CHAPTER 5

NETWORK DEVELOPMENT

This chapter documents Colorado's existing regional and intercity bus network and develops a classification of the network based on service characteristics. It then provides an assessment of potential services, evaluating future improvements and expansions based on transit need and expected performance.

CONTEXT FOR REGIONAL SERVICE DEVELOPMENT

The network of intercity and regional services is made up of many types of services. They may be operated by local jurisdictions, including regional transportation authorities. They may also be operated by the private sector, funded either entirely by fares or partially paid for with local, state, and/or federal taxes.

A complete service network consists of a variety of intercity and regional services:

- Intercity bus and airport shuttle services, both operated by the private sector
- Regional services operated by publicly funded transit agencies, such as the Regional Transportation District (RTD) regional and express routes and the services operated by the Roaring Fork Transportation Authority (RFTA) along Hwy 82. Often these are oriented to serve employment trips and may have routes that are 20-40 or more miles long.
- Other regional transit services with a focus on enabling residents to travel to the nearest urban center, conduct business, and return home in one day. These include services operated by public transit providers such as Northeast Colorado Association of Local Governments (NECALG), senior centers, or volunteer driver programs, such as those operated by Veteran's service organizations (Alamosa and Prowers counties are examples).

Rural regional services have developed in two areas: (1) resort communities where there is a high need for workers and housing near to jobs is expensive and (2) very rural regions where connections to medical and other services in the nearest regional service center is critical for elderly and disabled residents. There are a number of areas where rural regional services are needed but do not exist simply because of the lack of funding for public transit services or the difficulty in getting many local jurisdictions to agree on funding.



Having said that, the overall network in Colorado is in moderate shape, with many services provided by the resort transit agencies and many supported by CDOT's intercity bus program. The next steps in development of the regional network are to expand services within a framework that provides comprehensive services. This expansion should reflect state and regional priorities and be based on service standards that allow comparison of varying investment options.

Traditional privately operated intercity services do not meet the multiplicity of travel needs that exist. The nature of the private intercity bus network, and what is necessary to maintain profitability, is that it is geared to providing efficient services between major cities across the United States. Providing schedules conducive to travel within the state is not an objective. As a result many smaller communities no longer have access to service. For example, the route operating on east I-70 only serves Burlington, not Limon or any other small communities along the way. Also, the schedules do not, in many cases, provide viable services for people who need to travel to the nearest regional urban area for personal business, medical appointments, or the like. Someone living in La Junta or Lamar would need to spend two nights in Pueblo in order to have 4 or more hours available during business hours to carry out business because of the schedule. The bus arrives in Pueblo around 3 PM and departs at 9:30 AM. There are three major corridors in Colorado where this situation occurs.

Despite such limitations, the national intercity bus network remains important to the state, providing access and travel options for many passengers. It is a for-profit business, and the main lines operate without any taxpayer support. Colorado, like other states, uses Federal Transit Administration (FTA) Section 5311(f) program funds to support intercity bus (ICB) services that feed these main lines. Such subsidized routes serve smaller communities that otherwise would have no service.

Similarly, the airport shuttle services operate on a for-profit basis and serve a specific market. They offer services geared to visitors or residents wishing to access airports, providing high quality service at a relatively high price.

The publicly funded services have, to date, been those funded by local transit agencies or human service programs (such as an Area Agency on Aging). Such services are significant, particularly in the resort communities. Roaring Fork Transportation Authority and Eagle County Transit invest over \$30 million annually in operating transit services. The legislation establishing CDOT's Division of Transit and Rail provides funding for regional services. CDOT's initial efforts are to establish interregional express bus services connecting key cities along major corridors.

CLASSIFICATION OF EXISTING SERVICES

In order to assess potential network improvements and expansions, it was useful to classify existing corridors by service characteristics. Based on an examination of the route lengths and



frequencies, a classification was developed. Different levels of service are appropriate to each of the tiers, and potential service improvements reflect the classification.

<u>Intercity Bus Services</u> connect rural communities to the National Intercity bus network for travel to more distant points. Routes on these corridors have very limited frequencies (often one trip in each direction per day), and operate every day of the week (or if not every day, at least on the peak intercity travel days). Typically, a major national intercity carrier, such as Greyhound, provides intercity bus services.

<u>Interregional Express</u> services connect urbanized areas of the state that have existing local, and in some cases regional, transit service networks. Often these routes are focused on commuters, providing high frequency express services, but they also provide connecting services across two or more regions. Commute services typically operate with at least eight round trips a day, on weekdays. Interregional services require some level of public funding, but could be operated by a private contractor or a public transit operator. This category includes CDOT's Interregional Express (IX) bus as well as some regional services presently operating into resort communities.

<u>Regional Bus Services</u>: Routes on these corridors have moderate frequency (often several trips in each direction per day), and operate at least every weekday if not every day of the week. These routes allow for passengers to complete a round trip in a day, and may be used for commuting purposes. Public transit operators typically provide these services. This category covers many of the regional services presently operating into resort communities, and services connecting communities such as the FLEX route between Fort Collins and Longmont or Road Runner service between Ignacio and Durango that do not operate on an express basis.

