Roaring Fork Transportation Authority

Integrated Transportation System Plan

DRAFT Outline – Phases I and II

November 4, 2015

Introduction

Per Board direction at the June 2015 RFTA Board Retreat, RFTA staff has been directed to develop a draft scope of work for an Integrated Transportation System Plan (ITSP). RFTA has experienced great success with the rollout of VelociRFTA, the country's first rural Bus Rapid Transit (BRT) system. Now, RFTA must build upon a foundation of 30 years of transit investments by creating an ITSP. The ITSP will guide development of a transportation network that integrates a variety of multimodal transportation options, such as walking, bicycling, paratransit, regional transit, local transit systems, fixed guideway options, park-n-rides, transit station/stop redevelopment, Transit Oriented Development (TOD), and bike share. The Plan will consider catalysts and establish triggers for optimizing, enhancing, or expanding service, and for transitioning to different modes, such as from BRT to fixed-guideway.

The ITSP is intended to be inclusive and comprehensive, analyzing the impacts of population and employment growth, and land use policies and development patterns. The ITSP will evaluate the cost-effectiveness of various multi-modal public transportation options, assess organizational capacity, and forecast the financing needed in order to accomplish the goals and objectives of the region. The ITSP should outline the roles and responsibilities of RFTA and its partners as they relate to the financing, development and implementation of transportation infrastructure and services. The ITSP should establish a decision-making framework for RFTA and its partners when it comes to reviewing proposed developments, transit projects and services and investment alternatives. RFTA intends to develop the ITSP by undertaking a

thorough Board, organization, stakeholder and public engagement process. The ITSP should cast a vision that engages, energizes, and empowers the Board, RFTA employees, stakeholders, and the public to shift the focus from “what is” to “what is possible.”

Ultimately, the ITSP is intended to be a short and long-term, living, integrated, comprehensive vision and implementation plan for the region’s public transportation system and investments. The ITSP should establish RFTA as the “Go To” and “Can Do” organization in the region for implementing multimodal transportation options that are safe, attractive, comfortable and workable, and helping to make the communities it serves more livable. The ITSP should demonstrate that RFTA is responsive and proactive, that it has the capacity to maintain the safety and quality of its services, equipment, infrastructure, and facilities, while also accommodating growth and development now and in the future.

Without resources, plans are not implemented. The ITSP should inspire public and stakeholder confidence in RFTA and help create the community involvement, momentum, and support RFTA will need in order to achieve the region’s short and long-range multi-modal goals and objectives.

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Background

The entire ITSP scope of work encompasses the totality of issues that should be addressed to help RFTA and its constituents understand RFTA's long-term vision, "RFTA pursues excellence and innovation in providing preferred transportation choices that connect and support vibrant communities." The purpose of this document is to divide this scope of work into two phases. Phase I will address projects that can be addressed within one year, to accommodate logical work flow, priorities and annual budgets.

Phase I will assess RFTA's needs--in terms of facilities, fleet, human capital, capital and operating budgets and other resources—based on its current roles and responsibilities. Phase I will also establish forecasts of growth in the transit system, and outline what RFTA must do to sustain this growth. Phase I needs to culminate in a compelling narrative for what RFTA plans to do and be in the future, how it will generate the requisite financial resources, and why it has chosen its intended path to financial and operational sustainability.

Phase 1 Key Elements

The Phase I scope of work consists of the following tasks:

1. Background and History of Regional Transportation System

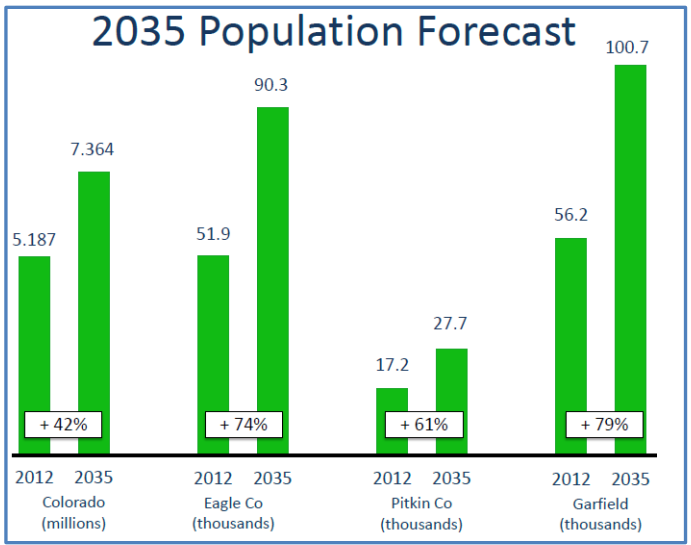
This section will discuss the history and key changes and milestones in the regional transportation system.

