

Boulder Transit Service Delivery Study Phase 2



Prepared for:



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Boulder Transit Service Delivery Study Phase 2

Final Report

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Introduction

PROJECT PURPOSE AND BACKGROUND

The City of Boulder’s 2014 Transportation Master Plan (TMP) describes a “Renewed Vision for Transit” (RVT) that would expand Boulder’s Community Transit Network (CTN – local transit services within the City), as well as regional transit connections. The challenge facing the City in implementing this Vision is that the current transit service model – which relies heavily on the Regional Transportation District (RTD) for both local and regional transit service – will be severely constrained by RTD’s limited resources and competing regional priorities.

For these reasons, the City is studying potential alternatives for a transit service delivery model that could facilitate achievement of its transit and TMP goals. This Study is intended to answer two questions:

1. To what extent can the current service delivery structure deliver the Renewed Vision for Transit and what is the nature and extent of the remaining challenges and service gaps?
2. What are the potential alternative “governance models” (funding, operating, management and partnership structures) that would optimize opportunities to implement the City’s Renewed Vision for Transit?

Moving forward into implementation will require information provided by this study including:

- assessment of estimated **costs, revenues and outcomes** associated with potential service delivery structures (governance models);
- evaluation of the **implementation feasibility** of potential governance models, taking into account Colorado law, the RTD franchise, and the potential for necessary intergovernmental cooperation among the City’s partners, including state, regional and local entities;

- identification and conceptual description of a **proposed transit service delivery governance model** that fulfills the transit vision and TMP goals; and,
- **documentation of the analysis and recommendations** in a strategic report and associated presentation materials for use by staff and stakeholders.

To guide this Study, the City appointed:

- Policy Steering Committee with representation from City Council, Boulder County Board of Commissioners, and CU-Boulder; and
- Technical Steering Committee with membership from City of Boulder, Boulder County, and CU-Boulder staff.

The Policy and Steering Committees each met five times between June 2017 and September 2018 reviewing: the Study purpose and scope (Meeting #1); goals, objectives and performance measures for use in guiding the Study (Meeting #2); potential governance models for future transit service delivery (Meeting #3); the evaluation of governance models (Meeting #4); and the Draft Report (Meeting #5).

Goals, Objectives, and Performance Measures

DEVELOPMENT METHODOLOGY

This section provides goals, objectives and performance measures (GOPM) in three categories:

- I. **Governance** Goals, Objectives, and Performance Measures
- II. **Project** Goal and Objectives
- III. **Service** Goals, Objectives, and Performance Measures

The Governance GOPM were used to guide a comparative evaluation of alternative governance and organizational models for implementation of Boulder’s transit plan. Service GOPM were designed to ensure that, under all models, the vision and direction established in the City’s Transportation Master Plan and Transit Modal Plan would be achieved. The Project Goal and Objectives guided conduct of this study.

Guidelines used in preparing the Governance GOPM included:

- Selected performance measures should relate to specific objectives;
- Performance measures must allow estimating and forecasting for each alternative;
- Performance measures must support comparison and evaluation of alternatives;
- The number of performance measures should be short and focused;
- Both quantitative and qualitative performance measures are useful.

The Project Goal and Objectives guided the conduct of this study – transit service delivery planning – and the technical analysis and coordination efforts of the project team.

The Service GOPM are found in the Boulder's 2014 Transit Modal Plan https://www-static.bouldercolorado.gov/docs/Boulder_TMP_Transit_Modal_Plan-1-201601291448.pdf and Appendix B to the Transit Modal Plan.

GOVERNANCE GOALS, OBJECTIVES AND PERFORMANCE MEASURES

Governance goals and objectives are based on adopted plans and documents, including the Boulder Valley Comprehensive Plan, City of Boulder Transportation Master Plan, and the City of Boulder Transit Modal Plan. Both quantitative [QN] and qualitative [QL] objectives are identified.

Goal 1: Ensure that transit service improvements are strategic and improve Boulder's ability to shape its future.

Objective 1a: Anticipate and account for oncoming technological changes and trends (autonomous vehicles, shared ride mobility, car share, ITS). [QL]

Qualitative Performance Measure: Capability of governance model to incorporate and adapt to technological advances and trends (high – medium – low)

Objective 1b: Ensure that predictability and consistency are designed into any new revenue sources and that each funding program is sustainable and resilient in the face of national and regional economic trends and fluctuations.

Qualitative Performance Measure: Relative predictability and stability of potential new revenue sources available under each governance model (high – medium – low)

Qualitative Performance Measure: Ability to respond to emerging funding opportunities and to adapt to a variety of future revenue sources (high – medium – low)

Objective 1c: Ensure that each governance model can be implemented in a cooperative manner that preserves the City's relationship with RTD.

Qualitative Performance Measure: RTD position on governance model (support - oppose)

Objective 1d: Ensure that the end result of implementation is not a net reduction in annual RTD expenditures and investment in Boulder beyond what otherwise would have occurred.

Quantitative Performance Measure: Annual RTD expenditures attributable to Boulder/Boulder County services (RTD budget allocable to Boulder and Boulder County)

Objective 1e: Ensure continued service integration, efficiency, and convenience to the public in local and regional transit operations.

Qualitative Performance Measure: Capability of governance model to provide integrated service, like fare structures, schedules, etc. (high – medium – low)

Goal 2: Ensure that any governance model proposed to implement the City's transit plans is feasible, equitable, and sustainable.

Objective 2a: Ensure implementation feasibility of the recommended governance model.

Qualitative Performance Measures:

- *Legislation required (yes – no)*
- *Legal questions or issues that cause uncertainty about feasibility (yes – no)*
- *Significant opposition from RTD or other key partners (yes – no)*
- *Service integration challenges and barriers (low – moderate – severe)*
- *Fare integration challenges and barriers (low – moderate – severe)*

Objective 2b: Address labor supply, equipment inventory, and operating environment as potential limitations to implementation of substantially higher levels of transit service.

Qualitative Performance Measure: Extent to which each governance model supports strategies to address scale limitations (high – medium – low)

Objective 2c: Fully identify capital and operating costs, including roadway infrastructure investments required to achieve desired service levels.

Quantitative Performance Measures: Capital cost to implement and annual operating cost

Objective 2d: Address “return on investment” (ROI) for the jurisdictions that would be directly involved in each governance model.

Quantitative Performance Measure: ROI for City of Boulder and for other jurisdictions involved in each governance model.

PROJECT GOAL AND OBJECTIVES

This goal addresses the conduct of this study (transit service implementation planning) and guided the technical analysis and coordination efforts of the project team. These reflect comments, concerns, and guidance offered by the Policy Steering Committee. These GOPM were not used to compare governance models, although they did provide perspective on governance and organizational choices.

Goal 3: Ensure that the transit governance model established to implement the above goals and objectives also preserves and improves relationships among the City of Boulder, RTD, Boulder County, and sister cities.

Objective 3a: Coordinate directly and often with RTD to ensure the agency is aware of the project information as it develops and has an opportunity to comment and advise the planning effort.

Objective 3b: Coordinate directly and often with other governmental entities that have a stake in the outcome of this project.

Objective 3c: Coordinate directly and often with other regional funding initiatives, including Commuting Solutions and the North Front Range.

SERVICE GOALS, OBJECTIVES, AND PERFORMANCE MEASURES

Service goals and objectives were used to ensure that implementation of Boulder’s transit plan will achieve the transit future envisioned in the Boulder Valley Comprehensive Plan, City of Boulder Transportation Master Plan and Transit Modal Plan. These GOPM were used to compare Governance Alternatives and provided additional perspective on governance and organizational choices.

Details on the Service GOPM can be found in Boulder’s Transit Modal Plan and in particular in Appendix B to the Transit Modal Plan, available at this link:

https://www-static.bouldercolorado.gov/docs/Boulder_TMP_Transit_Modal_Plan_APP_B_Transit_Scenario_Analysis-1-201601291658.pdf

The specific performance measures which relate directly to the Governance Alternatives, include the following.

- Annual weekday riders
- Annual operating costs

The potential impacts on annual weekday riders and annual operating costs are addressed in the evaluation of the service scenarios.

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Governance Models

GENERAL GOVERNANCE MODEL CONSIDERATIONS

The evaluation of these alternative approaches to achieving the City’s Transit Vision takes into account several general considerations that affect feasibility and prospects for successful implementation.

Technological Trends

Transportation in the US is changing more rapidly than at any time in recent memory. The rise of private sector ride-hailing services (e.g., Lyft and Uber) and the imminent arrival of semi-autonomous and fully-autonomous vehicles could significantly affect demand for and feasibility of certain types of transit service within just a few years. It will be important to preserve the City’s options for responding to, and perhaps taking advantage of, these trends. For example, fully-autonomous, electric “micro-transit” vehicles are being operated in regular service on limited routes in several US cities and this could be an option for Boulder sooner than is generally realized. More information about these emerging trends is provided in Appendix A.

Historic Capital Investments

The City also has to take into account the complexities of its long-term relationship with RTD and its role as a major “stockholder” within that regional system. Boulder’s citizens have (through taxation, fares, and passes) made a substantial cumulative investment in RTD’s capital assets (physical plant, vehicles, corridors, etc.) that must be reckoned with in any governance model that contemplates replacing some or all of RTD’s services with locally-governed/operated services.

Federally-Designated Recipient

The federal system of support to public transit systems identifies “designated recipients” eligible to receive federal funds through the Urbanized Area Formula (5307) and Bus and Bus Facilities (5339) programs. These formula funds are only

available to designated recipients that are public bodies with legal authority to receive and dispense federal funds. For urbanized areas over 200,000 in population (e.g., the Denver region), funds are apportioned and flow directly to a designated recipient selected locally to apply for and receive these federal funds. In the Denver region that designated recipient is RTD. For areas over 200,000, 5307 and 5339 funds can only be used for capital investments (unless a special exception is granted). For urbanized areas under 200,000 in population, the funds are apportioned to the state for distribution to agencies and 5307 funds can be used for both capital and operations.

These programs are an important source of bus transit funding. Loss of this funding would increase Boulder's local capital and operating cost burden. Other programs (discretionary grants, rural formula funds, etc.) can flow directly to agencies other than a regionally designated provider. How each governance model would affect the City's ability to draw on federal transit support is a key consideration. If the City decides it wishes to withdraw its transit services from RTD, it would need to consider whether to pursue designated provider status for whatever transit entity takes over or, alternatively, an agreement with RTD for proportional access to FTA Formula funds.

Continuation of FLEX Service

FLEX is a regional bus route serving stops between Fort Collins, Loveland, Berthoud, Longmont, and Boulder. This service is operated by Transfort and is made possible through a regional partnership that includes the City of Boulder. This service is expected to be increasingly important in the future. Preserving and strengthening the service and the partnership it supports is a priority for the City.

Return on Investment (ROI)

Protecting the interests of the City and its stakeholders requires that implementing a preferred governance model must not have the effect—intended or unintended—of reducing annual expenditures for transit services provided by RTD to and within the City of Boulder. RTD's capital and operating expenditures are funded through two regional taxes:

- a 0.6¢ sales tax that has been in effect for decades and is used to fund RTD’s bus transit services; and,
- the 0.4¢ FasTracks tax approved by regional voters in November, 2004 that funds the FasTracks rail network and the US 36 Flatiron Flyer BRT service.

Recent research conducted for the City indicates that RTD expenditures for transit services to and within Boulder using the original 0.6¢ tax are relatively in balance with the amount of tax revenues attributable to the City. The ROI for the FasTracks program, however, is significantly out of balance, with tax revenues attributable to Boulder exceeding by a large margin the amount of expenditures by RTD for the only FasTracks service to or within Boulder – the Flatiron Flyer BRT service.