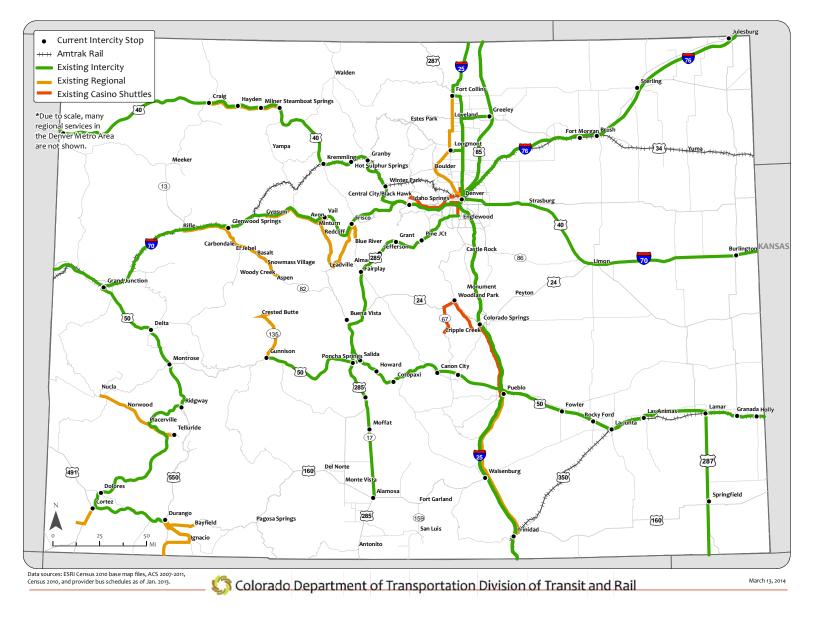
<u>Other Essential Regional Services</u>: Primarily operating on a fixed route and fixed schedule for traveling from rural to urban areas, these have flexible routing at the end. They are designed to serve areas within 200 miles of a regional service center (3.5 hours drive time), allowing for a same day trip with 4 – 5 hours to conduct business.

Figure 5.1 illustrates the existing services by category. Note that casino shuttle services are also identified. These fit best into the regular regional category but are called out separately due to differences in market, hours and days of service, and fare structure.





Figure 5.1: Existing Intercity and Regional Routes







This chapter continues with an analysis of where additional services are warranted and the gaps in the network. It builds on the classification of the existing network by identifying and evaluating improved and expanded intercity, rural regional, emerging regional, and high capacity regional routes.

The gaps in the network are then categorized as to which type of service would be the best fit: intercity, interregional, regular regional, or essential services. The services in each category are then described.

Table 5.1 identifies the level of service that might be associated with each type of regional service. For essential services, a "D" level of service might be appropriate unless demand warrants a "C" level of service. Corridors that can support regular regional services (at least 5 days a week), most commonly would operate a "C" level of service. A "C" level of service is a starting point for both regular regional and interregional express services.

		One-way Trips	Round Trips /Descriptor
Essential Service			
	F	0	No service provided
]	D	2	1 round trip daily or less (1 to 3 days per week)
	С	2 - 4	1-2 round trips, allowing 4-6 hours for business
Regular Regional			
	C 4-1		2 – 7 round trips
	В	16 - 28	8 - 14
Interregional Express			
	C 4-14		2-7 round trips
	В	16 - 28	8 - 14
	А	30 or more	15 or more

Table 5.1: Level of Service for Regional Services

POTENTIAL NETWORK IMPROVEMENT AND EXPANSION

INTERCITY ROUTE ASSESSMENT

To identify the need for additional intercity bus service corridors (in addition to the existing network), a multi-step process was applied. The first step in the intercity route assessment process involved a density ranking of potential transit-dependent persons. As described in detail in Chapter 3, each block group was ranked relative to the rest of the block groups in the state based on four needs categories (young adults, older adults, persons living below poverty,



and auto-less households). Those with moderate or high need were deemed possible candidates for additional or improved services.

The next step involved overlaying the existing intercity and regional bus network on the density ranking and creating 10-mile and 25-mile market area buffers around each existing intercity bus stop. Individuals who live within 10 miles of existing service have reasonably good and feasible access to the service. Those that live more than 10 miles away, and especially more than twenty-five miles away, have much more limited access. Therefore, places that are more than 10 miles away and are not currently served by local transit that could connect them to intercity bus services, would be good candidates for stops on new and improved routes.

As ridership is generally proportionate to the overall population served, an additional analysis step involved eliminating (as potential intercity bus stops) those cities and towns with a 2010 Census population of less than 2,500. This is one possible threshold for warranting fixed-route service in rural areas of the state, and is the same threshold applied in the 2008 study.

The final step involved an analysis of the existing regional transit connections from places not currently served by the intercity bus network that have over 2,500 people and are ranked as medium- or high-need. Regional transit connections to the nearest existing intercity bus stops from these places were identified. In most instances, these places did not have any regional transit providers, and thus no transit connection to the intercity bus stop. In instances where places were served by regional transit, the connections from these places to the nearest stops were analyzed for feasibility. If the regional transit connection required over two transfers and over two hours of travel time, or required a significant wait time at the bus stop, it was determined that the place did not have a reasonable connection to the existing intercity bus network. For places without a reasonable connection, or no connection at all, it was determined that the place was a suitable candidate for intercity bus service.

Table 5.2 (page 5-8) summarizes whether each of the candidate locations has some high or medium transit-dependent density ranking block groups, is over 10 or 25 miles from an existing stop, has a population of 2,500 or more, and does not have a reasonable transit connection to an existing stop. As shown in **Figures 5.2** and **5.3**, the following places meet these criteria.

- Castle Pines North*
- Castle Rock*
- Dacono*
- Estes Park
- Firestone*
- Fort Lupton
- Lochbuie

- Milliken
- Monte Vista
- Monument
- Parker
- Windsor
- Woodland Park

It also should be noted that the additional services implemented since the 2008 plan have resulted in the provision of intercity bus access to most places meeting these criteria, and that there are relatively few places that are not on the existing network. Communities marked with



one asterisk are urbanizing areas that are not part of RTD. Parker has access to RTD services that provide a connection to intercity bus in downtown Denver.

