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**REG10N**

League for Economic Assistance & Planning

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# Four County Transit Study Update

***FINAL REPORT***

Submitted By:



**April 2013**



# TABLE OF CONTENTS

<b>1: PROJECT OVERVIEW .....</b>	<b>1</b>
Purpose.....	1
<b>2: COMMUNITY PROFILE.....</b>	<b>3</b>
Study Area Overview .....	3
Characteristics .....	3
<b>3: TRANSPORTATION NETWORK .....</b>	<b>15</b>
Roadways .....	15
Private Transit Services .....	15
Human Services Transit Providers.....	16
Public Transit Services.....	19
Summary of Available Services.....	29
Peer System Analysis.....	29
<b>4: DEMAND ANALYSIS .....</b>	<b>31</b>
Purpose.....	31
Community Values.....	31
Approach to Transit Demand.....	32
Service Demand Summary.....	41
<b>5: SERVICE ALTERNATIVES .....</b>	<b>43</b>
Leverage Existing and Planned Network.....	44
Expand VanPool Program and Add Carpool Service .....	48
<b>6: COST ESTIMATES.....</b>	<b>51</b>
Recap of Alternatives .....	51
Cost of Alternatives .....	51
Alternatives Prioritized by Cost.....	56
Revenue .....	58
Summary.....	62
<b>7: IMPLEMENTATION PLAN .....</b>	<b>65</b>
Implementation Plan Summary.....	65
Coordination and Related Activities .....	65
Implementation Plan .....	66

# Figures and Tables

## Figures

Figure 2.1 – Major Communities in the Study Area .....	4
Figure 2.2 – Population Centers Ten-Year Growth .....	5
Figure 2.3 – Actual Population Growth .....	6
Figure 2.3 – Jobs Available by County .....	8
Figure 2.4 – Employment by Industry .....	9
Figure 2.5 – Activity Center.....	11
Figure 2.6 – Projected Population Growth .....	13
Figure 2.7 – County Employment Projections .....	13
Figure 3.1 – Region 10 Transportation Service Coverage .....	21
Figure 4.1 – Commuter Traffic on Major Roadways .....	40
Figure 6.1 – Cost per Passenger of Alternatives .....	58

## Tables

Table 2.1 – County Demographics .....	7
Table 2.2 – Job Growth and Rate by County.....	14
Table 2.3 – Population and Job Growth Projections.....	14
Table 3.1 – Intercity Bus Connectivity.....	15
Table 3.2 – Human Services Transit Service Operating Characteristics .....	16
Table 3.3 – Public Transit Service Operating Characteristics.....	20
Table 3.4 – Public Transit Service Financial Characteristics .....	20
Table 3.5 – APT Ridership Summary .....	24
Table 3.6 – System Comparison.....	30
Table 4.1 – Rural Transportation Service Benchmarks: High Performance Systems .....	33
Table 4.2 - Levels of Service in Peer Communities .....	34
Table 4.3 - Demand for Specialized Transportation Services .....	35
Table 4.4 – Transit Dependent Ridership per Capita .....	36
Table 4.5 - Commuters to Primary Jobs in Montrose City .....	37
Table 4.6 - Commuters to Primary Jobs in Delta City.....	37
Table 4.7 - Commuters to Primary Jobs in Telluride/Mountain Village .....	37
Table 5.1 – Montrose to Delta Sample Schedule .....	45
Table 5.2 – Durango-to-Grand-Junction Route Schedule .....	46
Table 5.3 – Transfer Timing in Montrose .....	46

Table 5.4 – Resources Required to Increase Specialized Transportation.....	47
Table 6.1 – Unit Costs Used in Alternatives Cost Modeling .....	52
Table 6.2 – Annual Cost of Supporting ICB Connections .....	52
Table 6.3 – Vanpool Maintenance and Depreciation Costs.....	53
Table 6.4 –Cost to Expand Vanpool Program .....	54
Table 6.5 – Monthly Cost per Rider per Vehicle .....	54
Table 6.6 – Cost of Public Transportation Options .....	55
Table 6.7 – Weekly Cost to Add Specialized Service .....	56
Table 6.8 – Alternatives Prioritized by Cost.....	57
Table 6.9 – Operating Funding Scenarios for Public Services .....	60
Table 6.10 – Capital Funding Scenarios for Public Services.....	60
Table 7.1 – Implementation Plan Summary.....	65
Table 7.2 – 2013 Implementation Plan Activities .....	66
Table 7.3 – 2014 Implementation Activities .....	67
Table 7.4 – 2015 Implementation Activities .....	68
Table 7.5 – 2016 Implementation Activities .....	68





# 1: PROJECT OVERVIEW

## PURPOSE

This study complements and extends the 2008 Four County Transit Feasibility Study, which led to the development of regional transit alternatives, some of which have been implemented.

The purpose of this study update is to develop and prioritize further transit service options and extend the planning horizon 3 – 5 years (2013-2017), resulting in a 5-year Transit Development Plan (TDP). The TDP will focus on how the Three Rivers Regional Transportation Coordinating Council (3RRTCC) can operate limited general public and specialized transit services in key corridors that include Highways US 50, US 550, and SH 145 and 62. This study will update and reconcile 2008 demand estimates to reflect current conditions, update cost estimates, and develop alternatives to meet demand.

The 3RRTCC planning area has added Gunnison and Hinsdale counties since 2008 and we have included data and systems from those communities. However, the development of alternatives will be focused on the original four counties from the 2008 study. The planning area includes some general public transit service, primarily a flex route between Olathe and Montrose provided by All Points Transit (APT). A regional system that connects to available services in Grand Junction, Telluride and Gunnison provides the most logical area connections and will be evaluated in detail.

The evaluation of options also raises some questions and poses trade-offs that must be considered as service is developed.

- What capacity exists among available providers to expand service?
- What financial capacity exists within the region to expand service?
- What facilities will be necessary for an effective regional system?
- How can the system transition from current to desired services?

The answers will likely involve both policy issues and working with operating and logistical constraints.

## SUMMARY OF ANALYSIS STEPS

The consulting team began with an examination of the current conditions and results in a community profile. The transportation network is described, including the roadway networks, private transportation providers, and all public transportation providers in the region. For providers this includes detailed information on current transit routes, ridership, productivity, budget and funding levels. The profile includes a description of existing and projected employment and population growth.



## Four County Transit Feasibility Study Update

In addition, we identified five peer systems for comparative purposes and gathered productivity and financial data that would assist the team in determining reasonable cost and productivity standards for proposed alternatives.

## 2: COMMUNITY PROFILE

### STUDY AREA OVERVIEW

The 3RRTCC region, located in southwest and south-central Colorado is expansive, with the four member counties of the 3RRTCC covering an area of 5,220 square miles of mostly mountainous terrain. Due to the recent recession population growth and development has slowed. Much previous development was centered in Montrose, Delta and Ouray Counties, as well as in Telluride, Mountain Village, and Crested Butte, which are major tourist destinations.

Traversing the 3RRTCC region, Highways 50 and 550 are the major transportation corridors in the study area, with Highways 145, 141, 133, 92 and 62 providing additional strategic connections. Other important features of the transportation network are the all-weather Montrose Regional Airport, which has a higher volume of flights in the winter months than in other months, the Telluride Regional Airport, and a comprehensive network of multi-use trails that provide important pedestrian and bicycling connections. The study area is illustrated on page 5.

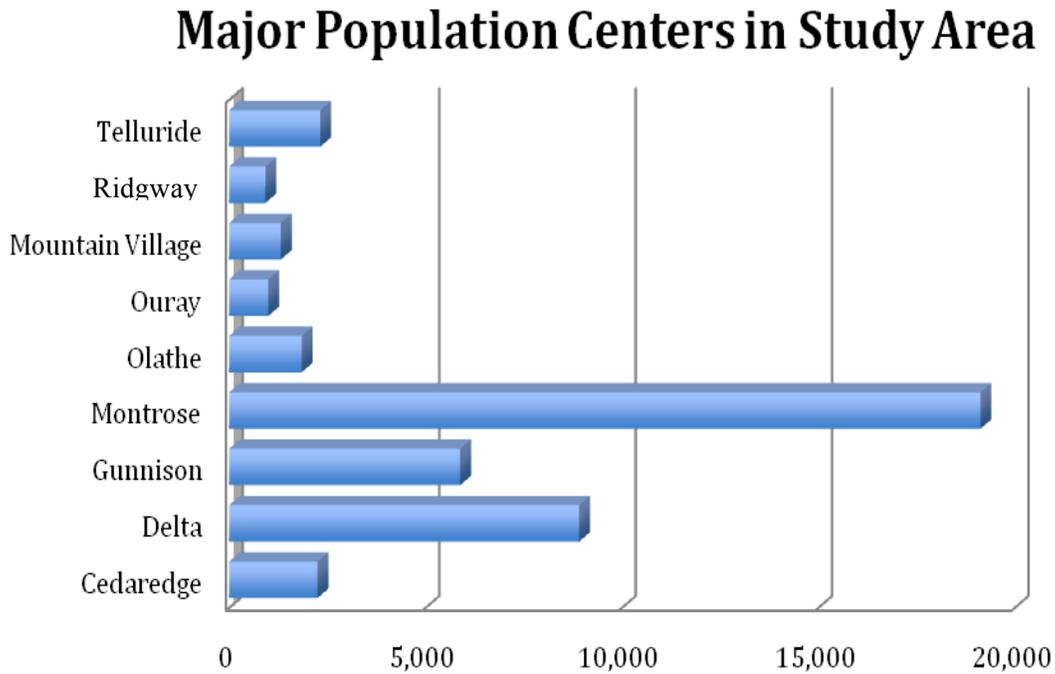
The mountain resort communities within the study area tend to be compact as the valleys are narrow and buildable land a scarce resource in the mountainous locales, while the larger population centers have relatively unconstrained geography.

All Points Transit (APT) provides public transportation services to residents and visitors of Montrose, Delta and San Miguel counties, which includes flex routes as well as scheduled Dial-a-ride services for seniors and people with disabilities. The Town of Mountain Village provides fixed route and demand responsive service as well as fixed-guideway (gondola) service between the towns of Telluride and Mountain Village, and commuter shuttle service to and from Norwood and Cortez. The Town of Telluride provides fixed route and deviated fixed route services with a Town Loop for visitors and residents and partner with San Miguel County to provide commuter and resident transit services to Norwood, Down Valley and the Lawson Hill subdivision. San Miguel County operates a vanpool service between Montrose and Ridgway to Telluride five days per week. APT provides dial-a-ride shuttle once or twice a week to Montrose for passengers in San Miguel County depending on demand.

### CHARACTERISTICS

The Region 10 population is centered on the major year-round population centers of Montrose, Delta and Gunnison, with the remaining inhabitants dispersed in smaller towns and unincorporated areas. The resort communities of Telluride, Mountain Village, Ouray, and Crested Butte attract high populations of visitors in the winter months and for summer recreational activities. **Figure 2.1** identifies the populations of the major communities in the study area.

Figure 2.1 – Major Communities in the Study Area

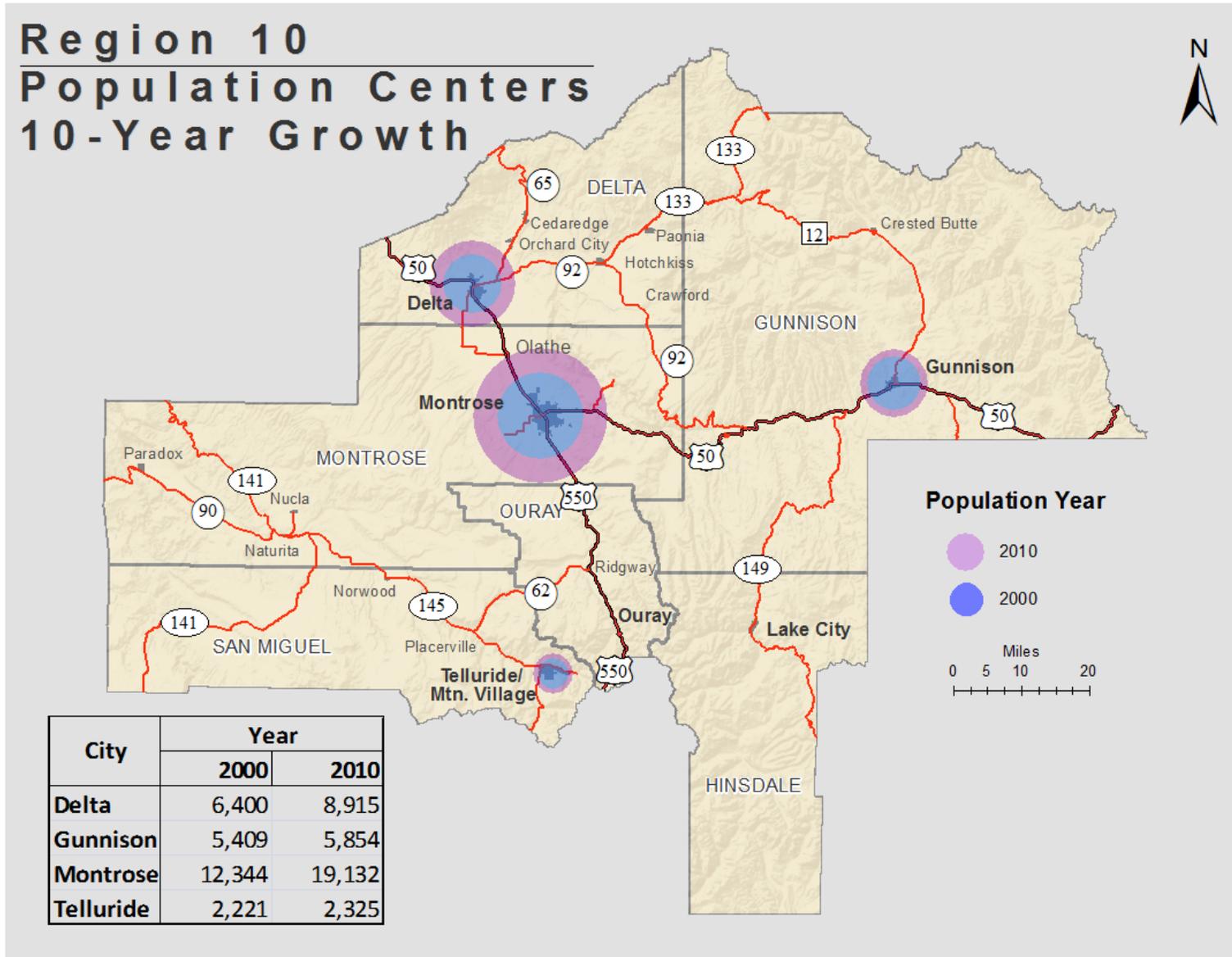


These communities have a population of 43,603, with the remaining population of 56,587 in smaller towns and unincorporated areas. While this study focuses on the communities in the six county Region, it is important to also consider Grand Junction in neighboring Mesa County. Grand Junction is the largest nearby urban area and contains additional medical facilities, Colorado Mesa University, government services, and shopping. Grand Valley Transit provides local transit services, connecting to air, Amtrak, and intercity bus service in Grand Junction.

## POPULATION

Population demographics play a large role in determining where and when transportation services are needed, as some populations have characteristics that make them more likely to need those services. The larger cities and towns logically have the highest need for services, while resort populations that can swell in the prime seasons have high but differing transportation needs. **Figure 2.2** illustrates the service area and compares the populations from 2000 and 2010 of the major Region 10 towns that currently have public transportation.

Figure 2.2 – Population Centers Ten-Year Growth



## Actual Population Growth

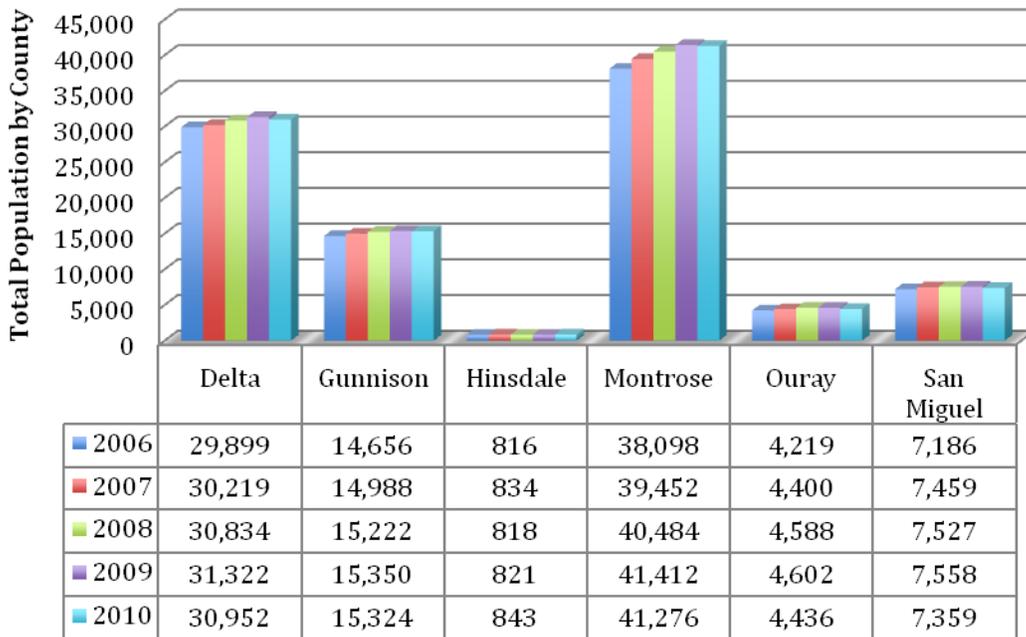
The actual 10-year growth cycle was substantial with Montrose gaining nearly 7,000 residents during the period, but tailed off in 2009 after the economy shifted. In fact, all communities experienced population loss between 2009 and 2010. Despite the downturn in population growth near the end of the decade, the counties in Region 10 actual growth generally kept pace with long-term projections. Although it varied somewhat by county, actual population growth was between 1 and 2% of the 2010 projections.