2. EXISTING CONDITIONS

This section will outline the existing regional conditions, in terms of transportation infrastructure, land use, and transportation and land use plans.

3. FUTURE COMMUNITY CHARACTRISTICS, NEEDS AND VISIONS

The purpose of this section is to consider what the community will look like in the future, in terms of community aspirations; land use patterns and policies; population, employment



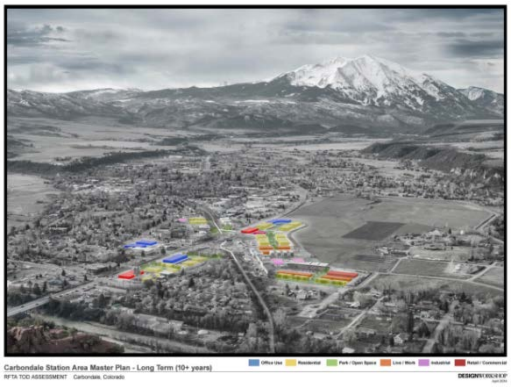
and demographics; and other factors. This information will provide the foundation for transportation purpose and need, goals, and investment and financing strategies.

- Community Needs, Goals and Aspirations
- Land Use Plans, Policies and Impacts
- Population (Age, Gender Ethnicity, and other Demographics)
- Employment (classifications, incomes, commuting patterns)

4. TRANSPORTATION AND COMMUNITY VISION

The purpose of this section is to outline the transportation vision and goals, based on the background information outlined in the previous section and from Board, Community, and stakeholder input

- Long Range Transportation Purpose and Need
- Community Vision
- Transportation Vision
- Transportation Goals and Objectives



5. ORGANIZATIONAL CAPACITY AND EFFICIENCY REVIEW

The purpose of this task is to help RFTA and its constituents understand RFTA's abilities to address its current and future responsibilities. The components of this review should include:

Inventory and Capacity of Existing Assets – Quantity, condition, and efficiency of the Organization, including the following elements

- Financial – Revenue, Expenses, Fund Balances
- Organizational Structure and Staffing
- Facilities – Fleet, Storage and Maintenance Facilities, Bus Stops and Park and Rides, Operations and Administrative Space
- Employee Housing
- Trails
- Land

Inventory of Services –RFTA's scope of services and responsibilities, such as

- Transit routes, schedules, operating hours, operating miles
- Boarding areas and park and rides
- Regional planning responsibilities
- Other core functions, such as construction management

Efficiency Review – This task will assess

- Strengths and weaknesses of RFTA's current approach to managing its services and responsibilities
- Areas of excess capacity and of deficiencies (in terms of fleet, facilities, organizational structure and staffing, and other resources)
- How RFTA can better manage under current conditions and priorities

6. Demand Forecasts

The purpose of this task is to evaluate and quantify future demands upon RFTA's fleet, facilities and staff. This section will incorporate information from Sections 3 and 4 to develop the following:

Ridership Forecasts -- Reasonable estimates of future transit ridership, in 5-year increments, for a 20-25 year period. These forecasts could be based upon conditions such as:

- Previous growth in transit ridership;
- Employment trends
- Population trends
- Anticipated enhancement and expansions of transit service
- Land use forecasts and residential and commercial build-out analysis

Other Needs Estimates -- Estimates of other future demands upon RFTA, such as Rio Grande ROW operations and maintenance, bicycle-pedestrian programs, regional planning, construction management, and special projects and programs

Impact Assessment -- Based on the forecasts of ridership and other demands, the consultant should estimates the impacts upon RFTA, in terms of:

- Transit Operating Hours and Miles
- Fleet (Expansion and Replacement)
- Facilities (Operating, Administrative, Housing, Maintenance, etc.)
- Organizational Structure and Staffing

7. Capital Plan

The purpose of this task is to develop a capital plan, based on current conditions and forecasts of needs and responsibilities for the next 15-20 years. The capital plan will address expansion and replacement needs and priorities, and cost estimates.

8. Service Alternatives Plan

The purpose of this task is to develop transit service alternatives, based on current conditions and forecasts of needs and responsibilities for the next 15-20 years. Operating plans will include estimated operating budgets based on factors including but not limited to:

- Fleet operating hours and miles
- Organizational Structure and staffing

9. Financial Sustainability/Financing Plan

The purpose of this task is to gain an understanding of projected revenue and projected capital and operating expenses, and determine strategies to ensure that income and expenses, financial goals and agency operational goals are aligned.

