corridors by 2040
- **Scenario 3a** assumes a 0.1% sales and use tax increase; NWR Peak Service Plan sequenced first by 2026; last corridor is NWR Full Service Plan by 2039 (C 2027, SW 2032, NM 2035)

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Funding Scenarios – Concept 3

3) TABOR Election with Bonding and Sales Tax Increase

- **Scenario 3b** assumes a 0.1% sales and use tax increase; sequences Unfinished Corridors starting with least expensive first, finishing with NWR Full Service by 2032 (C 2026, SW 2027, NM 2028)
 - NWR Peak Service not completed to allow for completion of all other corridors in their entirety
- **Scenario 3c** assumes a 0.1% sales and use tax increase and issuing more bonds with more debt; completes NWR Peak Service first by 2026; last corridor is NWR Full Service by 2037 (C 2027, SW 2028, NM 2030)

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Funding Scenarios – Concept 3

3) TABOR Election with Bonding and Sales Tax Increase

- **Scenario 3d** assumes a 0.15% sales and use tax increase; sequences corridors starting with least expensive first, finishing with NWR Full Service by 2032 (C 2026, SW 2027, NM 2028); supports additional funding for Base System as well
 - NWR Peak Service not completed to allow for completion of all others
- **Scenario 3e** assumes a 0.1% sales and use tax increase; 3-year delay in delivery; sequences corridors starting with least expensive first, finishing with NWR Full Service by 2035 (C 2029, SW 2030, NM 2031); supports additional funding Base System as well
 - NWR Peak Service not completed to allow for completion of all others

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Funding, Finance and Revenue Options



- In addition to the funding scenarios presented, staff believes other strategies are worth exploring. They include:
 - Federal New Starts and Small Starts Grants (see report for analysis)
 - Federal loan/finance options (TIFIA, RRIF, Private Activity Bonds, Transit Grant Anticipation Revenue Vehicles)
 - Stakeholder cash/loan/private equity contributions
 - Tolled roadway facilities
 - Vehicle Miles Travelled (VMT) tax
 - Parking charges
 - Fees on other transportation modes/delivery models
 - Fees for access to anonymized RTD trip data
 - Property tax special assessment district

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Funding, Finance and Revenue Options



- Other funding strategies – continued:
 - Development impact fees
 - Additional Marijuana tax
 - State-level transit and rail funds
 - Sale or lease of air rights over RTD stations
 - Lease rights-of-way to private entities
- Federal-level funding and finance proposals explored, but aren't available under current law or policies:
 - Investment tax credits
 - Revive Projects of National and Regional Significance funding program
 - Earmarks in next infrastructure/surface transportation bill

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Summary

- This is a Draft Initial Report on possibilities – not recommendations – the beginning of an iterative process
- All scenarios are options for Board consideration and can be revised and refined
- These concepts are designed to facilitate dialogue with the Board, regional stakeholders and the public

RTD Draft Initial Unfinished Corridors Report (June 14, 2019)

Board Member Questions and DRAFT Staff Responses

July 2, 2019

This document provides the questions posed by the RTD Board of Directors regarding the RTD Draft Initial Unfinished Corridors Report at the June 18, 2019 RTD Board of Directors meeting and in subsequent communications from Board members to RTD staff, as well as the initial RTD Staff responses.

Note that some of the Board's questions at the Board meeting were answered in the course of that meeting. Not all of those questions are included in this document. Additionally, as noted, some questions require additional time for staff response and the answers will be provided to the Board at a later date.

Question 1: In the past there have been regional ballot questions approving tax increases for stadiums and other types of capital improvements that included provisions for the sunset of the tax. Under the funding scenarios (3a through 3e) that include a potential sales tax increase election, was there a similar consideration made to sunset the tax?

Response 1: No, not in these analyses, however that is something that can be analyzed if the Board expresses interest in further developing these scenarios. Note that the 2004 FasTracks ballot included provisions for a partial sunset of the 0.4% sales and use tax increase following the repayment of debt, to the level required to operate and maintain the FasTracks improvements in a state of good repair.

Question 2: There are portions of the metropolitan area (Aurora subdivisions, Castle Rock and portions of southern Weld County, for example) that are not included within the legal boundaries of RTD. Should we consider reconstituting RTD's boundaries to include these areas, and if so what kind of revenues would that generate?

Response 2: Staff can support these discussions and provide revenue estimates, which will vary depending on the geographical areas included. This topic has been included as a task in the scope of work for the Transportation Transformation Comprehensive Plan.

Question 3: Can you provide additional information from the 2014 Northwest Area Mobility Study (NAMS) for the Northwest Rail Corridor by adding a column to the table on page 11 detailing the ridership, cost and travel time information for the Boulder to Longmont segment.

Response 3: Please reference the updated table below with that information from 2014.

Source: NAMS Report, 2014	Westminster to 116th St. Broomfield	Broomfield to Louisville	Louisville to Boulder	Boulder to Longmont	Full Corridor
Weekday Ridership (2035)	2,100-3,400	1,700-1,800	2,000-2,100	1,900-2,000	9,300 - 10,800
Capital Costs in millions (\$2013)	\$557 - \$681	\$159 - \$194	\$241 - \$295	\$203 - \$247	\$1,156 - \$1,413
Annual cost per trip (Operating & Capital Cost)	\$36.19	\$15.34	\$26.10	\$23.76	\$23.42
Travel time from DUS	27 min	38 min	52 min	71 min	71 min

Question 4: Please provide a table with opening date, ridership and costs for all current RTD rapid transit corridors.

Response 4: Please reference table below with that information.

DRAFT

Daily Ridership, Capital Costs and Annual O&M Costs

RTD Rapid Transit Corridors

Corridor	Description	Year Opened	2018 Average Weekday Ridership	Capital Cost (millions in year of expenditure dollars)	2017 Annual O&M (millions in 2017 dollars, net of depreciation) (See note 2)
Central LRT	L line (remainder included in SW and SE Corridor totals)	1994	2,800	\$116.5	NA (included in SW and SE totals, L line was not yet operational)
Southwest LRT	C & D lines	2000	19,900	\$177.7	\$27.2
Central Platte Valley LRT	Central LRT to DUS	2002	NA – all ridership included in SW, SE and West Corridor totals	\$47.8	NA (included in SW, SE and West Corridor totals)
Southeast LRT	E, F & H lines	2006	41,100	\$879.0	\$46.8
West LRT	W line	2013	13,500	\$678.2	\$17.9
US 36 BRT	Flatiron Flyer Routes	2016	11,600	\$190.1	\$15.7
East Corridor CRT	University of Colorado A line	2016	21,300	See note (1)	\$35.6
Northwest Phase 1 CRT	B line	2016	1,800	See note (1)	\$2.8
I-225 LRT	R line	2017	5,900	\$677.1	\$21.6
Gold Line CRT	G line	2019	NA Opened 2019	See note (1)	NA Opened 2019
Southeast Extension LRT	Lincoln Ave – Ridgeway Parkway	2019	NA Opened 2019	\$232.4	NA Opened 2019
North Metro CRT	N line	2020	NA Opening 2020	\$851.9	NA Opening 2020

1. Eagle Project Capital Costs \$2,286.5 million have not been allocated between corridors since the single project includes shared track segments (Gold and NW Rail) and shared maintenance facility under the single P3 contract.
2. 2017 O&M costs are fully allocated costs, not incremental. Forecasts for the future corridors are incremental costs without an allocation of the existing overhead, and not directly comparable.

Question 5: Stakeholders have expressed enthusiasm regarding the Northwest Rail Peak Service Plan based on previous estimates that the capital costs were approximately \$117 million in 2018 dollars. The estimate in this Report is significantly higher. We will need to address these expectations.

Response 5: Agreed that these expectations need to be addressed. To that end, when staff has presented the \$117 million estimate, we have always noted that the cost estimate is only for RTD capital costs and does not include the cost of BNSF infrastructure upgrades and operating slots, nor does it include costs for needed right-of-way.

In the Report, further explanation is provided as follows “In support of this report, RTD has also updated the order-of-magnitude capital cost estimates for the NWR Peak Service Plan using an approach that we believe is conservative. These updated cost estimates are based on actual commuter rail cost experience for the Eagle and North Metro projects and on the cost information provided by BNSF through the 2011 work described in this report (which is substantially different from the current NWR Peak Service Plan). These order-of-magnitude estimates have not been provided by, nor reviewed by, the BNSF railroad.” We also note that “Since 2017, RTD has continued to discuss and analyze the NWR Peak Service Plan with stakeholders to gain a better understanding of the related opportunities and challenges. To this end, in the summer of 2018, RTD submitted a letter to the BNSF requesting feedback on the Peak Service Plan. Subsequently, RTD has sent periodic status requests to BNSF and based on their most recent response, we understand that the railroad is working on a formal response which will include their feedback on the proposal.”

Question 6: How reasonable is it that BNSF would have track “just laying around.”

Response 6: The BNSF line from Denver to Longmont is the Front Range Subdivision. BNSF has over 32,000 miles of track across 28 states within the US. The Front Range is an element within the BNSF system, running 10 -17 trains a day across this section of track. BNSF utilizes all their subdivisions on a regular basis and in emergencies will change the primary purpose to handle reroutes and temporary service. Bottom-line, BNSF does not have track just laying around, it is part of their entire network and they know it is almost impossible to buy additional corridors. Therefore, they are very careful regarding the restrictions they place on their infrastructure.



Question 7: All these cost scenarios talk about RTD funding, what about grants like RTD received for the Southeast Corridor Rail Extension? The Board wants to hear more about these opportunities.

Response 7: In the Weekly GM and CEO Summary dated June 20, 2019, Mr. Genova provided a copy of the presentation entitled “Future Construction FasTracks Corridors Federal Funding Analysis” that was provided at the July 5, 2016 FasTracks Monitoring Committee meeting.

Question 8: Let us know your strategies in putting together a proactive ask for a tax increase and the opportunities for collaboration with key stakeholders.

Response 8: Staff have been monitoring and participating in dialogue and meetings convened by stakeholders such as the Metro Mayors Caucus and Denver Regional Council of Governments regarding various funding mechanisms for transportation at the regional and state levels. We will continue to do so and keep the Board apprised and involved especially if and when policy level discussions occur. The Board’s continued dialogue and engagement around the Draft Initial Unfinished Corridors Report supports these collaboration opportunities.

Question 9: When the Board revisits this Report at the July 9 Committee meeting, be prepared to talk about strategies regarding inclusivity.

Response 9: Staff is prepared to participate in and support this discussion.

Question 10: Some Board members expressed an interest in receiving information on railroad topics pertinent to the Northwest Rail and BNSF operations. For example, years ago, freight trains would pull into sidings and passenger trains would be able to pass by; now the priority has reversed. Why? Also, while there is a lot of coal train traffic today, the trend is that coal power plants are being closed and the coal trains going away, how will that affect available track time? Would like some discussion from BNSF’s viewpoint on sharing tracks with them.

Response 10: Capital Programs staff is working on a response. One option under review is to schedule an in-depth “Railroads 201” session for those Board member that have an interest in these and related topics; another is to make appropriate staff available for a more informal question and answer session. Also, as noted in the Report and in the Response to Question 5, RTD has reached out to the BNSF for input on the NW Rail Peak Service Plan and is awaiting an expected response from the railroad.

Question 11: There are trade-offs between the need to provide sustainable service throughout the District, to our diverse passenger base and populations, vis-a-vis the expansion of rapid transit corridors. Please be prepared to speak to that dichotomy and how that interacts with the various scenarios.

Response 11: Staff is prepared to participate in and support this discussion. This is a topic that will also be central to the work, citizen and stakeholder engagement and analyses within the Transportation Transformation Comprehensive Plan.

Question 12: RTD has a revenue source that other transportation providers do not have, that is the fares that we charge passengers for our services. Can we explore lowering our fares in conjunction with a potential request of the voters for a tax increase?

Response 12: Yes, if there is direction to continue analyzing relevant Scenarios, at the Board's direction, Staff can analyze the financial, operational, capacity and ridership opportunities and constraints of such an approach.

Question 13: This question references the analyses which assume a TABOR election for additional bonding authority – both Scenarios 2a - 2c and 3a – 3e. Doesn't the amount of money and debt to be issued under each of these scenarios vary greatly dependent on how much bonding authority is requested, what year it is placed on the ballot, and whether or not the money is "banked" or spent immediately? Presuming so, then isn't there a great potential variability of results based on what is asked for from the voters and when? Could RTD develop different scenario results if we just asked for more money to bond and what are the practical limits and constraints based on our ability to pay back the bonds?

Response 13: Yes, with additional time, staff can develop different scenarios in the future. Note that the current scenarios that model bonding authority only (Scenarios 2a – 2c) program the bond issuances based on when RTD would be able to repay the debt and maintain operations. Per IRS regulations, we're not allowed to "bank" money and earn interest on it; we have to have a plan to spend the proceeds within specified time frames.

Question 14: Last year's sales and use tax forecasts from the CU Leeds School of Business were much rosier than this year's, which were used to prepare the scenarios contained in this report. I want to assure citizens and stakeholders that these forecasts change regularly, and that each change can bring vastly different forecasts, with none of the results being guaranteed because they are all so speculative. To this end, I am interested in seeing what Scenarios 1a and 1b would look like, vis-à-vis the capacity to deliver the Northwest Rail Corridor Full Service and Peak Service? Would it be possible to run these to see the results?

Response 14: Yes, with additional time, staff can develop different scenarios in the future.

Question 15: Leeds sales tax forecasts change and they change our projected cash flow. The last Leeds projection showed a lot of excess of revenue over expenditure in a cash flow graph, beginning in 2026. Now, there is a new Leeds projection – when did that come out?