Under any of the governance models, disposition and reallocation of revenues from the RTD 0.6¢ sales tax collected in Boulder and/or Boulder County must be addressed to maintain a minimum acceptable ROI. Under some governance models it will also be necessary to work with RTD to determine an acceptable methodology for allocation and disposition of revenues from passes and fares collected from Boulder and/or Boulder County residents and employers on routes operated by RTD, but funded locally.

Feasible Scale of Operations

An underlying premise of Boulder’s Renewed Vision for Transit is that, with adequate funding and the right governance model, it would be possible to significantly increase transit service levels within and to Boulder. However, there may be other constraints on the feasible scale of transit operations. RTD currently is having difficulty hiring drivers. The chronic staffing shortage of over 100 drivers is affecting the agency’s ability to run its published schedules, leave alone expand the scope of bus operations. RTD currently starts new bus drivers at \$19.40 per hour and offers a \$2,000 signing bonus. It might be possible for a Boulder transit entity to offer higher pay to attract, hire, and retain drivers, but a confounding factor would be the cost of living and housing availability in Boulder and Boulder County. RTD is also having trouble hiring enough diesel mechanics. Further, the RTD bus fleet is sized for current operations and

enlarging the fleet to reach Boulder’s desired service levels would require significant capital funding and time to procure new vehicles. Therefore, any effort to increase transit services in Boulder (and Boulder County) may face scale challenges.

Organizational Issues

The alternative governance models described in the next section would require varying levels of administrative effort on the part of Boulder’s city government. Under Governance Model 3 the expanded transit responsibility would reside at the City. Governance Model 4 would involve the City and Boulder County working together in a “joint powers” framework, and a City/County transit entity would be needed. Under the Regional Transportation Authority models (5 and 6) the RTA itself could be an independent agency, or could be housed in and staffed by a member government.

A number of factors should be considered in organizational design once a preferred governance model has been selected. These include:

- *Staffing.* The level of staffing dedicated to managing transit operations can vary widely, from a single person managing a contract with a private operator, to a multidisciplinary staff including contract management, accounting, operations management, human resources, procurement, etc.
- *Fleet Management, Storage and Fueling.* Under future scenarios where a Boulder or Boulder/Boulder County entity owns and operates a transit fleet, facilities for storage, maintenance and fueling would be needed. Management of such facilities and fleets – including especially Federal Transit Administration auditing and reporting requirements – would entail significant staff, from mechanics to professional office staff. Physical facilities for vehicle storage, maintenance and fueling would have to be either owned or leased.
- *Transit Operations.* Under scenarios where a local entity is operating a local transit system, bus drivers, dispatch staff, and associated shift supervisors and operations managers would be required. Under some

scenarios, professional labor relations capability would be needed, either by staffing or contracting.

- *Insurance and Indemnification.* A transit entity with fleet, facilities and staff would need to address liability at a number of levels, from staff injuries to traffic crashes. Transit agencies may pool cash reserves among several agencies in a form of self-insurance and may buy insurance on the municipal market.

To the extent that a transit entity would be housed within an existing City or County department, some of these requirements could be met through existing organization capabilities. It is also possible to contract for most or even all of the functions described above, and many municipalities hire a single turn-key transit management firm to manage a local transit system under contract. Many variations of these approaches are possible and should be considered once a governance approach has been decided.

Implementation Phasing

The preferred governance model will take time – perhaps years – to implement. The phasing of specific steps (taking on certain transit routes, etc.) may vary somewhat by governance model.

GOVERNANCE MODELS

This study has evaluated a range of potential institutional arrangements, partnerships, operational entities and funding options. Six alternative models have been identified:

1. Maintenance of Current Service Model (Status Quo)
2. Incremental Expansion of City of Boulder Transit Program (Buy-Ups)
3. City of Boulder Local Transit Provider
4. City of Boulder/Boulder County Transit Provider (Joint Powers)
5. Boulder County Regional Transportation Authority (Funding Entity)
6. Boulder County Regional Transportation Authority (Secede from RTD)

These models are described in more detail below.

(1) Maintenance of Current Service Model (Status Quo)

The City could choose not to undertake any major change in how transit services are provided to and within Boulder. RTD would continue to provide most local and regional transit services, including most of the Community Transit Network (CTN). The HOP route would continue to be a contracted service.

This is not a “no change” alternative, because change will inevitably occur. Due to system-wide cost pressures, RTD would likely continue reducing service hours district-wide. Certain lower-ridership routes in Boulder could be candidates for service reduction or elimination. Private ride-hailing services (e.g., Lyft, Uber) could attract ridership away from public transit.

Funding

The City would increase funding for some CTN services. RTD funding of services is expected to decrease.

Operations

Boulder would continue to contract for operation of the HOP. Other routes would continue to be operated by RTD with some routes having a lower level of service.

(2) Incremental Expansion of City of Boulder Transit Program (Buy-Ups)

This could be thought of as a likely “trend” alternative. As cost pressures at RTD cause bus transit service levels to continue dropping, the City would step in to maintain or increase service levels on some local routes. The City would fund service improvements through buy-ups of routes operated by RTD.

Funding

Increased local funding would be required for the service buy-ups, but no new agency or operational entity would be created. To the extent that the City agreed to fund CTN routes, the City would work with RTD to ensure that the RTD funding attributable to those routes would be reallocated to Boulder services to maintain ROI (see above) or paid to the City in lieu of service.

Operations

RTD would continue to operate regional routes and local routes within Boulder. It is possible the City might work with mobility-on-demand service providers to replace less productive, local routes, and in that case, reallocated RTD funds could be used to subsidize those mobility-on-demand services.

(3) City of Boulder Local Transit Provider

With this alternative, the City would assume responsibility for management of the CTN network within the City, including both existing routes and potential new local routes. The City would operate some local routes and RTD would continue to operate all regional routes.

Funding

Significant new city transit funding would be required to implement this model to make it possible for the City to incrementally assume responsibility for the existing and future/expanded CTN network.

Operations

The City could choose to contract with one or more operators to implement this model, and could decide to form a City of Boulder transit operations entity (agency, department, etc.) to manage those contracts. The City could also choose to operate its transit services through a new organizational entity using City employees and City-owned/leased transit vehicles. Capital requirements would include maintenance facilities, a bus fleet, and communications systems. Staffing for operations and maintenance could be accomplished with employees of one of the partners or could be provided through a transit services contract. One example of how this alternative might be implemented would be: Boulder could take on the responsibility to provide the HOP, SKIP, BOUND, STAMPEDE, and future new local CTN routes and services needed to implement the City's Renewed Vision for Transit.

(4) City of Boulder/Boulder County Transit Provider (Joint Powers Authority)

The City of Boulder could form a "joint powers" transit partnership with Boulder County, (and, potentially with CU and other cities in Boulder County). Such a

partnership would be chartered through an intergovernmental agreement (IGA). The partnership would focus on transit routes and services operating within Boulder County. RTD would continue to operate regional services that extend outside Boulder County.

Funding

There are two options for this governance model. Initially one model was presented to the Steering Committees, but the Committees requested that two options be evaluated. The first option (#4A – Intergovernmental Transit Agency) is to form the transit provider partnership with no new taxing authority using the joint powers of the member governments. This would be done through an IGA that would require approval only by the participating government entities. The second option (#4B – County Mass Transit Agency) would be to create a county transit agency with a dedicated transit funding source as described below. This would require legislative action to revise state statutes and voter approval.

Operations

This program could be governed cooperatively through an intergovernmental committee structure, but some sort of administrative agency or operational entity would be needed to handle day-to-day management of what would be a sizable transit operation. This could be a private sector transit management firm or could be a new agency staffed by one of the partners. Capital requirements would include maintenance facilities, a bus fleet, and communications systems. Staffing for operations and maintenance could be accomplished with employees of one of the partners or could be provided through a transit services contract.

The City also might work with mobility on demand service providers to replace less productive, local routes, and in that case, reallocated RTD funds could be used to subsidize those mobility-on-demand services.

Funding

Significant new funding from the partners, including the City and County, would be required to fund the transit provider, probably beyond what could be budgeted through local general fund sources. Therefore, a new source or sources of dedicated funding would be required to ensure sustainability of the new transit

operator and to justify the required capital investments. This dedicated funding could be provided from a single county-wide taxing source or could come from a variety of sources that might vary by local jurisdiction.

The City and County (and other partners) would work with RTD to ensure that RTD's funding levels formerly attributable to Boulder County routes would be reallocated to services benefiting Boulder County to maintain ROI, or paid to the City in lieu of service. Reallocated funding could be used to buy up RTD service levels on any local routes that RTD continued to operate and/or on regional routes such as the US 36 BRT (Flatiron Flyer). A comprehensive agreement with RTD would be required to implement the various service components.

Statutory Requirements

Colorado Statutes section 29-2-1035 authorizes counties **outside RTD boundaries** to create a county transit agency funded by a sales and use tax of up to 1%, with approval by county voters in a general election. All revenues collected from such a county sales tax would be credited to a special fund in the county treasury known as the "county mass transportation fund." The fund could only be used only for the financing, constructing, operating, or maintaining of a mass transportation system within the county. For this source to be available under this governance model, Colorado Statutes would have to be amended by the Legislature to allow use of this authority in Boulder County.

(5) Boulder County RTA (Funding and/or Operations Entity)

This alternative would entail establishing a Regional Transportation Authority (RTA), pursuant to Colorado Statutes 43-4, Part 6 (the "Regional Transportation Authority Law"). The City of Boulder, Boulder County, and other cities in Boulder County would create the RTA by placing its formation on a general election ballot. A majority of voters in each jurisdiction (City of Boulder, rural Boulder County, and each partner city) must vote "yes" for that jurisdiction to become part of the RTA.

There are two variations of this governance model. Under governance model #5A, the RTA would serve primarily as a source of funding for multimodal transportation needs in Boulder County. Under governance model #5B, the RTA

would be used as a funding mechanism and would be responsible for operations of local routes in Boulder County. The statute would also allow the RTA to provide other functions such as road projects or a county trail network. The RTA would be governed by a multi-jurisdictional board of directors.

Funding

The new RTA would provide funding for enhanced transit services, including implementation of the City's Renewed Vision for Transit, and the funding source(s) (sales tax, vehicle registration fees, etc.) would also have to be approved by voters in the same or a subsequent general election. Other entities, such as the University of Colorado, could become part of the RTA by agreement.

If the RTA were formed to serve only as a **source of funding** (#5A) for transit services in Boulder County, it could buy up service levels on the RTD-operated CTN network and branded intercity routes or contract for services from other operators. It could also fund service buy-ups on regional routes and could provide funding for other services that venture outside the County, such as the FLEX.

Operations

The RTA could also be formed to **operate** (#5B) high priority transit services within Boulder County. RTD could continue to operate certain local routes within Boulder County and would continue to operate regional services that extend outside Boulder County. With this approach, some sort of administrative or operational entity would be needed to handle day-to-day management of transit services. This could be a private sector transit management firm or could be the RTA itself. Capital requirements would include maintenance facilities, a bus fleet, and communications systems. Staffing for operations and maintenance could be part of the RTA or could be provided through a transit services contract.

The RTA would work with RTD to ensure that RTD's funding levels formerly attributable to Boulder County routes would be reallocated to services benefiting Boulder County to maintain ROI, or paid to the City in lieu of service. Reallocated funding could be used to buy up RTD service levels on any local routes that RTD continued to operate and/or on regional routes, such as the US 36 BRT (Flatiron

Flyer). A comprehensive agreement with RTD would be required to implement the various service changes.

The City also might work with mobility-on-demand service providers to replace less productive, local routes, and in that case reallocated RTD funds could be used to subsidize those mobility-on-demand services.