**Figure 2.3** charts actual population growth over the period from 2006 to 2010.

In the last two decades, residential development expanded in the study area as the cost of housing near the resort communities rose in value, helping to drive the area’s growth. Prior to the recession, development was centered near Telluride and the nearby ski areas. However, the largest expansion in total population from 2000 to 2010 occurred in Montrose and Montrose County, which has a mixed economy. Given the improving economy, growth is expected to continue and eventually reach previously anticipated levels in the years to come

**Figure 2.3 – Actual Population Growth**

### Actual Population Growth 2006-2010



Source: 2010 US Census



## Demographics Affecting Transit Ridership by County

Age, disability, income below poverty level, and average drive time to work are useful demographic characteristics in helping to determine the location for needed transportation services. **Table 2.1** summarizes these by county.

**Table 2.1 – County Demographics**

County	Total Population	Population over 65	Disabled Population*	Population Below Poverty Level	Mean Travel Time to Work (minutes)
Delta	30,952	6,500	6,640	4,055	16
Gunnison	15,324	1,410	1,501	1,655	13
Hinsdale	843	153	92	6	6
Montrose	41,276	7,347	8,195	4,499	21
Ouray	4,436	798	619	364	23
San Miguel	7,359	581	589	721	17
<b>Totals</b>	100,190	16,789	17,636	11,300	

Source: 2010 US Census Bureau

\*Note: Disability data for 2010 was unavailable; 2000 US Census data was used

The total populations over 65 relate to the total populations of the counties in terms of raw numbers, however, the percentage of people over 65 by county varies greatly. Delta County, for example has a 65 and over population of more than 20%, while in San Miguel County less than 8% are over 65.

Rate of disability information for 2010 was not yet available through the U.S Census. However, we were able to develop estimates by using the relative percentage of disabled per county in 2000 and applying the percentages to 2010 total population data. The disabled populations in Delta and Montrose counties were nearly 20%, while San Miguel and Gunnison counties had the lowest relative disabled populations at 8 and 10% respectively.

The total population below poverty level varied greatly as well, ranging from a low of 2% in San Miguel County to a high of more than 13% in Delta County. Montrose and Gunnison counties had the next highest percentage of population below poverty level at nearly 11%.

Mean travel time to work is useful in establishing the distances people typically drive in a county to get to work, which has a bearing on the propensity to use transit when available. Communities in which workers have short travel times are less likely to need or use public transportation. Hinsdale and Gunnison counties are on the lower end, with Montrose and Ouray at the top with 21 and 23-minute average commutes.

## EMPLOYMENT AND ACTIVITY CENTERS

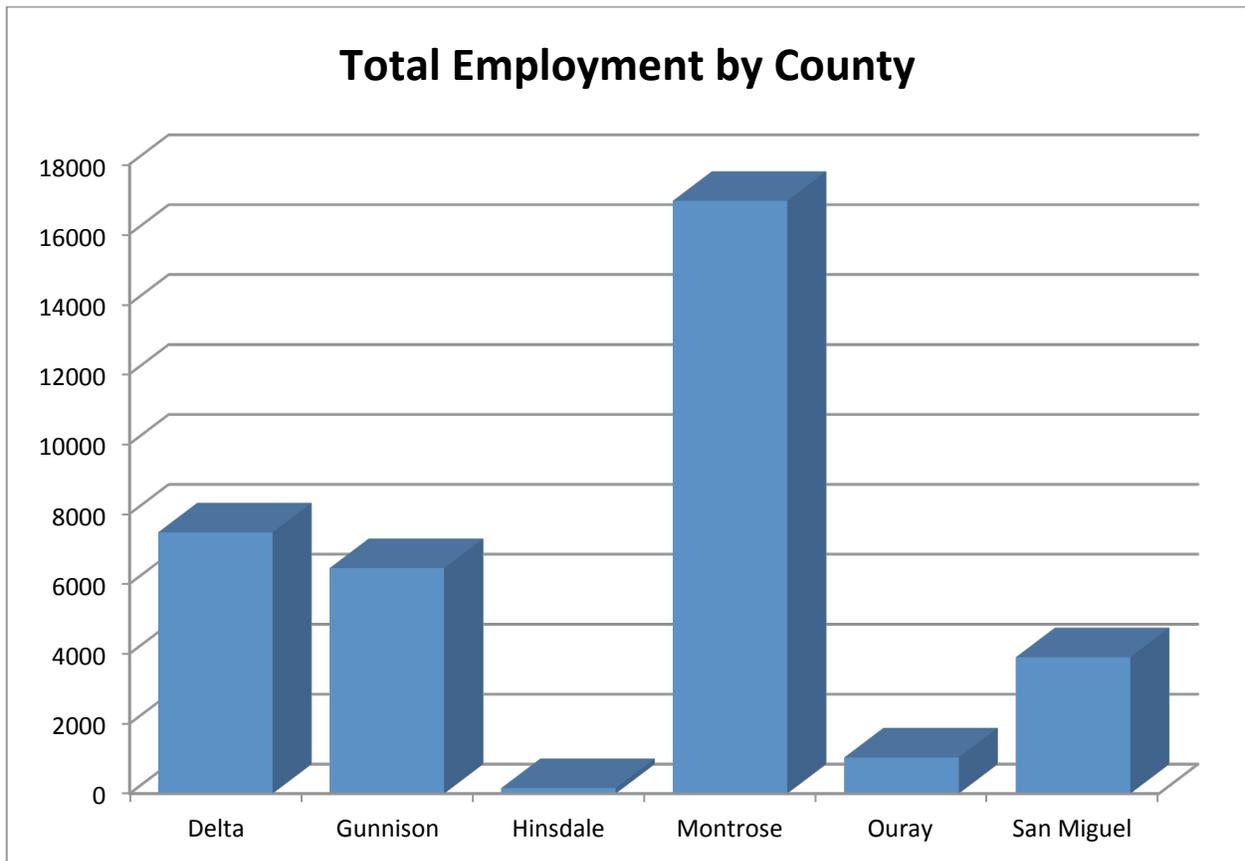
This section covers employment by type and key activity centers in the study area that have an impact on where transportation services will be needed.

The four largest population centers within the study areas are Montrose, Delta, Gunnison, and Telluride respectively and not surprisingly these communities show the highest level of public transportation activity

### Employment by County

There are currently 32,241 primary jobs in the study area according to the 2010 U.S. Census. The number of jobs available in an area influences rural transportation need, as many people, particularly those with service jobs in resort areas, must travel to where the jobs are. **Figure 2.3** depicts the actual number of jobs available by county.

**Figure 2.3 – Jobs Available by County**



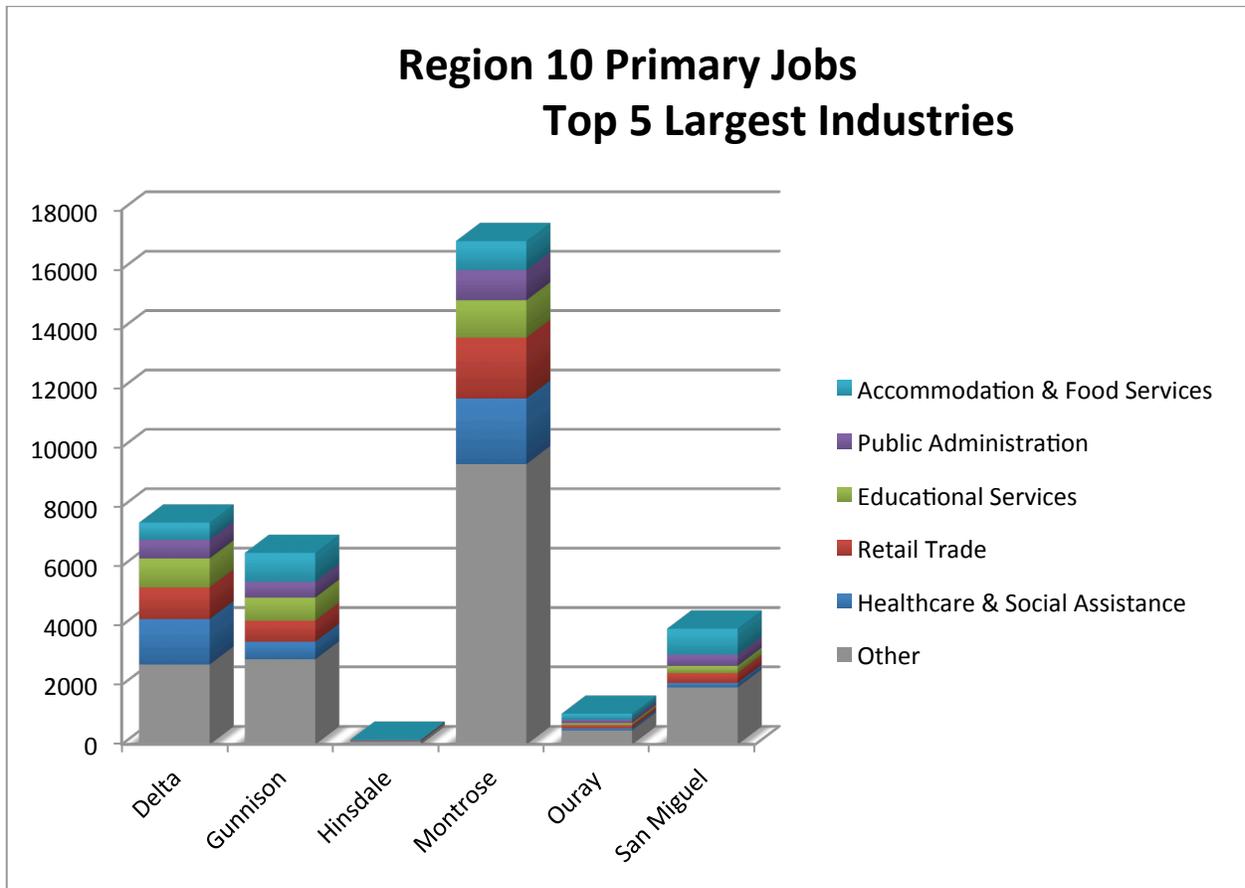
Source: 2010 US Census

As expected, Montrose has the highest number of jobs with over 16,000, and Delta has the next highest number with more than 7,000 workers from around the area. San Miguel and Gunnison also contribute a high volume of jobs to the region, with nearly 3,900 and 6,450 respectively.

## Employment by Category

Of the more than 28,000 jobs available in the study region, 14% are directly related to healthcare and social assistance, 13% are retail trade, 11% Accommodation and Food, 10% education services, 8% public administration. Other categories that included smaller employment rates combined to fill the other 44% of all study area jobs, these consist of arts, real estate, finance, transportation, and utilities among others. **Figure 2.4** highlights employment by the top five industries, by county.

**Figure 2.4 – Employment by Industry**



Source: 2010 US Census

Jobs in the study area are centered on healthcare, tourism, and retail trade, which implies that the region is mostly supported by tourism and related activities. Mining and construction jobs have shown recent expansion in the region. The 2010 census bureau data that was used for this study does not reflect this expansion, but it should be noted that the mining industry would bring a positive influence on the employment and population growth within the area.

## Residents and Visitors

The resident population of an area can be affected by migrating populations that include tourists, students, and seasonal workers. The seasonal nature of this annual population influx and outgo affects travel patterns and transportation needs.

The City of Montrose contains the Regional Airport, many area government services, and has the highest number of jobs in the study area. Montrose is a gateway to the resort areas of Telluride, Ouray County and the Highway 50 Corridor. The City of Montrose has the Colorado Mesa University regional extension campus, which is expected to expand over the next several years. The expected enrollment of 1,500 represents a small portion of the total community with many being local, so the seasonal impact of students will be minimal. In the summer and winter, Montrose will see a high number of tourists since its central location serves as a good base point.

The City of Delta is the next largest and has a relatively large employment base that includes a government services and a relatively high number of tourism-related jobs. Delta has some seasonal fluctuation with visitors coming to see Fort Uncompahgre and other tourist destinations, though much of the area's activity is centered on agriculture and related activities.

Gunnison connects visitors and local workers with the resorts of Crested Butte and is a jumping off point for the Black Canyon National Recreation Area. The Town of Gunnison is home to Western State College, which has a 2012 student population of 2,039 most of which are from beyond the County. Additionally, the town is popular with adventure enthusiasts who base there for skiing, fishing, river rafting, and hiking. For connections to the city by air, there is an airport in Gunnison as well.

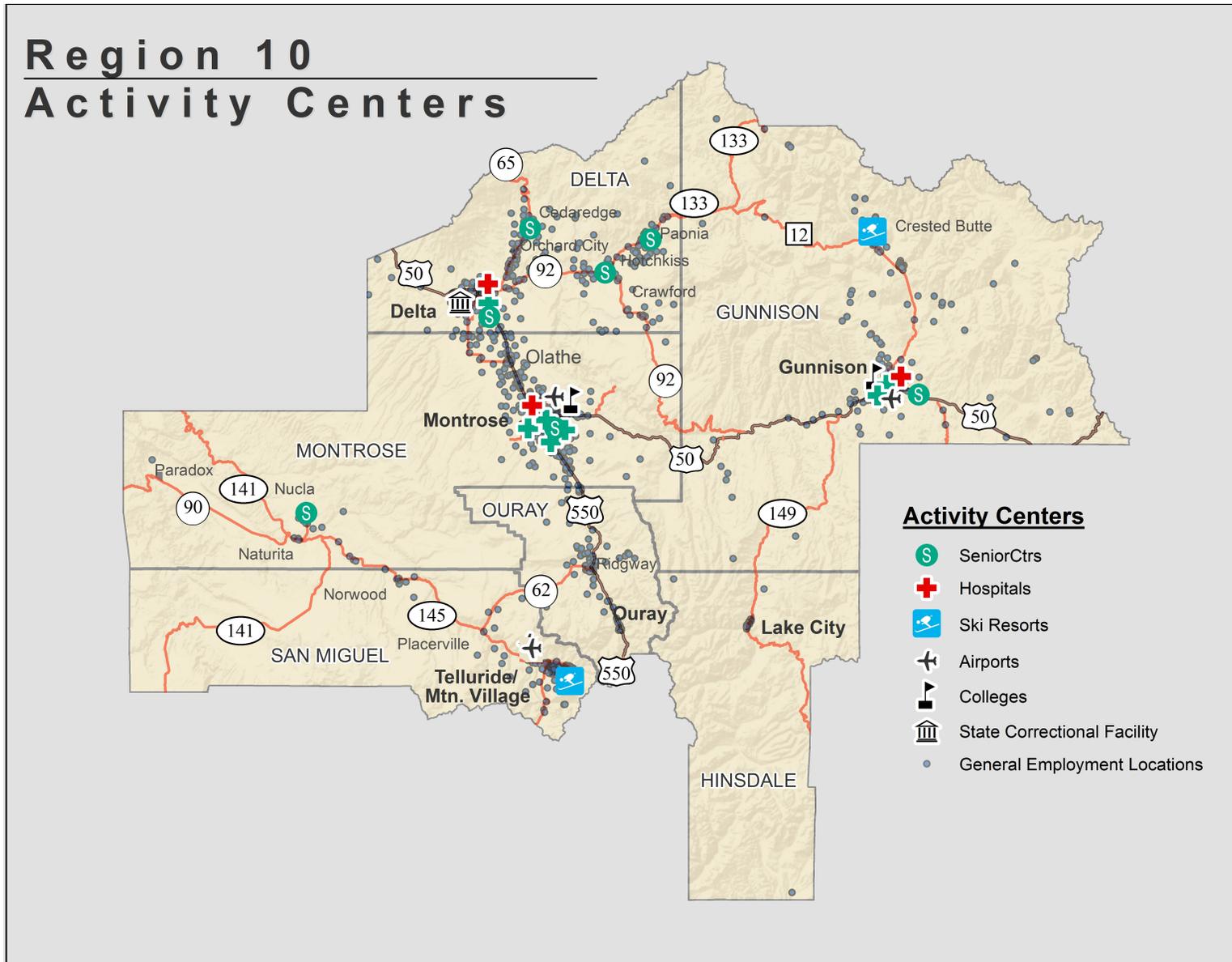
Telluride and Mountain Village maintain relatively small year round populations, but serve as a seasonal destination for high volumes of tourists and visitors, many who arrive via the Telluride Regional Airport. Telluride and Mountain Village have the highest degree of seasonal population fluctuation, as many housing units are second homes, and the tourist population in the summer and winter months add greatly to the total resident population.

Grand Junction is the nearest urban center to the study area and serves as a major employment and transportation hub, medical center, educational center, and has many other amenities that serve study area residents.

## Location of Services

It is important to identify the location of key services that are in many cases common to transit dependent populations to set the stage for transit demand analysis and service planning. **Figure 2.5** displays the locations of services, employment, and other activity centers.

Figure 2.5 – Activity Center





### *Aging Services*

The Region 10 League for Economic Assistance and Planning operates the Region 10 Area Agency on Aging with senior services operated by each county. San Miguel County operates the San Miguel County Senior Transportation Services. Two Buttes Senior Citizens, Inc. and Gunnison County Young at Heart are operated in Gunnison County.

### *Community Centered Boards*

Community Options, Inc. is the Community Centered Board for the six county-region. Their facilities are located in Montrose and they provide transportation services for their clients to medical appointments, jobs, day programs, shopping, leisure activities, and adult education programs.

### *Veterans*

There are Community Based Outpatient Clinics in Montrose and Durango (in La Plata County). The nearest VA Medical Center is in Grand Junction and there is a VA clinic in Montrose.

### *Employment and Education*

A variety of community colleges, State colleges, and universities are located in the region, along with two technical/vocational schools. Colorado Mesa University, Western State Colorado University, Delta Montrose Vocational College and the Montrose campus of Colorado Mesa University are all within the study area.

The region is covered by three WorkForce Investment Areas and has a variety of Workforce Centers. There are WorkForce Centers in Delta, Gunnison, Montrose, Ridgway, and Telluride. With the exception of Montrose, the WorkForce Centers are generally co-located with Vocational Rehabilitation services.