Response 15: We get two forecasts per year, one in March and one in September. The most recent sales and use tax forecast came out in March 2019. In April, Leeds presented the forecast to the RTD Board of Directors.

Question 16: Would it be possible to see a cash flow chart comparison between the two vastly different Leeds forecasts, to be able to see the difference in when money would become available?

Response 16: See Attachment 1, which compares the March 2019 forecast to the September 2018 forecast. The September forecast was used for the 2019 Budget and the March forecast will be used for the Mid-Term Financial Plan and Long Range Financial Plan.

Question 17: It would be good to see a visual comparison. (Reference prior cash flow chart from 2018 showing lots of potential money.)

Response 17: We included cash flow comparisons for each of the scenarios in the report that was sent to the Board. The prior cash flow charts included only debt service and O&M costs, and did not include the programmed capital expenditures. The cash flow comparisons in the report to the Board include capital expenditures.

Question 18: Was it only the tax projections that changed under Leeds?

Response 18: Leeds only does sales and use tax forecasts for RTD. RTD forecasts the other revenue streams internally.

Question 19: What revenue streams lead into the Leeds revenue streams, and did they change? If yes, can we see a comparison of the different revenue streams?

Response 19: Leeds uses Moody's forecasts and several other economic factors to arrive at their sales and use tax forecast. In addition, they take into consideration RTD's historical tax collection results. Leeds does not look at RTD's other revenue streams.

Question 20: To say, on page 14 of the Report, that all unrestricted funds balances are negative assumes that the expenditures aren't subject to choice. Isn't it possible we could lower our expenditures by forestalling base projects?

Response 20: We could; however, the 2026-2040 long range plan only has projects that replace or maintain existing assets in a state of good repair. The Board would need to reduce bus service below existing levels, or allow existing assets to deteriorate below a state of good repair, in order to provide funding from the base system to complete FasTracks projects. For the Mid-Term Financial Plan staff provides a list of projects funded by the base system to the Board for review.

Question 21: What are the base projects that are included in the base expenditures that result in 2021-2049 base fund balances always being negative?

Response 21: See response to previous question (Question 20).

Question 22: Given that we want to finish FasTracks corridors, couldn't the Board see the priority list of base projects so we can decide whether to include them or forestall them, and thus possibly use the freed-up revenues for construction of FasTracks corridors?

Response 22: Yes, this list is provided to the Board prior to the adoption of the Mid-Term Financial Plan each year. Please see attachments 2 and 3 for the 2019 – 2024 Mid-Term Financial Plan list that was approved by the Board last fall.

Question 23: Can we be provided a list of FasTracks bonds, and another list of base bonds, with the sunset date for each?

Response 23: Attachment 4 has a chart showing the debt service requirements for all of RTD's debt obligations which gives a good idea of the cash flow impacts. The debt service payments have been structured in a manner to best meet RTD's cash flow forecasts when the debt was issued.

Question 24: Why can't we use the money freed up at each sunset date for the FasTracks projects, either the money itself or as new bonding collateral for additional money

Response 24: The long-term financial plan already contemplates the use of cash being freed-up with the payoff of each debt issuance. The Base System bonds from the T-REX project will be paid off in 2024 and the cash that becomes available for not having to service this debt is forecasted to be used going forward. Under RTD's current TABOR authority, we were limited to the total principal amount of debt we can issue, the total repayment and the annual debt service amount. Under that existing authority, we have used most of the total repayment authorized and have a relatively small amount remaining that we are authorized to issue in tax-secured obligations (bonds).

Question 25: Why not think of FT projects in building block segments, so that they can be completed in segments that are not prohibitively expensive, and thus keep the project moving, such as through sunset bond amounts. I.e., using a sunset bond amount as the basis for a letter of intent from RTD to do a project of part of a corridor, to be able to get into a DRCOG project list.

Response 25: RTD has looked at completing sections in segments and the cost is substantially higher than completing longer or entire sections mainly due to the cost of mobilization, NEPA, design, etc. that would have to be performed many times due to the number of segments rather than a single time.

Question 26: Are we getting Wayfair tax money coming in yet? What are the projections for that and we couldn't we use some for FT?

Response 26: We are assuming you are referring to sales tax from on-line vendors. We have been receiving those revenues for some time and they have already been assumed in the forecast that Leeds provided.

Question 27: How much would RTD need to assess as a mill levy to raise the same amount of revenue as would be raised by the modeled increases in sales and use tax?

Response 27: Using the 2018 net taxable assessed valuation for the District and the 2022 sales tax forecast, RTD would need a mill levy of 1.3287 mills to raise the same revenue as a 0.1% sales and use tax increase, and a mill levy of 1.9930 mills to raise the same revenue as a 0.15% sales and use tax increase. However, given the differences in the bases for property tax and sales tax, this relationship may not hold true in the future.

Question 28: Why are NW Rail Ridership forecasts going down when our population is going way up? In particular, I understand that the revised, lower ridership figures addressed the lowered development expectations based on the Great Recession. So, now that we're a decade beyond the Great Recession and we continue to be in the Great Boom, have the revised upwards development figures been included, which should push projected ridership up? If not, why not? Also, show a comparison of all the corridors with the changed ridership estimates based on the Great Recession, and then hopefully revised upwards for the Great Boom, so we can know it wasn't just the NW Corridor that had its ridership figures halved.

Response 28: As noted, socioeconomic data forecasts (provided by DRCOG) decreased subsequent to completing NAMS. In particular, employment in the Northwest Rail Corridor was forecast increase by 1.5% per year at the time of NAMS, more recent forecasts show this annual increase show an average annual growth in the corridor of 0.9%. DRCOG works with local government to update their forecasts periodically, RTD expects that DRCOG’s forecasts will be revised in support of the development of their 2050 Plan, which scheduled to start soon.

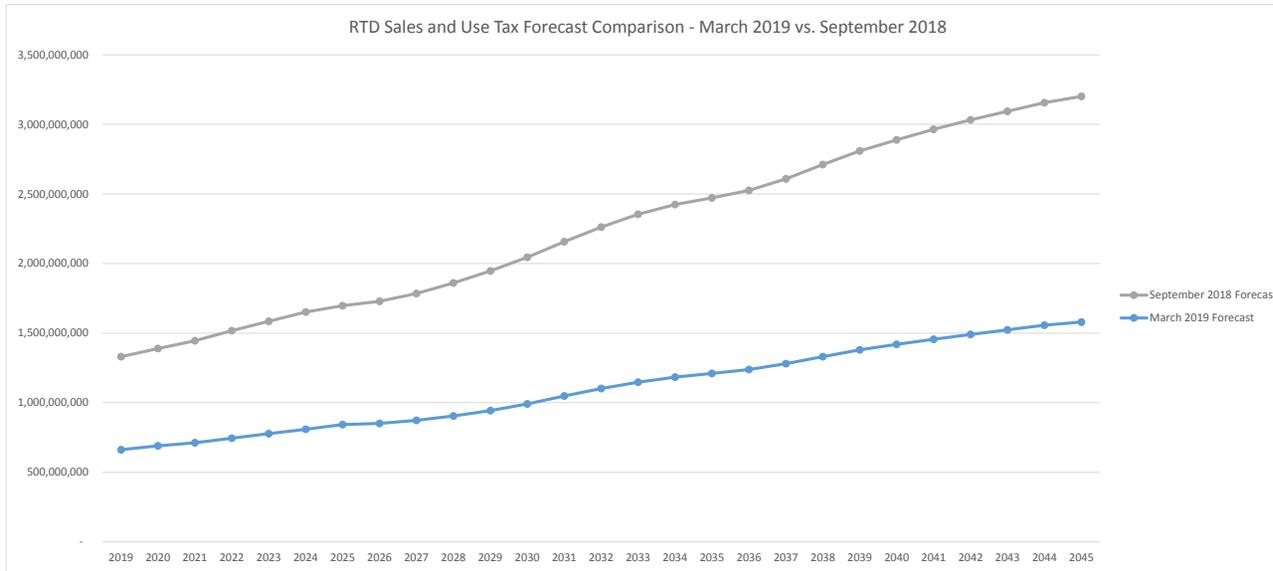
The table below shows weekday ridership forecasts for the year 2035. The second column shows those forecasts developed in 2012 (consistent with the NAMS forecast timeframe) compared with more recent forecasts from 2016. RTD expects to update these forecasts in the coming year in support of the Transportation Transformation Comprehensive Plan using updated DRCOG socioeconomic forecasts.

Corridor	2012 (Horizon Year 2035) Forecast	2016 (Horizon Year 2035) Forecast
Northwest Rail (B)	9,300	5,400
Southeast Extension (EFR)	18,800	6,600
Southwest Extension	5,500	4,100
Univ. of Col. A Line (A)	43,600	34,100
West Line (W)	29,700	18,700
R Line (R)	34,400	10,700
Gold Line (G)	13,900	12,900
North Metro (N)	24,500	19,100

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Attachment 1

**Regional Transportation District
Leads Sales and Use Tax Forecasts
March 2019 vs. September 2018**



	March 2019 Forecast	September 2018 Forecast	March vs. September Change
2019	662,375,952	668,329,976	(5,954,024)
2020	689,979,677	698,881,408	(8,901,731)
2021	711,453,605	733,444,363	(21,990,758)
2022	744,968,350	772,229,330	(27,260,980)
2023	777,266,470	807,820,321	(30,553,851)
2024	809,144,986	842,444,372	(33,299,386)
2025	842,241,427	854,775,579	(12,534,152)
2026	850,394,573	877,714,198	(27,319,625)
2027	872,743,179	912,049,583	(39,306,404)
2028	904,036,460	955,920,665	(51,884,205)
2029	943,091,377	1,004,185,765	(61,094,388)
2030	990,609,828	1,054,617,852	(64,008,024)
2031	1,047,740,998	1,108,564,435	(60,823,437)
2032	1,101,629,351	1,160,511,316	(58,881,965)
2033	1,147,741,497	1,206,308,659	(58,567,162)
2034	1,182,955,341	1,241,063,694	(58,108,353)
2035	1,210,911,657	1,261,470,424	(50,558,767)
2036	1,238,841,929	1,286,644,910	(47,802,981)
2037	1,280,243,014	1,328,206,361	(47,963,347)
2038	1,330,893,785	1,380,182,228	(49,288,443)
2039	1,379,112,145	1,429,555,191	(50,443,046)
2040	1,419,313,544	1,469,474,587	(50,161,043)
2041	1,455,927,478	1,508,092,450	(52,164,972)
2042	1,489,974,951	1,542,330,377	(52,355,426)
2043	1,523,638,039	1,569,828,916	(46,190,877)
2044	1,556,802,047	1,598,762,539	(41,960,492)
2045	1,579,603,978	1,621,352,125	(41,748,147)
			<u>(1,151,125,986)</u>

Attachment 2

EXHIBIT II
Regional Transportation District
2019-2024 Strategic Budget Plan
CAPITAL PROJECTS

Requesting Department	Title	Location	Project Description	Capital Costs 2019	Capital Costs 2020	Capital Costs 2021	Capital Costs 2022	Capital Costs 2023	Capital Costs 2024	Total Capital Costs
FLEET MODERNIZATION & EXPANSION										
Transit Buses										
Bus Operations	Transit Buses - 40 Foot	Districtwide	Purchase a total of 250 40-foot transit buses from 2019 through 2024. This consists of 250 replacements. The replacement buses are offset by retiring an equal number of existing buses. These buses will all be equipped with wheelchair ramps and automatic passenger counters.	\$ 20,240,000	\$ 15,840,000	\$ 29,480,000	\$ 13,640,000	\$ 15,840,000	\$ 14,960,000	\$ 110,000,000
Bus Operations	Transit Buses - 30 Foot	Districtwide	Project is to retire and replace fifty (50) 30-foot low floor transit buses over the term of this SBP. Major spares are not needed for this procurement since they will be operated by our contract carriers. The cost per bus is estimated to be \$414,200 per bus based on 2018 pricing.	\$ 10,355,000	\$ 5,384,600	\$ 0	\$ 4,970,400	\$ 0	\$ 0	\$ 20,710,000
Bus Operations	Hop Vehicle Replacement	Blake Street Office	This project, which was dropped in the SBP in 2018, is to assist the City of Boulder/Via Mobility (operator of service) in funding the replacement vehicles used to operate the Hop service in Boulder, Colorado. Over the years RTD has contributed \$200,000 each year into an RTD account used to reimburse Boulder with vehicle purchases. RTD funds are used as part of the local match for grants.	\$ 0	\$ 0	\$ 0	\$ 400,000	\$ 200,000	\$ 200,000	\$ 800,000
ADA Vehicles										
Bus Operations	Access-a-Ride Cutaway Buses	Districtwide	Project request is to purchase three hundred fifty-four (354) access-a-Ride vehicles over the term of this SBP, consisting of three hundredforty-four (344) replacements and ten (10) expansion. The estimated cost based on 2018 pricing is \$65,500 per vehicle.	\$ 655,000	\$ 2,423,500	\$ 0	\$ 9,301,000	\$ 5,043,500	\$ 5,764,000	\$ 23,187,000
Bus Operations	Call-n-Ride Cutaway Buses	Districtwide	Request is to purchase twenty-two (22) replacement call-n-Ride vehicles over the term of this SBP. The cost of each of these vehicles based on 2018 pricing is estimated to be \$69,450 per vehicle.	\$ 486,150	\$ 763,950	\$ 0	\$ 277,800	\$ 0	\$ 0	\$ 1,527,900
Total Bus Fleet				\$ 31,736,150	\$ 24,412,050	\$ 29,480,000	\$ 28,589,200	\$ 21,083,500	\$ 20,924,000	\$ 156,224,900
PARK-N-RIDES										
Capital Programs	Transit Plaza Upgrades @ Thornton PnR	Park-n-Ride	At the Thornton PnR, this project will replace standard bus shelters with BRT style canopies, similar to US36, that provide better illumination and protection from the elements, improve the transit plaza areas with concrete replacement, update the urban furnishings and landscape design - all following the principles of Crime Prevention through Environmental Design (CPTED).	\$ 485,000	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 485,000