Statutory Requirements

The statutory provisions (Colorado Statutes 43-4 Part 6) guiding RTA formation as applied to a potential Boulder County RTA (Governance Models 5 and 6) would include:

(1) Each of the towns, cities, counties and special districts considering becoming part of a Boulder County “Combination” to form an RTA must hold at least two public hearings, providing the public with at least 10 days notice for each hearing.

(2) The Combination of towns, cities and counties proposing to form an RTA must prepare a proposed “contract” describing the boundaries, functions and funding of the proposed RTA. The contract must be provided to the following entities (including all jurisdictions bordering Boulder County):

- CDOT;
- RTD;
- Plenary Roads Denver (US 36 operator);
- Grand, Larimer, Weld, Broomfield, Jefferson, Gilpin Counties;
- City of Erie; and,
- Director of Department of Local Affairs.

(3) If any of the above entities determine (within 90 days) that the RTA would “alter the physical structure of, or negatively impact safe operation of any highway, road, or street under its jurisdiction or will provide mass transportation services that impact the district (RTD),” then the Combination must enter into an intergovernmental agreement with each such entity specifying the “terms the Combination and the affected entity or entities deem necessary to avoid duplication of effort and to ensure coordinated transportation planning, efficient allocation of resources, and equitable sharing of costs.”

(4) Once steps (1) – (3) have been completed and any required intergovernmental agreements have been approved, the proposed RTA formation must be presented to the voters for approval at either a general or special election. The proposed form of taxation must also be presented to voters for approval, either at the same election as the proposed RTA formation or at a subsequent election.

(5) Revenues would begin to flow to the new RTA beginning in January of the year following the year of election.

Table 1 provides a conceptual schedule for formation of an RTA in Boulder County.

Table 1	
STEPS IN RTA DEVELOPMENT AND FORMATION	
MONTH	
1	By way of updating the Transportation Master Plan, the City of Boulder and Boulder County staff and elected bodies decide that an RTA is the preferred Governance Model
1	Meetings and coordination begin with CDOT, RTD, Plenary Roads and Boulder County cities and towns - discussion and consideration of Phase II report and RTA formation
1	Initiate a parallel county-wide public engagement process
4	City and County develop proposed Contract describing the boundaries, functions and funding of the proposed RTA. Signatories to the contract become the "Combination" in subsequent steps
6	Combination sends proposed RTA Contract to CDOT, RTD, Plenary Roads, bordering counties and DOLA Director for review
9	Comments, objections, concerns due back to Combination
11	Initiate discussions and negotiations to revise proposed Contract and develop draft intergovernmental agreements with affected entities
13	Draft intergovernmental agreements presented to all affected bodies for approval
13-23	Public engagement process pivots to election campaign (need citizens' entity to take lead at this point)
23	Elections
25	Revenues begin to flow to RTA

(6) Boulder County Regional Transportation Authority (Secede from RTD)

This alternative would entail establishing a Regional Transportation Authority (RTA), pursuant to Colorado Statutes 43-4, Part 6 (the "Regional Transportation Authority Law"). Governance model (6) also would entail modifying RTD district boundaries to exclude the land area within Boulder County. Because Colorado Statutes Title 32, Part 9 sets RTD boundaries and gives RTD exclusive franchise rights to transit service within those boundaries, legislation would be needed to

implement governance model (6). Effectively, the City of Boulder, Boulder County, and municipalities within the County would be seceding from RTD, which would require approval by the Colorado Legislature.

The City of Boulder, Boulder County, and other cities in Boulder County would create the RTA by placing its formation on a general election ballot as described under governance model #5B.

Funding

The RTA would fund transit routes operating within Boulder County. The RTA would work with RTD to ensure that RTD's funding levels formerly attributable to Boulder County routes would be reallocated to services benefiting Boulder County to maintain ROI, or paid to the City in lieu of service. Reallocated funding could be used to buy up RTD service levels on any local routes that RTD continued to operate and/or on regional routes, such as the US 36 BRT (Flatiron Flyer). A comprehensive agreement with RTD would be required to implement the various service changes.

Operations

The RTA would assume responsibility for the operations of all transit services within Boulder County. RTD would continue to operate regional services that extend into Boulder County. Some sort of administrative or operational entity would be needed to handle day-to-day management of transit services. This could be a private sector transit management firm or could be the RTA itself. Capital requirements would include maintenance facilities, a bus fleet, and communications systems. Staffing for operations and maintenance could be part of the RTA or could be provided through a transit services contract.

The City also might work with mobility-on-demand service providers to replace less productive, local routes, and in that case, reallocated RTD funds could be used to subsidize those mobility-on-demand services.

Statutory Requirements

Governance model (6) would require legislation to revise the RTD boundary map to remove Boulder County from RTD.

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Service Scenarios

INTRODUCTION

This section describes the service scenarios analyzed for each of the governance models. The service scenarios support the evaluation by determining how well each governance model supports implementation of Boulder’s Renewed Vision for Transit.

While the RVT shows implementation of service improvements in three phases; near term (2018-2020), mid term (2021-2024), and long term (2025-2035); the service scenarios have been developed to compare the long term implementation of the plan.


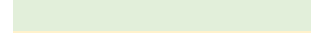




The service scenarios are described under each governance model with a summary of the services to be funded and/or operated by the City of Boulder, Boulder County, or the RTA shown in Table 2.

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**Table 2
Service Scenarios: Long Term Implementation**

Route Code	Route Name	Scenarios						
		Governance Model 1: Maintenance of Current Service Model (Status Quo)	Governance Model 2: Incremental Expansion of City of Boulder Transit Program	Governance Model 3: City of Boulder Local Transit Provider	Governance Model 4: city of Boulder/ Boulder County Transit Provider (Joint Powers)	Governance Model 5: Boulder County RTA - Fund	Governance Model 5: Boulder County RTA - Fund and Operate	Governance Model 6: Boulder County RTA (secede from RTD)
204	Table Mesa / Moorhead / North 19th	RTD/No improvement	RTD/No improvement	Boulder/Increased frequency	Agency/Increased frequency	RTA/Increased frequency	RTA/Increased frequency	RTA/Increased frequency
205	28th Street / Gunbarrel	RTD/No improvement	RTD/No improvement	Boulder/Increased frequency	Agency/Increased frequency	RTA/Increased frequency	RTA/Increased frequency	RTA/Increased frequency
206	Pearl / Manhattan / Pearl H.S.	RTD/Reduced service	RTD/Reduced service	Boulder/Reduced service	Agency/Reduced service	RTD/Reduced service	RTA/Reduced service	RTA/Reduced service
208	Iris / Valmont	RTD/Reduced service	RTD/Reduced service	Boulder/Reduced service	Agency/Reduced service	RTD/Reduced service	RTA/Reduced service	RTA/Reduced service
209	CU / Thunderbird	RTD/Reduced service	RTD/Reduced service	Boulder/Reduced service	Agency/Reduced service	RTD/Reduced service	RTA/Reduced service	RTA/Reduced service
225	Boulder / Lafayette via Baseline	RTD/No improvement	RTD/No improvement	Boulder/Increased frequency	Agency/Increased frequency	RTA/Increased frequency	RTA/Increased frequency	RTA/Increased frequency
AB	Boulder / DIA	RTD	RTD	RTD	RTD	RTD	RTD	RTD
BOLT	Boulder / Longmont	RTD/119 BRT consolidation	RTD/119 BRT consolidation	RTD/119 BRT consolidation	RTD/119 BRT consolidation	RTD/119 BRT consolidation	RTD/119 BRT consolidation	RTD/119 BRT consolidation
BOUND	30th Street	RTD/No improvement	Boulder/Maintain frequency	Boulder/Maintain frequency	Agency/Maintain frequency	RTA/Maintain frequency	RTA/Maintain frequency	RTA/Maintain frequency
DASH	Boulder / Lafayette via Louisville	RTD/Reduced frequency	RTD/Reduced frequency	Boulder/Increased frequency	Agency/Increased frequency	RTA/Increased frequency	RTA/Increased frequency	RTA/Increased frequency
FF	Flatiron Flyer	RTD/No improvement	RTD/No improvement	RTD/No improvement	RTD/Increased frequency	RTD/Increased frequency	RTD/Increased frequency	RTD/Increased frequency
GS	Golden / Boulder	RTD	RTD	RTD	RTD	RTD	RTD	RTD
HOP	Boulder Circulator	Boulder	Boulder	Boulder	Agency	RTA Contracts	RTA	RTA
J	Longmont / East Boulder / CU	RTD/119 BRT consolidation	RTD/119 BRT consolidation	RTD/119 BRT consolidation	RTD/119 BRT consolidation	RTD/119 BRT consolidation	RTD/119 BRT consolidation	RTD/119 BRT consolidation
JUMP	Boulder / Lafayette via Arapahoe	RTD/Reduced frequency	RTD/Reduced frequency	Boulder/Maintain frequency	RTD/Maintain frequency	RTD/Maintain frequency	RTA/Maintain frequency	RTA/Maintain frequency
L	Longmont / Denver	RTD	RTD	RTD	RTD	RTD	RTD	RTD
N	Nederland / Boulder	RTD	RTD	RTD	RTD	RTD	RTD	RTA
SKIP	Broadway	RTD	RTD	Boulder/Maintain frequency	Agency/Maintain frequency	RTA/Maintain frequency	RTA/Maintain frequency	RTA/Maintain frequency
STAMPEDE	CU East Campus	RTD/Shortened	RTD/Shortened	Boulder/Shortened	Agency/Shortened	RTD/Shortened	RTA/Shortened	RTA/Shortened
Y	Lyons / Boulder	RTD	RTD	RTD	RTD	RTD	RTD	RTA
Valmont (9th - 55th)		Not implemented	Boulder funds and contracts	Boulder	Agency	RTA funds/Contracts	RTA	RTA
9th/Baseline/Folsom		Not implemented	Boulder funds and contracts	Boulder	Agency	RTA funds/Contracts	RTA	RTA
SH7 BRT		Not implemented	Not implemented	Not implemented	Agency	RTA funds/Contracts	RTA	RTA
South Boulder BRT		Not implemented	Not implemented	Not implemented	Agency	RTA funds/Contracts	RTA	RTA
SH119 BRT		RTD	RTD	RTD	RTD	RTD	RTD	RTD
FLEX	Boulder / Fort Collins	Transfort	Transfort	Transfort	Transfort	Transfort	Transfort	Transfort
CLIMB	Gold Hill	Boulder County	Boulder County	Boulder County	Boulder County	Boulder County	Boulder County	Boulder County
323		RTD	RTD	RTD	Agency/Service TBD	RTD	Agency/Service TBD	Agency/Service TBD
324		RTD	RTD	RTD	Agency/Service TBD	RTD	Agency/Service TBD	Agency/Service TBD
326		RTD	RTD	RTD	Agency/Service TBD	RTD	Agency/Service TBD	Agency/Service TBD
327		RTD	RTD	RTD	Agency/Service TBD	RTD	Agency/Service TBD	Agency/Service TBD

Legend:

	Local Route		Indicates full implemetation of RVT
	CTN Route		Indicates partial implementation of RVT
	Regional Route		Indicates RVT service is not implemented

TMP 2018-19 update will likely recommend removing these Renewed Vision for Transit routes and incorporating this service into the future SH 119 BRT and expanded FF service.