City/Town	Distance from Existing Intercity Bus Stop (miles)	Census 2010 Population
Castle Pines North	within 10-25 mi buffer	10,360
Castle Rock	> 25	48,231
Dacono	within 10-25 mi buffer	4,152
Estes Park	> 25	5 <i>,</i> 858
Firestone	within 10-25 mi buffer	10,147
Fort Lupton	within 10-25 mi buffer	7,377
Lochbuie	within 10-25 mi buffer	4,726
Milliken	within 10-25 mi buffer	5,610
Monte Vista	within 10-25 mi buffer	4,444
Monument	within 10-25 mi buffer	5 <i>,</i> 530
Parker	within 10-25 mi buffer	45,297
Windsor	within 10-25 mi buffer	18,644
Woodland Park ¹	within 10-25 mi buffer	7,200

Table 5.2: Candidate Stops for Intercity Bus Service

Places that do not meet the 2,500 population threshold may still be candidates for additional or improved service, especially if they lie along potential routes. This includes the following places:

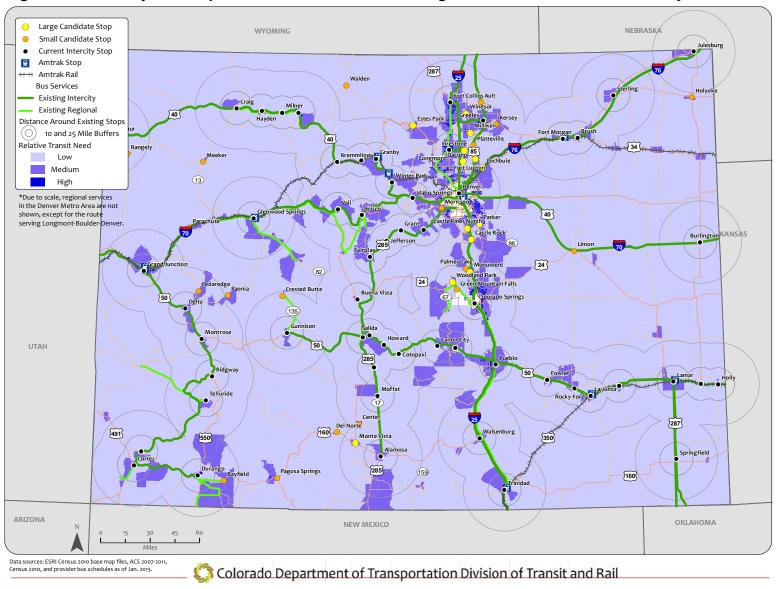
- Ault
- Bayfield
- Cedaredge
- Center
- Crested Butte²
- Del Norte
- Green Mountain Falls
- Holyoke
- Kersey
- Limon

- Meeker
- Morrison
- Pagosa Springs
- Palmer Lake
- Paonia
- Parachute
- Platteville
- Rangely
- Walden

¹ Woodland Park is served by a casino bus, serving Colorado Springs and Cripple Creek. A transfer location is needed in Colorado Springs.

² Gunnison Valley Rural Transportation Authority (GVRTA) provides a regional connection from Crested Butte to Gunnison. However, the current schedule for the GVRTA bus does not allow for an individual to make the 6:15am departure for Denver on the Black Hills Stage Lines intercity bus.









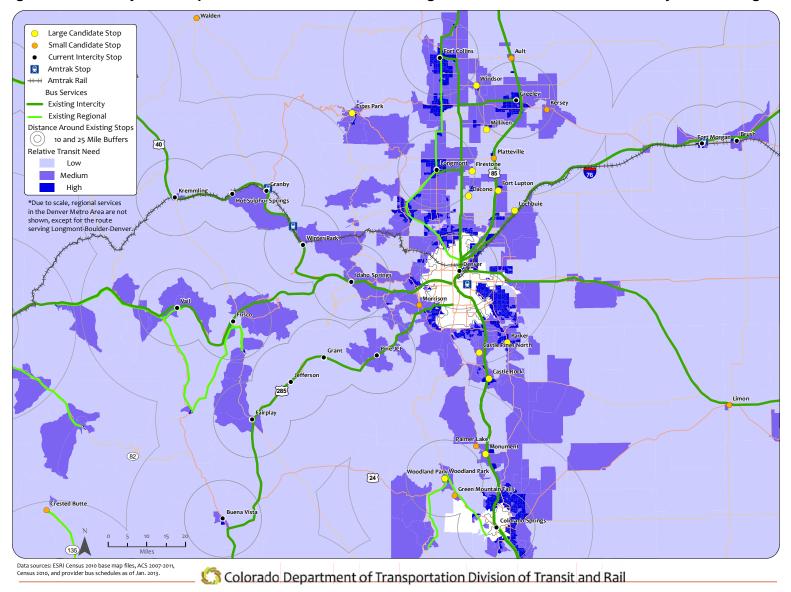


Figure 5.3: Intercity Bus Stop Candidates Overlaid on Existing Bus Network and Ranked Density: Front Range





Because this process resulted in the identification of stops rather than routes, a subsequent step involved the development of hypothetical routes that could serve these towns. These potential routes were developed jointly by the study team with input from CDOT. In a number of cases, route segments that currently lack service were analyzed on their own, and then as part of longer routes to larger population centers, which could be operated as either extensions of current services or as additional frequencies on those segments that also have existing service. This was done in order to test the possibility that a connection to a larger city would attract more demand and be more feasible despite the higher costs of the additional bus-miles.

Then, in order to do a preliminary assessment of feasibility, the TCRP 147 Rural Intercity Demand Toolkit was used to estimate ridership for the potential routes.³ The Toolkit includes two models that generate estimates of annual ridership, based on user inputs. The first, a regression model, is a statistical equation based on the length of the route and the average population of the stops served (excluding the largest population stop, which is assumed to be the destination). The trip rate model is a different approach using National Household Travel Survey data. It accounts for regional variation in long-distance trip rates made by rural residents using public transportation.