## POPULATION AND EMPLOYMENT FORECASTS

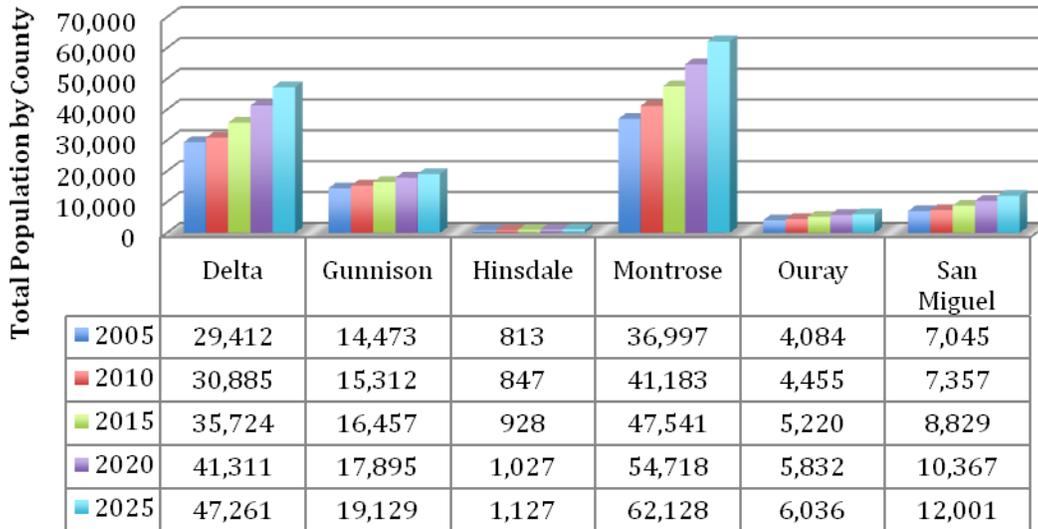
Population and employment forecasts are also useful in planning transit services, as services must be designed to meet current and future projected demand and connect people to jobs.

### Population Projections

It is important to our study effort to compare population projections with actual population growth to assist in updating demand estimates and to help us understand trends that will impact the need for transit services. **Figure 2.6** charts population projections from 2005 through 2025.

Figure 2.6 – Projected Population Growth

### Projected Population Growth 2005-2025



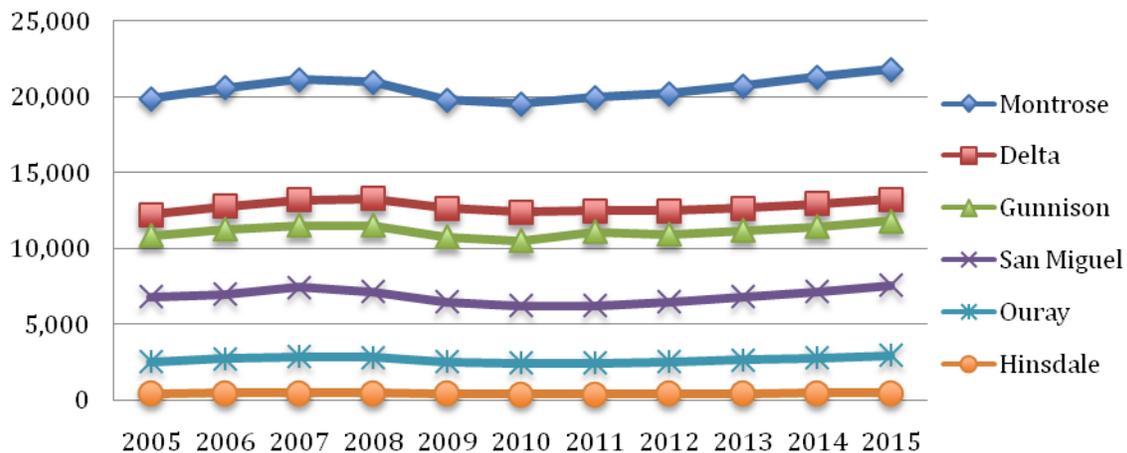
Source: Colorado State Demographer

### Employment Projections

The Colorado State Demographer’s projections for job growth are shown in **Figure 2.7**. The annual growth for the region is projected to be nearly 11% between 2010 and 2015.

Figure 2.7 – County Employment Projections

### Projected Job Growth 2005 - 2015



Source: Colorado State Demographer

Job growth is projected to be highest in Montrose County, both in total jobs and percentage of increase. Delta County shows the next highest number of total jobs, though the rate of growth is slower than in the other counties. Gunnison total jobs and

growth rate are projected to climb significantly over the period. San Miguel County shows the highest rate of job increase, which is not surprising given that it has the highest number of tourism-related jobs. Ouray and Hinsdale counties also show very solid job growth, with Ouray expected to add nearly 500 jobs. **Table 2.2** shows the number and rate of projected growth by county,

**Table 2.2 – Job Growth and Rate by County**

County	2010	2011	2012	2013	2014	2015	Growth
Montrose	19,537	19,955	20,225	20,723	21,288	21,813	10.4%
Delta	12,402	12,460	12,457	12,631	12,939	13,243	6.3%
Gunnison	10,536	11,111	10,971	11,177	11,450	11,832	10.9%
San Miguel	6,262	6,248	6,475	6,805	7,201	7,579	17.3%
Ouray	2,472	2,503	2,559	2,684	2,820	2,944	16.0%
Hinsdale	420	423	429	444	462	477	11.9%

Source: Colorado State Demographer

### Forecast Summary

As of 2010, the available workforce (persons between the age of 16 and 64) was approximately 63,000 strong. The regional work force was expected to fill more than 55,000 jobs. This ratio is in line with unemployment figures for the county. **Table 2.3** summarizes projected population and job growth.

**Table 2.3 – Population and Job Growth Projections**

County	2010 Population	2010 Jobs	2015 Population	Percentage Increase	2015 Jobs	Percentage Increase
Montrose	41,183	19,537	47,541	13.3%	21,813	10.4%
Delta	30,885	12,402	35,724	13.5%	13,243	6.3%
Gunnison	15,312	10,536	16,457	6.9%	11,832	10.9%
San Miguel	7,357	6,262	8,829	16.7%	7,579	17.3%
Ouray	4,455	2,472	5,220	14.6%	2,944	16.0%
Hinsdale	847	420	928	8.8%	477	11.9%

Comparing population projections with job growth projections allows us to see where the jobs and population to fill those jobs will be located. Montrose County’s population is expected to grow by more than 13%, while job growth will be only 10%. Similarly, but to a greater degree, Delta County’s population is expected to grow nearly 14%, while job growth is only 6.3%. The increasing retiring population causes the discrepancy between these numbers. These counties may see residents commuting to other locations within the region to seek out scarce jobs. Conversely, Gunnison County is projected to have a significantly higher rate of job growth than population growth, which may require workers commuting from other origins within the region. San Miguel, Ouray, and Hinsdale counties project slightly higher job growth than population growth.



# 3: TRANSPORTATION NETWORK

## ROADWAYS

The communities are mountainous, with limited roadways connecting them. State Highways 50 and 550 are the major north-south roadways, connecting Grand Junction, Delta, Montrose, and Ouray. East-west roads pertinent to this study include Colorado State Highways 145 connecting Norwood to Telluride and south to Cortez, and 62 connecting Ridgway with Highway 145. Meanwhile, Highway 50 changes direction eastward toward Gunnison at Montrose.

The smaller communities face a similar condition, with many having only single or double entry access from the existing roadways. Cedaredge and Orchard City, for example, can only be accessed via Highway 65; Paonia only has access from Highway 133, while Norwood and Placerville can only be reached by Highways 141 and 145.

## PRIVATE TRANSIT SERVICES

### INTERCITY BUS SERVICES

Greyhound operates services on I-70 with three round trips from Grand Junction to Denver daily. There is at present no intercity bus service directly to or from Montrose, making traveling from the Region 10 area to Denver difficult. The Southern Ute Community Action Programs (SUCAP) is planning to provide service along US 50/550 connecting Ignacio to Grand Junction via Durango.

Limited intercity bus service is also available on State Highway 50 with one trip originating in Gunnison to Denver daily. This is operated by Gunnison Valley RTA and is part of the intercity bus network so service information can be accessed through Greyhound. This was developed through the CDOT 5311(f) program.

Conversely, the Greyhound service originating in Grand Junction and going through to Denver makes limited stops and achieves the trip nearly as quickly as by car. Travel time from Gunnison to Denver, is well in excess of what can be achieved by car.

**Table 3.1 – Intercity Bus Connectivity**

Origin	Destination	Travel Time	Cost
Grand Junction	Denver	4.5 hrs	\$41*
Gunnison	Denver	5 hrs	\$34**
Montrose	Denver	N/A	N/A

\* = 2013 Greyhound

\*\* = 2013 Black Hills Stage Lines



## Montrose Taxi

The Montrose Taxi is a taxi service based out of Montrose that operates within the city of Montrose, but can make special trips to Telluride and Grand Junction as well.

## Telluride Express

Based in Montrose, Telluride Express airport shuttle service to six neighboring airports - Telluride Airport (TEX), Montrose Regional Airport (MTJ), Cortez Airport (CEZ), Durango Airport (DRO), Gunnison Airport (GUC), and Grand Junction Airport (GJT) – providing direct links to the resort area. Telluride Express also provides commuter shuttle services originating in Montrose to Mountain Village. Additionally, Telluride Express contracts with Mountain Village to provide Dial-A-Ride services within their town.

## Mountain Limo

The Mountain Limo, which is based out of Telluride provides shuttle and limousine services in the Telluride area, servicing all of the regional airports as the principal service.

# HUMAN SERVICES TRANSIT PROVIDERS

There are a relatively large number of Human Services providers of transit service, though they vary greatly in size and scope. Larger area Human Services providers include Community Options which provides services for disabled residents in their program in Montrose and Delta Counties and Volunteers of America, which supports several programs including PACE, the Homestead, Horizons Care Center, and Valley Manor Care Center. Additional providers include Midwestern Mental Care Center (MMCC), Neighbor-to-Neighbor Program, and the Disabled Americans Veterans (DAV). Following are summaries for the area Human Services transit providers.

**Table 3.2 – Human Services Transit Service Operating Characteristics**

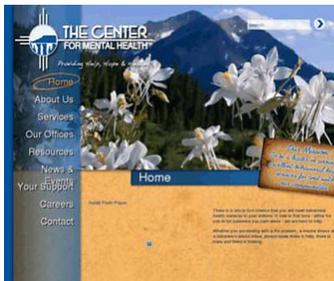
Agency	Service Area	Type	Fleet Size
Community Options	Montrose, Delta Counties	Disabled	31
Volunteers of America	Montrose, Delta Counties	Seniors	6
MMCC	Montrose, Delta Counties	Cognitive	4
Neighbor-to-Neighbor	Ouray County	Seniors/Disabled	1
Disabled American Veterans	Montrose, Grand Junction	Veterans	2
<b>Total</b>			<b>44</b>



## COMMUNITY OPTIONS Montrose, Delta Counties

**Community Options** is a private, nonprofit organization that provides 24-hour transportation services to Montrose and Delta to their clients. The agency maintains a relatively large fleet of 31 vehicles, servicing disabled residents within their programs. In 2011, Community Options provided approximately 25,000 annual one-way trips, 340,000 vehicle miles and more than 9,000 hours of service.

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## THE CENTER FOR MENTAL HEALTH Montrose, Delta Counties

**Midwestern Mental Health Care Center** is a private, nonprofit organization serving the Montrose and Delta areas. The agency has between five and nine vehicles, which are in use Monday through Friday from 8:00 AM to 5:00 PM for their clients. The consulting team was unable to reach representatives at Midwestern Mental Health Care Center.

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## VOLUNTEERS OF AMERICA Region 10 Counties

**Volunteers of America** is a faith-based private, nonprofit organization that assists low-income families, children, homebound seniors and victims of domestic violence, seeking to help rebuild lives. Volunteers of America operates a number of accessible transit services in western Colorado including:

**Senior CommUnity Care, PACE Program** – the Program of All-Inclusive Care for the Elderly. The PACE program has two locations, one in Montrose (Montrose County), and one in Eckert (Delta County) providing transportation to its participants to on site day programs Monday through Friday and to and from

medical appointments at no charge to their participants. Senior CommUnity Care operates 6 buses (10 to14 capacity) that are wheelchair accessible, one minivan that is wheelchair accessible and one minivan that is a 4-wheel-drive vehicle.

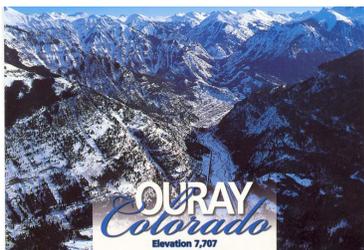
**The Homestead**, an Assisted Living Facility in Montrose providing transportation at no charge to its residents Monday through Friday with one wheelchair accessible 12 passenger cutaway van and one passenger sedan.

**Horizons Care Center** is a private, nonprofit organization that provides transportation services to the counties of Montrose, Delta and Mesa. The service is provided Monday through Friday from 8:00 AM to 7:00 PM with one wheelchair accessible bus, and a wheel chair accessible minivan.

**Valley Manor Care Center** is a Skilled Nursing Facility that provides its residents with no cost transportation services Monday through Friday with one 12 passenger cutaway van, one 8 passenger mid size van, and a minivan. All of the vehicles are wheelchair accessible.

These services for their clients are funded through a combination of volunteer time, Medicaid long-term care program, and program revenues.

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## NEIGHBOR TO NEIGHBOR Ridgway, Ouray, Ouray County

**Neighbor to Neighbor** (N2N) is a non-profit that serves Ouray County, principally in the towns of Ouray and Ridgway. N2N is committed to assisting local area senior citizens in maintaining their independence. N2N has one full size, ADA accessible 4X4 van to transport local residents to Montrose once per week for essential services. The van also provides transportation to select program activities. Additionally, N2N also provides volunteer transportation for eligible individuals to meal sites, medical appointments and shopping.

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## DISABLED AMERICAN VETERANS

### Montrose, Delta, Grand Junction

The **Disabled American Veterans (DAV)** provides service to disabled area veterans within Montrose, Olathe and Delta, utilizing two non-accessible vehicles; a 9-passenger van and a passenger sedan. The program services the VA Medical Center in Grand Junction and the Montrose Community Veterans Clinic. All Points Transit (APT) provides scheduling for the services. The DAV provides service from Montrose, Olathe, and Delta to the VA Medical Center in Grand Junction 5 days a week as needed. It also provides access to the Community Based Outreach Clinic in Montrose for local medical appointments from Delta, Olathe and within Montrose.

## PUBLIC TRANSIT SERVICES

Public transit services are provided by a combination of resort and community transit providers. Services range from Americans with Disabilities (ADA) service to general public fixed route and Dial-A-Ride (DAR), a type of call in service that provides curb-to-curb service. The primary providers are summarized below. Service areas of the public providers and key private providers are illustrated in **Figure 2.3**. This map illustrates the available transit services and how it is provided by a combination of public and private services. A more detailed description of each public provider follows.

**All Points Transit (APT)** is the largest provider of non-resort transportation in the region, principally providing local general public service in the city of Montrose, with pickups in Olathe.

**The Town of Telluride (Galloping Goose)** with funding from San Miguel County (SMC), and Town of Mountain Village (TMV) provide a majority of the region's trips, most of which are resort visitor based and commuter trips bringing service workers into Telluride and Mountain Village. Residents and students also make up significant ridership.

**San Miguel County (SMC)** provides both funding and local services. SMC provides vanpool service from Montrose and Ridgway to Telluride through a participant-directed vanpool program, and also funds services operated under contract with Town of Telluride Galloping Goose.

**The Gunnison Valley Regional Transportation Authority (RTA)** provides general public services to the town of Gunnison and connects with nearby Crested Butte but does not provide connecting regional services outside of Gunnison County.



**Crested Butte Mountain Express** offers fare free general public and ADA complementary paratransit service between the towns of Crested Butte and Mount Crested Butte.

**Table 3.3** highlights some of the operating characteristics of the Region 10 public transit providers while **Table 3.4** lists the financial characteristics.