EXHIBIT II
Regional Transportation District
2019-2024 Strategic Budget Plan
CAPITAL PROJECTS

Requesting Department	Title	Location	Project Description	Capital Costs 2019	Capital Costs 2020	Capital Costs 2021	Capital Costs 2022	Capital Costs 2023	Capital Costs 2024	Total Capital Costs
TRANSFER STATIONS										
Capital Programs	Bus Transfer Station @ Clear Creek Crossing	Districtwide	Project is to develop concept, preliminary design, possible land acquisition, final design and construction of a 6 bus bay transfer station within the new Clear Creek Crossing development in Wheatridge. This station will replace the current Applewood Transfer Station that is located on property having a 3-year lease (6-month termination clause) with WalMart at 38th Avenue and Youngfield Street. This new transfer station will include RTD standard improvements including but not limited to: lighting, landscaping, shelters, benches, trash receptacles, typical safety/security components, double unit driver's relief station, bike amenities and other improvements based on site specific needs that will be identified as part of the Site Plan approval process with the local agencies.	\$ 1,000,000	\$ 1,000,000	\$ 0	\$ 0	\$ 0	\$ 0	\$ 2,000,000
Capital Programs	Driver's Relief Station @ Arapahoe Crossing	Districtwide	Acquire property, design and construct a driver's relief station for the bus layover for the routes 66, 153, 169, 169L, & 483. The District receives numerous complaints from drivers as there is no convenient location to use a restroom during their layover.	\$ 200,000	\$ 350,000	\$ 0	\$ 0	\$ 0	\$ 0	\$ 550,000
CAPITAL SUPPORT PROJECTS										
Capital Programs	Welton Blank Out Sign Replacement/Upgrades	Central Rail Line	Provide supplemental funding for the initial SBP submittal to replace the existing blank-out signs along the Welton St. section of the Central Rail Line. The current blank-out signs and signal systems along the Welton St. section of the Central Rail Line are over 20 years old and are operating at a less than desirable manner. The initial SBP submittal did not take into account the degree of upgrades to the signal operating systems and hardware.	\$ 2,500,000	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 2,500,000
CAPITAL SUPPORT EQUIPMENT										
Vehicles & Maintenance Equipment										
Bus Operations	Administrative & Pool Vehicles	Districtwide	Project request is to purchase fifty nine (59) replacement and new vehicles over the SBP period. All of these vehicles will be at the end of their useful life at the time they are replaced. These vehicles include Transit Police vehicles.	\$ 449,000	\$ 159,000	\$ 144,000	\$ 630,000	\$ 487,000	\$ 360,000	\$ 2,229,000
Bus Operations	Incorporate MoD Service into Open Trip Planner	Districtwide	This project was identified and proposed in the Mobility on Demand Short-Term Project memo, which contains projects to engage existing service and technology partners to explore and develop opportunities to integrate MoD and RTD services. This project will incorporate MoD services, beginning with Call-n-Ride, into the RTD Open Trip Planner so that our customers can easily discover multiple services and plan integrated itineraries with all our fixed-route services.	\$ 275,000	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 275,000
Bus Operations	In-Plant Vehicles & Equipment	Districtwide	Project is to purchase one-hundred fifty-six (156) replacement units in Bus Operations in 2019-2024. The type of equipment being replaced includes but is not limited to electric carts, street sweepers, snow blowers, forklifts, etc.	\$ 180,500	\$ 32,000	\$ 50,000	\$ 1,143,500	\$ 1,527,700	\$ 447,000	\$ 3,380,700
Bus Operations	Support & Service Vehicles	Districtwide	Project is purchase of one-hundred three (103) trucks and vans through 2024.	\$ 100,000	\$ 96,000	\$ 90,000	\$ 2,515,000	\$ 1,607,000	\$ 1,979,000	\$ 6,387,000

EXHIBIT II
Regional Transportation District
2019-2024 Strategic Budget Plan
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Requesting Department	Title	Location	Project Description	Capital Costs	Total Capital Costs					
				2019	2020	2021	2022	2023	2024	
Communications	PIDs Program Infrastructure Support	Districtwide	Request is for funds to support the infrastructure investment needed to advance the deployment of PIDs at DUS and future locations across the District.	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 1,500,000
Information Technology, Computer Equipment for Operations										
Information Technology	Enterprise Customer Relationship Management System (CRM)	Civic Center Plaza (CCP)	TrapezeCOM has been the only customer complaint and commendation tracking tool in use for the past 8 years at RTD and most departments find it difficult to use and limited in its functionality. Various departments/projects like Communications, FasTracks, and the SmartCard system use their own customer issue	\$ 250,000	\$ 250,000	\$ 0	\$ 0	\$ 0	\$ 0	\$ 500,000
Information Technology	Oracle ERP Upgrade and/or Alternative System	Civic Center Plaza (CCP)	RTD currently is on version 12.1.3 of Oracle E-business suite. This current version of Oracle E-business suite support will end in 2021. RTD would need to upgrade to the next version starting 2019 or start looking at alternatives in 2018. Project is to implement the future of business applications such as finance, HR, procurement, recruitment, and so on. The project will assess the need to upgrade existing technologies and/or investigate/implement new technologies for these business functions. The project will analyze the need to move/segregate the business functions as necessary in order to upgrade existing application or move to the cloud or SAAS (software as a service) services.	\$ 2,000,000	\$ 2,750,000	\$ 750,000	\$ 0	\$ 0	\$ 0	\$ 5,500,000
Information Technology	Oracle Hardware Engineered Systems End of Life Replacement	Civic Center Plaza (CCP)	1) Replace 2 Exadata X2-2 database Servers with 2 Exadata X6-2 servers in 2017 and Replace 1 Exadata X3-2 database Server with newer version of Exadata servers available in 2020. The Exadata database servers host the Oracle E-business suite databases (HR/ FINANCE/ PROCUREMENT/ BUDGET/ GRANTS/ PROJECTS, etc.). The Exadata database servers also host the TIES, CAD/AVL/REALTIME and other application databases. All of these business applications will benefit and will be supported on the new Exadata Servers. 2) Replace 2 Exalytics X2-4 analytics Servers with 2 Exalytics X5-4 servers in 2019. SMARTCARD/CADAVL and REALTIME REPORTING needs to be supported on the supported platforms.	\$ 100,000	\$ 0	\$ 0	\$ 400,000	\$ 0	\$ 0	\$ 500,000
Information Technology	Smart Media Technology (Smart Card) Infrastructure Upgrade	Districtwide	Smart Media Technology System has been operational since January 2013. Since going live, the system has not received a refresh of the server and database operating system. A system infrastructure upgrade, for 50 servers, is required to maintain PCI Compliance.	\$ 500,000	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 500,000

EXHIBIT II
Regional Transportation District
2019-2024 Strategic Budget Plan
CAPITAL PROJECTS

Requesting Department	Title	Location	Project Description	Capital Costs	Total Capital Costs					
				2019	2020	2021	2022	2023	2024	
Information Technology	Traveler Information Systems (Real-Time) Development Support + 1 FTE	Civic Center Plaza (CCP)	Real-Time Passenger Information (RTPI) provides RTD passengers with predictive arrival times for their next bus. IT and Marketing are working toward providing predictive arrival times for buses via three primary delivery systems: 1) General Transit Feed Specification for Real Time or GTFS-RT (which feeds the information to Google Maps and some third party application developers), 2) Passenger Information Display (PID) signs, and 3) the RTD website. Additional funding will be required to implement future phases of this project. This will include planning, design, and development of a third party developer portal that will allow the open developer community to access rich data based on APIs (application programming interface, as opposed to the flat file/GTFS-RT protocol), and build interesting and contextually rich applications for our ridership and trip planning components. Also integration with IVR and RiderAlert data will require additional funding.	\$ 0	\$ 0	\$ 0	\$ 150,000	\$ 300,000	\$ 0	\$ 450,000
RAIL TRANSIT										
Capital Programs	Highblock Replacement @ Central Corridor - 20th & Welton to 30th & Downing	Central Rail Line	Project is demolition of the existing 22 year old concrete highblocks and replacement with new metal and fiberglass ADA compliant highblocks on the Central Corridor from 20th & Welton to 30th & Downing. The existing highblocks are over 22 years old. Due to the high use of magnesium chloride (MgCl) and age, the highblocks are rusting and the concrete is cracking/breaking. They are very unsightly and are a blight on the neighborhood which is going through a revitalization.	\$ 0	\$ 0	\$ 0	\$ 435,200	\$ 435,200	\$ 435,200	\$ 1,305,600
Capital Programs	Highblock Replacement @ Southwest Corridor	Southwest Rail Line	Project is the demolition of the existing 17 year old concrete highblocks and replacement with new metal and fiberglass ADA compliant highblocks on the Southwest Corridor. The existing highblocks are over 17 years old. Due to the high use of magnesium chloride (MgCl) and age, the highblocks are rusting and the concrete is cracking/breaking. They are very unsightly and are a blight on the neighborhood which is going through a revitalization.	\$ 0	\$ 0	\$ 0	\$ 485,200	\$ 485,200	\$ 485,200	\$ 1,455,600
Rail Operations	Cab Signaling on LRVs	Districtwide	The proposed Cab Signaling project would enable RTD Light Rail Vehicles (LRVs) to constantly display, on the dash of the cab, the maximum speed a train is permitted to operate based on signal indications and track conditions ahead of the train. The wayside signal logic transmits a 100 hertz pulsed signal into the rail using 7 unique pulsed rates, each having a different speed limit associated with it. If an Operator fails to comply to a reduced speed limit zone and begins braking within a predetermined grace period, the LRV will automatically apply brakes and come to a complete stop. The project costs are estimated to provide for new software and hardware for all of our current LRV fleet. Additionally the project funds would provide for new signal software for each of our existing corridors that currently have Automatic Train Stop (ATS) functionality.	\$ 1,500,000	\$ 0	\$ 0	\$ 3,500,000	\$ 2,500,000	\$ 1,000,000	\$ 8,500,000
Rail Operations	Heavy Equipment for LR Maintenance	Districtwide	Purchase of heavy equipment specific to Light Rail infrastructure and track maintenance to include: Speed Swing, Loader, Back Hoe, Rail Transport Truck, Bucket Trucks, Track Trucks, Welder, Compressor, Rail Handler, Crane, Platform Truck, etc.	\$ 0	\$ 250,000	\$ 250,000	\$ 1,500,000	\$ 0	\$ 0	\$ 2,000,000

EXHIBIT II
Regional Transportation District
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CAPITAL PROJECTS

Requesting Department	Title	Location	Project Description	Capital Costs 2019	Capital Costs 2020	Capital Costs 2021	Capital Costs 2022	Capital Costs 2023	Capital Costs 2024	Total Capital Costs
FACILITIES CONSTRUCTION & MAINTENANCE										
Capital Programs	AC Systems (3) Replacement @ Blake	Blake Street Office	The project consists of removing and replacing three split system AC systems. Each split system consists of a fan coil cooling unit and an air cooled condensing unit mounted outside. The units to be replaced serve the elevator equipment room, the Board Conference room, and the basement IT room.	\$ 0	\$ 0	\$ 0	\$ 120,000	\$ 0	\$ 0	\$ 120,000
Capital Programs	Brake Hoist Replacement @ East Metro	East Metro Division	This hoist is an original hoist in the building. It has reached the end of its useful life expectancy. The brake hoist requires constant maintenance and parts are becoming obscure. NABI buses will not work on this hoist due to the age of the hoist and the lifting capacity.	\$ 0	\$ 0	\$ 0	\$ 308,400	\$ 0	\$ 0	\$ 308,400
Capital Programs	Bus Wash Replacement @ East Metro	East Metro Division	Project is to replace the bus wash at East Metro. Bus wash is 15 years old and will have reached the end of its useful life. The bus wash is breaking down more frequently and repair parts are getting more difficult to find.	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 1,644,800	\$ 1,644,800
Capital Programs	Dry Fire Sprinkler System Piping Replacement @ Platte	Platte Division	The existing dry fire sprinkler piping is deteriorating. It is plumbed with a thin gauge pipe that is subject to corrosion damage because of condensation in the piping reacting with the air in the system. The piping, fittings, and other related material required for system repairs are no longer available. RTD has a very limited stock of these materials remaining. Deterioration will continue, so eventually spare material will be unavailable. Renovating the existing dry fire sprinkler piping systems will increase system reliability and safety for RTD now and in the future. Building maintenance will be reduced as a result of a new dry fire sprinkler piping system installation.	\$ 0	\$ 0	\$ 0	\$ 472,880	\$ 0	\$ 0	\$ 472,880
Capital Programs	Elevators (3) Replacement @ District Shops	District Shops - Operations Center	Request is to replace the three (3) elevators at District Shops Operations Center; 2 @ 3rd floor and 1 @ 4th floor. These are the original elevators for DS. They have become increasingly problematic, costly and labor intensive to maintain. Elevators that are unreliable create a safety risk; they can fail during an emergency situation stranding passengers on the elevators, and a catastrophic failure can cause the elevators to drop. Replacement of the elevators will increase reliability. Due to the frequency that one or more elevators are not functioning, the moving of materials becomes cumbersome. Working elevators are required for accessibility of RTD's physically challenged employees.	\$ 410,000	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 410,000
Capital Programs	Fire Control System Replacement @ District Shops	District Shops - Operations Center	Project is to replace fire panel and related infrastructure including replacing related cabling, new conduit, and new devices at District Shops. The existing fire control infrastructure is 25 years old and some of the wiring has been damaged over the years. This has led to phantom signals and alarms.	\$ 0	\$ 0	\$ 0	\$ 1,100,000	\$ 0	\$ 0	\$ 1,100,000
Capital Programs	Fire Protection Upgrades – Alarm Panel @ Platte	Platte Division	Project is to upgrade the fire alarm panel at the Platte facility to meet current Denver Fire Department and code requirements. The existing fire alarm panel technology is outdated and beyond its useful life. Replacement parts are no longer available for the existing fire alarm panel. Maintenance is becoming increasingly more difficult due to the aging equipment. This is a life safety system.	\$ 620,000	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 620,000
Capital Programs	High Speed Roll Up Door Replacements @ East Metro	East Metro Division	Project will replace the southeast and southwest high speed rubber roll up doors bus garage entry and exit doors at the East Metro facility.	\$ 0	\$ 0	\$ 82,240	\$ 0	\$ 0	\$ 0	\$ 82,240