Inputs into the two models include stop population (either Urbanized Area or Urban Cluster population) and route length. The population data was based on the 2000 Census (part of the Toolkit CD), and the one-way route lengths were obtained using Google Maps. Other required information also affects the Toolkit results, including whether the route would serve a commercial airport, whether it would serve a correctional facility, and whether it would be operated by a national intercity bus operator. Non-intercity bus operators are not interlined with the national intercity bus network – they have separate fares, no interline agreements, and are not included in the internet and telephone information systems of national carriers.

The Toolkit can be adjusted to evaluate particular situations that may affect potential ridership. Both models already eliminate the population of the destination city as it is assumed that very few residents there would take advantage of a new opportunity for travel to a rural area that was previously unserved. In some cases it is also useful to remove other cities that already have substantial intercity bus service, where the potential impact of a small incremental expansion of service would be limited. For example, this analysis dropped Salt Lake from the Durango-Salt Lake route, leaving Provo as the destination. The ridership estimate thus reflects the remaining towns along the route and is much closer to likely demand. Rather than dropping a location altogether, the user can also adjust overstated demand directly in the trip rate model. For example, the Alamosa-Walsenburg-Pueblo-Colorado Springs route was manually adjusted to allocate the estimated demand at these stops between the potential route and other existing services, as a percentage of the daily departures from each stop.

³ TCRP Report 147: Toolkit for Estimating Demand for Rural Intercity Bus Services. Transportation Research Board. Washington, D.C. 2011. <u>http://onlinepubs.trb.org/onlinepubs/tcrp/tcrp_rpt_147.pdf</u>.



Because of differences between the regression and trip rate model results in many of the corridors, the two demand estimates were averaged to provide a single demand number. This was done to be on the conservative side with regard to potential ridership. It is also important to note that the Toolkit makes a significant distinction between services that are/are not interlined with the national network. As described above, national intercity services are fully interlined in terms of ticketing, resulting in a higher ridership base. Several potential routes tested with the Toolkit had demand estimates of zero due to a non-intercity designation. In these cases the model, which was calibrated on intercity route data, estimated demand that was less than the error term of the equation. The Toolkit is also limited in that the models do not provide for testing the impact of multiple frequencies. Because of these factors, the Toolkit models are not applicable to estimating demand for regional routes designed for two or more round trips per day. A separate table with routes classified as regional is included later in this document.

Table 5.3 presents estimated ridership for routes classified as intercity in nature. Four of the twelve routes have multiple iterations, reflecting a range of estimates depending on either the presence of a correctional facility or the intercity/non-intercity operator designation. The routes range in length from about 50 miles to almost 400. Estimated ridership ranges from only 800 annually on the Colorado Springs-Frisco via Woodland Park route to almost 8,000 annually on the Grand Junction-Farmington (New Mexico) route.

Table 5.4 presents estimated operating costs and revenues for the potential routes. For routes assumed to use national intercity operators, a cost of \$3.65 per revenue bus mile was used. For the non-intercity operators, \$2.30 per mile was used. These figures were multiplied by the number of round-trip miles for the proposed service. Intercity services generally operate 365 days per year, so that level of service was used for all cost estimates. For revenue estimates, this analysis assumed that average passenger-trip length is 80 percent of route length (as some passengers will not ride the entire length of the route). Revenue per passenger mile was assumed to be \$0.20, based on estimates from current services.

The projected farebox recovery levels of the potential routes range from 8 percent for Colorado Springs-Frisco to 50 percent for Denver-Estes Park. Net deficit per passenger ranges from \$293 on a non-intercity operated Grand Junction-Farmington route to a low of \$13 on the Canon City-Colorado Springs route. It should be noted again that these are estimates based on a chain of assumptions. However, the average farebox recovery is comparable to that of the 2013 current and proposed Section 5311 services (**Table 5.5**). In addition, when checking the models against current routes, applying these assumptions to the Toolkit demand accurately estimated revenue per bus mile of \$.60 for the Chaffee Shuttle Salida-Pueblo route.

As noted above, demand could not be estimated for several of the proposed routes with the intercity bus demand tool. These routes can be considered as potential rural regional services, scheduled to allow a morning-inbound, evening-outbound service (possible because of the shorter route length). These routes might allow access to intercity bus services, but would not



be scheduled to optimize connections. **Table 5.6** presents a list of these routes, along with estimated demand based on a trip rate of .25 boardings per mile, and weekday only service.

Route Description	One- Way Miles	Serves Correc. Facility	Likely Operator	Regression Model Ridership	Trip Rate Model Ridership	Estimated Average Ridership
Alamosa-Walsenburg-	168		Non-Intercity	7,300	1,300	4,300
Pueblo-Colorado Springs	168		Intercity	13,100	1,300	7,200
Canon City-Colorado Springs	46		Non-Intercity	2,900	4,600	3,750
Colorado Springs- Woodland Park-Divide- Fairplay-BreckFrisco	116		Non-Intercity	200	1,400	800
Denver-Greeley-Loveland- Estes Park	106		Non-Intercity	7,900	2,500	5,200
Durango-Monticello-Moab- Green River-Price-Provo- Salt Lake	394		Intercity	6,300	-	3,150
Monticello-Moab-Green River-Price-Provo-Salt Lake	290		Intercity	5,600	-	2,800
Grand Junction-Delta-	294		Non-Intercity	2,500	400	1,450
Montrose-Cortez-Durango-	294		Intercity	8,300	400	4,350
Farmington	294	Y	Intercity	8,300	6,800	7,550
Grand Junction-Rifle- Glenwood Spgs-Gypsum- Vail-Frisco-ID Spgs-Denver	250		Intercity	9,100	3,400	6,250
Gunnison-Montrose-Delta-	130	Y	Non-Intercity	300	6,300	3,300
Grand Junction	130		Intercity	6,100	-	3,050
	130	Y	Intercity	6,100	6,300	6,200
Limon-Castle Rock	68	Y	Non-Intercity	_	3,800	1,900
Limon-Castle Rock-Denver	96		Non-Intercity	800	1,200	1,000
	96	Y	Non-Intercity	800	7,500	4,150
Limon-Colorado Springs	73	Y	Non-Intercity	-	4,700	2,350