**Table 3.3 – Public Transit Service Operating Characteristics**

Agency	Service Area	Type of Service	Fleet Size
All Points Transit	Delta, Montrose, San Miguel, Ouray Co.	Flex, ADA, DR	22
Crested Butte	Crested Butte, Mount Crested Butte	Fixed, ADA	16
Gunnison Valley RTA	Gunnison – Crested Butte	Fixed	5
San Miguel County	Montrose, Ridgway, Norwood, Down Valley	Van Pool	2
TMV Gondola/Chondola	Mountain Village – Telluride	Fixed	67
TMV DAR & Fixed Route	Mountain Village, Telluride, Cortez, Montrose, Ridgway, Nucla, Norwood	DR, Flex, Vans	23
SMC/Town of Telluride	Norwood – Placerville – Telluride	Fixed	12
<b>Total</b>			<b>155</b>

DR = Demand Response      ADA = American Disabilities Act

**Table 3.4 – Public Transit Service Financial Characteristics**

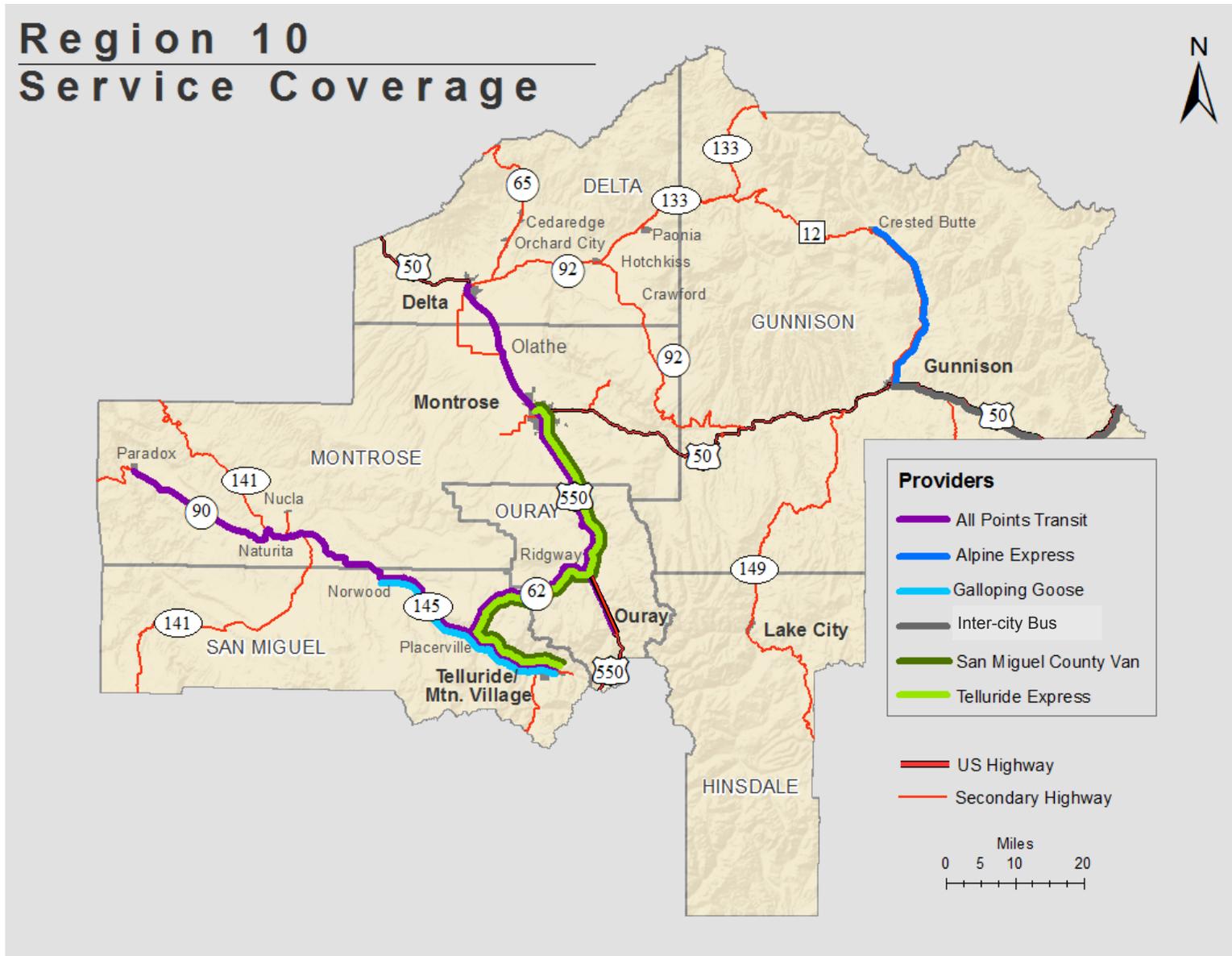
Agency	Total Budget	Total Passengers	Annual Hours	Cost per Hour	Passengers per Hour	Net cost/ Passenger
All Points Transit	\$916,214	78,006	34,750	\$26.37	2.1	\$11.75
Crested Butte	\$921,000	636,631	15,936	\$57.79	39.9	\$1.45
Gunnison Valley RTA	\$560,000	87,000	5,600	\$100.00	15.5	\$6.44
Town of Mountain Village*	\$3,470,000	2,298,067	4,829	\$718.58	475.9	\$1.51
Town of Mountain Village**	\$750,000	96,839	8,734	\$85.87	11.1	\$7.74
Town of Telluride	\$624,000	265,472	15,000	\$54.33	17.7	\$3.07
San Miguel County***	\$238,000	-	-	-	-	-
<b>Average</b>	<b>\$1,068,459</b>	<b>577,003</b>	<b>14,142</b>	<b>\$173.82</b>	<b>93.7</b>	<b>\$5.33</b>

\*Note: Totals are for the Gondola/Chondola services only

\*\*Note: Total are for TMV Dial-a-Ride and Fixed-Route Services

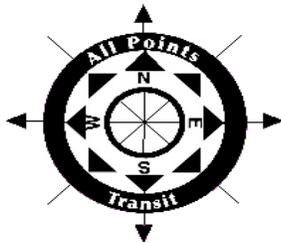
\*\*\*Note: Funds listed for San Miguel County are in support of services provided by Town of Telluride Galloping Goose

Figure 3.1 – Region 10 Transportation Service Coverage



The results varied widely in every category we reviewed as the services provided are significantly different. The Town of Mountain Village Gondola/Chondola is the most efficient and cost effective service as would be expected with this type of service, while APT's efficiency and cost are indicative of rural dial-a-ride. The majority of the Region 10 services are primarily fixed route systems that would typically carry more passengers by design. APT provides a mix of services including a high volume of demand response trips. Additionally, all of these other services are connected to resort activities, which produce higher than normal passenger counts through the transportation of service workers and resort visitors.

Net cost per passenger favors the gondola service as well, while Town of Telluride is able to gain efficiencies through frequent service in a relatively high-density area. With respect to the cost per hour to provide service, APT maintains the lowest cost per hour. This, together with relatively high capacity when considering the number of passengers per hour, positions APT favorably to contract to provide new general public services.



## ALL POINTS TRANSIT (APT) Montrose, Delta, San Miguel Counties

All Points Transit (APT) is a non-profit transportation company that provides both human services and general public service, utilizing the flexibility of its governance status to expand into a variety of services. APT is the largest provider of non-resort transportation in the region and has adopted a strategy of expansion to help address regional needs as well as attempting to maintain base service levels for existing clientele.

APT operates Human Services transportation in Montrose, Delta, Ouray, and San Miguel counties, and public transportation in the City of Montrose, using a mixed fleet of 27 vehicles and a centralized scheduling system.

### Montrose County Services

APT provides two types of general public service in the City of Montrose, demand response Dial-a-Ride and a general public flex route. The Dial-a-Ride program is available to persons with disabilities of any age for medical appointments, meal sites, and some shopping and personal appointments. The flex route system services the northwest, northeast and southern parts of the city using flexible routing. APT also provides an express route for student, workers and others commuting from Olathe to Montrose and Dial-a-Ride service in the West End of Montrose County and Norwood, a community in San Miguel County. Lastly, APT provides one round trip per month to Grand Junction.

### *Dial-a-Ride Service*

ADA Accessible Dial-a-Ride vans operate out of Montrose, Olathe, and Nucla/Naturita providing demand-responsive, door-to-door service. Qualifying seniors and persons with disabilities book trips in advance through the agency's scheduling system. Other riders may obtain trips for a reasonable fare.

Operating boundaries for the eastern portion of Montrose County are around the communities of Montrose and Olathe. Nucla/Naturita vans serve the western portions of the county (West End services) as well as the Norwood area of San Miguel County.

Dial-a-Ride service in all areas of Montrose County and Norwood is available from 6:00 a.m. to 4:00 p.m. on weekdays. Limited service for dialysis patients is provided on Saturdays.

### *Flex-Route Public Transit Service*

In August of 2010, All Points began public transit under a 5311 Rural Public Transit grant. Flex-Route City Bus of Montrose provides service to the northwest, northeast and southern part of town using flex routes. All vehicles are ADA accessible. An express route from Olathe gets passengers into Montrose. The program utilizes three flex, scheduled routes in the city of Montrose and a fourth express flex route from Olathe.

Buses depart a Transfer Point on the hour from 7:00 AM to 7:00 PM Monday through Friday. A fare of \$1.00 per trip is charged. Discounts are available for seniors, persons with disabilities, youth and students.

The Olathe Express Flex-Route offers limited service weekdays from Olathe to the Transfer Point at 7:30 a.m.; back to Olathe starting at the Montrose Transfer Point at 11:00 AM with an immediate return to the Montrose Transfer Point at noon. It then departs again from the Transfer Point in Montrose back to Olathe at 4:00 PM. A fare of \$3.00 is charged for this service each way with free transfers on the Montrose Flex Route. Discounts similar to the Montrose service apply.

### **Delta County Services**

ADA Accessible Dial-a-Ride transit in Delta County is provided for seniors (60+) and persons with disabilities five days a week at various locations throughout the county. Buses are stationed in the communities of Delta, Cedaredge, Paonia and Hotchkiss. Service is provided to senior community meal sites three to five days a week, depending on location. Additional transit is offered before and after lunch trips for medical and shopping requirements. Trips to Delta are provided on a space-available basis. In addition, trips to Grand Junction may be scheduled on the second and third Tuesdays of each month.

Job Access transportation is offered to qualifying passengers under the 5316 Job Access Reverse Commute program. This service is limited to 6 miles in any direction from the Delta City Hall.

## Operating Expenses and Revenues

ADA Accessible Dial-a-Ride transit provided by All Points Transit in Montrose County and Norwood in San Miguel County is funded by grants from CDOT, the Region 10 Area Agency on Aging, and by the City of Montrose, Montrose County and San Miguel County. Additional funding is garnered through contracts with local agencies, grants from private foundations as well as local donations and fares.

A 5311 Rural Public Transit Program grant, fare box revenue and other local match provide funding for the Flex-Route City Bus. The Norwood service is funded through contracts, grants primarily from the Telluride Foundation, San Miguel County, and other local donations.

Transit provided by All Points Transit in Delta County is funded by grants from CDOT, the Region 10 Area Agency on Aging and by the county and municipalities of Delta County. Additional funding is garnered through contracts, grants from private foundations as well as local donations and fares.

## Ridership

In 2011, APT provided more than 78,000 passenger trips, of which nearly 40% were general public. This represents a steep ascent from 2010 partial year ridership, which then accounted for 12% of service. There is a significant increase in ridership in 2011, as the service continues to grow. **Table 3.5** summarizes APT ridership from 2008 through 2011.

**Table 3.5 – APT Ridership Summary**

<b>APT Ridership</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
Total Ridership	42,179	57,200	65,926	78,006
Human Services Ridership	42,179	57,200	57,923	47,331
Percent of Service	100%	100%	88%	61%
General Public Ridership			8,003	30,675
Percent of Service			12%	39%

Ridership has climbed substantially over the period, nearly doubling in total numbers. However, with the introduction of the general public system, the number of specialized or Human Services passenger trips have declined markedly, particularly in 2011. This is due to JARC program elimination, loss of a contract, other program cuts and, a number of passengers transitioning from specialized services to the public services.



## GUNNISON VALLEY RTA Gunnison, Crested Butte

The Gunnison Valley RTA operates in the service area that includes the City of Gunnison, the Highway 135 corridor between Gunnison and Crested Butte, the Town of Crested Butte, and the Town of Mt. Crested Butte. The RTA contracts with Alpine Express to provide 9 daily round trips between Gunnison and Crested Butte in the winter and 6 daily round trips in the summer. The route provides transfer opportunities to the Mountain Express system and connects the town of Gunnison with the ski area and operates Monday through Sunday.

The service is provided with 5 transit coaches and produces nearly 90,000 annual trips at an annual operating cost of approximately \$560,000. Gunnison Valley RTA is sales tax funded and operates Monday through Sunday.

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## CRESTED BUTTE MOUNTAIN EXPRESS Crested Butte and Mount Crested Butte

Crested Butte Mountain Express provides fixed route and complementary ADA paratransit service between the towns of Crested Butte and Mount Crested Butte, also connecting with Gunnison Valley RTA to Gunnison.

The service operates Monday through Sunday from 7:00 AM to 12:00 AM, using 15 transit coaches and 1 body-on-chassis van conversion. Mountain express provides approximately 636,000 annual passenger trips at an annual cost of \$921,000. Funding is provided from a number of sources, including local general fund, advertising revenues, and FTA 5311 Rural Operating Grants.

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## SAN MIGUEL COUNTY

San Miguel County,  
Montrose, Ridgway

San Miguel County provides funding and direct services within the county and to and from Montrose and Ridgway. The county provides funding support to the Town of Telluride “Galloping Goose” service. SMC funds the Down Valley and Norwood Commuter routes, and half of the Lawson Hill route.

Additionally, SMC has purchased two 15-passenger vans to provide vanpool service to and from Montrose and Ridgway. The program is “managed” or directed by users of the system, who pay an average of \$25 per month to use the service. There is currently a waiting list for the vanpool.

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## TOWN OF MOUNTAIN VILLAGE

San Miguel County

The Town of Mountain Village (TMV) provides fixed route, dial-a-ride, gondola, and commuter service for the towns of Mountain Village and Telluride. Service is provided Monday through Sunday from 7:00 AM to midnight with a combination of 90 total vehicles; 9 vans, 10 cars, 4 cutaway (body-on-chassis) vans, 59 gondola cabins and 8 chondola cabins. All services with the exception of the commuter service are provided free of charge.

### *Mountain Village Gondola and Chondola*

The gondola connects the Town of Mountain Village with the Town of Telluride via a fixed-guideway that runs over the top of Coonskin Ridge. The chondola is a combination of gondola and a detachable chairlift that connects the Mountain Village Center with the densely populated Meadows Community.



### *Mountain Village Shuttle Bus*

The Mountain Village shuttle bus consists of three fixed-route services, operating up to 17 hours per day depending on weather conditions and issues with the gondola service, which the shuttle augments. The service is available 365 days a year but is designed to be flexible to support the gondola service.

### *Mountain Village Dial-A-Ride*

The demand response component of the city's transportation network operates within the boundaries of Mountain Village, covering areas where no alternative forms of transportation exist is Dial-A-Ride services under contract to Telluride Express through Winter 2012/2013.

### *Mountain Village Commuter Service*

The town also operates commuter services originating in Mountain Village that go to and from Nucla, Norwood, Montrose, Ridgway, and Cortez. These services are operated as a van pool program and cost \$2.00 each way.

## Operating Expenses and Revenues

The total operating costs in fiscal year 2009 were nearly \$5,000,000, with the demand response component accounting for nearly \$1.2 million. The majority of the system is funded through the city general fund, though there are also some contributions from the commuter system and the town has received FTA 5309 capital funds in the past.

## Ridership

TMV ridership is dispersed among the services, with the combination of fixed route services accounting for nearly 300,000 trips and demand response services tallying more than 91,000. Gondola services carried more than 2 million passengers for total annual ridership of more than 2.6 million.

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## TOWN OF TELLURIDE

### “Galloping Goose”

### San Miguel County

The Town of Telluride provides fixed route services within San Miguel County and the Town of Telluride under the Galloping Goose moniker. Services are operated Monday through Sunday from 7:00 AM to midnight, though there is a strong seasonal component to the service, with a majority of services operating in the summer months and winter ski season.

Service is provided using 5 full size coaches, 2 vans, 5 body-on-chassis, and one “other” for a total of 13 vehicles. There are several individual services available, each having a different fare structure.

#### *The Loop*

This service consists of a no fare, three-mile loop through Telluride that is designed both as local and tourist service. The Loop operates from 7:00 AM to 8:00PM in the winter and from 7:00 AM to 7:00 PM in the summer.

#### *Lawson Hill Express*

The Lawson Hill Express service provides peak commuter service that supports the Town Loop at about 15 minute intervals morning and evening and less frequent mid-day. The Lawson Hill Express is also a fare free service that operates year round.

#### *Down Valley Shuttle*

This service is a commuter service that connects Placerville with Telluride, with the ability to stop for passengers at any safe location along the route, and scheduled stops in Blue Jay, Sawpit, and Lawson Hill. This service is year round, provides 5 daily round trips, and costs \$1.00.

#### *Norwood Shuttle*

The Norwood Shuttle is a commuter service that connects Norwood to Telluride, with additional stops in Lawson Hill and Placerville. The Norwood Shuttle operates year round and costs \$2 each way. Service is operated twice in the morning from Norwood to Telluride at 7:00 and 7:30 AM and again returns in the evening, leaving Telluride at 5:05 and 5:35 PM to Norwood.



## Operating Expenses and Revenues

In 2012, total operating costs were more than \$855,375, with revenue coming from two sources. A majority of revenue comes from the Town's general fund, with the balance entirely funded by San Miguel County.

## SUMMARY OF AVAILABLE SERVICES

The combination of services available throughout the region provides a comprehensive mix of services, especially when considering population density of the area. However, there are some notable gaps in geographic coverage. There are no connections between Montrose and Gunnison and there is only limited, specialized service between Montrose and Grand Junction. Additionally, there are no connections between Ouray and Ridgway.

## PEER SYSTEM ANALYSIS

The project team identified All Points Transit as the logical organization to provide expanded public services, should the need be established and funding becomes available, as this has become a recent focus and APT's ability to spread fixed costs over many service types and contracts placed them in good position to look at taking on more services. A full peer system analysis is included in Attachment A.

## PEER SYSTEM COMPARATIVE ANALYSIS

The systems chosen by the project team are similar to APT, the assumed Region 10 provider of expanded public services, in terms of geographic distances covered, population density, funding issues and restrictions and scope.

For governance, the peer groups consisted of three government operated systems and two that are non-profit organizations. The private non-profit organizations have much broader funding opportunities, as they can draw on foundations, individual donations and enterprise projects while maintaining the same access to FTA and state funds as the government agencies.

Annual operating budgets were fairly close, with four of the systems ranging from \$217,300 to \$462,102, though the NECALG (Northeast Colorado Association of Local Governments) system topped \$1.3 million. **Table 3.6** highlights the similarities and differences in selected variables among the systems.

**Table 3.6 – System Comparison**

Organization	Operating Cost	Annual Passengers	Revenue Hours	Revenue Miles	Cost per Hour	Cost per Mile	Cost per Passenger
All Points Transit	\$916,214	78,006	34,750	290,000	\$26.4	\$3.2	\$11.7
East Central COG	\$217,300	9,700	2,900	54,000	\$74.9	\$4.0	\$22.4
NECALG	\$1,329,08	120,602	53,757	829,751	\$24.7	\$1.6	\$11.0
South Central COG	\$322,113	30,318	8,193	65,621	\$39.3	\$4.9	\$10.6
SUCAP Roadrunner	\$292,038	22,760	2,343	59,292	\$124.6	\$4.9	\$12.8

Source: 2009 National Transit Database (NTD) Reports, local information obtained directly from agency, 2011 Region 10 Existing Conditions.

## SUMMARY

What the project team learned from the comparative analysis is that costs to operate service fluctuate widely in rural operating environments depending on the type of service provided, distance, and population density. Comparing APT with peer systems in Colorado, the organization fares well in all statistical categories and has the second lowest hourly cost of the peer group. Cost per passenger is in the middle, though far from the highest. APT also provided the second lowest cost per mile, indicating that the services may not travel as far as some in the peer group.

What these numbers tell us is that APT operates its services at a reasonable cost when compared to peer systems and when compared to Region 10 providers. The low passenger per hour number is largely reflective of the fact that a majority of service remains demand response; however, the positive is that there is excess capacity available with which to expand services. Excess capacity, dramatic public ridership gains, and a relatively low hourly operating cost is a solid foundation upon which to expand services, provided demand and funding are in place to set such an initiative in motion.