EXHIBIT II
Regional Transportation District
2019-2024 Strategic Budget Plan
CAPITAL PROJECTS

Requesting Department	Title	Location	Project Description	Capital Costs	Total Capital Costs					
				2019	2020	2021	2022	2023	2024	
Capital Programs	Hoist Replacement in Small Engine Bay @ District Shops	District Shops - Operations Center	Project is to replace the hoist in the small engine bay at District Shops. This equipment has reached the end of its expected life, the ram is leaking and needs replacement.	\$ 50,000	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 50,000
Capital Programs	HVAC 601 Replacement in Upholstery Shop @ District Shops	District Shops - Operations Center	The existing HVAC unit has reached the end of its expected life and requires extensive maintenance.	\$ 40,000	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 40,000
Capital Programs	HVAC Units Replacement @ SCC Facility	Safety and Security	Project is to replace RTU-1, RTU-2, and provide supplemental/redundant (n+1) CRAC unit for the server room at the SCC facility. The cooling capacity of RTU-1 and RTU-2 cannot maintain current and future cooling requirements due to the added internal heat gains associated with heat generating equipment that has been added to the facility since the original construction. The server room also needs a permanent (n+1) redundancy CRAC unit in the event that the primary unit is down for service or failure.	\$ 263,000	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 263,000
Capital Programs	HVEC Unit Replacements @ Platte	Platte Division	These HVEC makeup air units are beyond their useful life. Maintenance is becoming increasingly more difficult due to the age of the equipment. If the HVECs fail then heating, ventilation and cooling will be lost in that location. New equipment will be more energy efficient technology. Current energy code requirements may require upgrading existing 100% outside air units to energy recovery units. The energy recovery units will save energy but because they are larger equipment than the existing MUAs, structural and ductwork modifications may be required to install them. The energy code requirements will make it necessary to evaluate and remodel HVEC units and exhaust fans in the Maintenance End at the same time.	\$ 0	\$ 0	\$ 0	\$ 30,000	\$ 3,000,000	\$ 0	\$ 3,030,000
Capital Programs	In-Ground Hoists Replacement in Bays T-1 & T-2 @ District Shops	District Shops - Operations Center	Request is to replace in-ground hoists in bays T-1 and T-2 at District Shops. Replacement consists of a three post hoist and one table hoist.	\$ 0	\$ 0	\$ 0	\$ 380,000	\$ 0	\$ 0	\$ 380,000
Capital Programs	In-Ground Lifts (6) Replacement @ District Shops	District Shops - Operations Center	Project is to replace 6 in-ground lifts throughout the District Shops Operations Center, including support vehicles and chassis wash areas.	\$ 0	\$ 0	\$ 0	\$ 320,000	\$ 0	\$ 0	\$ 320,000
Capital Programs	Makeup Air Units (MAUs) (4) Replacement @ Platte	Platte Division	Project is to replace four (4) makeup air units MAU-9, 10, 11, 12 serving the bus storage area at the Platte facility. These makeup air units (MAUs) are beyond their useful life. Maintenance is becoming increasingly more difficult due to the age of this equipment. If the MAUs fail, ventilation and heating will be lost in that location. New equipment will be more energy efficient technology. Current energy code requirements may require upgrading existing 100% outside air units to energy recovery units. The energy recovery units will save energy but because they are larger equipment than the existing MAUs, structural and ductwork modifications may be required to install them.	\$ 0	\$ 0	\$ 0	\$ 1,028,000	\$ 0	\$ 0	\$ 1,028,000
Capital Programs	Overhead Product Reels @ East Metro	East Metro Division	Project is to install new overhead product reels in some of the bus maintenance repair bays and before the bus fueling lanes. The products required for normal bus service and maintenance include engine oil, transmission fluid, anti-freeze, and air lines.	\$ 0	\$ 0	\$ 0	\$ 303,544	\$ 3,000	\$ 5,000	\$ 311,544

EXHIBIT II
Regional Transportation District
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CAPITAL PROJECTS

Requesting Department	Title	Location	Project Description	Capital Costs	Total Capital Costs					
				2019	2020	2021	2022	2023	2024	
Capital Programs	Particulate Sensors Replacement with CO NO2 Sensors @ Platte	Platte Division	Project is to replace existing particulate sensors with CO NO2 sensors to monitor air quality and activate ventilation systems at Platte facility. The existing building automation system (BAS) monitors air quality in the bus parking garage using particulate sensors. The particulate sensors send a signal to the BAS to activate ventilation systems when a programmed level of particulates is reached. Particulate sensor technology is outdated and no longer available for this application. The current method of determining the concentration of tailpipe emissions is using a CO NO2 sensor. CO (carbon monoxide) and NO2 (nitrogen dioxide) are the main components of bus exhaust. The existing particulate sensor technology is outdated, unreliable and beyond its useful life.	\$ 200,000	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 200,000
Capital Programs	Roof Replacement @ East Metro	East Metro Division	Project is roof replacement at the East Metro facility. This project is identified in the FE needs assessment document. The roof requires increasingly more repairs on a yearly basis and is near the end of its useful life.	\$ 0	\$ 35,000	\$ 6,392,144	\$ 0	\$ 0	\$ 0	\$ 6,427,144
Capital Programs	Roof Replacement @ Platte	Platte Division	Project is to replace the roof at the Platte Facility. Year 1: design the roof replacement. Year 2: replace the roof over the maintenance repair area and the transportation/drivers end. Year 3: replace the roof over the bus storage garage.	\$ 20,000	\$ 3,916,652	\$ 0	\$ 0	\$ 0	\$ 0	\$ 3,936,652
Capital Programs	Steel Inspection Pits Replacement @ East Metro	East Metro Division	Project will replace/rebuild the existing inspection pits at East Metro. The existing inspection pits are constructed of steel framing and grating. The steel is 40 years old and is showing signs of metal fatigue. Eventually there will be failure in the steel members. This steel is nearing the end of its useful life and the inspection pits need to be replaced.	\$ 0	\$ 0	\$ 0	\$ 205,600	\$ 2,570,000	\$ 0	\$ 2,775,600
Rail Operations	Mezzanine Addition (2nd Floor) for Operator Training @ Elati	Elati Light Rail Division	Project is to add a second floor mezzanine at the Elati Light Rail facility for training of Rail Operations personnel. We are currently renting a double wide trailer used for operator training purposes with no running water or adequate relief facilities. Utilizing the unused space on the second floor of the Elati facility will eliminate the need for construction of a separate building as was previously considered. It will also allow the project to be completed in a more timely manner.	\$ 1,615,000	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 1,615,000

EXHIBIT II
Regional Transportation District
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CAPITAL PROJECTS

Requesting Department	Title	Location	Project Description	Capital Costs 2019	Capital Costs 2020	Capital Costs 2021	Capital Costs 2022	Capital Costs 2023	Capital Costs 2024	Total Capital Costs
Safety, Security & AM	Security Command Center - University Project	Districtwide	RTD owns a vacant 10,000 square foot facility which is located at the University Station under the existing parking structure. This request is to relocate the existing Security Command Center Operations to this location. This space is ideal for our needs for many reasons, including its size, which is more than 4 times what is currently being used. This space will also provide for the Map 21 recommendation of an (EOC) Emergency Operations Center for the District. The facility will be designed primarily as a Security Command Center, but also function as an EOC (Emergency Operating Center). This design would greatly benefit the District's operating divisions by creating a facility that could support and operate Light Rail Control, Bus Dispatch and the IT Division during critical incidents. It would serve as a redundant common operating facility in emergencies for all disciplines while under an EOC activation. The design will allow for redundant face to face operations, should a large scale emergency occur. The facility would also provide a large server room, designed to support both security operations and corporate IT redundancies. The existing Security Command Center would be re-purposed into the Transit Police Division as a "Field Operations" building to consolidate services between the Transit Police Division, Allied Universal Security and the Denver Police Department contracted police. The current view room would be converted into a large conference and training room. The current server room would be surrendered to the IT Division for continued use to support security and RTD corporate networks.	\$ 0	\$ 0	\$ 0	\$ 5,743,100	\$ 0	\$ 0	\$ 5,743,100
RAIL CONSTRUCTION										
Capital Programs	Materials & Supplies - Light Rail	Districtwide	This funding would be used to purchase materials and supplies needed in the event of a catastrophic failure of the existing rail lines (C, D, E, F, G) as well as the four new lines brought on in 2017.	\$ 0	\$ 0	\$ 0	\$ 300,000	\$ 300,000	\$ 300,000	\$ 900,000
Capital Programs	OCS Wire Replacement on Central Rail Line	Central Rail Line	Project is to develop a final engineering analysis of the existing Overhead Contact System (OCS) Contact wire along the Central Rail Corridor to determine the order of replacement. Prepare a replacement plan, construction drawings and specifications. Perform field replacement of all OCS contact wire in the Central Rail Corridor.	\$ 375,000	\$ 400,000	\$ 400,000	\$ 800,000	\$ 800,000	\$ 600,000	\$ 3,375,000
Capital Programs	Rail Replacement @ Central Corridor	Central Rail Line	The Central Corridor is over 23 years old. For the most part this infrastructure has reached its potential life span. This repair project will replace existing rail, switches, concrete flatwork and items associated with the existing rail alignment which have deteriorated over the past 23 years. The work will be broken down into zones based on the priority of conditions of the rail and location. All work will include coordination with City and County of Denver (CCD), traffic control, and public information (bulletins, radio and TV announcements).	\$ 1,250,000	\$ 1,250,000	\$ 1,250,000	\$ 1,250,000	\$ 1,250,000	\$ 1,250,000	\$ 7,500,000

EXHIBIT II
Regional Transportation District
2019-2024 Strategic Budget Plan
CAPITAL PROJECTS

Requesting Department	Title	Location	Project Description	Capital Costs	Capital Costs	Total Capital Costs				
				2019	2020	2021	2022	2023	2024	
Rail Operations	Downtown Track & Switches Replacement	Central Rail Line	This project will include all of the downtown track and infrastructure from 7th Street to 30th and Downing. This alignment is 24 years old and has been in service since inception. For the most part this infrastructure has reached its potential lifespan. There are several projects in place to make repairs and replace the worst of the defects but an overall plan is needed to replace all track, turnout switches, street crossings, concrete flat work, etc. Please see the attached report from MOW and SGR, highlighting the condition of the infrastructure in the area. This is a six year plan. The alignment will be divided into segments that can be completely refurbished within the span of one construction season. Our estimates are at a cost of between \$2,500,000-\$3,000,000 per year for 6 years.	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	\$ 3,000,000	\$ 3,000,000	\$ 1,500,000	\$ 15,000,000
PLANNING										
Planning	Bus Rapid Transit @ SH 119	Northwest Rail Line	Project is to construct approximately 18 miles of Bus Rapid Transit (BRT) in the SH 119 Corridor to connect Boulder and Longmont in accordance with the recommendation of the Northwest Area Mobility Study (NAMS). It is anticipated that approximately half of the total costs for this project would be grant-funded. The establishment of BRT in the corridor would raise ridership from approximately 1,900 to approximately 5,000 daily weekday riders in 2035. Detailed cost estimates and design will be established through environmental clearance and preliminary engineering ahead of construction. The project is anticipated to take two years to construct.	\$ 0	\$ 0	\$ 0	\$ 0	\$ 60,000,000	\$ 0	\$ 60,000,000
TREASURY										
Finance & Administration	TVM Replacement - Open Bid	Platte Division	Project is replacement of 108 Ticket Vending Machines (TVM) that have several components that are at the end of life and are no longer supported by the vendor. The replacement TVMs will be an open bid for machines with the latest technology. 40 TVMs on the SE corridor are to be replaced in 2018 and 68 TVMs on the SW, Central and West corridors will need to be replaced in 2023.	\$ 0	\$ 0	\$ 0	\$ 0	\$ 2,064,000	\$ 0	\$ 2,064,000
UNALLOCATED CAPITAL										
Executive Office	General Manager's Discretionary			\$ 100,000	\$ 50,000	\$ 50,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 500,000
TOTAL				\$ 48,968,650	\$ 37,700,702	\$ 41,688,384	\$ 55,059,624	\$ 101,762,600	\$ 31,280,200	\$ 316,460,160