 Table 5.3: Predicted Annual Ridership for Potential Colorado Intercity Routes

Route Description	One- Way Miles	Est. Rider- ship	Estimated Revenue	Est. Annual Operating Cost	Est. Farebox Recovery	Net Operating Deficit	Net Deficit/ Passenger
Alamosa-Walsenburg- Pueblo-Colorado Springs	168	4,300	\$ 115,584	\$ 282,072	41%	\$ 166,488	\$ 39
1 0	168	7,200	\$ 193,536	\$ 447,636	43%	\$ 254,100	\$ 35
Canon City-Colorado Springs	46	3,750	\$ 27,600	\$ 77,234	36%	\$ 49,634	\$13
Colorado Springs- Woodland Park-Divide- Fairplay-Breckenridge- Frisco	116	800	\$ 14,848	\$ 194,764	8%	\$ 179,916	\$ 225
Denver-Greeley- Loveland-Estes Park	106	5,200	\$ 88,192	\$ 177,974	50%	\$ 89,782	\$ 17
Durango-Monticello- Moab-Green River-Price- Provo-Salt Lake	394	3,150	\$ 198,576	\$ 1,049,813	19%	\$ 851,237	\$ 270
Monticello-Moab-Green River-Price-Provo-Salt Lake	290	2,800	\$ 129,920	\$ 772,705	17%	\$ 642,785	\$ 230
Grand Junction-Delta- Montrose-Cortez- Durango-Farmington	294	1,450	\$ 68,208	\$ 493,626	14%	\$ 425,418	\$ 293
	294	4,350	\$ 204,624	\$ 783,363	26%	\$ 578,739	\$ 133
	294	7,550	\$ 355,152	\$ 783 <i>,</i> 363	45%	\$ 428,211	\$ 57
Grand Junction-Rifle- Glenwood Springs- Gypsum-Vail-Frisco- Idaho Springs-Denver	250	6,250	\$ 250,000	\$ 666,125	38%	\$ 416,125	\$ 67
Gunnison-Montrose- Delta-Grand Junction	130	3,300	\$ 68,640	\$ 218,270	31%	\$ 149,630	\$ 45
	130	3,050	\$ 63,440	\$ 346,385	18%	\$ 282,945	\$ 93
	130	6,200	\$ 128,960	\$ 346,385	37%	\$ 217,425	\$ 35
Limon-Castle Rock	68	1,900	\$ 20,672	\$ 114,172	18%	\$ 93,500	\$ 49
Limon-Castle Rock- Denver	96	1,000	\$ 15,360	\$ 161,184	10%	\$ 145,824	\$ 146
	96	4,150	\$ 63,744	\$ 161,184	40%	\$ 97,440	\$ 23
Limon-Colorado Springs	73	2,350	\$ 27,448	\$ 122,567	22%	\$ 95,119	\$ 40

Table 5.4: Revenue and Costs for Potential Colorado Intercity Routes



Table 5.5: 2013 Section 5311(f) Projects

Route Description	Carrier	One- way CO Miles	CO Annual Bus Miles	Ċ	oerating ost/ Bus Mile	CO Annual Operating Cost	Revenue/ Bus Mile	Total CO Revenue	Colorado Operating Deficit	Farebox Recovery
Denver- Omaha	†BHSL	186	135,780	\$	3.95	\$536,331	\$2.00	\$271,560	\$264,771	51%
Alamosa/ Gunnison- Denver	†BHSL	304	221,920	\$	3.35	\$743,432	\$0.90	\$199,728	\$543,704	27%
Denver-Salt Lake City	Greyhound	300	219,000	\$	4.69	\$1,027,110	\$1.39	\$304,410	\$722,700	30%
Salida- Pueblo	Chaffee Shuttle	99	51,480	\$	2.44	\$125,611	\$0.60	\$30,888	\$94,723	25%
Pueblo- Wichita	Prestige	155	113,150	\$	2.16	\$244,404	\$0.99	\$112,019	\$132,386	46%
Fairplay- Breckenridge	Park County	28	20,440	\$	1.76	\$35,974	\$0.72	\$14,717	\$21,258	41%
Durango- Grand Junction	††SUCAP	237	116,130	\$	2.87	\$333,293	\$1.36	\$235,394	\$175,356	47%



Table 5.6: Predicted Ridership for Potential Colorado Regional Routes

Route Description	Likely Operator	One-Way Miles	Days per Year	Annual Miles	Estimated Annual Ridership
Alamosa-Walsenburg	Rural Regional	72	254	18,288	4,572
Alamosa-Walsenburg-Pueblo	Rural Regional	123	254	31,242	7,811
Alamosa-Del Norte	Rural Regional	31	254	7,874	1,969
Alamosa-Del Norte-Pagosa Springs-Durango	Rural Regional	151	254	38,354	9,589
Fort Collins-Walden	Rural Regional	99	254	25,146	6,287
Fort Morgan-Greeley-Loveland-Estes Park	Rural Regional	105	254	26,670	6,668
Gunnison-Montrose	Rural Regional	65	254	16,510	4,128
Kremmling-Frisco	Rural Regional	43	254	10,922	2,731



Table 5.6 above shows an assumed farebox recovery rate of 10 percent based on rural services generally. These routes could be considered in addition to the regional routes described in the next section.