## 4: DEMAND ANALYSIS

### PURPOSE

This chapter addresses the question of “How much transit service should be provided for rural residents?” Region 10 is diverse so the answer to this question varies based on the area. Telluride and Crested Butte are resort areas with transportation needed for tourists and employees in the resort industries. These areas are relatively well served with transportation that is designed principally to carry workers, skiers and tourists to and from their homes and the resort areas.

This demand analysis covers the four counties of Delta, Montrose, San Miguel, and Ouray. The focus is not on the needs of resort communities but rather on demand for services for the transit dependent population in the region. Such transportation programs may include services for the general public and for those individuals requiring specialized transit services.

Formulas have been developed to identify the demand for specialized rural transit services; however, applying these formulas can result in identifying tremendous theoretical levels of demand. Actual ridership on services depends on the quality of service offered: Does it operate when and where the trips are needed? Is it reliable and affordable? Understanding the level of service provided by similar communities can provide context for understanding how your community can balance the need for service with the available resources. Formulas also do not answer the following key questions:

- How much service can a community afford?
- Which trips should be considered for funding?
- How should the need for program-based transportation be addressed?

This demand chapter begins by addressing the community values expressed by the advisory group. It will continue with demand estimates for the market segments that may be served. Key market groups in the region are (1) disabled individuals, who are elderly, or are Veterans; (2) general employment trips; and (3) trips related to the tourism industry, including both visitors and resort employees. As the resort systems already adequately address this third group, this analysis will emphasize the first two groups and include attention to those needs that require regional transit services.

### COMMUNITY VALUES

Determining the appropriate service levels ultimately results from the nexus of demand and community values. Additionally, factors such as geography and the institutional structure for delivering and funding services need to be considered. Region 10 stakeholders have reached an overall consensus that rural residents should have transit services for:

- Necessary medical services, including regular treatments and occasional appointments; and,
- Activities for daily living – shopping, personal business, socialization, and similar trips.
- Work trips

Finally, the stakeholders noted that there is inadequate transit between:

- Montrose and Grand Junction
- Montrose and Ridgway
- Montrose and Gunnison

An intercity route on US Hwy 550 has been approved for 2013 that will provide additional service between Montrose and Grand Junction.

In addition to the above markets, rural areas are increasingly finding that employment transportation is an important component of their services.

## APPROACH TO TRANSIT DEMAND

The analysis will examine the type of services provided in other rural areas from national research. It will also identify how similar areas (the peers examined earlier and other resort communities) serve these markets.

Once the range of service levels is understood, these will be applied to the demographics of the region to see what the expected ridership might be both within communities and between communities. Comparing this to the amount of service that is presently provided will illustrate where additional services may be needed.

### Comparison to Other Rural Areas – National Research

Looking at the service levels provided by other communities can help in identifying how much service is needed. “Transit Cooperative Research Program (TCRP) Report 6: User’s Manual for Assessing Service-Delivery Systems for Rural Passenger Transportation” identifies the range of service levels provided in rural systems across the nation. This report reviewed a range of rural transit systems considered to be “high performing” – systems that are cost effective and productive. This review revealed that there is considerable range in how much service is provided in rural communities, which is often determined by unique community values. This report identified a series of service benchmarks that provide a useful context for this report. **Table 4.1** provides a summary of the benchmarks identified in the report.



**Table 4.1 – Rural Transportation Service Benchmarks: High Performance Systems**

<b>Service Factors</b>	<b>Ranges</b>
Population Served	6,000 - 62,000
Area Served (sq. miles)	5 - 3,000
Vehicles	1 - 34
Square Miles/Vehicle	1 - 650
Persons Served/Vehicle	650 - 7,200
Miles/Vehicle/Year	11,500 - 29,000
Trips/Year	8,200 - 210,000
Trips/Persons/Year	.85 - 9
Trips/Vehicle/Year	4,200 - 13,500

A wide range of systems is included. They vary from 1 to 34 vehicles, serve populations of 6,000 to 62,000, and cover from 5 to 3,000 square miles. It is acknowledged that the study area is larger with more than 10,000 square miles and has a population of 100,000. However, the TCRP findings remain useful in helping us establish a benchmark of rural transit demand per capita and vehicle requirements per square mile. They are also helpful in understanding the needs that might exist in specific communities within the study area

One important benchmark is the range of 0.85 to 9 in the number of trips/per person/per year. The systems at the high end of the range include all types of trips (including program transportation services and employment trips) but do not have the level of ridership associated with resort communities in Colorado. The visitor population essentially swells the population in resort towns. The ridership numbers in Region 10 can be compared to the above standards, looking at all markets except those in Crested Butte and Telluride.

Other useful benchmarks from the national data are related to the number of vehicles required for service. This information is most helpful when service alternatives and service delivery options are considered. The overall vehicle requirements in the region will be higher than average because of the large area that is covered. As a result, a long-term strategy of coordinating resources and sharing vehicles among different programs where it is possible to do so has the potential for substantial benefits in the region.

### Peer Community Levels of Service

The peer analysis identified overall ridership for each system. Using the population, the level of service each provides on an annual per capita basis can be determined. **Table 4.2** shows the level of service provided in each peer system, with All Points Transit included. This table illustrates how peer communities compare to the national rates of service and how the various types of service provided impact the annual riders per capita figure.

**Table 4.2 - Levels of Service in Peer Communities**

Peer Systems	Riders	Population Served	Annual Trips per Capita
All Points Transit	78,006	78,933	0.99
East Central COG	9,700	40,010	0.24
NECALG	120,602	72,105	1.67
South Central COG	30,318	21,465	1.41
SUCAP Roadrunner	22,760	3,071	7.41

Whereas the first four systems primarily focus on transportation to meet the needs of persons who are elderly or have disabilities, SUCAP operates service into Durango that meets these needs and serves commuters. The daily commuter ridership is what raises the annual riders per capita. These peer systems generally fall within the national range. East Central COG only operates limited services for the elderly, mostly over long distances for medical or shopping purposes, so they are lower than the high performing systems noted in the national research. Both NECALG and South Central COG have general public transit in their largest communities, similar to APTs service in Montrose. (Sterling and Fort Morgan for NECALG and Trinidad for South Central COG.)

Looking at the range of annual trips per capita, it might be reasonable to consider a range of 0.5 to 2.0 for the region, with variations within communities and counties. This would not include either daily employment trips (other than those provided on the fixed route service) nor trips related to the tourism industry, either for visitors or employees.

Decisions about the level of service that is appropriate will reflect the community values, the demographics, geographic characteristics, and the location of services. Are there medical and shopping services in a community or do people need to travel to meet the needs of daily living? Is there a high level of elderly in a community?

**Table 4.3** illustrates the range of trips that might be expected in communities in the four counties. Some comments about these figures are warranted. First, in each county the population in unincorporated areas is high, so much demand is in the less dense areas that can be hard to serve. Second, it is useful to think about demand in corridors. For example, grouping the demand in Cedaredge and Orchard City, plus that of any incorporated population in the corridor, makes sense from a service perspective. Western Montrose County services fit most logically with services in San Miguel County. Finally, remember that a good number of trips are provided by senior centers in these communities and All Points Transit.



**Table 4.3 - Demand for Specialized Transportation Services**

	Population	Range of Trips per Capita			
	July 2011	0.5 Trips	1.0 Trips	1.5 Trips	2.0 Trips
<b>DELTA COUNTY</b>	<b>30,412</b>				
Cedaredge	2,208	1,104	2,208	3,312	4,416
Crawford	422	211	422	633	844
Delta	8,751	4,376	8,751	13,127	17,502
Hotchkiss	930	465	930	1,395	1,860
Orchard City	3,061	1,531	3,061	4,592	6,122
Paonia	1,424	712	1,424	2,136	2,848
Unincorporated Area	13,616	6,808	13,616	20,424	27,232
<b>MONTROSE COUNTY</b>	<b>41,025</b>				
Montrose	19,036	9,518	19,036	28,554	38,072
Naturita	540	270	540	810	1,080
Nucla	707	354	707	1,061	1,414
Olathe	1,829	915	1,829	2,744	3,658
Unincorporated Area	18,913	9,457	18,913	28,370	37,826
<b>OURAY COUNTY</b>	<b>4,355</b>				
Ouray	975	488	975	1,463	1,950
Ridgway	905	453	905	1,358	1,810
Unincorporated Area	2,475	1,238	2,475	3,713	4,950
<b>SAN MIGUEL COUNTY</b>	<b>7,496</b>				
Mountain Village	1,336	668	1,336	2,004	2,672
Norwood	525	263	525	788	1,050
Ophir	160	80	160	240	320
Sawpit	40	20	40	60	80
Telluride	2,374	1,187	2,374	3,561	4,748
Unincorporated Area	3,061	1,531	3,061	4,592	6,122

All Points Transit reported 30,675 riders on their general public service in the City of Montrose – or 1.61 annual riders per capita. Their human service transportation carried 47,331 riders in their entire service area. This equates to .56 trips per capita for the four county Region. This is similar to peer systems. For example, NECALG has a higher level of service in Sterling than in Logan County or other counties in their region. Table 4.4 shows the urban trips per capital currently being provided by APT.

**Table 4.4 – Transit Dependent Ridership per Capita**

City	Population	Total Trips	Trips per Capita
Montrose	19,132	33,319	1.74
Delta	8,915	12,608	1.41
Nucla/Naturita	1,257	2,145	1.71
Norwood	518	1,686	3.25
<b>TOTAL</b>	<b>29,822</b>	<b>47,331</b>	

The cities currently being covered by APT are relatively well served by the Dial-A-Ride service. Assuming that all riders are within the town limits and not from unincorporated areas, four of the five communities receiving Dial-A-Ride services averaged more than 1.5 trips per capita, while Delta was the lowest at just over 1.4 so all these areas have a good level of specialized transportation services available. However, it must be noted that limited specialized transportation trips occur outside of the incorporated areas. With a population of 56,587 receiving very limited service, this is a major gap.

Considering the entire populations by county, the ridership per capita drops significantly, and below desired per capita rider thresholds. Montrose County remains the highest with an average of .86 demand response trips per capita. Delta County has an average of .41 trips per capita, and no service is provided in Ouray County other than senior center trips. San Miguel County is on a different scale as the County, Telluride, and Mountain Village services provide relatively high levels of service.

*Trips for Transit Dependent Riders*

Looking more specifically at the population needs of the transit dependent population needing specialized services in order to access medical appointments, shopping, and other activities required to live independently, communities in Colorado often provide between 0.5 and 1.0 trips per capita per year. Areas at the higher end of this range are likely to be farther from services, have a greater the number of elderly or disabled residents, or place a higher value on enabling residents to live independently. Within the study area, service could be increased to an average of 1.0 annual human service trips per capita and still be considered only a moderate level of service.

*Trips for Employment*

Trips for employment were evaluated using the On The Map tool from the US Census Bureau, Center for Economic Studies. Data illustrating where workers within the region live and where they work is provided in **Table 4.5** for Montrose, **Table 4.6** for Delta, and **Table 4.7** for the Telluride/Town of Mountain Village. As in most communities, the highest number of workers live in the communities in which they work. As importantly, in this region many workers live in the unincorporated area around the town in which they work.



**Table 4.5 - Commuters to Primary Jobs in Montrose City**

Commuters to Primary Jobs in Montrose City				
COUNTY	Incorporated	Unincorporated /Other	Total Jobs	Share
Montrose	3,378	3,404	6,782	66.76%
Delta	428	350	778	7.66%
Mesa	214	180	394	3.88%
Ouray	0	212	212	2.09%
All Other Loc		1,993	1,993	19.62%
<b>TOTALS</b>	4,020	6,139	10,159	100%

**Table 4.6 - Commuters to Primary Jobs in Delta City**

Commuters to Primary Jobs in Delta City				
COUNTY	Incorporated	Unincorporated/Other	Total Jobs	Share
Delta	994	496	1,490	49.16%
Montrose	427	102	529	17.45%
Mesa	305	85	390	12.87%
All Other Loc		622	622	20.52%
<b>TOTALS</b>	1,726	1,305	3,031	100%

**Table 4.7 - Commuters to Primary Jobs in Telluride/Mountain Village**

Commuters to Primary Jobs in Telluride-Mountain Village				
COUNTY	Incorporated	Unincorporated /Other	Total Jobs	Share
San Miguel	1,289	774	2,063	65.97%
Montrose	159	161	320	10.23%
Ouray	70	77	147	4.70%
La Plata	20	46	66	2.11%
Montezuma	0	55	55	1.76%
All Other Loc		476	476	15.22%
<b>TOTALS</b>	1,538	1,589	3,127	100%

The commuter analysis was done in three stages. All stages utilized data from the U.S. Census Bureau, Center for Economic Studies. The data collection was done using the “On the Map” (<http://onthemap.ces.census.gov/>) site.

The first stage involved a query of “Places (Cities, CDP’s, etc.)” where workers work versus “Places (Cities, CDP’s, etc.)” where workers live. An analysis was done of Montrose city, Delta city, Mountain Village town, and Telluride town. The top 10 incorporated places (Cities, CDP’s, etc.) were listed in the results, and an “All Other



Locations” was listed at the bottom of the analysis. This “All Other Locations” includes out-of-state workers, and workers that reside in unincorporated areas. To find those areas the second stage in our commuter analysis was started.

In the results of stage one, greater than 40% of all home addresses for workers were categorized as “All Other Locations.” This represents a significant number of commuters whose commutes were unaccounted for. Since the results from the first part of the analysis only specified “Places”, as defined by the U.S. Census Bureau, it left out people commuting from unincorporated areas. To get that number, a query was done on “Places” where workers commute to versus “Counties” where workers commute from. The results were similar to that in stage one, as the top 10 counties workers commute from were listed and “All Other Locations” was listed at the bottom of the analysis. While this gave us a smaller percentage of unaccounted for counties where workers commute from, it lacked the detail of the first stage. To present a better picture of where workers were actually commuting from, one more process needed to be completed.

The final stage involved a comparison of results and some basic arithmetic. In this way, we could compare incorporated areas (from stage one) that were located within counties (from stage two) and subtract the difference to discover which workers were commuting from unincorporated areas. Finding that most commuters came from relatively close areas, but are residing in unincorporated areas brought our “All Other Locations” results down by greater than 30% for all areas that were analyzed. A new table was drawn to reflect where commuters came from and whether they were commuting from incorporated areas or not. “Total Jobs” and “Share”(percentage) columns were added to the tables to ensure data quality.

Considering the close proximity and tightly intertwined transit systems that service both Telluride and Mountain Village, their numbers were combined, however, the steps to perform and analyze the results remained the same.

It should be noted that since this data comes from the U.S. Census Bureau, home addresses listed for workers are their primary addresses and may not reflect a daily commuting pattern, especially in cities/towns that offer more services due to resort or seasonal recreation activity.

Montrose has approximately 10,000 jobs with Delta and Telluride/Mountain Village each having about 3,000 jobs. The data show a fairly strong link between Delta and Montrose counties, with 729 Montrose city employees living in Delta County and 529 Delta city employees living in Montrose County.

Information on Telluride and Mountain Village employees is shown both for the place the workers live and the county in which they live. For San Miguel County residents,

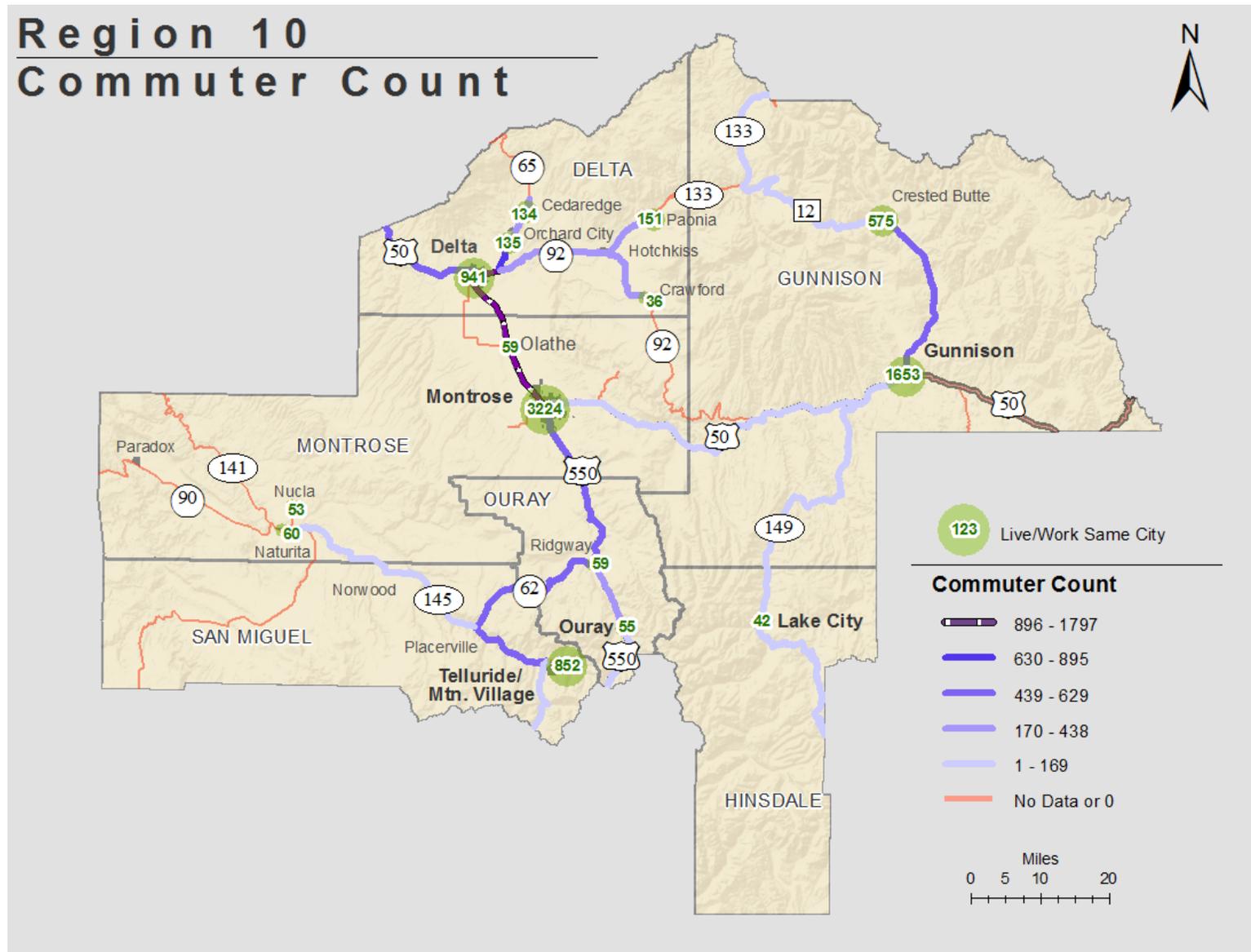


approximately 1,250 live in incorporated communities and 800 are in unincorporated areas.