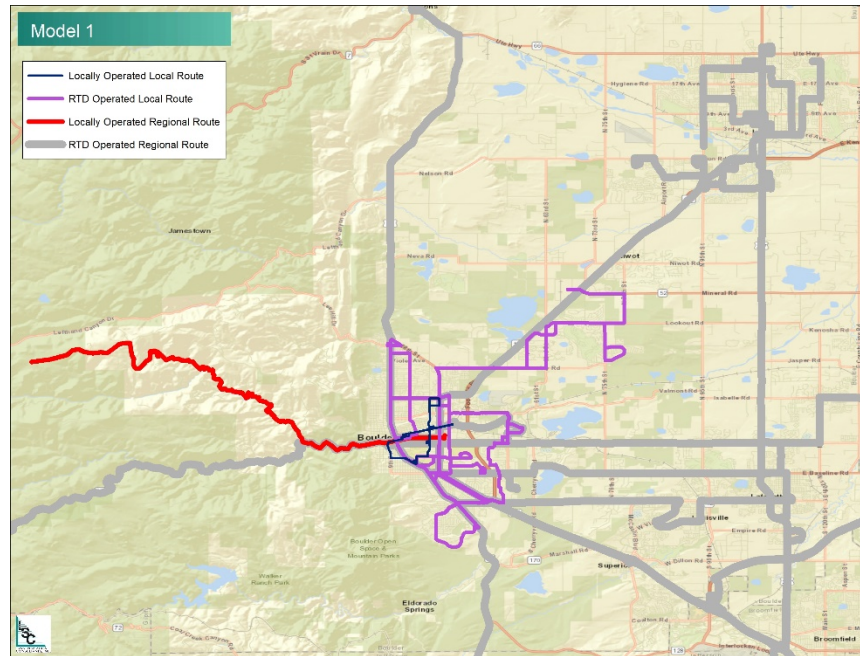
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GOVERNANCE MODEL 1

Governance model 1 is the status quo condition, but the current arrangement does not ensure that the current level of service will continue. The Service scenario has been developed to reflect the potential reduction in service provided by RTD as shown in Figure 1.

This scenario incorporates anticipated cuts in service provided by RTD as RTD is unable to maintain service levels because of increasing costs without a corresponding increase in revenue. In this scenario, Boulder is not expected to provide additional funding or to have buy-ups of service operated by RTD.

Figure 1
Model 1

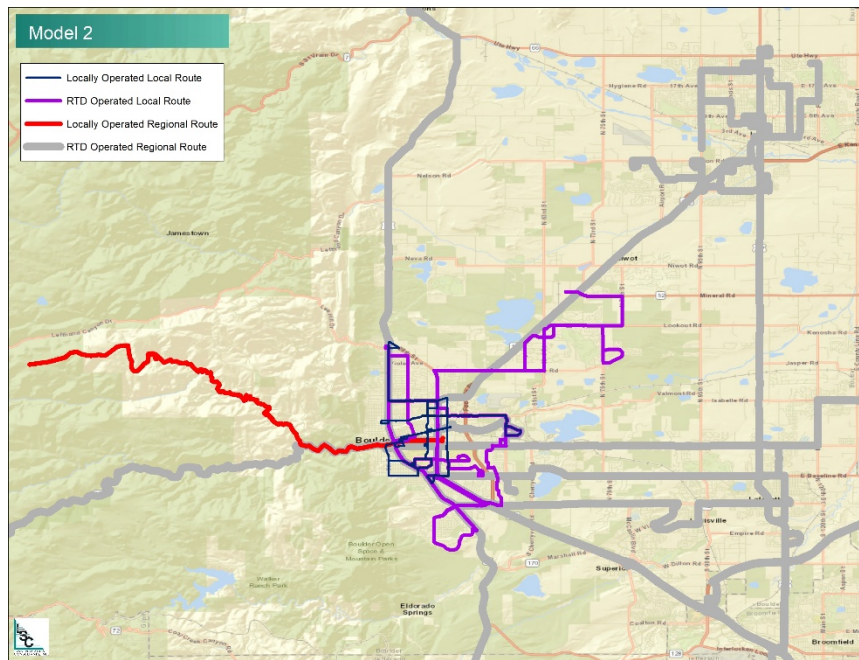


GOVERNANCE MODEL 2

Governance model 2 incorporates additional funding from the City of Boulder to operate the CTN and local service.

Boulder would fund more frequent service on select local routes and on existing and planned CTN routes through service buy-ups from RTD as shown in Figure 2.

Figure 2
Model 2

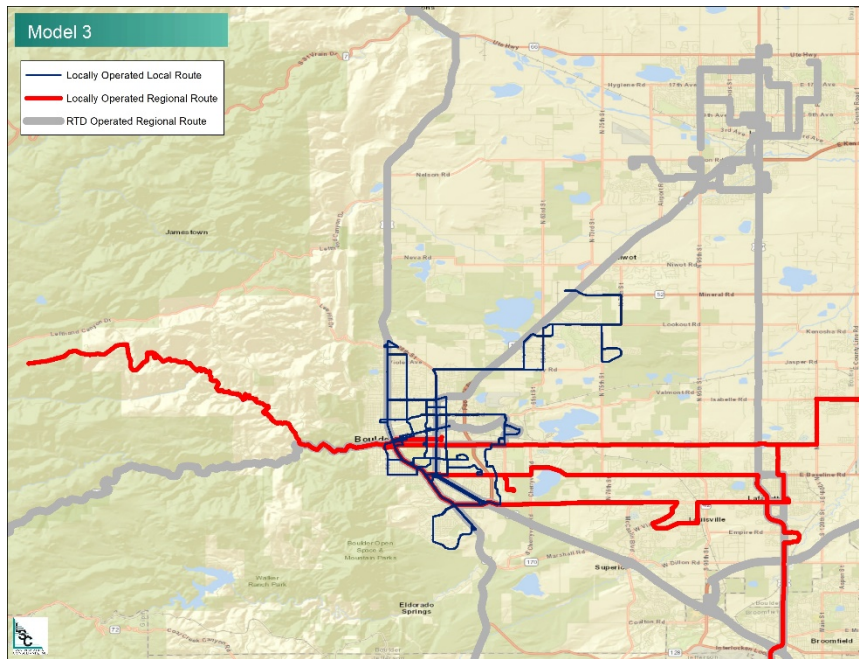


GOVERNANCE MODEL 3

In this model, the City of Boulder would become a local transit provider, either contracting for operation or developing a city-operated service. The service scenario for this model is based on the long-term service plan and build-out of the RVT.

The service scenario for Model #3 is shown in Figure 3. The City would take responsibility for operation of existing and planned CTN routes and some of the 200 numbered routes in Boulder County. RTD would continue to fund and operate other regional and local services in Boulder County.

Figure 3
Model 3

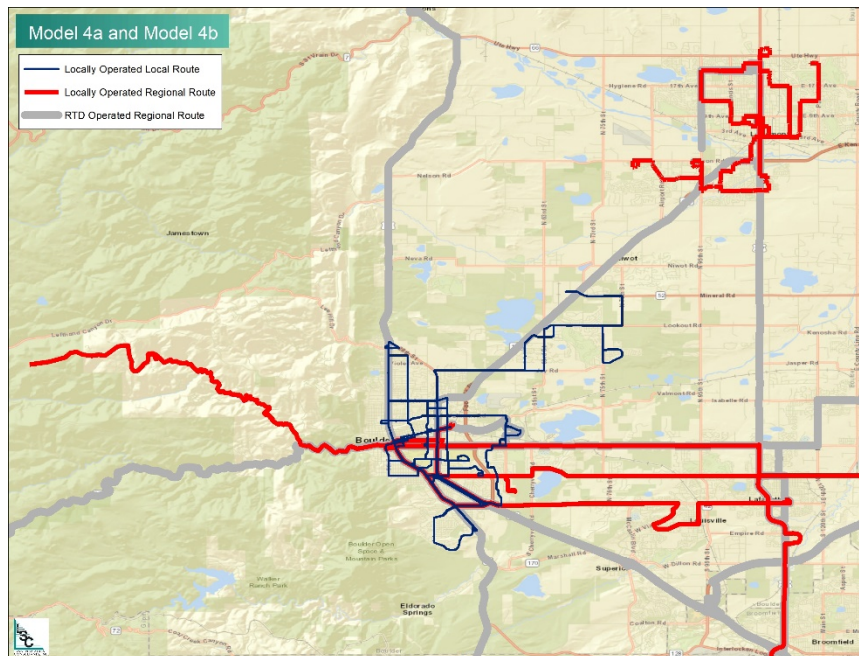


GOVERNANCE MODEL 4

Under model #4A, a joint City and County Intergovernmental Transit Agency would be formed as the local transit provider. Under Model #4B, a County Mass Transit Agency would be formed with a dedicated sales tax for funding. The service scenario for both models, as, shown in Figure 4 is based on the long-term service plan and build-out of the RVT.

In this scenario, the City/County transit agency would take responsibility for operating all existing and planned CTN routes and all numbered routes operating within Boulder County. The agency would also operate other routes operating completely within Boulder County. RTD would continue to fund and operate regional routes connecting Boulder County to other parts of the RTD service area.

Figure 4
Model 4



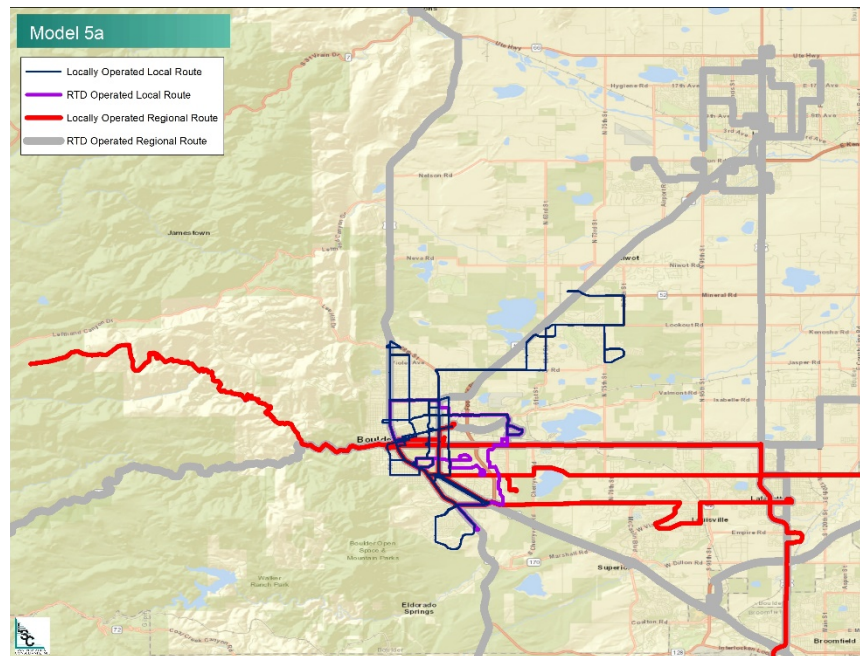
GOVERNANCE MODEL 5

This model is based on formation of a Regional Transit Authority (RTA) for Boulder County. There are two service scenarios reflecting the option to have the RTA serve as a funding mechanism only or to fund and operate services.

Service Scenario #5A-Funding

This scenario assumes that the RTA is established as a funding mechanism and that services would be operated by the City (through a contractor) and RTD. The RTA would not be responsible for operating any services. The service scenario is shown in Figure 5.