The consultant should evaluate potential sources of revenue and develop forecasts of anticipated revenues for a 15-20 year period. These forecasts can be based on previous trends, anticipated sales tax revenues, anticipated grant revenues, and other appropriate factors.

The consultant should then discuss strategies to ensure financial sustainability. These strategies could include:

- Increasing fares (to increase revenues and control demand)
- Identifying financing options, such as lease-purchases and bonding
- Public-private partnerships
- Reducing levels of transit service or other responsibilities
- Proposing new or additional sales taxes, lodging taxes, property taxes, etc.

RFTA and the consultant will then determine the most appropriate strategies and create a plan and timetable for implementation.

10. Property Tax Levy Planning and Implementation

Based on RFTA's current analysis, fleet replacement will be a critical challenge. RFTA must replace over 80 vehicles within the next 18 years. The cost of a transit vehicle is between $500,000 and $750,000 in today's dollars. RFTA believes that property tax in its service area of approximately 1 mil would generate sufficient revenue to fund 75% of fleet replacement. The consultant team, in coordination with RFTA Bond Counsel, will determine if this is a valid financial sustainability strategy, and develop a plan and schedule to put a ballot measure on the November 2016 or 2017 ballot, if advisable and authorized by the RFTA Board of Directors.

Plan elements include:

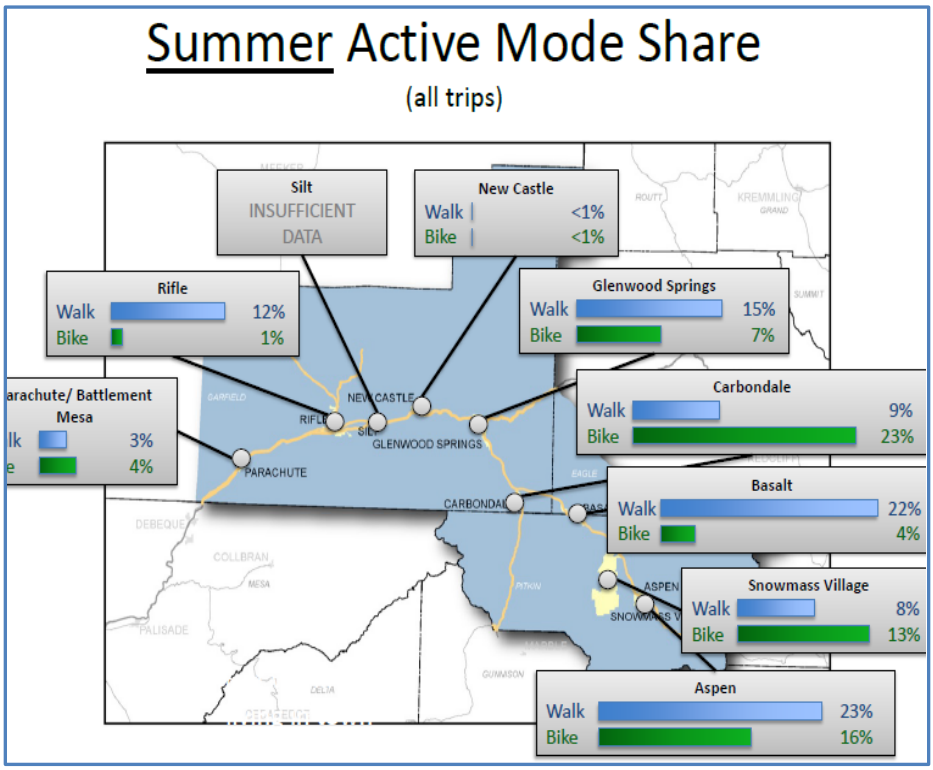
- Analyzing the opportunities and constraints of a ballot measure in 2016 and/or 2017
- Polling the public to determine public support for a mil levy at different rates
- Creating and implementing a public education campaign
- Determining appropriate ballot language and following appropriate processes and schedules to get the ballot measure on the ballot

Phase II Key Elements

Phase two of the study is anticipated to begin in Year 2017. The purpose of Phase II is to complete the remaining elements of the ITSP. Phase II, may be modified and further subdivided, based upon the outcomes of Phase I and scheduling and budget factors.