Generally fixed route regional bus service will carry 2-8% of one-way work trips (individual passenger trips), if adequate service can be provided to make the service viable. In resort towns and busy urban corridors such services may carry closer to 30% of work trips. However, looking only at primary job trips and applying a range of 2-4%, the demand for service in the 550 Corridor between Ouray County and Montrose City would be between 8 and 17 one-way passenger trips per day. Demand for service between Montrose City and Delta County would be between 52 and 105 one-way passenger trips per day, including both directions of travel. From Delta to Montrose City would be 31 to 62 one-way passenger trips a day. Demand for service between Montrose County and Telluride/Mountain Village would be between 13 and 26 one-way passenger trips per day. However, given that existing demand for service exceeds these estimates, we have applied a factor of 30% to this segment. This factor yields a demand estimate 186 one-way passenger trips per day. The existing San Miguel County vanpool program serves around 24 one-way passenger trips each day and has a waiting list, which supports the need for increased service.

**Figure 4.1** illustrates commuting patterns between communities in the Region 10 area. For the best analysis of the area, the Jenks Natural Breaks Optimization method was used to create the 5 different commuter count classifications. This data classification method is designed to determine the best arrangement of values into different classes. This is done by seeking to minimize each class's average deviation from the class mean, while maximizing each class's deviation from the means of the other groups. In other words, the method seeks to reduce the variance within classes and maximize the variance between classes. ArcGIS (the analysis software used) uses many different kinds of methods for its analysis, and the Jenks Natural Breaks is the most recommended for this kind of study. The source for those numbers comes from the "onthemap.census.gov" website, the same website used to get the numbers for the job totals referenced above.

Figure 4.1 – Commuter Traffic on Major Roadways





## SERVICE DEMAND SUMMARY

TransitPlus approached demand from a market perspective that included the largest groups of transit dependent riders and compared current service levels to expected demand.

Comparing existing specialized services in the study area with national benchmarks, we were able to establish how much service would be necessary to achieve minimal service benchmarks. Using a very conservative target of .5 riders per capita for unincorporated areas only, we estimated an annual unmet demand for specialized service of nearly 25,000 trips for the four county-area, with nearly 22,000 of those trips in Montrose and Delta counties. Specific demand by county is estimated at:

- Delta County – 35 daily trips (10,749 annual trips)
- Montrose County – 35 daily trips (10,947 annual trips)
- Ouray County – 6 daily trips (1,926 annual trips)
- San Miguel County – 5 daily trips (1,678 annual trips)

An analysis of transit dependent populations revealed that there was solid demand for work/commuter services, and that the San Miguel County Vanpool program was meeting a significant amount of current demand and currently holds a waiting list. Based on very conservative estimates of rural commuter travel patterns, we estimated the number of daily trips that could be expected in the following corridors:

- Ouray County to Montrose City would require 9 to 17 daily one-way passenger trips (2,331 – 4403 annually)
- Montrose City to Delta County would require 52 to 105 daily one-way passenger trips (13,468 – 27,195 annually)
- Delta County to Montrose City would require 31 to 62 daily one-way passenger trips (8,029 – 16,058 annually)
- Montrose County to Telluride/Mountain Village would require 186 daily one-way passenger trips (97,500 annually)

Based on our demand estimates, there is significant need for increased specialized and work-related transportation. Alternatives will be developed and prioritized based on the expected demand and corresponding cost to add services.



## Four County Transit Feasibility Study Update



## 5: SERVICE ALTERNATIVES

The service alternatives with the most potential are those that strengthen the existing area transit network by increasing connections between existing and planned services as well as strengthening local services.

The analysis of existing services, demand estimation, and earlier planning studies point to the following:

- The region has a moderate level of transit services overall with the transit services oriented to the resort industry providing a strong base in San Miguel County and All Points Transit providing services in Montrose City and a means to operate uniform human services transportation, particularly for the elderly and Veterans.
- There is demand to support increased general public transportation, particularly between communities. The demand for service between communities is greatest between Delta and Montrose. Within the region, additional demand response service could be supported within and between communities both for human service program participants and for other low-income individuals.
- Recently, an intercity route from Durango to Grand Junction was approved for funding by the Colorado Department of Transportation. The route is scheduled to run once per day, making stops in Cortez, Ouray, Ridgway, Montrose, and Delta before terminating in Grand Junction. It is presently scheduled to arrive in Grand Junction shortly after noon and depart around 5:45 PM. The route represents a significant milestone in inter-city transportation for the region and is valuable for the entire western slope transportation network.

The alternatives are grouped into two major areas:

- A. Leverage Existing and Planned Service Network.** This includes improving or adding regional connections as well as increasing the level of service within communities.
- B. Expand Vanpool Program and add Carpool Services.** This would expand and stabilize the San Miguel County program.

Service options must be economically and logistically feasible. Our approach to developing service options is a conservative one. Given uncertainty surrounding future funding and governance structures in some parts of the region, it is important to focus our efforts on practical solutions that connect markets and are efficient. Our approach to developing alternatives begins with identifying opportunities within the current transportation network and expands to include conceptual alternatives for expansion.

## LEVERAGE EXISTING AND PLANNED NETWORK

This alternative takes advantage of both the existing network and the planned intercity route. It includes several options:

- Establish morning service from Montrose to Grand Junction
- Public service between Montrose and Delta
- Support connections to planned Durango-to-Grand-Junction Intercity Bus Route

Each of these options build on or take advantage of the existing network so more value can be obtained from the current and planned investment in transit services.

## ESTABLISH MORNING SERVICE FROM MONTROSE TO GRAND JUNCTION

The Durango-to-Grand Junction Intercity Bus Route will only operate once per day, arriving at 12:25 PM and returning at 5:45 PM, based on the most current proposed schedule. People coming from the south will be able to access services in Grand Junction while the bus lays-over. One option for enhancing the impending service is to establish an afternoon route from Montrose to Grand Junction that can take advantage of the return trip from Grand Junction at 5:45 PM.

The service could be set up such that the vehicle continues on to local services in Grand Junction and returns approximately in the middle of the schedule, thereby creating two opportunities for return trips from Grand Junction. It would be necessary to provide passengers with connecting information for local bus service from their destination to the Intercity Bus Route stop for the return back to Montrose on the Durango-to-Grand-Junction Intercity Bus Route. Grand Valley Transit has extensive fixed route service and paratransit service for those unable to ride a fixed route bus.

It would be desirable to have a bus arrive in Grand Junction early enough to allow approximately 2 hours for people to conduct business. Arriving at 1:30 PM and returning at 3:30 PM would be suitable. Passengers would have the option of returning on the Montrose to Grand Junction bus at 3:30 PM or the Durango-to-Grand-Junction Intercity Bus Route at 5:45 PM. Passengers could board local transit beginning around 4:45 PM to arrive at the transfer center in time to take the Durango-Grand-Junction Intercity Bus Route South to Delta and Montrose.

This service could be operated one day a week to start and if it is well-used expanded to two or three days per week. For the cost of a single bus traveling to Grand Junction, people would be able to travel round-trip twice in one day.

Based on a run time of 1 hour and 15 minutes, two hours within Grand Junction, and with stops in Olathe and Delta, the run would add approximately 4.5 daily revenue hours



to the network. Revenue hours are defined as hours that a vehicle is in passenger service and does not include deadhead hours and miles. APT has a cost of \$26.37 per revenue hour, which equates to a daily cost of \$119. Ridership on this route is projected to be 6 people per trip or 312 passengers per year. Assuming an initial schedule of 1 trip per week, the service would have an annual cost of approximately \$6,188 or \$19.83 per passenger.

An additional consideration would be connecting ADA eligible passengers from Montrose and Delta to the GVT ADA service in Grand Junction. It is required by the ADA that eligible passengers be allowed to utilize services wherever they may travel. This normally requires individual or dispatch coordination with the out of area system. To accomplish this it would be necessary to develop a communications protocol between APT and GVT dispatch.

## PUBLIC SERVICE BETWEEN MONTROSE AND DELTA

Though the Montrose-to-Grand Junction connection presented as an alternative adds service in the corridor, it is limited service that does not meet the needs of workers. Given that this corridor has the highest volume of work trips, there is justification to add regularly scheduled service in the area.

Service between Montrose and Delta was also recommended in the 2008 plan, and current demand forecasts continue to support this recommendation. We have estimated the daily one-way demand for work related trips to be between 31 and 62 trips per day, which forms a solid foundation for two to three public round trips. **Table 5.1** illustrates a potential schedule and the associated costs of adding the proposed route.

**Table 5.1 – Montrose to Delta Sample Schedule**

Montrose	Delta	Montrose	Daily Revenue Hours	Annual Revenue Hours	Cost per Hour	Annual Cost
6:00 AM	6:45 AM	7:30 AM	1.50	389	\$26.77*	\$10,400
8:00 AM	8:45 AM	9:30 AM	1.50	389	\$26.77	\$10,400
4:00 PM	4:45 PM	5:30 PM	1.50	389	\$26.77	\$10,400
6:00 PM	6:45 AM	7:30 AM	1.50	389	\$26.77	\$10,400
<b>Total</b>			<b>6.00</b>	<b>1,554</b>		<b>\$41,600</b>

*\*Note: Costs per revenue hours were calculated based on costs that are two years old. Costs should be updated to reflect inflation when a detailed implementation plan and schedule is developed.*

The sample schedule is for illustrative purposes and route timing, stops, and frequency can be adjusted by the local communities to best serve their needs. Limited service operated from Montrose to Delta would require approximately 3 revenue hours for each round trip when accounting for stops and recovery time. Assuming two round trips in the morning and two in the afternoon, the annual cost to provide service is estimated at \$41,600. Adding a third run would increase the total to \$62,400.

## SUPPORT CONNECTIONS TO THE DURANGO-TO-GRAND-JUNCTION INTERCITY BUS ROUTE

While this alternative scored well against the evaluation criteria, there was concern in the Advisory Committee that the Region could better use its resources to other options, while the operator of the service may be able to provide marketing. The Durango-to-Grand-Junction Intercity Bus Route will only operate once per day, meaning that people coming from the south will not be able to access services in Grand Junction unless they stay over night. Supporting the Durango-to-Grand-Junction route with Ouray, Ridgway, Montrose, and Delta requires matching existing service schedules with the new route schedules to ensure timely connections in either direction. **Table 5.2** summarizes the proposed schedule of the new route.

**Table 5.2 – Durango-to-Grand-Junction Route Schedule**

Durango	Cortez	Telluride	Ridgway	Montrose	Delta	Grand Junction
6:20 AM	7:27 AM	9:12 AM		10:44 AM	11:14 AM	12:01 PM
Grand Junction	Delta	Montrose	Ridgway	Telluride	Cortez	Durango
1:15 PM	2:01 PM	2:46 PM		4:18 PM	6:03 PM	6:58 PM

### Connection in Montrose

APT provides a good level of local service in the City of Montrose, which can be connected with the Durango-to-Grand-Junction Intercity Bus Route. The three local routes operate from 6:30 AM to 6:30 PM on hourly frequencies and transfers take place at the downtown Montrose transfer center located at the intersection of North 2<sup>nd</sup> Street and Uncompaghre. **Figure 5.1** is a map of APT services in the City of Montrose.

The three routes are designed for timed transfers at the transfer centers, with each route having several minutes for recovery. **Table 5.3** summarizes the current transfer and wait times for APT buses at the transfer center.

**Table 5.3 – Transfer Timing in Montrose**

Route	Arrival Time	Dwell Time	Departure Time	US 550 Transfer/NB	Wait Time	US 550 Transfer/SB	Wait Time
Blue	:52	:08	:00	:44	:52	:46	:54
Red	:51	:09	:00	:44	:53	:46	:53
Gold	:54	:06	:00	:44	:50	:46	:56

Looking at transfer opportunities northbound to Grand Junction, there is a significant wait for transfers to the NB route. Passengers arriving from any of the three routes would have a wait of more than 50 minutes. Southbound transfer times are similar with a range from 54 to 56 minutes. For passengers wishing to access service in Montrose, the transfer times are more reasonable. Passengers coming from Grand Junction would have a 14-minute wait for service, while passengers coming from Durango would have a 16-minute wait. Though by national transit standards these wait times are on the outer



edge of the acceptable range, the nature and frequency of this type of connection would likely work. There is an opportunity to adjust the APT schedules in Montrose to provide better connectivity; however, as those routes are established and have been designed to support local travel patterns, it is not recommended to adjust the schedules at this time.

### Connections for Olathe Residents

The Olathe Shuttle is a general public route that brings Olathe residents into Montrose in the morning and midday and runs back to Olathe midday and evening, providing an opportunity for connections in Montrose. Passengers use the shuttle for transportation to doctor's appointments, work and school, as well as just running errands around Montrose.

The Olathe Shuttle does not provide convenient transfer opportunities to the Durango to Grand Junction Intercity Bus Route at Montrose Transfer Center, as it arrives nearly three hours early (7:54 AM). The return run in the afternoon originates at the Montrose Transfer Center at 4:00 PM, so passengers would need to wait an hour and fifteen minutes after alighting from the Durango-to-Grand-Junction ICB route. An option might be to request SUCAP to consider a flag stop in Olathe for passengers who have purchased tickets ahead of time.

### Connections in City of Delta

There is no existing public transit in the City of Delta. Demand response services would be able to make connections for riders around the scheduled time for the Durango-to-Grand-Junction Intercity Bus Route.

## INCREASE SPECIALIZED TRANSPORTATION SERVICE IN UNINCORPORATED AREAS

Our demand analysis indicated that though the cities and towns in Montrose and Delta counties were relatively well served with specialized transportation. The unincorporated areas of all four Counties have virtually no service. Assuming no or very little service in unincorporated areas, our analysis includes hours and costs that would be required to bring unincorporated areas to reasonable service standards identified in Chapter 4. **Table 5.4** forecasts the resources that would be required to reach passenger benchmarks of .5 annual trips per capita, which represents the low end of level of service when compared to peer systems.

**Table 5.4 – Resources Required to Increase Specialized Transportation**

County	Unincorp. Population	.5 Trips per Capita	Service Hours*	Annual Cost**
Montrose Co.	21,893	10,947	4,976	\$131,209
Delta Co.	21,497	10,749	4,886	\$128,835
San Miguel Co.	3,851	1,926	875	\$23,080
Ourray Co.	3,355	1,678	763	\$20,107
<b>Totals</b>	<b>50,596</b>	<b>25,298</b>	<b>11,499</b>	<b>\$303,231</b>
<i>*Note: Service hours are based on APT's current productivity of 1.9 passengers per hour.</i>				
<i>**Note: Annual cost is based on APT's hourly cost of \$26.77; which is two years old. Future planning projections should be adjusted for inflation.</i>				

The unincorporated areas within the study area would require an additional 11,500 hours of service at an annual cost of \$303,231 to reach a minimum standard of 0.5 annual trips per capita, but services might be increased only in some, but not all, areas. Given the relatively high cost of this option, the 3RRTCC must decide if or where this level of specialized transportation service is desired.

## **EXPAND VANPOOL PROGRAM AND ADD CARPOOL SERVICE**

### **VANPOOL EXPANSION**

The San Miguel County Vanpool program is a good example of a successful program that can be expanded to other areas. The program, which has a waiting list, currently transports an average of twelve people per day to and from both Montrose and Ridgway to work in Telluride and Mountain Village. The program has an annual budget of only \$8,000, the vehicles are nearly 5 years old, and program participants only pay for fuel, oil changes, and tires.

The area transit demand projections, high current ridership and waiting list are reflective of successful service that has the potential to eventually form the foundation of expanded fixed route services, though funding and capital concerns remain a barrier.

For the past two years, San Miguel County has been funding services, including funding for the vanpool, from reserve funds that originate from a dwindling property tax base. Currently, the county is in discussions about forming a Regional Transit Authority (RTA) to stabilize funding for the long haul. In addition to stabilizing funding, the creation of an RTA also has some potential to provide funding for service expansion.

The challenges of decreasing funding and increasing work transportation demand are difficult to balance when so many contributing issues are undefined. An additional challenge that was identified is the staff time to manage the vanpool, as any increase in program scope would likely require additional staff. Larger-scale service expansion, if any, would occur in the later years of the plan when the RTA issue is settled.

Steps that can be taken to expand the service include:

## Leverage Grant Funds to Replace/Expand the Vanpool Fleet

Currently vans are lease-purchased by San Miguel County and there is not a fleet replacement plan in place. Continuing or expanding the vanpool service requires additional vehicles. There are state and Federal grant programs available that can be used to acquire vehicles and capital for program expansion.

- **FTA 5311 Rural Capital and Operating grant program.** This program provides vehicles and operating assistance for rural transportation projects that include vanpools. The San Miguel Vanpool is eligible for 5311 grant funding for both vehicles and operating. The Colorado Department of Transportation (CDOT), through a competitive grants program that includes a 20% local match, administers the program.
- **State of Colorado FASTER grant program.** Also administered by CDOT, the FASTER grant program provides capital that includes vehicles for selected transportation projects. Vanpool capital including vehicles is eligible under the FASTER grant guidelines.

## Increase the Cost of the Vanpool

Excess demand is an indicator that the price of a product or service is too low and that demand has exceeded supply. In the case of San Miguel County, only consumable expenses (fuel, oil, tires) are paid from program proceeds, leaving a gap for capital replacement and program administration. There are studies available that allow us to determine the extent to which ridership/usage will drop off based on the percentage of fare/cost increase.

- Determine true cost to operate each van. This includes depreciation, capital maintenance, and realistic administration numbers.
- Apply true costs to each van operation, raising the individual passenger cost to effectively maintain and replace the vehicles over time.