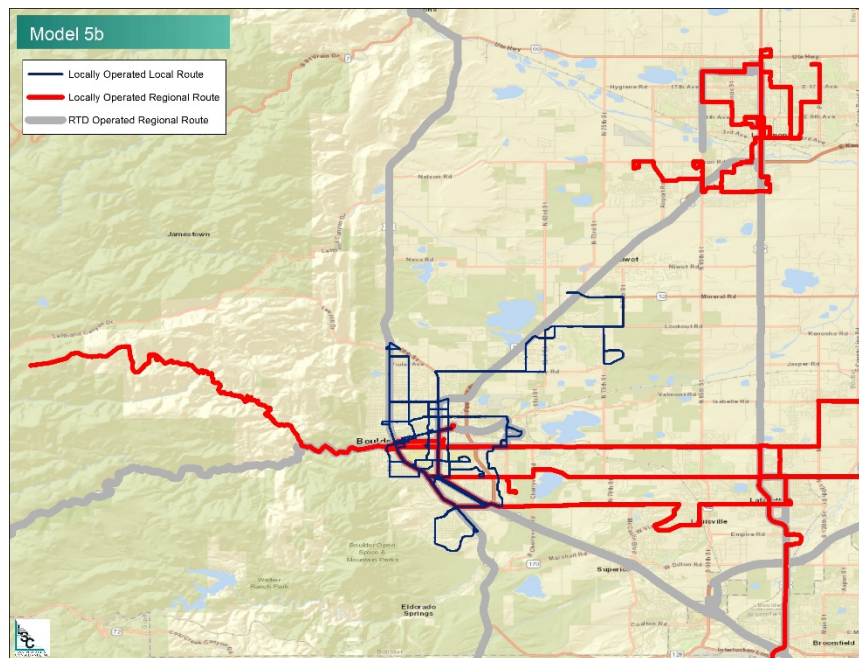
Figure 5
Model 5A



Service Scenario #5B - Fund and Operate

In this scenario, the RTA would both fund and operate local transit services with RTD continuing to provide regional transit service as shown in Figure 6. The City of Boulder would not operate or contract for operation of service. The RTA would take responsibility for operating all existing and planned CTN routes and all numbered routes operating within Boulder County. The agency would also operate other routes operating completely within Boulder County. RTD would continue to fund and operate regional routes connecting Boulder County to other parts of the RTD service area.

Figure 6
Model 5B

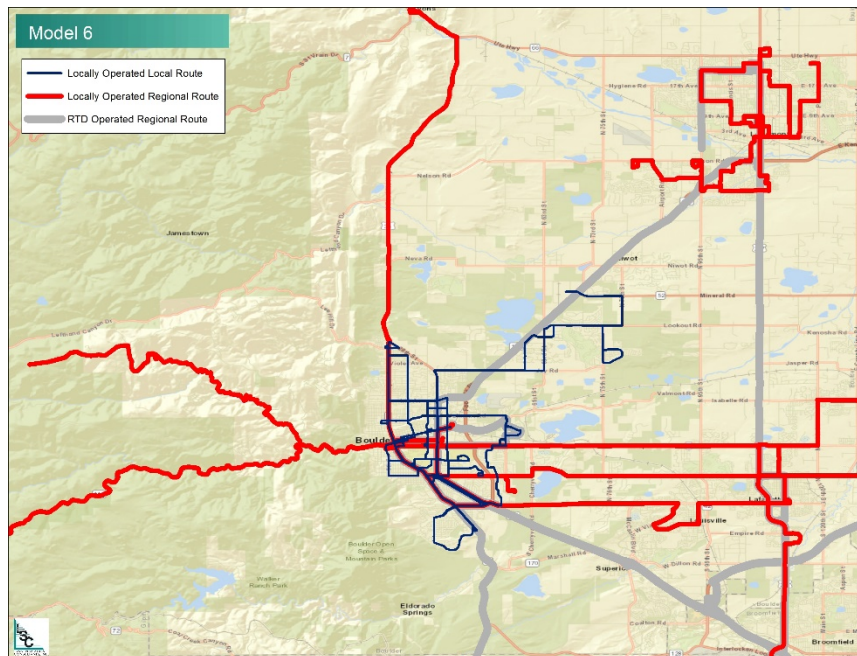


GOVERNANCE MODEL 6

In this model, a Regional Transportation Authority (RTA) would be formed and Boulder County would be separated from RTD. The RTA would fund and operate local services and RTD would continue to operate only regional service.

The RTA would take responsibility for operation of all existing and planned CTN routes and all existing and planned routes operating completely within Boulder County as shown in Figure 7. RTD is assumed to continue operating regional service routes connecting to areas outside Boulder County assuming that RTD would operate some service extending outside the district boundaries.

Figure 7
Model 6



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Evaluation of Governance Models

This section provides the evaluation and comparison of the different governance models. The models are compared based on the service scenarios and performance measures presented in Section 2. The comparison is summarized in Table 3.

Performance measures for the governance models are estimated based on the service scenarios described in the previous section and the Boulder Transit Cost Model. Services operated by the City of Boulder and contractors have a lower operating cost per hour than services operated by RTD. Capital costs are assumed to be the same, but responsibility for capital expenditure changes based on the operating entity for each route and the facilities which would be required. The cost comparisons do not include any adjustments for reallocation of tax revenue collected by RTD or reductions for farebox and pass revenue. Use of these revenue sources for the local routes would have to be determined as part of the coordination with RTD and implementation of the specific governance model.

GOVERNANCE MODEL 1. MAINTENANCE OF CURRENT SERVICE MODEL (STATUS QUO)

Capability to incorporate and adapt to technological advances and trends: LOW

RTD remains as the primary operating agency and incorporation of new technologies would take place through RTD.

Relative predictability and stability of potential new revenue sources available under each governance model: NOT APPLICABLE

This alternative makes no new revenue sources available for Boulder's transit needs.

Ability to respond to emerging funding opportunities and to adapt to a variety of future revenue sources: LOW

This alternative makes no changes to the current operations regime, limiting the City's access to emerging funding opportunities and providing access to no new revenue sources.

Capability to provide integrated service: HIGH

RTD remains the primary operator so that a single fare system is possible with integrated services on most or all routes.

RTD position on governance model: NEUTRAL (tentative)

It is expected that RTD will weigh in on governance alternatives only if the agency believes it is necessary to take a position in opposition to a specific proposal. This evaluation is tentative and will be updated once more detailed discussions with RTD staff have taken place.

**Table 3
Evaluation of Governance Models**

Governance Model	Flexibility to incorporate and adapt to technological advances and trends	Relative predictability and stability of potential new revenue sources available under each governance model	Flexibility to respond to emerging grant opportunities and to adapt to a variety of future revenue sources	Flexibility to provide integrated service	Potential RTD position on governance model	Implementation feasibility of the recommended governance model			Cost to Implement			Ability to Achieve RVT Ridership Goals
						Legislation required	Legal questions or issues that cause uncertainty about feasibility	Requires new funding partnerships with other communities	Annualized Capital Cost to Implement	Additional Annual Operating Funds Required	Annual RTD Operating Funds	
Governance Model 1: Maintenance of Current Service Model (Status Quo)	Low	Not Applicable	Low	High	Neutral (tentative)	No	No	No	\$0	\$1,300,000	\$55,200,000	11% decrease below existing
Governance Model 2: Incremental Expansion of City of Boulder Transit Program	Low	Moderate	Moderate	High	Neutral (tentative)	No	No	No	\$1,000,000	\$9,900,000	\$53,200,000	2% decrease below existing
Governance Model 3: City of Boulder Local Transit Provider	High	Moderate	Moderate	High	Neutral (tentative)	No	No	No	\$6,500,000	\$46,900,000	\$28,800,000	Low 39% of RVT
Governance Model 4A: Intergovernmental Transit Agency	Moderate	Moderate	High	Moderate	Neutral (tentative)	No	No	Yes	\$13,100,000	\$50,000,000	\$47,600,000	High 100% of RVT
Governance Model 4B: Boulder County Mass Transit Agency	Moderate	Moderate	High	Moderate	Could oppose, approval required.	Yes Under CRS 29-2-103.5 Any county outside RTD may levy a sales tax for transit	No	No	\$13,100,000	\$50,000,000	\$47,600,000	High 100% of RVT
Governance Model 5A: Boulder County RTA - Fund	Moderate	Moderate	High	Low	Could oppose, approval required.	No	No	Yes	\$11,700,000	\$39,900,000	\$57,800,000	High 100% of RVT
Governance Model 5B: Boulder County RTA - Fund and Operate	Moderate	Moderate	High	Low	Could oppose, approval required.	No	No	Yes	\$13,800,000	\$57,000,000	\$40,600,000	High 100% of RVT
Governance Model 6: Boulder County RTA (secede from RTD)	High	Moderate	High	Neutral	RTD would probably oppose.	Yes - changing RTD boundaries to exclude Boulder County.	Potentially a number of legal questions associated with RTA formation, disposition of Boulder County share capital assets attributable to historic tax payments, and other similar issues.	Yes	\$14,000,000	\$58,100,000	\$39,500,000	High 100% of RVT

Note: Local capital and operating costs to implement could be reduced by RTD funding and farebox revenues.

Source: LSC, 2018. All costs are 2017.

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Implementation feasibility of the recommended governance model

Legislation required: **NO**

Legal questions or issues that cause uncertainty about feasibility: **NO**

Requires new funding partnership with other communities: **NO**

Cost to Implement

- Annualized Capital Cost to Implement: \$0
- Additional Annual Operating Funds Required: \$1,300,000
- Annual RTD Operating Funds: \$55,200,000

Ability to Achieve Ridership Goals: LOW

Ridership is expected to decrease by 11 percent from existing.

GOVERNANCE MODEL 2. INCREMENTAL EXPANSION OF CITY OF BOULDER TRANSIT PROGRAM (BUY-UPS)

Capability to incorporate and adapt to technological advances and trends: LOW

RTD remains as the primary operating agency and incorporation of new technologies would take place through RTD.

Relative predictability and stability of potential new revenue sources available under each governance model: MODERATE

The City controls the level of funding through the budget process although there are no specific new funding sources identified.

Ability to respond to emerging funding opportunities and to adapt to a variety of future revenue sources: MODERATE

The City has legal authority to pursue funding through grant programs but may be limited in obtaining funding through the Federal Transit Administration.

Capability to provide integrated service: HIGH

RTD remains the primary operator so that a single fare system is possible with integrated services on most or all routes.

RTD position on governance model: NEUTRAL (tentative)

It is expected that RTD will weigh in on governance alternatives only if the agency believes it is necessary to take a position in opposition to a specific proposal. This evaluation is tentative and will be updated once more detailed discussions with RTD staff have taken place.

Implementation feasibility of the recommended governance model

Legislation required: **NO**

Legal questions or issues that cause uncertainty about feasibility: **NO**

Requires new funding partnership with other communities: **NO**

Cost to Implement:

- Annualized Capital Cost to Implement: \$977,500
- Additional Annual Operating Funds Required: \$9,900,000
- Annual RTD Operating Funds: \$53,200,000

Ability to Achieve Ridership Goals: LOW

Ridership is expected to decrease by two percent from existing.

GOVERNANCE MODEL 3. CITY OF BOULDER LOCAL TRANSIT PROVIDER

Capability to incorporate and adapt to technological advances and trends: HIGH

With a higher amount of local control, Boulder has increased opportunities to adjust to new technologies and integrate technological advances.

Relative predictability and stability of potential new revenue sources available under each governance model: MODERATE

New revenue sources for this alternative would likely come from an adjustment to the City's transportation sales tax, or another new source, like head tax of development fees.

Ability to respond to emerging funding opportunities and to adapt to a variety of future revenue sources: MODERATE

The City has legal authority to pursue funding through grant programs but may be limited in obtaining funding through the Federal Transit Administration.

Capability to provide integrated service: HIGH

RTD remains the primary operator so that a single fare system is possible with integrated services on most or all routes.

RTD position on governance model: NEUTRAL (tentative)

It is expected that RTD will weigh in on governance alternatives only if the agency believes it is necessary to take a position in opposition to a specific proposal. This evaluation is tentative and will be updated once more detailed discussions with RTD staff have taken place.

Implementation feasibility of the recommended governance model

Legislation required: **NO**

Legal questions or issues that cause uncertainty about feasibility: **NO**

Requires new funding partnership with other communities: **NO**

Cost to Implement:

- Annualized Capital Cost to Implement: \$5,400,000
- Additional Annual Operating Funds Required: \$46,900,000
- Annual RTD Operating Funds: \$28,800,000

Ability to Achieve Ridership Goals: LOW

Expected to achieve about 39 percent of Renewed Vision for Transit ridership goal.