The purpose of this section is to outline the proposed multimodal transportation components to be implemented incrementally, based on the vision, goals, and trigger points

1. Active Transportation



Bicycle and pedestrian trips and are critical part of the transportation picture. According to the 2014 Local and Regional Travel Patterns Study (RTPS), regional bicycle trips-making is about 9x the national average; and in the communities of Aspen, Carbondale, Glenwood Springs and Rifle, the rate of bicycle trips is even higher. Moreover, nearly one-third of transportation trips in Aspen and Glenwood Springs are internal, yet they create significant transportation impacts. Bicycle and pedestrian trips should be encouraged, for universal and affordable mobility, human health, congestion reduction and other goals. This chapter focuses on bicycle and pedestrian mobility and accessibility projects (and other active transportation modes, if applicable). This section should address:

- Vision and Goals for active transportation
- Projects and Programs
- Cost
- Priority
- Time Frame and Triggers

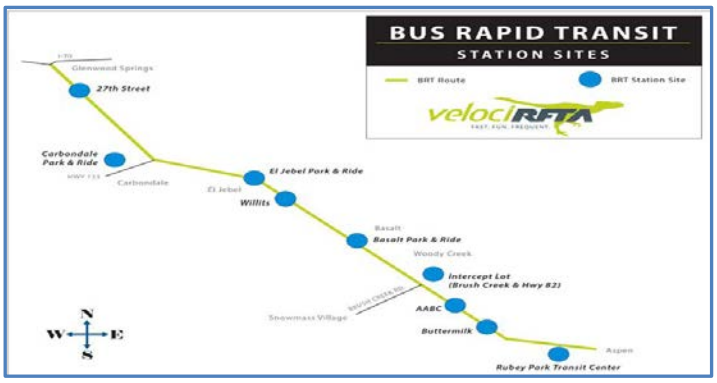
2. Transportation Demand Management

Out of the key policies suggested by the RTPS is the cultivation of local and regional TDM programs. TDM programs are a collection of predominately small program to encourage shifts away from SOV use. The City of Aspen has one of the more effective TDM programs in the county, and has managed to maintain ADT in the Aspen area at 1993 levels. According to the RTPS, continued implementation and expansion of TDM can balance mobility choices and reduce traffic congestion. Elements of this section should include:

- Vision and Goals for TDM
- Inventory of Existing Programs and Evaluation of Effectiveness
- Optimization and Enhancement
- Expansion
- Alignment with land use and development proposals

3. Transit

This region has been invested in mass transit for over thirty years, and has dedicated sales tax to transit system development and operation. This chapter outlines plans for the transit system and related functions, above and beyond the outcomes of Phase I. Elements may include:



Regional Bus Service

Regional bus service on the roughly 35-mile I-70 corridor and SH82 corridor is the backbone of mass transportation in the region. Based on the outcomes of Phase I, this section may address:

- Optimization of regional bus service
- Enhancements
- Expansion

Local Transit Systems and Circulators

Local transit in Glenwood Springs, Aspen, and Carbondale is critical to the success of the regional system. This section should address

- Optimization
- Enhancement
- Expansion
- Operation and Maintenance Structure and Agreements
- Impact on Facilities

Paratransit

Complementary paratransit to existing transit services is a Federal requirement; moreover, according to the State Demographer, the age 65+ cohort will be an increasing component of the Western slope population, and will have impacts on the economy, transportation and other aspects of life. This section should address

- Goals for Paratransit
- Optimization and Enhancement
  Expansion
- Capital and operating costs
- Priorities for implementation
- Funding

Intelligent Transportation Systems (ITS) and Transit Priority Measures

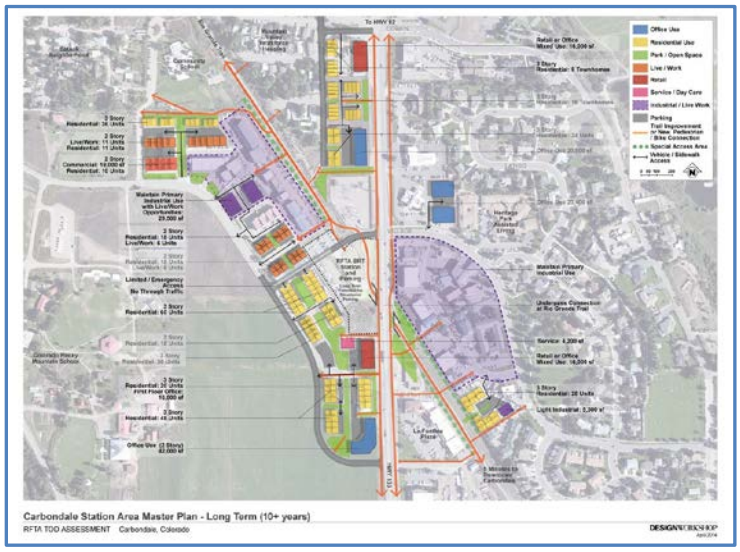
Technology has a significant impact on the transportation system, from counting passengers to adjusting signal timing. This section should address:

- Effectiveness of current transit priority measures
- Potential for enhancement and optimization
- Expansion of queue jumps, signal priority, slip lanes, and bus/HOV lanes
- Priorities, timelines and triggers
- Other ITS solutions

Bus Boarding Areas and Park and Rides

Bus boarding areas are the passengers' first experience with the transit system and a critical part of the image of transit. These areas must be safe and inviting. Bus stop locations may influence community goals and the land use plans. This section will address:

- Bus Stop Enhancement and Expansion
- Park and Ride Enhancement and Expansion



    - Surface parking
    - Structured Parking
- New Parking Sites
- Bicycle Parking
- Bike Share and Car Share
- Costs, funding, priorities, timelines

Impacts to Fleet, Facilities and Human Resources

The improvements proposed in this section (regional and local bus service, paratransit, bus boarding areas, etc.) cannot be implemented without the supporting infrastructure, such as maintenance and operations facilities, and the people to operate, maintain and administrate the service. This section will address the following components:

Maintenance Facilities

Enhancement Needs
Expansion Needs
Costs and Time Frames
Revenue Sources

Operations and Administrative Space and Employee Housing

Enhancement Needs
Expansion Needs
Costs and Time Frames
Revenue Sources

4. FIXED GUIDEWAY TRANSIT

Light rail transit or some other application of fixed-guideway type transportation has been envisioned for the Roaring Fork valley since at least the 1970s. With the implementation of BRT, ridership has exceeded 5 million trips per year, and over 600 buses per days arrive, depart and circulate through Aspen. City of Aspen may be at the edge of its ability to accommodate more buses, prompting the need for this alternative. This section should address:

- Scope and phasing
- Triggers for implementation
- NEPA Issues
- Capital and Operating Costs

- Funding
- Implementation Plan

5. ROAD AND BRIDGE

Road and bridge infrastructure is critical to mobility, for cars, buses, bicyclists and pedestrians. And most road and bridge components have multimodal components. This section should address

- Proposed Road and Bridge Improvements
- Proposed Expansions
- Evaluation criteria
- Priorities, timelines and triggers
- Multimodal components

6. RIO GRANDE RAIL ROW

The Denver and Rio Grande Western rail right of way is a railbanked corridor, up to 200' in width, extending from roughly Glenwood Springs to Aspen. The ROW was acquired through railbanking provisions in roughly year 2000, and, by the terms of railbanking, must be preserved for future rail-based transportation. The ROW is currently paved to about 10' width and is being used as a popular trail for bicyclists and pedestrians. Corridor planning, maintenance and preservation have become an increasingly significant responsibility. The section should address:

- History and Background of the rail corridor
- Vision and Goals
- Critical Management Plans and Covenants – Access Control, Design Guidelines. Comprehensive Plan, Recreational Plan
- Protection, and Preservation

7. TRANSIT ORIENTED DEVELOPMENT

As the transportation system evolves and the region experiences population and employment growth, development of compact, mixed use communities within walking distance of BRT stations may become a priority for both transportation efficiency and effective land use. This section should address the considerations:

- Potential Locations for TOD
- Scope of development
- Community visions and goals
- Amount of mix of commercial, residential, civic and other uses
- Process and milestones
- Agency Roles and Responsibilities

8. PUBLIC PRIVATE PARTNERSHIPS (PPPS)

PPPs are agreements among public agencies and the private sector to finance, develop, operate and maintain infrastructure. PPPs may be a tool for development and operation of TODs, maintenance facilities, bridges, and light rail systems. This section will address:

- Potential PPP Developments and Infrastructure
- Scope, timing, and applicability
- Roles and Responsibilities

9. Phase II Costs and Financing

This plan will lead to proposals for a variety of transportation improvements, including maintenance of existing assets and expansions. The purpose of this section is to help align plans and visions with available resources. This section should address:

- Capital and Operating Cost Estimates
- Infrastructure Priorities
- Timeframes
- Revenue Forecasts
- Sources and action plans for additional revenues, if needed

10. OTHER

This section addresses other needs related to the topics herein, including:

- Incentivizing multimodal transportation and other goals through the entitlements process
- Local agency review process/agency roles and responsibilities for projects in long range plan