## CARPOOL AND RIDESHARE PROGRAMS

Carpools consist of two or more persons driving together in a privately owned vehicle. Rideshare programs are free commuter services designed to inform people about less expensive and environmentally friendly commuting alternatives.

### Carpool and Rideshare Program Development

Carpooling and ridesharing are not “free” services as is the common expectation among people unfamiliar with these programs. There are tangible costs such as printing, advertising and outreach, as well as intangible costs that include commitment to the project and concerns about traveling with unfamiliar people. Steps to setting up an effective carpool program include:

- Identify the lead agency – there is a substantial amount of “management” that needs to take place in order for carpool programs to be effective. The first step in setting up a program is to identify a lead agency that is committed to the project and has some resources available to dedicate to it.
- Secure a financial commitment. Be it directly from the lead agency, positively affected employers, health care providers, and other common destination agencies, securing a financial commitment is critical.
- Change in behavior. It needs to be understood by administrators and program users alike that carpooling represents a significant change in behavior. For people living in the southwest, which is known for its independence, attracting carpool program participants may present some challenges.
- Find champions. These are people who truly believe in the program and are willing to sacrifice time and resources to help make the project successful.
- Market the carpool. Begin a publicity campaign that includes local channels for marketing distribution such as print media, company newsletters, social and electronic media.
- Incentivize the program. At a workplace, employees may choose to carpool without any assistance or involvement from the employer; however, carpool incentive programs are a way for employers to encourage employees to carpool. Work with program participants and potential beneficiaries to establish a useful incentive program, as these have shown to be quite effective in promoting carpool programs.



## 6: COST ESTIMATES

TransitPlus presented service alternatives to the community on November 8, 2012, gathering feedback on details and settling on priorities from the list of options developed in Chapter 4. The focus was on regional connections, as called for in the study; however, it should be again noted that a regional connection between Montrose and Gunnison was not supported by demand estimates at this juncture and was thus left out as an alternative. This route may become viable at some point in the future, but it is not anticipated that this will take place during the five-year study period. Additionally, demand estimates for work-related transportation indicated that a connection between Delta, Orchard City, and Cedaredge might be viable, though we did not initially pursue this option given its demand status relative to the other alternatives. Local stakeholders requested that we include this alternative in our cost estimates and operating plan.

### RECAP OF ALTERNATIVES

TransitPlus developed alternatives that would potentially serve all of the major rural transportation markets and these were prioritized at the regional meeting of November 8. Following is a recap of the alternatives, as prioritized by the community stakeholders at the November 8 meeting:

1. Vanpool Expansion
2. Carpool/Rideshare Programs
3. Public Service Between Montrose and Delta
4. Increase Specialized Transportation in the unincorporated areas
5. Public Service Between Delta and Cedaredge/Orchard City
6. Market Connections to the Durango-Grand Junction Intercity Bus Route

The priorities reflect the value placed on low-cost alternatives that will improve mobility as well as the recognition that the basic public and specialized transportation networks need expansion. Though marketing connections to the Durango-Grand Junction Intercity Bus Route represents a low cost alternative and is included as an option, it is not a preferred option based on comments received from the Advisory Committee.

### COST OF ALTERNATIVES

In prioritizing the alternatives as a community, there was discussion on the potential costs of alternatives and preliminary basic cost estimates were included among some of the options. This chapter expands on the original cost estimates and prioritizes alternatives based on cost and impact.

## BASIS FOR DETERMINING COSTS

The basis for cost estimates of the alternatives developed in this study are 1.) hourly cost figures for APT for public and specialized options and 2.) estimates for other cost units based on a combination of known true costs and reasonable estimates. **Table 6.1** depicts individual unit costs that TransitPlus has used in forecasting alternative costs. Costs are increased by 2.5% per year beyond 2013 to reflect increases in wages, fuel, etc.

**Table 6.1 – Unit Costs Used in Alternatives Cost Modeling**

Unit	2013	2014	2015	2016	2017
Cost per Revenue Hour	\$26.77	\$27.44	\$28.13	\$28.83	\$29.55
Staff Hour - Marketing	\$18.00	\$18.45	\$18.91	\$19.38	\$19.87
Printing	\$0.25	\$0.26	\$0.26	\$0.27	\$0.28
Annual Capital Cost - APT	\$20,000	\$20,500	\$21,013	\$21,538	\$22,076
Annual Capital Cost - Vanpool	\$3,885	\$3,982	\$4,082	\$4,184	\$4,288

APT hourly costs were calculated in Chapter 3. Staffing for marketing and coordination of vanpool, carpools, etc. is estimated at \$18 per hour initially, while glossy printing is estimated at \$.25 per page. APT capital costs are calculated based on the average cost of a medium-duty transit vehicle depreciated over five years. Vanpool annual capital cost is based on a seven-year depreciation schedule, as there is less anticipated daily use.

## MARKET CONNECTIONS TO DURANGO – GRAND JUNCTION INTERCITY BUS ROUTE

This option would principally benefit passengers in Ridgway, Montrose and Delta and will require coordination and marketing to make potential passengers aware of the opportunities for connecting with the service. TransitPlus is suggesting that it will take approximately 250 annual staff hours (20 hours per month) to coordinate with other agencies and services as well as distribute the anticipated 3,000 annual pages of fliers, brochures and schedules.

**Table 6.2 – Annual Cost of Supporting ICB Connections**

Unit	2013	2014	2015	2016	2017
Staff Hour - Marketing	\$18.00	\$18.45	\$18.91	\$19.38	\$19.87
250 Hours	\$4,500	\$4,612	\$4,728	\$4,846	\$4,967
Printing	\$0.25	\$0.26	\$0.26	\$0.27	\$0.28
3,000 Pages/year	\$750	\$769	\$788	\$808	\$828
<b>Total Annual Cost</b>	<b>\$5,250</b>	<b>\$5,381</b>	<b>\$5,516</b>	<b>\$5,654</b>	<b>\$5,795</b>

The annual cost to market and coordinate system and agency transfers with this new service will cost between \$5,200 and \$5,800 annually over the life of the plan.



## VANPOOL EXPANSION

Expanding the successful model that is currently in play in San Miguel County can be done either by expanding the program to other counties under an IGA or other contractual arrangement, or exporting that model to other counties and communities. The costs to expand or export the program will be similar, given the nature of how the serviced will be delivered. Also, an effective vanpool program can form the foundation of future fixed route services, which should be considered once ridership reaches more than 10 passengers per hour, with adequate total passengers to support 3-5 trips in the morning and afternoon peak periods.

Maintenance and vehicle depreciation are shown over a 7-year period, which is in line with projected annual mileage of just over 15,000. **Table 6.3** breaks down these costs.

**Table 6.3 – Vanpool Maintenance and Depreciation Costs**

	2013	2014	2015	2016	2017	2018	2019	Totals	Average
<b>Vehicle Maintenance for One Van</b>									
Oil Changes	\$375	\$375	\$375	\$375	\$375	\$375	\$375	\$2,625	\$750
Tires			\$800			\$800		\$1,600	\$457
Wear Components			\$700	\$1,000	\$1,200	\$1,500	\$1,500	\$5,900	\$1,686
<b>Sub Total</b>	<b>\$375</b>	<b>\$375</b>	<b>\$1,875</b>	<b>\$1,375</b>	<b>\$1,575</b>	<b>\$2,675</b>	<b>\$1,875</b>	<b>\$10,125</b>	<b>\$2,893</b>
<b>Vehicle Depreciation</b>	<b>\$3,885</b>	<b>\$3,885</b>	<b>\$3,885</b>	<b>\$3,885</b>	<b>\$3,885</b>	<b>\$3,885</b>	<b>\$1,690</b>	<b>\$25,000</b>	<b>\$7,143</b>
<b>Total</b>	<b>\$4,635</b>	<b>\$4,635</b>	<b>\$7,635</b>	<b>\$6,635</b>	<b>\$7,035</b>	<b>\$9,235</b>	<b>\$5,440</b>	<b>\$45,250</b>	<b>\$12,929</b>

Expanding on these annual cost estimates, TransitPlus estimated the cost per vehicle to expand the vanpool program and later the cost per passenger to use the service. Table 6.4 illustrates potential costs for expanding the vanpool program to other areas.

TransitPlus has estimated that approximately 250 hours per year of staff time will be needed for a program of up to 4 vans (20 hours per month). The position is assumed to be part time, so no benefits costs have been included. The program management cost is \$4,500 - \$5,000 per year or about \$1,250 per van with four vans.

**Table 6.4 –Cost to Expand Vanpool Program**

Unit	2013	2014	2015	2016	2017
<b>Administrative Costs/Hour</b>	\$18.00	\$18.45	\$18.91	\$19.38	\$19.87
250 Hrs./Yr. for up to 4 Vans	\$4,500	\$4,613	\$4,728	\$4,846	\$4,967
<b>Capital Costs – Initial Cost</b>	\$25,000				
Annual Hourly Cost – 100%	\$3,885	\$3,982	\$4,082	\$4,184	\$4,288
Annual Hourly Cost – 20%	\$777	\$796	\$ 816	\$ 837	\$ 858
<b>Operating Costs</b>					
Insurance (\$150/month)	\$1,800	\$1,845	\$1,891	\$1,938	\$1,987
Maintenance	\$2,331	\$2,389	\$2,449	\$2,510	\$2,573
Fuel	\$3,826	\$3,922	\$4,020	\$4,120	\$4,223
<b>Subtotal Operating Costs</b>	<b>\$7,957</b>	<b>\$8,156</b>	<b>\$8,360</b>	<b>\$8,568</b>	<b>\$8,783</b>

Capital costs are calculated at \$3,900 - \$4,200 per year, for five years, based on the use of the vehicles each year, with 2 hours each day per vehicle and 259 operating days per year. In reality, the capital cost will be incurred when the vehicle is purchased and it is recommended that 80% be funded with Federal 5311 capital funds.

Annual operating costs include fuel and maintenance. Fuel is calculated based on 60 miles per day per vehicle (30 miles one-way), 15 MPG, \$3.50 per gallon and the same number of operating days. Maintenance for the purposes of this study includes routine preventive maintenance and tires, as well as regular wear component estimates in later years. This results in annual operating costs of \$8,000 - \$9,000 per year for each vehicle.

It should also be noted that fuel and maintenance costs are currently being borne by the users of the service, although it is unlikely the full cost is covered. Grant funds are available to offset 80% of the capital costs of purchasing new vehicles for the service. The remaining 20% of the capital costs have been allocated to the users.

**Table 6.5** illustrates the costs per rider for a typical month, based on 11 paying riders per vehicle, assuming the driver provides time and does not pay other costs.

**Table 6.5 – Monthly Cost per Rider per Vehicle**

Monthly Operating Costs per Rider		Monthly Admin/Capital Costs per Rider	
Fuel	\$25.18	Administration – for a 2 van program	\$17.05
Maintenance	\$11.92	Capital Replacement – User	\$5.89
Insurance	\$12.50	Capital Replacement – Fed.	\$23.54
<b>Total</b>	<b>\$49.60</b>	<b>Total Based on a 2-Van Program</b>	<b>\$22.94</b>

Currently, passengers pay an average of \$25 per month to use the service based on conversations with San Miguel County staff. In order for the entire operating cost of the vanpool service to be absorbed by the riders, costs would double, which could have an impact on use. This does not include paying for the administrative time or local share of



vehicles, which would increase the cost by another \$14.50 to \$40, depending on the number of vans in the program. Looking at administrative and capital costs, the share of administrative costs per passenger would range from \$8.50 per month if there were four vans to \$34 per month if one van was operated. The mid-point is used in Table 6.5. Total capital is estimated at \$29.43 per passenger; however, this figure represents the full cost of depreciation. Assuming FTA grants for 80% and a 20% local match, the capital cost per passenger drops to \$5.89.

## CARPOOL AND RIDESHARE PROGRAMS

Another low cost option to improving the regional transportation network is the development of carpool and rideshare programs. These programs rely on individual participation and a willingness to let someone else drive. Most of the costs are related to staff coordination efforts. In many communities large employers absorb these costs. A cost of \$5,250 is estimated for this function, to include staff time at 250 hours per year and minor printing.

## PUBLIC SERVICES

Public service options include Montrose to Delta, Delta to Cedaredge/Orchard City, and limited service to Grand Junction from Delta. **Table 6.6** illustrates the potential costs of adding public services, increasing based on the number of daily trips provided. This table shows the relatively low investment needed to initiate limited service as well as a realistic picture of what it would cost if expanded to 12 trips daily.

**Table 6.6 – Cost of Public Transportation Options**

SERVICE	Daily Runs	Daily Hours	Annual Hours	Hourly Cost	Annual Cost
<b>Montrose-Delta</b>					
	2	6	1,554	\$26.77	\$41,601
	4	12	3,108	\$26.77	\$83,201
	8	24	6,216	\$26.77	\$166,402
	12	36	9,324	\$26.77	\$249,603
<b>Delta-Cedaredge</b>					
	2	2	518	\$26.77	\$13,867
	4	4	1,036	\$26.77	\$27,734
	8	8	2,072	\$26.77	\$55,467
	12	12	3,108	\$26.77	\$83,201

Looking at the annual costs to add public services and also taking into account the regional priorities expressed by the community stakeholders, there is opportunity to begin desired connections with a relatively small annual investment. Adding frequency to the route increases the cost; however, service additions can be made modularly over time.

If the purpose of the service is meeting basic travel needs to enable people to continue living independently, then one trip a day is appropriate. Such service will likely not serve many workers or students, although some might use it if the schedule is appropriate for their needs. To serve the work trip market, generally 3 round trips are needed to address the variety of work schedules.

A Montrose to Delta connection shows the most promise when considering the results of the demand analysis. There is also considerable work traffic between Delta and Cedaredge and the run time is much shorter, which produces a lower cost. This should be considered when establishing implementation priorities.

## SPECIALIZED SERVICES

Of the alternatives identified, adding specialized service is the most expensive, as would be expected, making it the least attractive option financially. However, each community within the region and the region as whole must decide the relative importance of helping seniors and the disabled to maintain independent lifestyles. Building local matching funds needed to provide adequate specialized services is an ongoing process. **Table 6.7** illustrates some scenarios for adding minimal weekly service in each county along key regional corridors.

**Table 6.7 – Weekly Cost to Add Specialized Service**

County	Corridor	Weekly Cost per Round Trip					
		Trips	Cost	Trips	Cost	Trips	Cost
Delta	Delta-Grand Junction	1	\$107	3	\$321	5	\$535
Montrose	Montrose-Delta	1	\$54	3	\$161	5	\$268
	Montrose-Ridgway	1	\$54	3	\$161	5	\$268
San Miguel	Telluride-Montrose	1	\$54	3	\$161	5	\$268
Ouray	Ouray-Ridgway	1	\$54	3	\$161	5	\$268

Based on the current APT cost, one round trip per week from Delta to Grand Junction is projected to cost \$107 weekly, or \$5,564 annually. Other regional specialized trips are based on shorter distances and estimated to cost \$54, or \$2,782 annually. In looking at options to increase specialized services over time, building the service by adding one or two weekly trips within major transportation corridors that connect lifeline services makes the most sense.

## ALTERNATIVES PRIORITIZED BY COST

The November 8 discussion with the regional stakeholders resulted in identifying the highest priorities as: expanding the vanpool program, service between Delta and Montrose, and marketing connections with the Durango to Grand Junction Intercity Route. **Table 6.8** summarizes the service alternatives in order of cost.



**Table 6.8 – Alternatives Prioritized by Cost**

Alternative	Daily Service	Annual Cost	Daily Trips	Annual Passengers	Cost per Passenger
Market connection w/Durango-Grand Jct. ICB	1 RT	\$5,250	N/A	N/A	N/A
Establish Carpool/Rideshare Program	Variable	\$5,250	12	3,108	\$1.69
Expand Van Pool Program	1 RT	\$16,342	24	6,216	\$2.63
Delta - Cedaredge Public Service	1 RT	\$6,933	8	2,072	\$3.35
Montrose - Delta Public Service	1 RT	\$20,800	12	3,108	\$6.69
Expand Specialized Service (.5 trips per capita)	37 Hours	\$303,231	81	25,298	\$11.99

Supporting connections to the impending Durango-Grand Junction Intercity Bus is tied for the lowest initial annual cost and could have no cost, depending on marketing specifics of the new route. It is given that this service will run through the region regardless of Region 10’s efforts to connect seamlessly with the service and that some marketing efforts will accompany the kickoff of the project. Therefore, cost estimates could be high and all coordination opportunities should be explored. It should again be noted that the Region is not willing to support this option financially, so any efforts toward this end that generate costs would need to be funded through CDOT.

The cost of establishing carpool and rideshare programs was calculated similarly to the first option, with 250 hours of staff time and 3,000 quality printed documents. Assuming that 6 people (12 daily trips) agree to carpool or share rides to work, the service is projected to carry more than 3,000 annual passengers at a cost of \$1.69 per rider.

Limited service providing one daily round trip between Delta and Cedaredge could be achieved at an annual cost of \$6,933, providing an estimated 2,072 annual trips at a cost of \$3.35 per passenger. This model assumes 4 daily passengers (8 daily trips), which may be high for the area if only one trip is provided. The demand analysis shows the demand is present, but the actual ridership will depend on when the vehicle can be scheduled and how well it suits passenger needs. Service can be expanded or contracted as practical.