Several points identified in this process are actually already on the existing network, but are not currently stopping points for the intercity services that pass through them. These are listed below in **Table 5.7**, along with estimates of the potential intercity trips that might be generated if a satisfactory intercity bus stop could be provided, with service at a reasonable time of day. The incremental cost of adding a stop is very low, and these should be considered for implementation.

Town	Number of Households	Intercity Mode Share	Days per Year	Daily Long- Distance Trip Rate (ATS)	Estimated Annual Trips	Frequency
Ault ²	577	0.0185	365	0.03	117	2
Dacono ²	1,459	0.0185	365	0.03	296	2
Fort Lupton ¹	3,099	0.0185	365	0.03	628	4
Limon ²	828	0.0185	365	0.03	168	2
Lochbuie ¹	1,531	0.0185	365	0.03	310	2
Platteville ²	863	0.0185	365	0.03	175	4

 Table 5.7: Demand Estimates for Candidate Stops on Existing Intercity Routes

¹Number of Households for Urban Cluster (Census 2010)

²Number of Households for City/Town (Census 2010)

This process developed potential intercity service options based upon an assumed goal of providing a minimum level of access to the national intercity bus network to as many Colorado residents as feasible. The objective might be further specified as providing access to the national intercity bus network, to all places with a population of 2,500 and above, and ranked as having a high- or medium- need for transit based on demographic data. Finally, the feasibility of meeting this goal and objective might be measured by examining estimated performance measures for the proposed services. One such measure could be farebox recovery, and if a standard of 20 percent is used as a minimum (noting that all of the current CDOT-funded intercity services meet this threshold), there are several potential routes that merit consideration:

- Limon-Colorado Springs
- Canon City-Colorado Springs
- Grand Junction-Denver (local service)
- Alamosa-Walsenburg-Pueblo-Colorado Springs
- Denver-Greeley-Loveland-Estes Park



REGIONAL ROUTE ASSESSMENT

While the modeling technique used above for intercity service provides a statewide look at the potential for expanded intercity bus services, there is not a comparable modeling technique for regional services. Rather, we rely on corridor level analysis and statewide values in regard to providing regional and interregional services. Corridor analysis have been prepared for the I-70 corridor (as detailed in Appendix A) and Interregional Express Bus services (as detailed in Appendix B). The following high-level review of other corridors in the State provides an indication of the quality of service on the existing network and gaps that exist. While this indicates where improvements may be needed and even some potential ways of meeting the needs, *it bears emphasizing that corridor plans are recommended prior to developing new services*. The development of corridor plans is listed as the first strategy under Objective A-1: "Develop and maintain services in each of the corridors illustrated in the CO Regional and ICB Network Map." Some of this regional service planning can be done with relative ease led by CDOT staff and with all the stakeholders at the table; others will likely require a consultant led study with a comprehensive evaluation.

The limited intercity bus schedules impact the ability of intercity services to meet the demands for a broad range of trips within Colorado, particularly for individuals wishing to travel to and from the nearest big city and return in the same day. An evaluation of the schedules in each corridor resulted in identifying those corridors where trips could be made in a single day, where one night's stay is required, and where two nights stay is required in order to have four or more hours in which to conduct business. A description of how well the intercity services meet the travel needs, and the relationship of the intercity service to other transportation services, in each of the major corridors follows. Where the existing intercity and regional services do not meet regional travel needs, the development of additional regional services are suggested. The reader may refer to Appendix E for bus schedules.

CORRIDOR OR REGIONAL ASSESSMENT

North Front Range

The major corridors between the North Front Range cities and Denver are I-25, US 85, and US 287. From Fort Collins to Denver, Greyhound service allows a single day trip departing Fort Collins at 5:40 AM and returning from Denver mid-day. While Black Hills Stage provides a similar departure from Greeley via US 85, the only return trip is shortly after midnight. US 287 service is not provided by intercity carriers; FLEX service operates service throughout the day between Fort Collins and Longmont, connecting to RTD services. No intercity or regional services are available on US 34; to travel between Fort Collins and Greeley one must go via Cheyenne or Denver.

Potential corridor planning activities: (1) Appendix B identifies NFR as an area where corridor planning is needed to address commute travel patterns. (2) Planning for essential services is most likely a separate



effort, and would address travel needs to and from the NFR and Northeast Colorado as well as travel from NFR and Northeast Colorado to Denver and Cheyenne (VA).

Eastern Plains

Intercity bus services are provided in the I-76 and I-70 corridors. Long distance human service transportation is provided in by NECALG in the US 34 and I-76 corridors and by ECCOG in the I-70 and US 24 corridors, among others. Local services also exist in several communities.

The region has intercity services on both I-76 and I-70 east, with one daily trip on I-76 and two daily trips on I-70. The route on I-76 does provide service to and from Denver in a single day, but it is not practical for many trips because the schedule requires an early departure and has a late return. NECALG provides regional service in this area, with trips to Denver and to Greeley/Fort Collins that are scheduled with shorter travel days. The I-70 service only serves Denver and Burlington, not any intermediate towns, so even Limon is not served. ECCOG's Outback Express does provide regional service to both Denver and Colorado Springs, with services limited to approximately one day per week, depending on the destination.

Potential corridor planning activities: (1) Planning for Essential Service routes from NE Colorado to NFR, Denver, and Cheyenne, and covering routing for regional specialized and ICB services (FR and DR), scheduling, and how to leverage multiple funds. (2) Similar planning for Essential Service routes from East Central CO to Denver and Colorado Springs.

Southeast

Intercity services travel on two main routes, one on US 50 east to Kansas and the other along US 50 and turning south at Lamar and continuing to Oklahoma. CDOT (together with KDOT) supports the route to Kansas through the 5311(f) program while the route to Oklahoma is self-supported. Connections are provided to a variety of intercity routes in Pueblo. Amtrak serves Lamar and La Junta. Long distance human service transportation is provided by the Veterans in Prowers County and by limited county-operated services. Local services also exist in Lamar and La Junta.