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Attachment 3

EXHIBIT III
Regional Transportation District
2019-2024 Strategic Budget Plan
OPERATING & MAINTENANCE PROJECTS

Requesting Department	Title	Location	Project Description	O&M Costs 2019	O&M Costs 2020	O&M Costs 2021	O&M Costs 2022	O&M Costs 2023	O&M Costs 2024	Total O&M Costs
SYSTEMS PLANNING										
Planning	15L Route Improvements	Colfax - East - ITS	Request is to proceed with the Colfax Avenue Transit Priority Project. RTD has received a Federal Ladders of Opportunity grant to fund a capital project to reduce travel time and increase security and ridership for 15L bus route. The project includes: stop amenity improvements (repair and replace existing amenities, lighting, shelters, security cameras), bus bulbs at a few locations, transit signal priority (TSP), and bypass lanes/queue jumps. The project includes East Colfax from Broadway east to Potomac (near I-225). It is important to note that from Yosemite to Potomac, the project will only include improved stop amenities.	\$ 125,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 1,375,000
Planning	Systems Optimization Plan	Districtwide	A centerpiece of the District's Transportation Transformation, the Systems Optimization Plan represents how RTD can maximize the benefits from our current investment and simultaneously plan for a sustainable, fiscally sound future. This ambitious and necessary effort includes a number of elements: 1) a continuous improvement process, 2) defining where RTD is in the life-cycle of a transit agency, 3) integrating a comprehensive Systems Operations Assessment, 4) addressing a changing workforce and changing demographics, 5) dealing with ridership growth challenges and current downward bus ridership trends.	\$ 1,160,000	\$ 1,740,000	\$ 0	\$ 0	\$ 0	\$ 0	\$ 2,900,000
PARK-N-RIDES										
Capital Programs	Bus Transfer Station @ Clear Creek Crossing	Districtwide	Project is to develop concept, preliminary design, possible land acquisition, final design and construction of a 6 bus bay transfer station within the new Clear Creek Crossing development in Wheatridge. This station will replace the current Applewood Transfer Station that is located on property having a 3-year lease (6-month termination clause) with WalMart at 38th Avenue and Youngfield Street. This new transfer station will include RTD standard improvements including but not limited to: lighting, landscaping, shelters, benches, trash receptacles, typical safety/security components, double unit driver's relief station, bike amenities and other improvements based on site specific needs that will be identified as part of the Site Plan approval process with the local agencies.	\$ 0	\$ 0	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 400,000
Capital Programs	Pedestrian Bridge Maintenance & Repair @ Mineral PnR - Supplemental Funding	Park-n-Ride	Provide supplemental funding for initial project submittal (#1485009661), as the needs of refurbishment have greatly increased from what was initially proposed. Original request is to provide funding for the repair and maintenance that is specifically needed for the Mineral PnR/Station Ped Bridge over Santa Fe.	\$ 600,000	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 600,000
Capital Programs	Transit Plaza Upgrades @ Thornton PnR	Park-n-Ride	At the Thornton PnR, this project will replace standard bus shelters with BRT style canopies, similar to US36, that provide better illumination and protection from the elements, improve the transit plaza areas with concrete replacement, update the urban furnishings and landscape design - all following the principles of Crime Prevention through Environmental Design (CPTED).	\$ 0	\$ 0	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 40,000

EXHIBIT III
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OPERATING & MAINTENANCE PROJECTS

Requesting Department	Title	Location	Project Description	O&M Costs 2019	O&M Costs 2020	O&M Costs 2021	O&M Costs 2022	O&M Costs 2023	O&M Costs 2024	Total O&M Costs
TRANSFER STATIONS										
Capital Programs	Driver's Relief Station @ Arapahoe Crossing	Districtwide	Acquire property, design and construct a driver's relief station for the bus layover for the routes 66, 153, 169, 169L, & 483.	\$ 0	\$ 0	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 80,000
BUS MAINTENANCE FACILITIES										
Capital Programs	Air Curtains at Bus Entry and Exit Doors @ East Metro	East Metro Division	Project is to install Air Curtains at the bus entry and exit doors at the East Metro facility. Air curtains will ultimately save energy by keeping heat inside the garage.	\$ 77,100	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 77,100
Capital Programs	Automatic Door Openers at 11 Doors @ DUS	Denver Union Station Complex	Project was recommended by Advisory Committee for People with Disabilities (ACPD). After 6 months of review, RTD has agreed to replace 11 of the doors at the DUS bus concourse with electronic doors. The original request was 22 doors. RTD will make 11 doors at DUS underground capable of automatically opening by pressing a button by changing out the door closure with an automatic door closure. Some electrical work will be needed where wireless technology will not work.	\$ 74,800	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 74,800
Capital Programs	Canvas Wash Bay Doors (4) Replacement in Car Wash @ District Shops	District Shops - Operations Center	Request is to replace the four (4) canvas doors to the two car wash bays, entrance and exit at District Shops. The original building equipment had reached the end of useful life. FM now spends man hours and rescores keeping this out of date equipment working. The reliability of the FM staff is compromised when they drop other projects to work on the doors.	\$ 0	\$ 0	\$ 0	\$ 121,000	\$ 0	\$ 0	\$ 121,000
Capital Programs	CDL Training Course @ Weston Property	District Shops - Operations Center	Project is to reconstruct a CDL Training Course at the Weston property near the Platte garage. The current surface lot used for training future RTD bus drivers is undersized and does not meet CDOT size requirements for a CDL training area. The existing lot at Weston needs to be redesigned and reconfigured to meet CDOT requirements.	\$ 0	\$ 0	\$ 975,000	\$ 0	\$ 0	\$ 0	\$ 975,000
Capital Programs	Exhaust Fans (13) Replacement Maintenance End @ Platte	Platte Division	Project is to replace thirteen (13) exhaust fans at the maintenance end at the Platte facility. These exhaust fans have been in service removing bus tail pipe emissions from the maintenance areas for twenty years and are beyond their useful life. Maintenance is becoming increasingly more difficult due to the age of this equipment. Current energy code requirements may require upgrading existing 100% outside air units to energy recovery units. The energy code requirements will make it necessary to evaluate and remodel HVEC units and exhaust fans in the Maintenance End at the same time.	\$ 0	\$ 0	\$ 0	\$ 9,000	\$ 90,000	\$ 0	\$ 99,000
Capital Programs	Exterior Wall Panel Caulking Replacement @ East Metro	East Metro Division	Project request is to replace deteriorated and missing caulking at panel joints on building exterior at the East Metro facility. The caulking that was placed in between the exterior wall panel joints has rotted and needs to be replaced. It was installed when the building was built. The caulking seals the building to prevent water migration into the walls and helps insulate the building.	\$ 82,240	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 82,240
Capital Programs	Fuel Pumps Upgrade @ District Shops	District Shops - Operations Center	Project is to replace RTD vehicle fleet fuel pumps at the Boulder facility with new pumps that have an electronic interface with Metasys. The existing fuels pumps are 25 years old and obsolete. Installing new electronic pumps will allow RTD to monitor the distribution of fuel more efficiently, thus eliminating the possibility of theft.	\$ 0	\$ 0	\$ 0	\$ 0	\$ 60,000	\$ 0	\$ 60,000

EXHIBIT III
Regional Transportation District
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OPERATING & MAINTENANCE PROJECTS

Requesting Department	Title	Location	Project Description	O&M Costs 2019	O&M Costs 2020	O&M Costs 2021	O&M Costs 2022	O&M Costs 2023	O&M Costs 2024	Total O&M Costs
Capital Programs	Overhead Sectional Doors (34) Replacement @ District Shops	District Shops - Operations Center	Project is replacement of 27 large and 7 small overhead sectional doors at District Shops. The existing doors have reached the end of their expected life and now require excessive maintenance.	\$ 0	\$ 0	\$ 0	\$ 500,000	\$ 0	\$ 0	\$ 500,000
Capital Programs	Remodel Lockers, Partitions and Restrooms for Mechanics End @ Boulder	Boulder Division	Request is to upgrade the restroom lockers, partitions, fixtures and finishes for the Mechanics End restrooms at the Boulder facility. The existing restroom lockers, partitions, fixtures and finishes are beyond their useful life. Maintenance and cleanliness are becoming increasingly more difficult due to the age of the of the restroom interiors.	\$ 0	\$ 0	\$ 0	\$ 308,400	\$ 0	\$ 0	\$ 308,400
Capital Programs	Roll-Up Doors (3) Replacement in Landscape Building @ District Shops	District Shops - Operations Center	Project is to replace the 3 roll-up doors in the landscape building at District Shops. The original building equipment has reached the end of useful life. The existing metal sectional doors are obsolete, and rubber roll up doors would better meet the facility's needs. FM now spends man hours and resources keeping this out of date equipment working. The reliability of the FM staff is compromised when they drop other projects to work on the doors.	\$ 0	\$ 0	\$ 0	\$ 100,000	\$ 0	\$ 0	\$ 100,000
Capital Programs	Supervisors Office Remodel @ Boulder	Boulder Division	Project is to upgrade Supervisors Office layout, function and finishes at the Boulder facility. The existing Supervisors Office layout, function and finishes are inefficient and beyond their useful life. Updating the layout of the room to match the current use will enhance the function of the space and the efficiency of the employees.	\$ 0	\$ 0	\$ 0	\$ 360,000	\$ 0	\$ 0	\$ 360,000

RAIL STATIONS & INFRASTRUCTURE

Capital Programs	Concrete and ADA Tactile Replacement @ Southeast Corridor	Southeast Rail Line	On the Southeast Corridor, project is to remove existing tactile strip and concrete substrate, install new poured in place concrete and mechanically fastened ADA approved tactile strips. Remove and replace damaged 6" concrete curb face as needed. Existing ADA tactile strips have become brittle and "popping" loose from the concrete. They are a tripping hazard to the visually impaired and the general public.	\$ 0	\$ 0	\$ 0	\$ 1,026,200	\$ 1,026,200	\$ 0	\$ 2,052,400
Capital Programs	Concrete and ADA Tactile Replacement @ Southwest Corridor	Southwest Rail Line	Remove existing tactile strip and concrete substrate, install new poured in place concrete and mechanically fastened ADA approved tactile strips. Remove and replace damaged 6" concrete curb face as needed. Existing ADA tactile strips have become brittle and "popping" loose from the concrete. They are a tripping hazard to the visually impaired and the general public.	\$ 0	\$ 0	\$ 0	\$ 513,100	\$ 513,100	\$ 0	\$ 1,026,200

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OPERATING & MAINTENANCE PROJECTS

Requesting Department	Title	Location	Project Description	O&M Costs	Total O&M Costs					
				2019	2020	2021	2022	2023	2024	
Rail Operations	7 FTE: LR (3 MOW, 1 rail laborer, 3 field supervisors) *	Districtwide	Over the last several years, the rail system has grown significantly. As the rail system grows so does the need for additional staff to maintain safe operations and provide timely and reliable service to our customer base. With the growth, we are requesting 7 new positions, to include 3 Signal Traction Power Maintainers, 1 Rail Laborer, and 3 LRT Field Supervisors. Rail Ops is responsible for 5 separate corridors including West, Downtown, East, Southeast and Southwest. With the current staffing level, it is difficult to support and provide a timely response for each corridor. The lack of coverage has a direct impact on our response times to incidents such as mechanical failures, passenger accidents, requested operator assistance, etc. As we move forward, it is imperative to have the correct number of personnel in a position where they can assist/respond when needed to avoid major delays and maintain the safety of our alignment. Our headcount has not kept pace and does not account for the fact that our infrastructure is aging and requires continuous maintenance/replacement.	\$ 432,270	\$ 432,270	\$ 432,270	\$ 432,270	\$ 432,270	\$ 432,270	\$ 2,593,620
RAIL MAINTENANCE FACILITIES										
Capital Programs	Site Drainage Improvement - Zee Building and Mariposa	Mariposa Light Rail Division	The drainage issue is occurring at the loading dock where there has been a settling of the slab and upheaval of the drainage pipe which has resulted in the storm water not being able to have a negative slope back to the main storm drainage pipe. Water is pooling in the vicinity (up to 3 feet at times) and in the winter it is causing ice buildup at the loading dock which makes this issue also safety related.	\$ 431,000	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 431,000
Rail Operations	Mezzanine Addition (2nd Floor) for Operator Training @ Elati	Elati Light Rail Division	Project is to add a second floor mezzanine at the Elati Light Rail facility for training of Rail Operations personnel. We are currently renting a double wide trailer used for operator training purposes with no running water or adequate relief facilities. Utilizing the unused space on the second floor of the Elati facility will eliminate the need for construction of a separate building as was previously considered. It will also allow the project to be completed in a more timely manner.	\$ 0	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 75,000
DISTRICT-WIDE										
Capital Programs	Ped Bridge & Tunnel Inspections - Biennial *	Districtwide	Request is for funding of biennial pedestrian bridge and tunnel inspections throughout the District. Every other year we need to perform these inspections that increase our funding needs by \$100K over the annual allocation in the operating budget.	\$ 0	\$ 100,000	\$ 0	\$ 100,000	\$ 0	\$ 100,000	\$ 300,000
Capital Programs	Systems Engineering Standard Drawings	Districtwide	Using details of systems components from existing projects, develop a set of standard drawings for OCS, Communications, Traction Power, Systemwide Electrical, Signals, Stray Current, and Ticket Vending. We do not currently have a set of standard drawings for systems engineering. This leads to redundant loop of continual re-doing of the same drawings to accommodate requests from engineering or developers.	\$ 300,000	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 300,000