GOVERNANCE MODEL 4A. INTERGOVERNMENTAL TRANSIT AGENCY (JOINT POWERS)

Flexibility to incorporate and adapt to technological advances and trends: MODERATE

As Boulder and Boulder County assume more responsibility for local and regional services, the opportunity to adjust to new technologies and integrate technological advances will increase.

Relative predictability and stability of potential new revenue sources available under each governance model: MODERATE

Overview. This alternative could make new revenue sources available, and could set the stage for broadening the revenue base for transit in Boulder County by involving multiple jurisdictions: the City of Boulder, Boulder County, and – potentially – other cities within Boulder County. Because Boulder County’s economy is regional and highly integrated, it is unlikely any increased predictability or stability would result from a broadening of the revenue base: trends in one part of the county will be mirrored to a large degree county-wide. Predictability and stability of a multi-jurisdictional revenue system also would depend on what sources of revenue individual jurisdictions might implement.

Property taxes and special districts. The most stable potential revenue source is the property tax, which local cities, towns and counties have authority to apply, within various statutory restrictions. While any proposals for jurisdiction-wide property tax rate increases are likely to be highly unpopular, there is potential for creation of property-tax-funded special districts around major transit stations or mobility hubs. These likely would have to be tied to some sort of zoning overlay to allow/guide higher intensity of mixed-use development under a benefit capture concept. In Colorado under TABOR, any property tax increase by any local government requires a vote of the people in a general election.

Sales taxes. Sales (and related) taxes represent the most robust of the potential revenue sources for transit. Sales taxes are viewed with somewhat less hostility by voters because at least some of the tax revenue comes from visitors and tourists. However, sales tax revenues are quite volatile, increasing during strong economies and declining during recessions and other downturns. In Colorado

under TABOR, any sales tax increase by any local government requires a vote of the people in a general election.

Other sources. Other potential sources of revenue – accommodations tax, admissions tax, and so forth – could be brought to bear on a transit program by various local governments joint powers partners. These generally tend to follow trends in overall sales tax revenues and are similarly volatile. In Colorado under TABOR, any local tax increase by any local government requires a vote of the people in a general election.

Flexibility to respond to emerging funding opportunities and to adapt to a variety of future revenue sources: HIGH

A range of possible tax and revenue plans could be pursued under this governance model, including all of the normal tax sources available to local governments – property tax, sales and use tax, accommodations tax, admissions tax, and direct fees and fares. However, under any likely revenue scenario, the Boulder County transit system would be heavily dependent on sales tax revenues, which as noted above can be volatile.

Flexibility to provide integrated service: MODERATE

As services operated by Boulder expand, integration of services with RTD will become more difficult. Services within Boulder County may be integrated as part of the city-county transit agency.

RTD position on governance model: NEUTRAL (tentative)

It is expected that RTD will weigh in on governance alternatives only if the agency believes it is necessary to take a position in opposition to a specific proposal.

Implementation feasibility of the recommended governance model

Legislation required: **NO** – The City and County may form a transit agency.

Legal questions or issues that cause uncertainty about feasibility: **NO**

Requires new funding partnership with other communities: **YES**

Cost to Implement:

- Annualized Capital Cost to Implement: \$13,060,000

- Additional Annual Operating Funds Required: \$50,000,000
- Annual RTD Operating Funds: \$47,600,000

Ability to Achieve Ridership Goals: HIGH

Expected to achieve 100 percent of Renewed Vision for Transit ridership goal.

GOVERNANCE MODEL 4B. BOULDER COUNTY TRANSIT AGENCY WITH MASS TRANSIT TAX

Flexibility to incorporate and adapt to technological advances and trends: MODERATE

As Boulder and Boulder County assume more responsibility for local and regional services, the opportunity to adjust to new technologies and integrate technological advances will increase.

Relative predictability and stability of potential new revenue sources available under each governance model: MODERATE

Under this model, the sources of funding described for Model 4A would also be available through participation of other local governments and county tax revenues. In addition, a county sales tax for mass transit could be used to fund a county transit agency. Colorado Statutes section 29-2-103.5 authorizes counties outside the RTD service area boundaries to levy a sales tax of up to 1 percent to fund a “mass transportation system within the county.” Eagle County (ECO Transit) and Summit County (Summit Stage) have both created transit agencies funded through this authority. Approval by county voters is required.

Flexibility to respond to emerging funding opportunities and to adapt to a variety of future revenue sources: HIGH

A range of possible tax and revenue plans could be pursued under this governance model, including all of the normal tax sources available to local governments – property tax, sales and use tax, accommodations tax, admissions tax, and direct fees and fares. The county-wide frame of this model also suggests that a “county mass transportation” system and sales tax could be applied, although that would require legislation. However, under any likely revenue scenario, the Boulder County transit system would be heavily dependent on sales tax revenues, which as noted above can be volatile.

Flexibility to provide integrated service: MODERATE

As services operated by Boulder expand, integration of services with RTD will become more difficult. Services within Boulder County may be integrated as part of the county transit agency.

RTD position on governance model: COULD OPPOSE, APPROVAL REQUIRED

It is expected that RTD will weigh in on governance alternatives only if the agency believes it is necessary to take a position in opposition to a specific proposal. Implementation of a “county sales tax for mass transit” would require a legislation to modify Colorado Statutes section 29-2-103.5. RTD’s position on such legislation would be of critical importance to its passage and it is possible RTD would oppose this.

Implementation feasibility of the recommended governance model

Legislation required: **YES** – The City and County may form an agency, but under CRS 29-2-103.5, only counties outside RTD may levy a sales tax for transit.

Legal questions or issues that cause uncertainty about feasibility: **NO**

Requires new funding partnership with other communities: **NO**

Cost to Implement:

- Annualized Capital Cost to Implement: \$13,060,000
- Additional Annual Operating Funds Required: \$50,000,000
- Annual RTD Operating Funds: \$47,600,000

Ability to Achieve Ridership Goals: HIGH

Expected to achieve 100 percent of Renewed Vision for Transit ridership goal.

GOVERNANCE MODEL 5. BOULDER COUNTY RTA (FUNDING ENTITY)

Capability to incorporate and adapt to technological advances and trends: MODERATE

As Boulder assumes more responsibility for local and regional services, the opportunity to adjust to new technologies and integrate technological advances will increase.

Relative predictability and stability of potential new revenue sources available under each governance model: MODERATE

RTA's are authorized by Colorado Statutes 43-4 Part 6. Revenue sources authorized by the statute include:

- direct user charges (tolls, fares, fees, etc.)
- vehicle registration fee – up to \$10
- visitor benefit tax – up to 2 percent
- sales or use tax – up to 1 percent
- property tax up to 4 mills

The statute also authorizes the establishment of local improvement districts and imposition of special assessments within them, presumably around major stations and transit centers. This potential diversity of revenue base could improve the stability of transit system revenues beyond what would be the case with a sales tax only based system. All of these sources are well-known and already exist at some level in city and county government in Boulder County. Forecasting revenues from these sources would be fairly straightforward. However, of the revenue sources authorized for RTA's, only the sales tax would generate revenues at a level sufficient to support a major transit service level increase in Boulder County. As noted above, sales tax revenues are relatively volatile, fluctuating with economic conditions.

Implementation of an RTA requires voter approval, both for creation of the entity and for any taxes. Placing the RTA (and/or any taxes) on the ballot requires a vote of the governing body for each jurisdiction (city, town, unincorporated

county) to authorize the question to be presented to the voters in that jurisdiction. RTA's and their taxes and fees are exempted from coverage by TABOR.

Ability to respond to emerging funding opportunities and to adapt to a variety of future revenue sources: HIGH

The diversity and scale of revenue sources authorized by the RTA statute would have the potential of supporting a significant increase in transit service levels, both for the City of Boulder and for all of Boulder County. An RTA also would have considerable flexibility to compete for discretionary funds (state and federal) and could serve as a platform for a variety of public/private endeavors.

Capability to provide integrated service: LOW

As services operated by Boulder expand, integration of services will become more difficult.

RTD position on governance model: COULD OPPOSE, APPROVAL REQUIRED

Implementation of an RTA that includes any areas within RTD's service boundaries would require an intergovernmental agreement with RTD. Effectively, then, establishment of a Boulder County RTA would require approval by the RTD board. Because under this alternative, the RTA would be used to generate revenue for transit and would not involve Boulder or Boulder County seceding from RTD, it is possible RTD would be willing to work on an intergovernmental agreement with Boulder and Boulder County.

Implementation feasibility of the recommended governance model

Legislation required: **NO**

Legal questions or issues that cause uncertainty about feasibility: **NO**

Requires new funding partnership with other communities: **YES**

Cost to Implement:

- Scenario #5A (Funding):
 - Annualized Capital Cost to Implement: \$11,700,000
 - Additional Annual Operating Funds Required: \$39,900,000
 - Annual RTD Operating Funds: \$57,800,000

- Scenario #5B (Funding and Operating):
 - Annualized Capital Cost to Implement: \$13,800,000
 - Additional Annual Operating Funds Required: \$57,000,000
 - Annual RTD Operating Funds: \$40,600,000

Ability to Achieve Ridership Goals: HIGH

Expected to achieve 100 percent of Renewed Vision for Transit ridership goal.

GOVERNANCE MODEL 6. BOULDER COUNTY RTA (SECEDE FROM RTD)

Capability to incorporate and adapt to technological advances and trends: HIGH

An independent RTA which funds and operates service would have the greatest flexibility to implement technological advances.

Relative predictability and stability of potential new revenue sources available under each governance model: MODERATE

RTA’s are authorized by Colorado Statutes 43-4 Part 6. Revenue sources authorized by the statute include:

- direct user charges (tolls, fares, fees, etc.)
- vehicle registration fee – up to \$10
- visitor benefit tax – up to 2 percent
- sales or use tax – up to 1 percent

This potential diversity of revenue base could improve the stability of transit system revenues beyond what would be the case with a sales tax only based system. All of these sources are well-known and exist at some level in city and county government in Boulder County. Forecasting revenues from these sources would be fairly straightforward. However, of the revenue sources authorized for RTA’s, only the sales tax would generate revenues at a level sufficient to support a major transit service level increase in Boulder County. As noted above, sales tax revenues are relatively volatile, fluctuating with economic conditions.

Implementation of an RTA requires voter approval, both for creation of the entity and for any taxes. Placing the RTA (and/or any taxes) on the ballot requires a

vote of the governing body for each jurisdiction (city, town, unincorporated county) to authorize the question to be presented to the voters in that jurisdiction. RTA's and their taxes and fees are exempted from coverage by TABOR.

Ability to respond to emerging funding opportunities and to adapt to a variety of future revenue sources: HIGH

The diversity and scale of revenue sources authorized by the RTA statute would have the potential of supporting a significant increase in transit service levels, both for the City of Boulder and for all of Boulder County. An RTA also would have considerable flexibility to compete for discretionary funds (state and federal) and could serve as a platform for a variety of public/private endeavors.

Capability to provide integrated service: NEUTRAL

With the RTA providing all services and the county seceding from RTD, all local services could be integrated. Connections with regional services provided by RTD would require coordination with RTD.

RTD position on governance model: RTD WOULD PROBABLY OPPOSE

Implementation of an RTA that includes any areas within RTD's service boundaries would require an intergovernmental agreement with RTD. Effectively, then, establishment of a Boulder County RTA would require approval by the RTD board. Because under this alternative, the RTA would be used to generate revenue for transit and would also involve Boulder or Boulder County seceding from RTD, it is highly unlikely RTD would be willing to work on an intergovernmental agreement with Boulder and Boulder County.