A look at the intercity bus schedules shows that while the schedules provide good connections to other routes and modes, they are not effective for common human service trips. Traveling from Lamar or Springfield to Pueblo, a passenger might arrive at 2:45 PM or 6:45 PM. Return trips from Pueblo depart around 10 AM or 2:30 AM. Anyone requiring more than 2 hours to conduct business will likely require a two-night stay.

Amtrak operates daily passenger rail service. The eastbound train is scheduled to depart La Junta at 7:41PM; the westbound train is scheduled to depart La Junta at 8:30AM. An Amtrak Thruway bus operated by Greyhound provides daily connections between La Denver, Colorado Springs, Pueblo and Raton, NM. If the Amtrak Thruway connection from Raton was discontinued, an alternative service could be developed connecting Denver, Colorado Springs,



and Pueblo with the Southwest Chief in La Junta, integrating such service with regional connections in Pueblo as well. The long-term future of the Southwest Chief on this route is not assured, and it may be that additional Amtrak Thruway or other bus services would eventually be needed to provide replacement services.

Potential corridor planning activities: Planning for Intercity, Regional and Essential Service routes for south I-25, Southeast Colorado, and the San Luis Valley is recommended to be combined into a single corridor study that examines ICB, Amtrak Thruway, and specialized services (both NEMT and volunteer services). There are multiple ways of combining segments, and a comprehensive evaluation of the market needs, routing, scheduling, and funding options is needed to determine the best way to serve the region. See also description in South Front Range: I-25 below.

South Front Range and South Central Mountains

This region extends south from Frisco and Denver and includes both US 287 and I-25 as the corridors are connected. Intercity services operate on:

- I-25 serving Denver, Colorado Springs, Pueblo, Walsenburg, and Trinidad (Greyhound, Americanos, and El Paso-Los Angeles Limousine);
- US 287 between Alamosa and Denver (Black Hills Stage Lines);
- US 50 between Gunnison and Salida (Black Hills Stage Lines) and Salida and Pueblo (Chaffee Shuttle)

CDOT supports the routes on US 287, and US 50 through the 5311(f) program while the I-25 services are supported through operating revenues. In addition, the Casino industry operates regional services between Pueblo, Colorado Springs, and Cripple Creek, funded by fares and the Casino industry.

Local services operate in Summit County, Walsenburg, Trinidad, and Cripple Creek, but not in Alamosa or Woodland Park. Some regional services in rural El Paso County are provided by Fountain Valley Senior Center. The Chaffee Shuttle operates limited commuter service from Salida to Buena Vista. Long distance human service transportation is provided through Veterans programs and Non-Emergency Medical Transportation providers.

I-25

There are many daily trips operated by Greyhound (including its Americanos line) and El Paso Los Angeles Limousine. These services are profitable and require no subsidy. Southbound trips are clustered around 7-8 AM and 7-8 PM. While Colorado Springs and Pueblo are served by most schedules and can make a trip to Denver and back in one day, Walsenburg and Trinidad are served only with one southbound and one northbound trip each day. Castle Rock is not served.



As a result of the limited schedules to and from Trinidad and Walsenburg, a passenger wishing to travel and have 4 hours in which to conduct business in Denver must stay over two nights. The bus leaves Trinidad at 1:20 PM and Walsenburg at 2:05 PM, arriving in Denver at 5:30 PM. The return trip is more challenging, requiring a second overnight in Pueblo. After a day in Denver, the passenger can depart anytime from 7 PM to 11:50 PM. The bus to Trinidad leaves at 8:10 AM from Pueblo.

As a result of intercity bus schedules that are not viable for Colorado trips for medical and other trip purposes, a variety of local public transit and human service organizations operate or pay for private sector services to transport passengers. The South Central Council of Governments (SCCOG) provides local transit services, but also plans to link Trinidad with Pueblo (this service will be expanded under a Section 5311(f) rural intercity project). Other services include Veterans service organizations and Colorado Department of Health Care Policy and Finance, responsible for Medicaid Non-Emergency Medical Transportation (NEMT). CO Department of Healthcare Policy and Finance reports the providers serving the San Luis Valley are paid over one million annually to provide NEMT transportation.

A variety of options have been identified to meet the needs for improved service in Southeast and South Central Colorado. These range from different combinations of origins and destinations to provide a one seat ride for some passengers and a timed transfer for others to integrating Amtrak Thruway service as part of the service mix. The objectives would be to provide improved "essential" regional services; minimize the number of transfers; provide access to destinations in Pueblo, Colorado Springs, and Denver; and provide a stronger network of intercity and regional connections that best meet the needs of the residents in the US 50 East, South I-25, and US 160 corridors. Because of the varied interests, ability to fund services (or reallocate existing funding), and specific travel needs of various markets, the best solution will be one arrived at in conjunction with stakeholders in the corridor.

Potential corridor planning activities: Planning for Intercity, Regional and Essential Service routes for south I-25, Southeast Colorado, and the San Luis Valley is recommended to be combined into a single activity. It would address ICB services, Amtrak Thruway, regional and specialized services. See Southeast Colorado description.

US 24: Breckenridge – Fairplay – Woodland Park – Colorado Springs

The Ramblin' Express Casino Shuttle operates between Pueblo, Colorado Springs, Woodland Park, Divide, and Cripple Creek. At present there is no service available from Breckenridge to Divide via Highway 9 and US 24.

Potential corridor planning activities: Planning for ICB, regional, and Essential Service routes for the US 24 corridor is needed. Corridor planning would cover markets, routing, scheduling, locations for transfer points and any facility requirements, and how to leverage multiple funds.