EXHIBIT III
Regional Transportation District
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OPERATING & MAINTENANCE PROJECTS

Requesting Department	Title	Location	Project Description	O&M Costs	O&M Costs	Total O&M Costs				
				2019	2020	2021	2022	2023	2024	
Capital Programs	UNCC Memberships	Districtwide	Request is for funding to join Utility Notification Center of Colorado. Contractors that are going to excavate for any type project must call UNCC to request utility locates in the area of their excavation. All members will get notified to locate their utilities. RTD has many utilities across the district at bus parking areas, light rail lines and stations as well as RTD owned facilities. It is required by law to be a member and in RTD's best interest to prevent expensive repairs to possible damage to RTD utilities as well as the down time it would cause.	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 60,000
Communications	FlexPass Program	Blake Street Office	RTD offers to its Riders a versatile online payment system called FlexPass. The FlexPass program helps move people by providing a fiscally sustainable program for RTD as well as to employees of participating employers, and it helps contribute to overall customer satisfaction. The program's flexible nature enables employees to choose their service level, vary passes from month-to-month, and enter or leave the program at any time. Plus, it offers incentives for employers and employees to participate including a pre-tax option. The program accounts for approximately \$4.5 million in annual revenue and it continues to experience growth each year. In March 2010, RTD contracted with 360Media in Englewood, CO to provide and administer an eCommerce website to provide services to FlexPass business customers and their employees. The term of the agreement was for two (2) contract years and three (3) one (1) year options. In 2014, RTD exercised the final option to retain the services of 360Media. It was envisioned that this eCommerce website will be replaced by RTD's SmartMedia system and that this function will be brought in-house in the near future. Unfortunately, this solution is not currently budgeted for or in the immediate Smart Card plans for implementation. It will most likely be discussed in 2020. Historically this program was funded through a Smart Card line item which is no longer available.	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 255,000	\$ 0	\$ 1,255,000
Communications	On-Vehicle Advertising Repairs	Blake Street Office	Request is for an increase for processing repairs to on-vehicle advertising direct application advertisements. It is the intent of this project to create a single line item for repairs to direct app advertisements in order to streamline the processing and payment of invoices associated with these repairs. Currently, there is a multi-stream process to request, track, process invoices, track repair and process payments for these repairs. We are anticipating an increase to this O&M expense in the coming years due to the anticipated increase in light rail vehicles to service the light rail expansions.	\$ 25,000	\$ 25,000	\$ 40,000	\$ 40,000	\$ 50,000	\$ 75,000	\$ 255,000

EXHIBIT III
Regional Transportation District
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OPERATING & MAINTENANCE PROJECTS

Requesting Department	Title	Location	Project Description	O&M Costs 2019	O&M Costs 2020	O&M Costs 2021	O&M Costs 2022	O&M Costs 2023	O&M Costs 2024	Total O&M Costs
INFORMATION TECHNOLOGY, COMPUTER EQUIPMENT FOR OPERATIONS										
Communications	Rider Alert System	Blake Street Office	After further analysis, it has been determined that the project will require \$225,000 in Operating and Maintenance Costs rather than the approved \$75,000 in on-going Operating and Maintenance. The additional funds are necessary because the cost of the product is higher than we originally scoped. In addition, it has come to light that there is a need for a new email service and text messaging provider in order to send out the customized, targeted messages to riders. We are resubmitting this request to ask for additional Operating and Maintenance funds to maintain and build upon the product going forward. Communications is looking to implement a Rider Alert System in order to communicate up-to-the-minute service alerts for our riders in timely manner. The system will include a web-based interface that allows staff to create and manage the thousands of service alerts that are sent out each year. The Alerts System will be intuitive and fast to use, allowing simple alerts to be created in seconds. At the same time, the system will offer fine grained control over selecting the specific route, branch, trip, or stop an alert applies to, when an alert is in effect, and by what channels (like emails, text messages, electronic signs, agency website, General Transit Feed Specification real-time feeds and third party apps) the alerts should be disseminated. The system will use templates to automatically generate appropriate messages for all the dissemination channels.	\$ 0	\$ 225,000	\$ 225,000	\$ 225,000	\$ 225,000	\$ 225,000	\$ 1,125,000
General Counsel	Enterprise Content Management *	Districtwide	This project will implement a District-wide comprehensive Enterprise Content Management (ECM) solution to consolidate identified existing systems that create, capture or store content at RTD to create a single point of access. The project scope will include the development of policies, procedures, taxonomy and metadata for the consistent identification, use, maintenance, retrieval, retention, and destruction of data. The project also will include identification of personnel and tools required to implement the policies and procedures, implementation of the system, and the development of training and audit tools to support the ongoing utilization of the system. The current project cost estimate beyond the approved scope for IQBG assumes that RTD will own and maintain the hardware and software in-house. As part of its scope, IQBG will recommend a path forward for procurement of ECM tools, which could include externally hosted systems or software-as-a-service (SaaS) systems instead of in-house tools. If a hosted or SaaS system is selected, the cost structure of the project and future staffing levels will change.	\$ 500,000	\$ 200,000	\$ 200,000	\$ 1,534,500	\$ 684,500	\$ 716,000	\$ 3,835,000
General Counsel	Law Practice Management Integrity Systems	Blake Street Office	The proposed project would allow the Legal Services division ("RTD Law"), which functions as RTD's in-house law firm, to come into compliance with its legal and ethical obligations. There are three components: (1) secure management and sharing of legal records along with case management of those legal matters; (2) docketing and calendaring of court-mandated deadlines; and (3) collection, review and production of electronically stored information ("ESI") for purposes of executing and enforcing legal holds and producing documents in litigation and in response to other requests.	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 300,000

EXHIBIT III
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OPERATING & MAINTENANCE PROJECTS

Requesting Department	Title	Location	Project Description	O&M Costs 2019	O&M Costs 2020	O&M Costs 2021	O&M Costs 2022	O&M Costs 2023	O&M Costs 2024	Total O&M Costs
Information Technology	Smart Media Technology (Smart Card) Infrastructure Upgrade	Districtwide	Smart Media Technology System has been operational since January 2013. Since going live, the system has not received a refresh of the server and database operating system. A system infrastructure upgrade, for 50 servers, is required to maintain PCI Compliance.	\$ 0	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000	\$ 300,000
Information Technology	Cybersecurity Assessment, Mitigation, and Monitoring Services and Equipment *	Civic Center Plaza (CCP)	Project is to purchase and continually fund a suite of equipment, software and cybersecurity specialist consulting services designed to identify security and compliance gaps in our IT systems, remediate those gaps, and monitor for and respond to suspicious activity in a timely manner. Assessment and mitigation requires specialized skill sets and separation of duties (from RTD systems specialists) which are more cost-effective and operationally effective to outsource at this time; additional equipment and services are needed to achieve compliance and security goals such as network separation, threat monitoring, and asset discovery.	\$ 1,000,000	\$ 750,000	\$ 750,000	\$ 1,525,000	\$ 1,225,000	\$ 800,000	\$ 6,050,000
Information Technology	Enterprise Customer Relationship Management System (CRM) *	Civic Center Plaza (CCP)	TrapezeCOM has been the only customer complaint and commendation tracking tool in use for the past 8 years at RTD and most departments find it difficult to use and limited in its functionality. Various departments/projects like Communications, FasTracks, and the SmartCard system use their own customer issue tracking/management tools to collect customer data and feedback that is not integrated. Reporting from TrapezeCOM is also not conducive to the needs of the District. Customer Care and other departments, including Legal, are unable to pull reports to view a customer's overall interaction/relationship with RTD. In addition, the current system has no analytics capabilities, so we are unable to pull reports to understand complaints about specific routes, lines, stops, etc. The recommendation from some of the studies like the SmartCard Business Process Re-engineering (SMT BPR) and Fare Systems visioning exercise was that RTD procure and implement an Enterprise Level CRM system that would meet the needs of all departments and projects. The first phase (2018) of this project is to implement a contact center customer relationship management tool for servicing customer needs and to replace the TrapezeCOM functionality as a customer service case management need. The future phases (2019 and beyond) will be to integrate and implement the service module to other needs of the RTD district towards marketing/sales.	\$ 350,000	\$ 700,000	\$ 700,000	\$ 700,000	\$ 700,000	\$ 700,000	\$ 3,850,000
Information Technology	Oracle ERP Upgrade and/or Alternative System *	Civic Center Plaza (CCP)	RTD currently is on version 12.1.3 of Oracle E-business suite. This current version of Oracle E-business suite support will end in 2021. RTD would need to upgrade to the next version starting 2019 or start looking at alternatives in 2018. Project is to implement the future of business applications such as finance, HR, procurement, recruitment, and so on. The project will assess the need to upgrade existing technologies and/or investigate/implement new technologies for these business functions. The project will analyze the need to move/segregate the business functions as necessary in order to upgrade existing application or move to the cloud or SAAS (software as a service) services.	\$ 1,000,000	\$ 1,500,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 6,500,000

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Requesting Department	Title	Location	Project Description	O&M Costs	Total O&M Costs					
				2019	2020	2021	2022	2023	2024	
Information Technology	Oracle Hardware Engineered Systems End of Life Replacement *	Civic Center Plaza (CCP)	1) Replace 2 Exadata X2-2 database Servers with 2 Exadata X6-2 servers in 2017 and Replace 1 Exadata X3-2 database Server with newer version of Exadata servers available in 2020. The Exadata database servers host the Oracle E-business suite databases (HR/ FINANCE/ PROCUREMENT/ BUDGET/ GRANTS/ PROJECTS, etc.). The Exadata database servers also host the TIES, CAD/AVL/REALTIME and other application databases. All of these business applications will benefit and will be supported on the new Exadata Servers. 2) Replace 2 Exalytics X2-4 analytics Servers with 2 Exalytics X5-4 servers in 2019. SMARTCARD/CADAVL and REALTIME REPORTING needs to be supported on the supported platforms.	\$ 150,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 1,400,000
Information Technology	Traveler Information Systems (Real-Time) Development Support + 1 FTE	Civic Center Plaza (CCP)	Real-Time Passenger Information (RTPI) provides RTD passengers with predictive arrival times for their next bus. IT and Marketing are working toward providing predictive arrival times for buses via three primary delivery systems: 1) General Transit Feed Specification for Real Time or GTFS-RT (which feeds the information to Google Maps and some third party application developers), 2) Passenger Information Display (PID) signs, and 3) the RTD website. Additional funding will be required to implement future phases of this project. This will include planning, design, and development of a third party developer portal that will allow the open developer community to access rich data based on APIs (application programming interface, as opposed to the flat file/GTFS-RT protocol), and build interesting and contextually rich applications for our ridership and trip planning components. Also integration with IVR and RiderAlert data will require additional funding.	\$ 0	\$ 0	\$ 0	\$ 175,000	\$ 175,000	\$ 175,000	\$ 525,000

ADMINISTRATION & ADMINISTRATIVE FACILITIES

Communications	2 FTEs: Digital Customer Relations Expansion (Rider Alerts)	Blake Street Office	RTD's Rider Alert system is being replaced in late 2018/early 2019 with a much more intuitive and robust system that allows for much more detailed and refined alerts to subscribers, including down to a route/block/stop level. With this new system, RTD will be able to communicate information related to dropped trips, detours by impacted stops, disruptions by rail station, etc. Customer Care's Digital Customer Relations Liaison team will assume responsibility for increased outbound communication to passengers, and will also assume responsibility from Bus Ops Dispatch on certain detours and planned disruptions. With the addition of two FTE, the team will now be at six and will need a Lead/Supervisor rather than reporting directly to the Senior Manager of Customer Care.	\$ 152,532	\$ 172,195	\$ 172,195	\$ 172,195	\$ 172,195	\$ 172,195	\$ 1,013,507
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2019-2024 Strategic Budget Plan
OPERATING & MAINTENANCE PROJECTS

Requesting Department	Title	Location	Project Description	O&M Costs 2019	O&M Costs 2020	O&M Costs 2021	O&M Costs 2022	O&M Costs 2023	O&M Costs 2024	Total O&M Costs
Communications	1 FTE: Marketing / Events Coordinator	Blake Street Office	Request is for one (1) new FTE position in Marketing to manage agency-wide promotional item purchases, inventory and brand consistency. RTD can improve the management of promotional items by developing a centralized promotional (promo) item procurement program. This program would address promo item needs for all RTD departments; manage agency purchases of promo items; manage vendor selection in conjunction with RTD Procurement; develop an ordering and fulfillment program for all departments; manage an inventory of surplus promotional items and provide an efficient and cost-effective promo item program for the entire agency.	\$ 0	\$ 0	\$ 0	\$ 81,148	\$ 81,148	\$ 81,148	\$ 243,444
Executive Office	1 FTE: Internal Auditor (incremental cost)	Blake Street Office	In an age where organizations across markets and industries depend heavily on technology to operate successfully, the IT Auditor plays an increasingly important role in helping to manage and respond to risks. Information Technology (IT) Audit was introduced in 2015 to ensure that RTD was prepared for the current global scenario of Information Technology. IT Audit was introduced with Board of Directors support, but the resources that accommodate the successful introduction and ensure efficient and effective work are still needed. This request will ensure that RTD Audit has the resources needed to provide assurance on the protection of assets, data integrity, system reliability and information security as required by the Board of Directors.	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 180,000
Finance & Administration	1 FTE: Union Accounting Clerk	District Shops - Operations Center	The project will add one (1) FTE union hourly employee for the purpose of supporting the growth of the Finance department's responsibilities resulting from the SmartCard contract termination with Celina Inc. The Accounting department has taken on the additional workload of ECO/College and Stored Value production, quality control, packaging and distribution. The process of personalizing and encoding cards is in excess of 8 hours per day and will continue to grow with introduction of MyRide program.	\$ 47,050	\$ 47,050	\$ 47,050	\$ 47,050	\$ 47,050	\$ 47,050	\$ 282,300
Non-Departmental	Employee Appreciation Event	Districtwide	In 2019, RTD is offering tickets to the employee event for the employee + 3 for a total of 4 tickets plus lunch. Increases after 2020 are attributed to assuming the cost of the venue will go up or having to change venues which will be more expensive.	\$ 110,000	\$ 110,000	\$ 125,000	\$ 125,000	\$ 150,000	\$ 150,000	\$ 770,000
SECURITY										
Safety, Security & AM	Armed Security @ DUS Wynkoop Plaza	Denver Union Station Complex	This request is for one armed security officer to be stationed at the Denver Union Station Wynkoop plaza (contracted personnel). This armed security officer will be stationed at the plaza and will patrol, respond to incidents, and provide customer service to our patrons. This project will be for 1 armed security officer 24 hours a day 7 days a week totaling 168 hours per week.	\$ 0	\$ 0	\$ 0	\$ 283,920	\$ 283,920	\$ 283,920	\$ 851,760