Implementation feasibility of the recommended governance model

Legislation required: **YES** – changing RTD boundaries to exclude Boulder County

Legal questions or issues that cause uncertainty about feasibility: **POTENTIALLY** – a number of legal questions associated with RTA formation, disposition of Boulder County share capital assets attributable to historic tax payments, and other similar issues

Requires new funding partnership with other communities: **YES**

Cost to Implement:

- Annualized Capital Cost to Implement: \$14,000,000
- Additional Annual Operating Funds Required: \$58,100,000
- Annual RTD Operating Funds: \$39,500,000

Ability to Achieve Ridership Goals: HIGH

Expected to achieve 100 percent of Renewed Vision for Transit ridership goal.

Potential Revenue Sources

Each of the governance models has access to various sources of revenue. While some of these are common to multiple models, others are unique to specific models. Potential revenue sources would include operating revenues (fares, passes, etc.), local tax revenues, and state and federal grants and fund allocations. Table 4 shows the sources of revenue associated with each of the governance models. An initial assessment of the amount which could be generated by each source is discussed in this section.

	City of Boulder	Boulder County	Other Cities	Special Districts	County Transit Agency	RTA
Sales Tax	✓	✓	✓	✓	✓	✓
Property Tax	✓	✓	✓	✓		✓
Vehicle Registration Fees		✓				✓
Tourism Benefit Fee						✓
Exactions and Impact Fees	✓	✓	✓			
Employment Opportunity Fee	✓		✓			
Lodging Tax	✓		✓			
Ride-Hailing Surcharge	✓		✓			
State Funds	✓	✓	✓	✓	✓	✓
Federal Discretionary Funds	✓	✓	✓	✓	✓	✓
Federal Formula Funds	?	?	?	?	?	?

GENERAL LOCAL REVENUE SOURCES, INCLUDING JOINT POWERS AUTHORITIES

Potential Revenue Sources: Governance Models 1, 2, 3, 4a

- County sales tax up to statutory limit
- City sales tax up to statutory limit
- Special district sales tax
- County-wide property tax

- City property tax
- Special district property tax
- City occupational privilege tax (head tax) – charter cities only

Potential Annual Revenues

Governance Models	Sales and Use	Property Tax	Occup. Privilege	Total Potential
1, 2, 3 and 4a	Tax (at 1¢)	(at 5 mills)	Fee (@ \$6/mo)	Annual Revenues
Boulder	\$27,200,000	\$18,300,000	\$7,200,000	\$52,700,000
Lafayette	\$3,100,000	\$2,700,000	\$0	\$5,800,000
Longmont	\$14,200,000	\$7,100,000	\$0	\$21,300,000
Louisville	\$3,900,000	\$3,200,000	\$0	\$7,100,000
Superior	\$2,400,000	\$1,100,000	\$0	\$3,500,000
Other	\$4,500,000	\$6,900,000	\$0	\$11,400,000
TOTAL COUNTY	\$55,300,000	\$39,300,000	\$7,200,000	\$101,800,000
Note: Revenues are 2017.				

COUNTY MASS TRANSIT AGENCY

Potential Revenue Sources: Governance Model 4b (CRS 29-2- 103)

- Sales tax up to 1¢ - countywide

Governance Model	Sales and Use
4b	Tax (at 1¢)
Boulder	\$27,200,000
Lafayette	\$3,100,000
Longmont	\$14,200,000
Louisville	\$3,900,000
Superior	\$2,400,000
Other	\$4,500,000
TOTAL COUNTY	\$55,300,000
Note: Revenues are 2017.	

REGIONAL TRANSPORTATION AUTHORITY

Potential Revenue Sources: Governance Models 5 and 6 (CRS 43-4 Part 6)

- Sales tax up to 1¢
- Property tax up to 5 mills

- Vehicle registration fee of flat \$10 per registered vehicle
- Visitor benefit fee (lodging receipts tax) up to 2%

Governance Models	Sales and Use	Property Tax	Vehicle Reg	Visitor Benefit	Occup. Privilege	Total Potential
5 and 6	Tax (at 1¢)	(at 5 mills)	Fee (at \$10)	Tax (at 2%)	Fee (@ \$6/mo)	Annual Revenues
Boulder	\$27,200,000	\$18,300,000	\$600,000	\$3,200,000	\$7,200,000	\$56,500,000
Lafayette	\$3,100,000	\$2,700,000	\$200,000	\$100,000	\$0	\$6,100,000
Longmont	\$14,200,000	\$7,100,000	\$800,000	\$1,000,000	\$0	\$23,100,000
Louisville	\$3,900,000	\$3,200,000	\$200,000	\$400,000	\$0	\$7,700,000
Superior	\$2,400,000	\$1,100,000	\$100,000	\$0	\$0	\$3,600,000
Other	\$4,500,000	\$6,900,000	\$600,000	\$0	\$0	\$12,000,000
TOTAL COUNTY	\$55,300,000	\$39,300,000	\$2,500,000	\$4,700,000	\$7,200,000	\$109,000,000

Note: Revenues are 2017.

Notes to Tables:

- “Other” includes Nederland, Erie, Jamestown, Lyons, Ward, and unincorporated areas of Boulder County.
- Sales and Use Tax and Property Tax revenues are estimated at tax rates allowable under an RTA (Governance Models 5 and 6) to facilitate direct comparisons.
- Occupational Privilege Fee (or “Head Tax”) revenue is estimated at \$6 per employee per month. Denver’s current rate is \$5.75. This analysis assumes only the City of Boulder would implement this revenue source.
- Implementation of any tax increase or new tax by any municipality or county in Colorado requires approval by a vote of the electorate in a general election.
- Implementation of an RTA and associated taxes requires approval by a vote of the electorate in a general election in each of the jurisdictions, or parts of jurisdictions, to be included in the RTA.

ALL MODELS

Additional Potential City of Boulder Revenue Sources

In addition to revenue sources traditionally associated with transit funding or have been authorized by Colorado Statutes for transit agencies, the City of Boulder could consider several additional revenue sources. These could provide funding in addition to, or in lieu of, funding from sources shown in the tables under some scenarios.

- *Transportation Maintenance (or Utility) Fee.* A monthly fee (not a tax) assessed to commercial and residential property owners for operations and maintenance costs. Such fees are normally associated with street

maintenance and repair needs. Using this source for transit costs would have to survive a “rational nexus” test in the inevitable lawsuits that would follow its adoption.

- *Transit Shelter Advertising Revenues.* The City could allow and approve lease(s) for placard-style advertising on transit shelters. This would involve one or more contractors or concessionaires who would sell advertising, remitting rents to the City. Several issues, including ownership of the shelters (RTD?), changes to City outdoor advertising ordinances, and content management would have to be addressed and resolved.
- *Parking Space Fees.* The strong, direct relationship between parking availability and transit demand suggests that a fee on off-street private parking might be legally feasible. Significant opposition from property owners and commuters could be expected, but the nexus between source and use of revenues would be appealing.
- *Ride-Hailing Services Surcharge.* Another strong, direct relationship exists between ride-hailing services (Uber, Lyft, taxi companies) and transit demand. These services compete with transit and also add traffic volume to city streets. Consequently a number of jurisdictions (Chicago, Philadelphia, State of Massachusetts, among others) have imposed fees (per ride) on such services. Boulder may have the authority to do this as a charter city. The technological and political challenges associated with this appear to be surmountable. It might be possible to implement this surcharge County-wide.
- *Local Option Gas Tax.* The State of Colorado has not authorized a local option gas tax for use by cities or counties, although these have been approved and placed in use in other states (Florida, Nevada, Hawaii, etc.). Because there are no fuel wholesalers in Boulder, the tax would have to be applied at the retail level to generate revenue for the City. Also, given the prevalence of in-commute vehicles in the Boulder traffic stream, avoiding the tax by buying fuel at retailers in other cities and towns would be fairly easy. This would reduce the revenue potential for the City and also would probably adversely impact Boulder fuel/retail businesses.

- *Mileage Fees.* Several states (notably Oregon) are actively testing the feasibility of mileage, or VMT fees (VMT – vehicle miles traveled). These require a system for recording the amount, time and location of vehicular travel and collecting a fee or tax for that road usage. It is possible that mileage fees could replace fuel taxes at the state and federal levels. However, implementing this at the municipal level is unlikely to be feasible, given the technological, privacy, and state preemption issues.

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Summary of Findings

INTRODUCTION

As presented in the previous sections, each of the governance models has advantages and disadvantages for implementing the Renewed Vision for Transit. The evaluation presented in Section 5 identified those strengths and weaknesses and the potential funding sources described in Section 6 gives an indication of how well each model may support achievement of the Renewed Vision for Transit. This section provides a summary of the governance models, the feasibility of each, and implementation steps to support the Vision.

FEASIBILITY OF GOVERNANCE MODELS

Table 4 shows the recommendations for those governance models which should no longer be considered and those which are feasible for implementation.

Governance Model	Recommendation	Advances Local Transit Service Goals	Advances Regional Transit Service Goals
#1 – Maintenance of Current Governance	Not Viable	No	No
#2 – Incremental Expansion (Buy-Ups)	Not Viable	No	No
#3 – City Provider	Viable	Yes	No
#4A – Intergovernmental Transit Agency	Viable	Yes	Yes
#4B – County Transit Agency with Mass Transit Tax	Viable	Yes	Yes
#5A – RTA Funding Only	Not Viable	Yes	Yes
#5B – RTA Funding and Operating	Viable	Yes	Yes
#6 – RTA Secede from RTD	Not Viable	Yes	Yes

Governance Model #1 – Maintenance of Current Governance

Although governance model #1 maintains the current governance structure, it will not maintain the current level of service. As costs increase, service cuts are anticipated. No additional funding is included for expansion of service or implementation of new services as part of the Renewed Vision for Transit. This model fails in accomplishing the primary goals and will result in less service and reduced ridership compared to the goals of the Vision.

This model is considered feasible to implement because it requires no action on the part of the City or County. However, it does not accomplish the goals of the City and is not recommended.

Governance Model #2 – Incremental Expansion (Buy-Ups)

This model relies on service buy-ups for service operated by RTD. RTD has indicated that, due to other limitations, it would not be able to provide significantly increased service, even with additional funding provided by the City of Boulder. The Steering Committees determined that based on the evaluation and reliance on RTD to operate service, this option is not feasible for implementation.

Governance Model #3 – City of Boulder Local Transit Provider

In this model, the City of Boulder would assume operations of all CTN and local routes and operate them either directly or through a contract operator. This option requires additional sources of revenue, but could be implemented by the City independent of other local governments. The City would need to work with RTD for reallocation of funds collected by RTD and currently used for these routes so that the funds could be used by the City for operation of routes formerly operated by RTD.

The greatest challenge for implementation of this option is the need for increased funding for implementation. Local funding sources could potentially meet this level of funding, but would compete for other funding needs. The City has the legal authority to implement this model and the corresponding transit services. It is not clear whether the City would have access to Federal Transit Administration (FTA) funds or RTD facilities in Boulder.

This option could be seen as an incremental step to full implementation with future governance based on one of the county-wide or regional models. Longer term implementation of county-wide services may require a governance model that partners with other local governments.

Governance Model 4A – Intergovernmental Transit Agency

In this model a new county transit agency would be formed through intergovernmental agreements using Joint Powers Authority of the City and County. The new agency would assume responsibility for operating all CTN and local routes in Boulder County. RTD would continue to operate regional services.

Funding for this option would rely on current local revenue sources and would require additional funding for full implementation of the RVT plus other local Boulder County routes (300 numbered routes). Local funding sources have the potential to support this level of funding, but local funding would have to compete with other needs.

This may be a feasible option for long-term implementation. Local revenues could be available to implement the service, but would require voter approval of any new taxes.