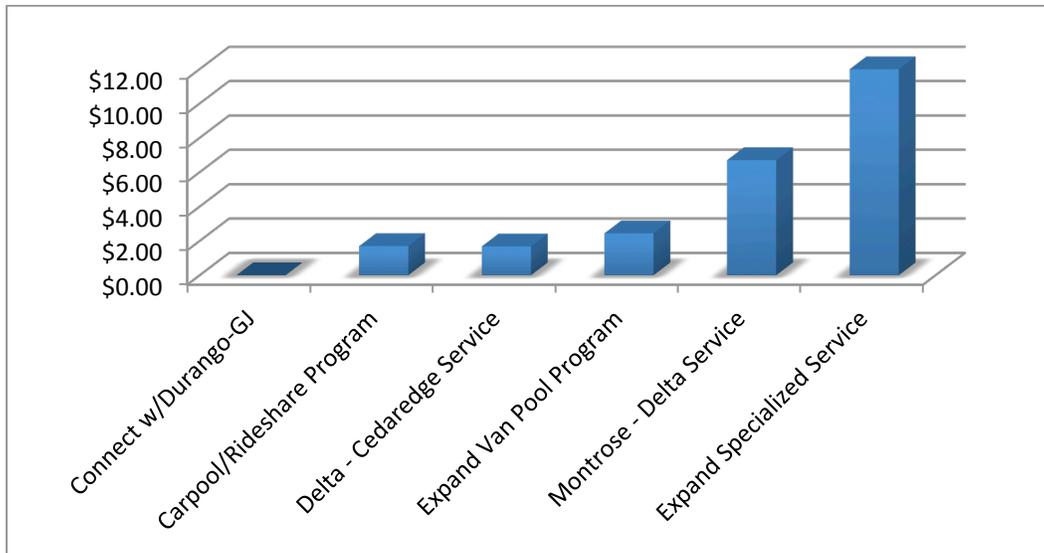
Expanding the vanpool program model being used by San Miguel County will cost more than \$16,500 per van and provide more than 6,200 annual passenger trips at a cost of \$2.63 per trip, when considering total program cost. As noted in Chapter 5, there are options for funding both capital and operations available to the region, which has the potential to reduce the cost to the program lead agency or jurisdiction.

Montrose to Delta public service shows the highest demand for service and can be implemented on a limited basis beginning at approximately \$21,000 annually for one round trip run. If it carried 6 daily round trip passengers (12 one-way trips), the service is projected to provide more than 3,100 annual trips at a cost of \$6.69 per passenger.

Expanding specialized services, even to a minimal standard of .5 trips per capita, is the most costly and logistically difficult alternative to implement. It would likely be implemented gradually, as funds could be found, and on a corridor or community basis.

Assuming more than 25,000 trips to reach that level of service, the cost to provide the service would exceed \$300,000 annually at a cost of approximately \$12 per passenger. **Figure 6.1** shows the cost per passenger of each alternative.

**Figure 6.1 – Cost per Passenger of Alternatives**



## REVENUE

This section presents some revenue options for the agencies that will be involved in the implementation of the alternatives. It must be noted that the options presented are from logical existing sources of funding, but that the sharing and coordination of resources that must occur for alternatives to be implemented needs to be worked out among the affected agencies and stakeholders.

## MARKETING/COORDINATION BASED ALTERNATIVES

### Connections with Durango-Grand Junction Intercity Bus Route

The principal communities that will benefit from the Durango-Grand Junction route are Telluride, Ridgway, Montrose, and Delta. The staffing component of this alternative represents the bulk of the anticipated costs. Potential funding strategies include:

- Staff and supplies contribution from each community. Under this scenario each community assigns staff time from a participating agency and supplies to the project. This represents a decentralized approach to funding and assumes an equivalent level of effort from each community.
- Pooling of resources is another vehicle for funding staff and supplies. This scenario assumes that the participating communities and agencies have reached agreement on a contribution formula.



- Volunteers and donations can also be utilized to offset the cost of this alternative, assuming there is ample time and energy provided. Volunteers and donations can come from individual or corporate sources, but it is critical that volunteers are committed to the outcome.

## Carpool/Rideshare Programs

Since there it is likely that many carpool and rideshare programs will be centered on employment, there is an opportunity to engage positively impacted employers in the program to provide resources. Employer and tax incentives can be used to gain riders. It should again be noted that the lead agency or person must be committed to the outcome for a successful program.

## GENERAL PUBLIC ALTERNATIVES

Funding of public service alternatives is more complex than the previous options and the financial stakes are higher.

### Regional Connections and Vanpool Expansion

The Montrose to Delta and Delta Cedaredge routes are regional connections that provide a high level of work related trips, approximately 2,400 and 1,200 respectively. Funding options for these services include:

- **Farebox revenues** are expected to recover between 7% and 10% of the operating cost, when compared to rural averages.
- **General Fund** or other similar local line item for the towns of Montrose and Delta will be required, either as local match for FTA or CDOT funds, or as a sole source of funding.
- **FTA 5310 and 5311 operating and capital grants** can be applied through CDOT for a portion of funds. Rural operating grants (5311) require a 50% local match, while capital grants under both programs require a 20% local match.
- **Colorado's FASTER grants** provide capital funding for buses and related infrastructure. The funds can be used for direct purchases (80% match) or to leverage local funds (80% of required local match) for FTA capital purchases.
- **Increase the monthly cost** of the vanpool program. The program currently costs nearly \$50 per passenger to operate, while \$25 per passenger is collected.

**Table 6.9** and **Table 6.10** present operating and capital funding levels for several service level scenarios of each alternative.

**Table 6.9 – Operating Funding Scenarios for Public Services**

Service	Annual Operating Cost	Farebox Revenue	FTA 5311	Local Match
<b>Montrose - Delta</b>				
1 Run	\$20,800	\$1,664	\$10,400	\$8,736
2 Runs	\$41,600	\$3,328	\$20,800	\$17,472
4 Runs	\$83,200	\$6,656	\$41,600	\$34,944
8 Runs	\$166,400	\$13,312	\$83,200	\$69,888
<b>Delta - Cedaredge</b>				
1 Run	\$6,933	\$555	\$3,467	\$2,911
2 Runs	\$13,688	\$1,095	\$6,844	\$5,749
4 Runs	\$27,376	\$2,190	\$13,688	\$11,498
8 Runs	\$54,752	\$4,380	\$27,376	\$22,996
<b>Vanpool Extension</b>				
1 Van	\$5,130	\$3,826	\$2,565	\$1,304
2 Vans	\$10,260	\$7,652	\$5,130	\$2,608
4 Vans	\$20,520	\$15,304	\$5,216	-
8 Vans	\$41,040	\$30,608	\$10,432	-

**Table 6.10 – Capital Funding Scenarios for Public Services**

Service	Annual Capital Cost	FTA 5311/Capital	FASTER	Local Match
<b>Montrose - Delta</b>				
1 Bus/Van	\$20,000	\$16,000	\$3,200	\$800
2 Bus/Van	\$40,000	\$32,000	\$6,400	\$1,600
4 Bus Van	\$80,000	\$64,000	\$12,800	\$3,200
8 Bus Van	\$160,000	\$128,000	\$25,600	\$6,400
<b>Delta - Cedaredge</b>				
1 Bus/Van	\$20,000	\$16,000	\$3,200	\$800
2 Bus/Van	\$40,000	\$32,000	\$6,400	\$1,600
4 Bus Van	\$80,000	\$64,000	\$12,800	\$3,200
8 Bus Van	\$160,000	\$128,000	\$25,600	\$6,400
<b>Vanpool Extension</b>				
1 Van	\$5,000		\$4,000	\$1,000
2 Vans	\$10,000		\$8,000	\$2,000
4 Vans	\$20,000		\$16,000	\$4,000
8 Vans	\$40,000		\$32,000	\$8,000

Operating and capital funding scenarios depicted are best-case scenarios and reflect the maximum grant funding that is available for each service alternative. The models



assume that 50% of local operating costs and 80% of capital cost are covered through FTA 5311 funds. The model further assumes that FASTER grants will be used to offset 80% of local capital match on fixed route projects and for 80% of the entire cost of vans used for vanpool expansion. Annual capital costs are estimated based on the projected accumulated depreciation for each period. For example, a van with an initial purchase price of \$100,000 that is depreciated over five years costs \$20,000 annually.

## INCREASED SPECIALIZED TRANSPORTATION

Not only is this alternative the most costly, it is also the most difficult to fund in terms of gathering the community resource necessary to begin to meet area meeting. However, it is also one measure of quality of life for area residents that must be carefully considered by community leaders when making difficult financial decisions.

### The Role of Mobility Management

In considering funding mechanisms that are practical and conservative, TransitPlus believes that regional coordination and mobility management will play a key role in the establishment and success of new services. Mobility management activities will be critical to increasing specialized, as well as other types of services. Additionally, a mobility manager has the ability to raise community support and funds for the programs being initiated. Activities may include information referral; coordination of trips and services across agencies; and managing van pool and carpool programs.

Given that a number of activities associated with all alternatives fall into this category, it is recommended to establish or designate a mobility manager for the region who can serve as a champion of both regional coordination efforts and implement recommendations of this Transit Development Plan. This person could work within APT or the Region 10 office. Mobility Management activities can be funded with Section 5310 funds, so the cost would be or reflect a 20% local share if such a grant was obtained.

### Temporary Assistance for Needy Families (TANF)

There are successful models including the North Front Range MPO (NFRMPO) in Northern Colorado that utilized Temporary Assistance for Needy Families (TANF) funds for transportation. Mesa County has used TANF funds for local match on transportation projects and the program encourages creativity. Many States are working to break down the transportation barriers for welfare recipients and transportation services are an important part of these activities.

Many examples are included in *Access To Jobs, A Guide to Innovative Practices in Welfare-to-Work Transportation* developed by DOT and the Community Transportation Association of America. The guide features innovative transportation approaches to meet the needs of welfare recipients and other low-income persons, as well as a list of available resources.

## Increased Use of Volunteers

APT and DAV are two of many agencies that successfully use volunteers to provide specialized transportation trips. Increasing the use of volunteers may be a key to establishing additional specialized transportation in both areas with existing services and unincorporated areas with little or no services. However, it is recognized that the challenges to expanding the volunteer driver pool are relatively steep.

## Increased Coordination of Services

There are many ways to leverage relationships among local providers to both share and tap into strengths and need. Examples of collaborations taking place include coordination with local Medicaid transportation, hospital transportation, community action programs, community public/private transit, volunteer transportation programs (i.e., Faith in Action, Red Cross, RSVP, faith communities), community centers, local senior centers/senior services, count shared ride program, etc. Some of these collaborating organizations provide or supplement center provided transportation, while others share equipment and/or vehicles.

## REGIONAL TRANSPORTATION AUTHORITY

There has been some discussion in the region of pursuing ballot initiatives to establish a Regional Transportation Authority (RTA) in one or more of the jurisdictions. A RTA establishes dedicated transit funding for the jurisdiction through sales tax or other taxes tied directly to funding for ground transit, trails, rail, aviation, roads, aerial tramway, and related infrastructure. The RTA can be established in parts of a county and/or cross county lines. In addition to dedicated funding, RTA initiatives can consolidate services and improve the jurisdiction's ability to leverage federal funds.

Jurisdictions within San Miguel County have taken the initiative to consider a RTA in 2013. The Town of Mountain Village is expected to support the initiative as well in the future. At this juncture there are a number of details that will have to be worked out between now and November of 2013. However, the RTA has the most potential of all funding and organizational options to advance future transit management and operations. With this option current governmental funding levels would remain at current levels for two to three years until approved tax revenue accrued to support transit.

## SUMMARY

Prioritizing services both by cost and impact (annual trips), the carpool/rideshare, Delta-Cedaredge public service, and expansion of Vanpool service alternatives provide the best short-term options for meeting regional demand and establishing and supporting regional connections between major population centers. Additionally, the cost of promoting local connectivity with the Durango-Grand Junction Intercity Bus route could be reduced through coordination efforts with Region 9 and SUCAP Roadrunner. The



relatively low risk and cost associated with these alternatives make them an excellent foundation for the initial years of the Transit Development Plan

Montrose to Delta public service, though on the high side of cost, appears viable as well and could eventually reach very high ridership, given the work traffic in the corridor. This option is slightly higher on a projected cost per passenger basis than the previously mentioned alternatives; however, the costs are still reasonable and the alternative can be implemented in the middle years of the plan.

Expanding specialized services is the most costly and politically challenging alternative for consideration. However, the maintenance of independence is an important regional and individual community objective, while the aging of the population in general necessitates that this regional area of transportation network weakness be addressed at some point in the future.



## Four County Transit Feasibility Study Update



## 7: IMPLEMENTATION PLAN

The service alternatives with the most potential are those that strengthen the existing area transit network by increasing connections between existing and planned services as well as strengthening local services. Additionally, one of the intended outcomes of the study was to establish the viability and cost of regional intercity connections. Having applied cost and impact models to each alternative, TransitPlus was able to prioritize the alternatives, forming the basis of the implementation plan.

### IMPLEMENTATION PLAN SUMMARY

The detail steps, processes, and protocols that will be necessary to implement the alternatives are beyond the scope of this study and will be further developed in a subsequent study that is planned by Region 10. The following implementation plan will be based on broad-based initiatives that are required of each alternative, providing a blueprint for moving forward with a more detailed planning effort. **Table 7.1** summarizes implementation plan activities over the five-year period covered by this study.

**Table 7.1 – Implementation Plan Summary**

Alternative	Plan Year	Coordinating Partners	Objective
Support Durango-Grand Junction ICB	2013	San Miguel, Ouray, Montrose, Delta	Provide access to ICB route
Establish Carpool/Rideshare Program	2013	San Miguel, Ouray, Montrose, Delta	Establish viable program
Delta - Cedaredge Public Service	2014	Delta, APT	Establish viable service
Expand Van Pool Program	2015	San Miguel, Ouray, Montrose, Delta	Expand program within region
Montrose - Delta Public Service	2016	Montrose, Delta	Develop viable service
Expand Specialized Service (.5 trips per capita)	All Years	San Miguel, Ouray, Montrose, Delta	Increase level of service

The summary and timing of activities is based on established priorities, anticipated costs, and the degree of difficulty in accomplishing the necessary steps in implementing the alternative.

### COORDINATION AND RELATED ACTIVITIES

Analyzing the cost and processes involved to develop transit service alternatives provides the platform for an operational or implementation plan, but it does not address one of the most critical elements to implementing regional services – coordination. With four counties and multiple towns and incorporated areas involved in the current regional effort and two more counties set to become more involved in the future, the need for coordination cannot be overstated. Ultimately, it will be the ability of regional stakeholders, staff and agencies to unite toward common objectives that will determine the outcome of the planning effort. It is critical that partnerships be developed early in the process and that potential partners are identified and solicited throughout the plan period.

# IMPLEMENTATION PLAN

## YEAR ONE - 2013

Prior to beginning any phase of implementation, regional coordination must take place and all key representatives of agencies, jurisdictions, and planning partners must be in place. Additionally, as there is significant cross-jurisdictional travel anticipated, it will be necessary to gain consensus on how alternatives will be funded. Given that the first year projects have relatively low cost and that some costs can be avoided or mitigated through effective grass roots marketing campaigns, this element will not be as important in year one of the plan as in subsequent years when more costly options are being implemented. **Table 7.2** presents a timeline for 2013 implementation activities.

**Table 7.2 – 2013 Implementation Plan Activities**

Alternative/Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>Precursor Activities</b>												
Establish all coordinating partners	=====											
Gain agreement on funding sources		=====										
<b>Support Durango-Grand Junction ICB</b>												
Coordinate with SUCAP		=====										
Identify marketing plan/channels			=====									
Develop related print materials				=====								
Distribution and marketing					=====							
Performance Evaluation						=====						
<b>Establish Carpool/Rideshare Programs</b>												
Establish the parameters of the program					=====							
Identify potential partners/sponsors						=====						
Develop related print and media materials								=====				
Distribution and marketing									=====			
Performance Evaluation										=====		

### Connect with Durango-Grand Junction Intercity Bus Route

Activities can begin almost immediately, once a lead agency or person is identified. It is important for this alternative that Region 10 work closely with Region 9, SUCAP and CDOT to establish how best to combine resources and what resources are already available. The majority of cost and effort assigned to this alternative are related to staff time, so there is potential for one of the agencies or jurisdictions to absorb the marketing/outreach functions within existing staffing frameworks.



### Establish Carpool/Rideshare Programs

Similar to the activities required to connect with the Durango-Grand Junction Intercity Bus Route, establishing an effective carpool/rideshare program requires coordination efforts and a “champion”.

### Expand Specialized Transit Services

Another major consideration that must be addressed perpetually by all planning partners throughout the planning period is how to increase specialized transportation services. The services are costly, and the region should band together to share ideas and success stories that will help the individual counties and communities find funding sources for this expansion. For these reasons, we have scheduled activities related to this expansion of vital services to begin in year one and extend to all years of the planning period.

### Identify Funding Sources for Future Year Options

A final activity that is ongoing and must take begin in the first year is the identification of funding sources and strategies that will support the development of desired services.

## YEAR TWO - 2014

The third year of the plan marks the expansion of the vanpool program. A number of activities will need to have taken place prior to beginning implementation activities including determining the structure, placement, and funding of services. **Table 7.3** highlights the activities required to implement expand the vanpool program or program model.

**Table 7.3 – 2014 Implementation Activities**

Alternative/Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>Expand Vanpool Program</b>												
Establish the parameters of the service	■											
Identify potential partners/service provider	▨	▨	▨									
Develop logistics		▨	▨	▨	▨	▨						
Marketing/Public Awareness Campaign			■	■	■	■	■	■	■			
Begin new service							◆					
Operate new service							▩	▩	▩	▩	▩	▩

## YEAR THREE - 2015

The second phase of alternatives implementation begins in 2014 with the implementation of the Delta-Cedaredge public service. Depending on the timing and availability of grant funding, regional and local discussions of funding and funding strategies should be discussed during this period. **Table 7.4** presents a timeline for 2014 implementation activities.

**Table 7.4 – 2015 Implementation Activities**

Alternative/Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>Delta-Cedaredge Public Service</b>												
Establish the parameters of the service	■											
Identify potential partners/service provider	▨	▨										
Develop logistics		▨	▨	▨	▨	▨						
Marketing/Public Awareness Campaign			■	■	■	■	■	■	■			
Begin new service							◆					

## YEAR FOUR - 2016

The final phase of alternatives implementation begins in 2016, with the implementation of the Montrose - Delta Public Service. There are a number of activities that will need to take place prior to implementing the service including grants applications and the development of accounting procedures. **Table 7.5** illustrates the timeline for implementing the new service

**Table 7.5 – 2016 Implementation Activities**

Alternative/Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>Montrose-Delta Public Service</b>												
Establish the parameters of the service	■											
Identify potential partners/service provider	▨	▨										
Develop logistics		▨	▨	▨	▨	▨						
Marketing/Public Awareness Campaign			■	■	■	■	■	■	■			
Begin new service							◆					
Operate new service							▩	▩	▩	▩	▩	▩

## YEAR FIVE - 2017

The final year of the plan should be dedicated to the improvement of services that were put in place in prior years, as well as extra focus on the expansion of specialized transportation services.