EXHIBIT III
Regional Transportation District
2019-2024 Strategic Budget Plan
OPERATING & MAINTENANCE PROJECTS

Requesting Department	Title	Location	Project Description	O&M Costs 2019	O&M Costs 2020	O&M Costs 2021	O&M Costs 2022	O&M Costs 2023	O&M Costs 2024	Total O&M Costs
Safety, Security & AM	Security Command Center - University Project	Districtwide	RTD currently owns a vacant 10,000 square foot facility which is located at the University Station under the existing parking structure. This request is to relocate the existing Security Command Center Operations to this location. We feel this space is ideal for our needs for many reasons, including its size, which is more than 4 times what is currently being used. This space will also provide for the Map 21 recommendation of an (EOC) Emergency Operations Center for the District. The facility will be designed primarily as a Security Command Center, but also function as an EOC (Emergency Operating Center). This design would greatly benefit the District's operating divisions by creating a facility that could support and operate Light Rail Control, Bus Dispatch and the IT Division during critical incidents. It would serve as a redundant common operating facility in emergencies for all disciplines while under an EOC activation. The design will allow for redundant face to face operations, should a large scale emergency occur. The facility would also provide a large server room, designed to support both security operations and corporate IT redundancies. The existing Security Command Center would be re-purposed into the Transit Police Division as a "Field Operations" building to consolidate services between the Transit Police Division, Allied Universal Security and the Denver Police Department contracted police. The current view room would be converted into a large conference and training room. The current server room would be surrendered to the IT Division for continued use to support security and RTD corporate networks.	\$ 0	\$ 0	\$ 0	\$ 0	\$ 120,000	\$ 120,000	\$ 240,000
Safety, Security & AM	Security Increase on LR Vehicles *	Districtwide	RTD currently provides armed uniform security officers along our light rail corridors, facilities, and system wide. CR has a security officer on every train. These officers provide security response, patrol, and conduct fare inspection for our rail system, vehicles, and facilities. RTD Security officers are instrumental in the operation of our department as well as provide services to keep our employees, patrons, and public safe while on RTD. This request will provide for a staged increased such that every LRV will have security presence.	\$ 501,037	\$ 501,037	\$ 501,037	\$ 1,002,074	\$ 1,002,074	\$ 1,002,074	\$ 4,509,333
TOTAL				\$ 7,458,029	\$ 7,417,552	\$ 6,212,552	\$ 11,425,857	\$ 9,087,457	\$ 6,874,657	\$ 48,476,104
* to be allocated to FasTracks at 30%				(1,179,992)	(1,329,992)	(1,149,992)	(1,963,153)	(1,588,153)	(1,500,103)	(8,711,385)
TOTAL net of FasTracks allocation				\$ 6,278,037	\$ 6,087,560	\$ 5,062,560	\$ 9,462,704	\$ 7,499,304	\$ 5,374,554	\$ 39,764,719

Attachment 4

**Regional Transportation District
Debt Service Schedule**

	Secured by Sales and Use Taxes					Appropriation Obligations				Total Debt Service
	Base System Bonds	FasTracks Bonds	TIFIA Loan	TABOR Portion of P3	Total	COPs and Lease Purchases	Non-TABOR Portion of P3	Total		
2019	\$ 19,980,341	\$ 84,397,000	\$ -	\$ 45,388,150	\$ 149,765,491	\$ 104,144,264	\$ 48,746,434	\$ 152,890,698	\$ 302,656,189	
2020	19,982,061	84,398,500	-	45,813,411	150,193,972	111,339,154	54,366,228	165,705,382	315,899,354	
2021	14,495,579	84,399,750	10,734,974	46,263,740	155,894,043	111,247,215	42,929,281	154,176,496	310,070,539	
2022	9,583,950	84,455,500	10,734,974	44,618,361	149,392,785	107,520,119	42,976,608	150,496,727	299,889,512	
2023	9,582,400	104,202,750	10,734,974	45,790,286	170,310,410	106,888,200	44,375,139	151,263,339	321,573,749	
2024	9,588,275	104,206,850	10,734,973	47,210,467	171,740,565	106,870,275	52,916,967	159,787,242	331,527,807	
2025	-	104,207,950	19,330,708	49,812,129	173,350,787	106,864,150	68,941,545	175,805,695	349,156,482	
2026	-	125,212,950	19,327,608	44,523,988	189,064,546	90,527,375	45,473,216	136,000,591	325,065,137	
2027	-	162,311,400	11,151,341	45,475,113	218,937,854	82,652,409	43,727,773	126,380,182	345,318,036	
2028	-	161,266,150	11,151,342	46,675,612	219,093,104	61,303,672	46,825,191	108,128,863	327,221,967	
2029	-	150,417,650	11,151,342	48,154,170	209,723,162	61,305,272	52,648,306	113,953,578	323,676,740	
2030	-	125,062,900	11,151,340	61,422,786	197,637,026	61,303,241	75,692,613	136,995,854	334,632,880	
2031	-	164,805,925	11,151,341	49,261,307	225,218,573	61,308,619	45,285,059	106,593,678	331,812,251	
2032	-	160,046,675	11,151,342	55,464,975	226,662,992	61,271,234	42,872,897	104,144,131	330,807,123	
2033	-	149,261,000	11,151,341	67,957,415	228,369,756	61,274,436	43,272,245	104,546,681	332,916,437	
2034	-	120,540,725	11,151,343	84,463,655	216,155,723	61,288,973	53,004,179	114,293,152	330,448,875	
2035	-	118,499,475	11,151,341	97,323,155	226,973,971	61,295,460	79,102,485	140,397,945	367,371,916	
2036	-	167,039,100	11,151,341	43,848,307	222,038,748	48,910,427	52,419,271	101,329,698	323,368,446	
2037	-	156,018,363	11,151,341	49,294,601	216,464,305	48,904,955	48,306,955	97,211,910	313,676,215	
2038	-	85,559,000	11,151,341	57,225,685	153,936,026	48,915,538	50,119,391	99,034,929	252,970,955	
2039	-	47,057,500	49,717,913	73,605,255	170,380,668	48,920,552	57,871,536	106,792,088	277,172,756	
2040	-	47,003,500	49,717,915	82,267,193	178,988,608	48,921,919	73,447,043	122,368,962	301,357,570	
2041	-	41,003,750	49,717,914	77,751,457	168,473,121	32,515,550	53,273,799	85,789,349	254,262,470	
2042	-	41,003,000	49,717,915	13,005,523	103,726,438	32,511,075	45,831,896	78,342,971	182,069,409	
2043	-	41,003,500	49,717,914	15,089,879	105,811,293	32,515,450	66,801,535	99,316,985	205,128,278	
2044	-	41,003,000	49,717,914	25,134,047	115,854,961	32,515,325	63,196,154	95,711,479	211,566,440	
2045	-	41,004,250	49,717,915	-	90,722,165	-	-	-	90,722,165	
2046	-	94,224,750	-	-	94,224,750	-	-	-	94,224,750	
2047	-	70,831,823	-	-	70,831,823	-	-	-	70,831,823	
2048	-	70,920,223	-	-	70,920,223	-	-	-	70,920,223	
2049	-	71,015,803	-	-	71,015,803	-	-	-	71,015,803	
2050	-	71,116,584	-	-	71,116,584	-	-	-	71,116,584	
	\$ 83,212,606	\$ 3,173,497,296	\$ 563,439,707	\$ 1,362,840,667	\$ 5,182,990,276	\$ 1,793,034,859	\$ 1,394,423,746	\$ 3,187,458,605	\$ 8,370,448,881	

ATTACH C

To: Chair and Members of the Board of Directors

From: Douglas W. Rex, Executive Director
303-480-6701 or drex@drcog.org

Meeting Date	Agenda Category	Agenda Item #
September 4, 2019	Discussion	6

SUBJECT

Reimagine RTD study.

PROPOSED ACTION/RECOMMENDATIONS

N/A

ACTION BY OTHERS

N/A

SUMMARY

RTD is embarking on a two-year endeavor (Reimagine RTD) to better understand and forecast current and future public transportation needs of the Denver metro region. This effort includes considering a comprehensive redesign of its service, programs, and funding to address future needs and enhance customer experience. RTD will examine its bus and rail services; future projects, including the remaining FasTracks projects; Mobility as a Service and other technology integration; and new funding options to provide needed mobility in the Denver region.

PREVIOUS DISCUSSIONS/ACTIONS

N/A

PROPOSED MOTION

N/A

ATTACHMENTS

1. RTD presentation

ADDITIONAL INFORMATION

If you need additional information, please contact Douglas W. Rex, Executive Director, at 303-480-6701 or drex@drcog.org; or Matthew Helfant, Senior Planner, Long Range Transportation Planning, at 303-480-6731 or mhelfant@drcog.org; or Dave Genova, RTD General Manager, at 303-299-2448 or david.genova@rtd-denver.com.



Reimagine RTD

The Process to Transform Transportation Across
the Denver Metro Region

DRCOG Board Work Session
September 4, 2019



Transportation Transformation



- As transportation evolves, we must evolve with it
- And we must think differently
- RTD has made a lot of progress over the past 50 years
- But there's still a lot more to do
- As the Denver metro region's mobility integrator, innovator and instigator, RTD ushers in a new era:

Transportation  **Transformation**
FROM TRANSIT AGENCY TO MOBILITY INTEGRATOR



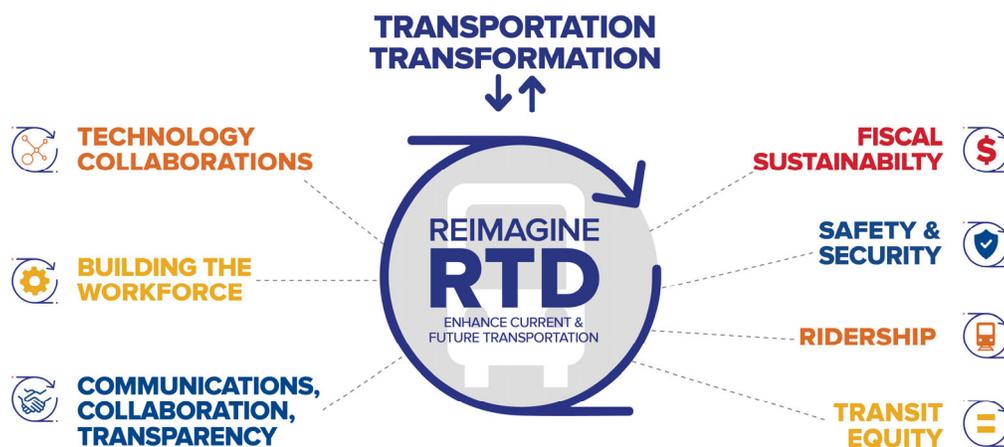
What is T2?