Governance Model 4B – County Transit Agency with Mass Transit Tax

Boulder County would form a new county transit agency. The primary difference in this model is that funding would be through a county mass transit tax of up to one cent.

Boulder County has the legal authority to create a transit agency. However, state laws limit use of a county mass transit tax to those counties outside the boundaries of RTD. This tax also requires approval of the voters through a county-wide ballot initiative. To pursue this funding would require a change in state statutes and would most likely require support from RTD for the new sales tax within the boundaries of RTD.

This may be a feasible option for long-term implementation, but would require support from RTD, legislative action, voter approval of the sales tax, and additional local revenue. However, implementation of the county-wide sales tax

would be somewhat simpler than implementing a sales tax through an RTA (see 5 and 6 below) because it would require only one county-wide vote. The RTA requires separate votes in each participating jurisdiction.

Governance Model 5A – RTA Funding Only

Under this option, the City and County would form a Regional Transportation Authority. To cover all of Boulder County would also require participation by the each of the local municipalities. The RTA would be used as a funding mechanism for service operated by local entities and RTD. Funding options available through an RTA could cover this additional cost.

The process to form an RTA is more complex than forming a county transit agency. Formation requires three steps as described earlier. The first is to gain approval of the participating local governments through an intergovernmental agreement to place the measure on the ballot in each local jurisdiction. The RTA must then be approved through two votes in each jurisdiction; the first to approve formation of the RTA and the second to approve the revenue sources. It is possible that some local governments would approve the ballot measure, but one or both of the ballot measures could fail. This could result in an RTA that does not cover all of Boulder County and has funding from only portions of the county. The City and unincorporated Boulder County do have the potential to fund this option without participation from the other local municipalities.

The Policy Steering Committee determined that this model is not feasible because of the reliance on RTD to provide additional service through additional funding and service buy-ups.

Governance Model 5B – RTA Funding and Operations

Model 5B is similar to Model 5A except that the RTA would both fund and operate transit services. Funding sources available to an RTA could provide this level of funding but would require participation of some local municipalities to achieve the required level of funding.

This may be a feasible option for long-term implementation, but would require support from RTD, participation of multiple local governments, voter approval of the RTA, and voter approval of the RTA funding.

Governance Model 6 – RTA Secede from RTD

Under this model, an RTA would be formed in Boulder County and Boulder County would secede from the RTD.

This model is not considered to be feasible for multiple reasons:

- This model would require voter approval of the RTA as described above.
- Formation of an RTA would require support from RTD. Seceding from RTD is not likely to be supported by RTD and legislative changes are not likely.
- It is unclear if Boulder County could separate from RTD for both the base level of taxation (sixth tenths percent) and the FasTracks funding (four tenths). As RTD bonding is based on revenue from Boulder County, rescinding the FasTracks funding is not likely.
- Use of RTD facility assets in Boulder County is unclear. There is a high level of uncertainty about whether a new RTA would have access to RTD facilities. It is unknown if RTD would be willing to share the facilities or would require purchase or rent.
- Access to FTA funding is uncertain as RTD is currently the designated provider and recipient of FTA funds.

NEXT STEPS

A number of steps must be completed to create a new governance model to implement the RVT.

The first step should be to obtain affirmation and support from TAB and City Council on the best governance models to continue considering based on the results of this study. Additional information will be required to select a preferred model and service plan, but several of the governance model options could be eliminated from any further consideration. The results of this study should also be taken into consideration as part of the future TMP funding analysis and update.

Transportation Master Plan

The City of Boulder Transportation Master Plan will be updated in the next year. The long-term preferred governance model should be selected based on funding potential, potential position of RTD, and City/County goals.

Coordination with Boulder County and Agency Partners

Continue conversations with Boulder County and other municipalities within Boulder County should take place to determine the level of interest and potential support for establishing a county-wide transit governance model.

The University of Colorado and Boulder County are in the process of updating their Transportation Master Plans. The City should continue to coordinate with these planning efforts and incorporate the preferred transit governance models and service scenario in the plans.

Funding and Revenue Analysis

As part of the TMP Update, the City will be completing a transportation funding study in the fall and winter of 2018/19. This study will provide more detail about the potential funding which could be generated by local revenue sources. Other programs which may compete for funding from the local revenue sources need to be identified and prioritized to determine a realistic level of funding for implementation of the enhanced transit service. A better understanding of the potential funding level given competing needs will assist in selecting a governance model and service level which will then be best for implementing the RVT.

A similar analysis may be needed for Boulder County if the preferred governance model is a county-wide transit system, whether through a county transit agency or an RTA.

Transportation funding is addressed each year by the Colorado State Legislature. Action by the Legislature or statewide ballot initiatives could change the potential funding available to local communities and counties.

Coordination with RTD

A large amount of uncertainty remains with respect to the position which may be taken by RTD for local funding of transit service, particularly through a county

mass transit tax or an RTA. City and County staff should initiate discussions with RTD leadership to determine the potential reaction of RTD and the likely position to be taken by RTD regarding a county mass transit tax or RTA for transit funding.

Trends to Consider

There are emerging trends and technologies that should be considered as decisions are made and steps taken to implement a change in the governance structure for the City of Boulder and potentially Boulder County. Changes in RTD service and the ability of RTD to deliver service at current levels or increased levels is uncertain. Similarly, the level of Federal Transit Administration (FTA) funding always has some uncertainty and programs are often changed as part of the reauthorization process for the surface transportation bill. Two ballot initiatives have been submitted for the 2018 statewide election for transportation funding. One of the ballot measures would provide some funding for transit operation while the second measure provides no funding for transit capital or operations.

Technology trends which could impact service delivery include Mobility on Demand, Mobility as a Service, Transportation Network Companies, and autonomous vehicles. The developments in technology should be monitored and integrated as appropriate in the development of service changes under the selected governance models.

Phased Implementation

Once a preferred long-term strategy is selected, which may include more than one governance model, interim changes in the governance structure should be decided. This may be the city operating transit directly or through the use of a contractor to operate service that may be cut by RTD and to implement new or enhanced services under Model #3 and creation of a County Transit Agency as described in Model #4. Other municipalities within Boulder County could establish municipal transit agencies similar to that described for the City of Boulder in Model #3.

A timeline similar to that for RTA implementation should be created to identify the various steps required to move from the current governance structure to the short-term, mid-term, and long-term preferred governance models.

Innovative Trends in Transit

Transit operators and public agencies across the country are looking for new and innovative ways to provide public transit that will attract more riders while also managing costs. Many of these innovations involve partnerships between traditional public transit providers and newer, technology-enabled mobility services like Transportation Network Companies (TNCs), the largest of which are Uber and Lyft, or microtransit solutions, from companies like Via, Chariot, or Transloc. Other emerging trends include deployment of autonomous vehicles for transit service and shared mobility.

Many of the newer models for service delivery, like TNCs and microtransit, are still rapidly evolving with little long-term data or analysis to determine costs and benefits.

- **Transportation Network Companies (TNCs)** are a privately-operated form of demand response transportation that use mobile phone apps and an online platform to pair passengers needing a ride with drivers operating their own personal car to perform the ride. TNCs rely on smartphones with GPS capability to identify the rider pick-up location and inform the rider how long it will take for the driver to arrive. Passengers must have a smartphone in order to book a ride. TNCs are private companies, the largest of which are Uber and Lyft, that treat the drivers as independent contractors who are required to meet certain minimum standards in order to use the online platform and provide rides. Drivers generally choose the hours and areas they serve, rather than being dispatched like a taxi. Drivers are responsible for all the costs associated with operating their own vehicle, including having insurance coverage for the vehicle, but TNCs provide additional insurance coverage while a driver is performing a trip. TNCs are part of what is often called the “sharing economy” where people with assets like cars or spare bedrooms can use them to make extra money. TNCs can also be known as ride hailing, technology-enabled ride sharing, or shared mobility.

- **Microtransit** is a relatively new term and can be difficult to define. Microtransit is defined as a ridehailing form of transportation which employs on-demand dynamic route transportation technology to serve multiple passengers in the same vehicle along a route that can either be fixed or flexible. Microtransit companies, such as, Bridj, Chariot, Split, and Via, serve passengers using dynamically generated routes and may expect passengers to make their way to and from common pick-up or drop-off points. Vehicles can range from large SUVs to vans to shuttle buses. Microtransit can also be called dynamic shuttles or private flexible transit. It should also be noted that some existing microtransit program have used public agency vehicles and drivers. The primary difference between microtransit and a route deviation service is that microtransit employs technology that has only recently been available. Microtransit includes the use of software and smartphone technology which: (1) allow the passenger to reserve a ride directly (without the use of a dispatcher), (2) provides the driver with pick-ups and drop off assignments in real time and (3) calculates the most efficient route between passenger pick-ups/drop offs. General routes and schedules are followed, but these can be modified as passenger demands evolve. Microtransit services will typically use vans instead of larger buses but will cost more than a fixed route service. The hope is that technology will allow microtransit programs to carry more passengers than a DAR service for a smaller cost.
- **Vouchers or Contracted Services** – Vouchers are provided by a transit agency at a base rate and quantity to give a rider access to a taxi or van operated by another agency. In some cases, a transit agency would contract for these services while, in others, an agency would just purchase vouchers in bulk for use by transit passengers who may not be served by a fixed route bus. This report looks at examples where service was contracted with a private provider dedicated to maintaining a fixed amount of scheduled service (unlike on demand TNC service), possibly in combination with taxi vouchers.
- **Mobility-on-Demand (MOD)** – MOD is a user-focused approach which leverages emerging mobility services, integrated transit networks and operations, real-time data, connected travelers, and cooperative Intelligent

Transportation Systems (ITS) to allow for a more traveler-centric, transportation “system-of-systems” approach, providing improved mobility options to all travelers and users of the system in an efficient and safe manner. MOD combines different mobility options under one technology platform, often a smartphone app, and allows a user to plan a trip from point A to point B without regard for what agency or company is providing the service. MOD can encompass many different newer, innovative, technology-enabled service alternatives like TNCs or microtransit. MOD solutions explored in this report are those which utilized a technology platform that fell under the auspices of a transit agency. Inherent in MOD is cooperation and coordination among many transportation providers within a given geographic area.

Shared ride mobility is emerging as an option both for local and regional trips. This addresses its implications for local circulation travel and access within the City of Boulder.

LOCAL SHARED RIDE MOBILITY	
RELEVANT TO TRANSIT AND DIRECTLY RELEVANT TO THIS PROJECT	RELEVANT TO TRANSIT, NOT DIRECTLY RELEVANT TO THIS PROJECT
Ride-hailing services (Uber, Lyft, taxi)	Car share - membership
Integrated mobile fare/fee payment	Car share – personal, app-enabled
Autonomous buses	Bike share
Electric buses	Personal autonomous vehicles
ITS – V2V and V2I connectivity	
Microtransit	
Mobility on Demand (MOD)	

Local shared ride mobility implications:

- may be reducing transit ridership on local routes;
- may be increasing vehicular traffic on Boulder streets;
- may eventually reduce personal vehicle ownership among Boulder residents;
- may have a lower cost per ride than local transit;
- could replace low-volume, fixed-route, scheduled transit service;
- may or may not meet needs of transit-dependent population;

- may or may not be integrated into an interconnected, adaptive traffic signal network;
- could be integrated into a mobile platform multimodal fare system; and,
- could or could not take the form of an electric micro-transit network (ala EZ10).

There are two potential strategic directions for City of Boulder:

- Reactive – The trends are too complex and uncertain to predict. The City should watch what happens and react as appropriate. Scenarios should be agnostic with respect to potential roles of local shared ride mobility and adaptable to a range of outcomes.
- Proactive – While we cannot predict exactly what will happen, the general direction of trends is clear. The City should work to shape how local shared ride mobility evolves in Boulder and should guide what its role will be relative to local transit.