- **T2** is RTD’s overarching, ongoing initiative to address the changing landscape of transportation to provide alternatives, integrated transit options, and better connect people to where they want/need to go
- **T2** aims to forge short- and long-term solutions to move people safely, conveniently and efficiently
- **T2** has many components as the agency takes a holistic look at addressing the transportation of tomorrow

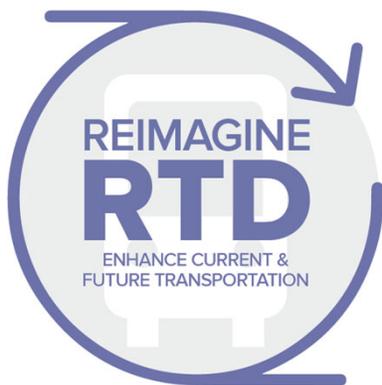


The T2 Initiative





Reimagine RTD



- **Reimagine RTD** is a 2-year open, transparent project to reimagine and redesign mobility of the future
- **Reimagine RTD** is a comprehensive redesign of RTD's service, programs and funding opportunities to address growing demands to enhance the customer experience
- **Reimagine RTD** will examine RTD's bus and rail service, future projects including the remaining FasTracks projects, Mobility as a Service and other technology integration, and new funding streams to implement the new mobility of the region

5



Reimagine RTD



- **Reimagine RTD** will listen and learn from “the people” about their mobility needs through a robust public engagement process



- **Reimagine RTD** will involve employee engagement and workforce development

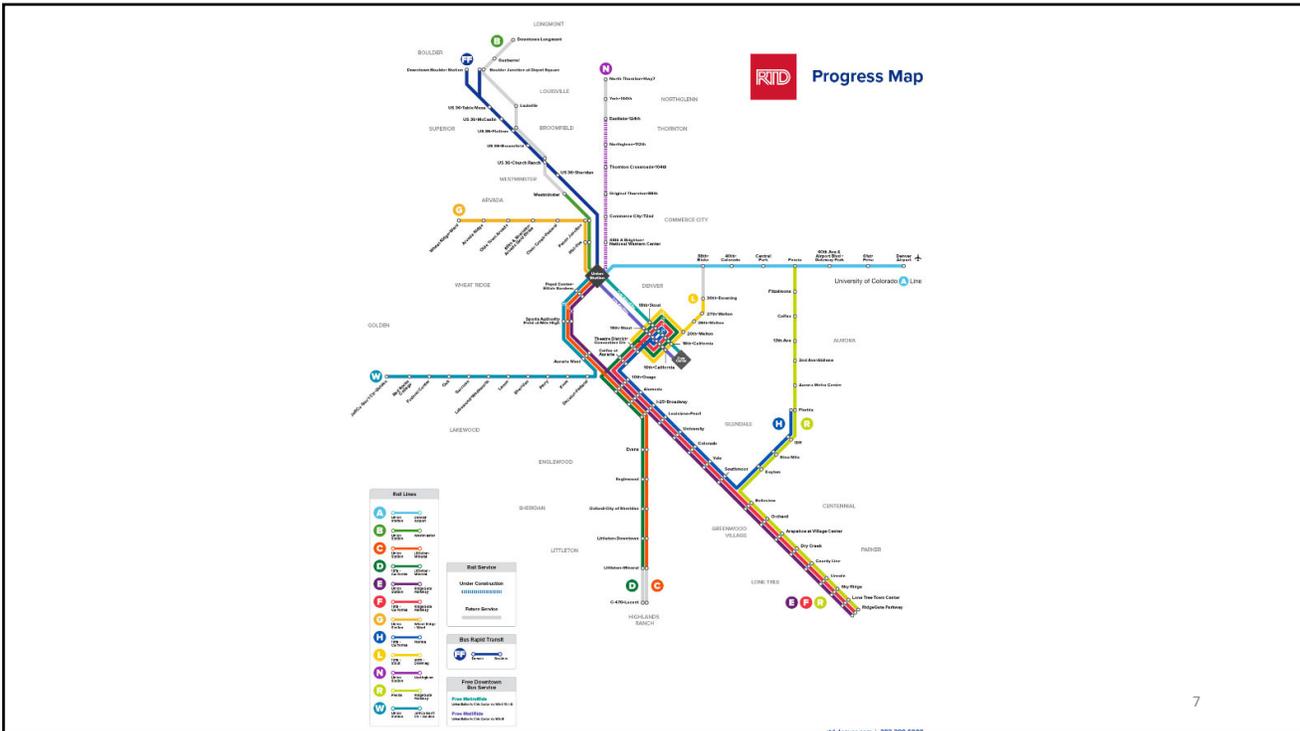


- **Reimagine RTD** will build on regional partnerships and provide an open dialogue on how the region can work together to integrate new mobility services with traditional transportation options



- **Reimagine RTD** will result in a comprehensive, forward-thinking plan that will better connect people to the places they want to go and provide better access to opportunities

6



7



Reimagine RTD



Scope

1. Stakeholder & Community Engagement
2. Fiscal and Financial Sustainability
3. Comprehensive Assessment of RTD Services
4. Mobility Plan for the Future

Schedule

2019

- Initiate project (Q3)
- Initiate stakeholder engagement (Q3)

2020

- Complete and adopt a System Optimization Plan by end of the year (focus on short term bus and rail service optimization)
- Complete significant progress on Mobility Plan for the Future
- Continue engagement process

2021

- Complete and adopt Mobility Plan for Future
- Continue engagement process
- Ongoing engagement and monitoring of plan implementation



8

ATTACH D

To: Chair and Members of the Board of Directors

From: Douglas W. Rex, Executive Director
303-480-6701 or drex@drcog.org

Meeting Date	Agenda Category	Agenda Item #
September 4, 2019	Discussion	7

SUBJECT

Update on Front Range Passenger Rail planning process.

PROPOSED ACTION/RECOMMENDATIONS

N/A

ACTION BY OTHERS

N/A

SUMMARY

SB 17-153 reconstituted the Southwest Chief Commission to establish the [Southwest Chief and Front Range Passenger Rail Commission](#) (“Commission”) in 2017. The purpose of the Commission is twofold:

- Continue to oversee the preservation and expansion of Amtrak’s Southwest Chief rail service in southeastern Colorado, and
- Facilitate the development and operation of a Front Range passenger rail system along the I-25 corridor from Fort Collins to Trinidad.

The Commission includes members from the previous Southwest Chief Commission, representatives from RTD, BNSF and Union Pacific Railroads, and the four Front Range MPOs, including DRCOG. Non-voting members include staff from CDOT, Amtrak, and Wyoming.

SB 17-153 also charged the Commission with reporting to the General Assembly by December 1, 2017 regarding development of a Front Range Passenger Rail System. Accordingly, the Commission prepared and submitted [materials](#) that discuss the key issues, tasks, initial costs and timelines the Commission believes are needed to define and advance Front Range passenger rail toward implementation.

In response, the General Assembly provided funding to the Commission in 2018 through SB 18-001 to initiate a planning process to study Front Range passenger rail and to hire a Project Director.

The Commission recently hired the consulting firm HDR to assist the Commission and CDOT in conducting a federally compliant Service Development Plan and Environmental Impact Statement (SDP/EIS) to [study Front Range Passenger Rail](#). The SDP/EIS will be conducted together using a “blended team” approach that combines the resources of the Commission, CDOT staff, and the consultant team.

The SDP/EIS will have significant technical, stakeholder, and public engagement tasks focusing on desired and feasible passenger rail service along the Front Range from Fort Collins to Pueblo/Trinidad. This process will address multiple topics, from travel markets and service/operating characteristics to alignment, technology, funding, and

operator/governance options. One of the first decision points is a potential legislative and/or ballot measure in 2020.

The Commission's Project Director, Randy Grauberger, will facilitate a conversation to seek input at the September 4 meeting.

PREVIOUS DISCUSSIONS/ACTIONS

N/A

PROPOSED MOTION

N/A

ATTACHMENTS

1. Rail Commission presentation

ADDITIONAL INFORMATION

If you need additional information, please contact Douglas W. Rex, Executive Director, at 303-480-6701 or drex@drcog.org; or Jacob Riger, Manager, Long Range Transportation Planning Manager, at 303-480-6751 or jriger@drcog.org, or Randy Grauberger, Rail Commission Project Director, at 303-512-4005, or Randall.Grauberger@state.co.us.



1



SOUTHWEST CHIEF & FRONT RANGE
PASSENGER RAIL COMMISSION

Southwest Chief and Front Range Passenger Rail Commission

- **Legislature's Senate Bill 17 – 153 created the Commission (effective July 1, 2017). It replaced the previous Southwest Chief Commission which had existed since 2014.**
- **Housed under CDOT; similar to HPTE and Bridge Enterprise in terms of independence reporting to a Board/Commission other than the Transportation Commission.**
- **11 voting Commissioners**
 - Five appointed by the Governor: two Class I railroad representatives (BNSF and UP), two advocates for passenger rail, one resident of Huerfano, Las Animas, Otero, Prowers or Pueblo counties that advocates for passenger rail.
 - One each from the four Front Range MPOs and one from South Central Council of Governments
 - One from RTD
- **3 non-voting members**
 - CDOT
 - Amtrak
 - Cheyenne, Wyoming

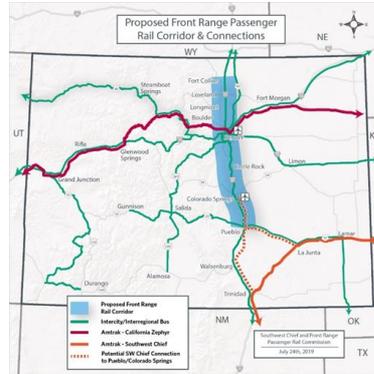
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Southwest Chief and Front Range Passenger Rail Commission

- **Commission Responsibilities:**

- Work to preserve Amtrak's Southwest Chief service across southeast Colorado.
- Consider re-routing the Southwest Chief service between La Junta and Trinidad by way of Pueblo and Colorado Springs to better serve southern Colorado and pursue possible Amtrak Southwest Chief service extension into Pueblo and Colorado Springs from La Junta.
- Facilitate the development of Front Range Passenger Rail service.



3



Consultant Selection

- HDR Consultant Team has been selected.
- Team includes consultants from:
 - AECOM—SDP Lead, Funding, Finance, and Economic Analysis
 - CDR Associates—Public Outreach, Engagement, and Consensus Building
 - Blueprint Strategies—Governance
 - Felsburg Holt & Ullevig—Operations Planning Support
 - Peak Consulting Group, LLC—Environmental Planning, Compliance, and Mitigations
 - Triunity—Technology Integration and Phasing Support



4



Passenger Rail Service Development Plan

- **Completion projected for mid-2020.**
- **Review past planning (Colorado and peer states) to ensure alternatives align with the Front Range's vision.**
- **Develop a business, operating, and capital plan that garners a high level of public support.**
- **Demonstrate operational feasibility, financial feasibility, and the merit of the proposed service.**



5



Environmental Impact Statement

- **NEPA anticipated to initiate in spring 2020.**
- **SDP and Stakeholder Engagement activities will be coordinated to meet pre-NEPA milestones.**
- **Building on the pre-NEPA activities (draft purpose and need, range of alternatives, preliminary preferred alternative, environmental impacts, permitting strategy) to streamline the scoping process.**
- **Prepare draft EIS using proven streamlining techniques and One Federal Decision Processes.**



6



Stakeholder Engagement

Project Management Team (PMT)

Function: Management and project-level decision making

Members: SWC&FRPR Commission representatives, CDOT, federal agencies (as needed), Consultants

Frequency: Bi-weekly

Technical Working Group (operating as part of PMT)

Function: Integrate various disciplines and perspectives of agencies into the study

Members: SWC&FRPR Commission representatives, CDOT, Consultants, Technical stakeholders

Frequency: Bi-weekly or as needed

7



Stakeholder Engagement

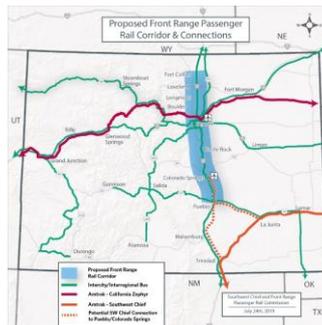
Segment Stakeholder Coalitions (North, Central, South)

Function: Provide project information to and obtain feedback at the local level

Members: Local stakeholders, consultants

Responsibilities: Share project information with segment communities; Gather community input and share with Corridor Stakeholder Coalition

Frequency: Quarterly – First meeting tentatively Oct 2019



8



SOUTHWEST CHIEF & FRONT RANGE
PASSENGER RAIL COMMISSION

Stakeholder Engagement

Corridor Stakeholder Coalition

- **Function:** Create stakeholder-based recommendations for cohesive, corridor-wide project decisions
- **Members:** Segment Stakeholder Coalition representatives, consultants
- **Frequency:** Quarterly - First meeting tentatively Nov 2019

Project Leadership Committee

- **Function:** Resolution of issues; contact for media; policy-level agency liaison
- **Members:** SWC&FRPR Commission, CDOT, Governor's Office, Lead Federal Agency, Consultants
- **Frequency:** Major milestones



Rail Industry Roundtable

- **Function:** Provide rail industry-focused input on project decisions
- **Members:** SWC&FRPR Commission railroad representatives, Consultants
- **Frequency:** Mid project or as needed

9



SOUTHWEST CHIEF & FRONT RANGE
PASSENGER RAIL COMMISSION

Legislative Options

- Commissioners and Commission staff are beginning to discuss possible legislative options for the January 2020 Legislative Session.
- Potential legislative options include measures for governance and future funding options.
- Commission, CDOT and consultant staff continue to identify possible options, including pros/cons, regarding districting and funding.



10



Upcoming Activities

- Southwest Chief and Front Range Passenger Rail Commission
 - Commission Meeting – September 13th
- Initiation of Public Involvement and Stakeholder Engagement Activities
- Initiation of SDP and EIS study



11



Front Range Passenger Rail

<https://frontrangerail.metroquest.com>

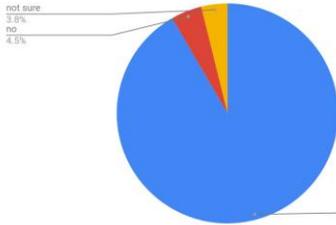
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Interim Results

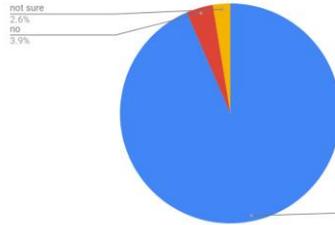
Over 3400 responses (8/22/19)

Do you support establishing Front Range Passenger Rail service between Fort Collins and Pueblo



yes	3055
no	150
not sure	128

Do you believe passenger rail service could help address transportation needs along the Front Range?



yes	3176
No	133
not sure	87

13

Questions?



SOUTHWEST CHIEF & FRONT RANGE
PASSENGER RAIL COMMISSION

Randy Grauberger, Project Director
Southwest Chief & and Front Range Passenger Rail
Commission
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303-512-4005

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