US 287 and US 50 West

Intercity service is provided on US 287 from Alamosa to Salida, and then north to Fairplay and Denver. While the trip can be made in a single 12-hour day, one overnight stay is required if 4-5 hours are needed for conducting business as the bus arrives at 11:15 AM and departs at 2:00 PM.

US 50 service from Gunnison to Pueblo meets the US 287 bus at 7:50 AM traveling to Denver, and at 5:05 PM traveling to Alamosa. Passengers traveling to Pueblo from Gunnison or Alamosa have 5 hours in Pueblo to conduct business.

Potential corridor planning activities: None.

Southwest Colorado

Existing regional or intercity services include routes that travel between:

- Ignacio and Durango
- Ignacio and Aztec, NM
- Gunnison and Crested Butte
- Gunnison and Salida, with connecting services to Denver, Pueblo, and Alamosa
- Telluride, Placerville, Norwood, and Nucla

A new route, replacing discontinued service, is due to begin operating shortly and will travel between Durango and Grand Junction. Service to Crested Butte and Telluride is oriented to commuters. In addition, there is a vanpool program operating in the Telluride area, with vans traveling between Montrose and Telluride.

The intercity services from Gunnison to Denver are described in the previous corridor description. The new intercity service from Durango to Grand Junction will arrive mid-day and leave about 1.5 hours later, so an overnight stay will be required to conduct business. As with the Gunnison-Denver service, this is a function of distance and travel time.

Potential corridor planning activities: Planning for the southwest corner of the State, including connections to Farmington, NM and Monticello, UT will support the development of services in this region. All services (ICB, regional, commuter, and Essential Service routes) would be included and the planning would cover markets, routing, scheduling, locations for transfer points and any facility requirements, and how to leverage multiple funds.

Northwest Colorado and Mountain Region

There is a high level of private sector services in the region. Intercity buses (ICB) operate on I-70 and US-40. The I-70 service is profitable although it makes limited stops. The US 40 service serves many small towns but does require a significant subsidy.



For the I-70 service, intermediate stops are limited to Glenwood Springs, Vail, Frisco, and Idaho Springs. Good connections are made with public transit services in Glenwood Springs, Vail, and Frisco. This service has had regular quality issues including overloaded buses and late buses. In the summer an extra mid-day trip is operated between Grand Junction and Denver, easing crowding issues. Passengers traveling to Denver require an overnight stay to have 4-5 hours in town to conduct business if they are coming from points west of Vail. For Vail, Frisco, and Idaho Springs, such a trip can be completed in a single day. Passengers traveling to Grand Junction also require an overnight stay to have time to conduct business.

Traveling on the US 40 service to conduct business requires two overnight stays. The bus arrives in Denver at 7:35 PM; it departs for points west at 9:35 AM.

Potential corridor planning activities: Planning for the northwest corner of the State includes travel on US 40 to Denver, Highway 13 between Craig and Rifle, I-70 between Rifle and Grand Junction, and Highway 9 between Kremmling and Silverthorne is warranted. The focus would be on strengthening ICB services, addressing Essential Service needs, and feeding into transit services in the I-70 corridor.

Summary of Regional or Corridor Assessments

In summary, the ability to use intercity services for same day trips to the nearest big city depends on the schedule for each corridor. Distance and travel times are factors. Traveling up to 200 miles and back in a day and having 4-5 hours at the destination city requires at least 12 hours and generally requires service that begins between 5 and 6 AM. For distant locations, an overnight stay is a necessity because single day travel makes for too long a day to be practical. Priority areas where some improvements, such as the provision of regional or Essential Services routes, are warranted are:

- *Lamar to Pueblo*: a regional route providing same day service is warranted.
- *Trinidad/Walsenburg to Denver*: regional services providing either same day or a onenight stay-over is warranted.
- *Greeley to Denver*: a route serving towns on US 85 is warranted.
- *US 40 Corridor to Denver*: a route that allows same-day service for those residents living fairly close in (e.g Kremmling) and a one-night stay for those living at greater distances.

The first three corridors have relatively high levels of Non-Emergency Medical Transportation (NEMT), Veterans transportation, and general-purpose trips that are presently met by a mix of volunteer driver programs, county-based services, friends and family, and private providers.

The US 40 corridor would not likely support daily service, but would rather start at a lower level of service – one to three days per week – and might include the option of purchasing tickets from private providers operating in the corridors.



The Greeley-Denver corridor might be considered along with Essential Services improvements for I-76 and US 34 East. There is the potential that given the resources already expended in this area that improvements could be made at a relatively low additional cost.

Identifying the most efficient means of providing such services would be a first step.

COMPREHENSIVE NETWORK RECOMMENDATIONS

In developing recommendations regarding the best way to serve these various corridors, each route was assessed to determine the appropriate level of service for initial service development. These routes may change categories over time as ridership develops, as schedules are adjusted to provide different types of connections, or based on corridor planning studies.

This section describes a comprehensive regional service network plan that includes a diverse range of services to meet the many travel needs. Each component is important to the network. All services that showed a reasonable chance of meeting service standards for the category of service in which it falls are included in the network plan. Adjustments may occur to frequencies based on demand levels, and some services may be a priority to implement sooner than others based on local conditions. A few services were not included in this plan due to a combination of ridership levels and operational constraints. One in particular that was not included was service over Wolf Creek Pass due to low ridership projections and the difficulty of serving this region. Rather, the focus is on connecting communities on the east side of the divide to the I-25 corridor and communities on the west side of the divide to Durango and the Highway 550 corridor. A future update may recommend linking these services once they are solidly established.

Figure 5.4 presents a map of the existing and proposed services for intercity, interregional, regular regional, and essential regional service routes. Following this, recommendations for each type of service are detailed, beginning with intercity bus services.

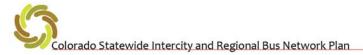
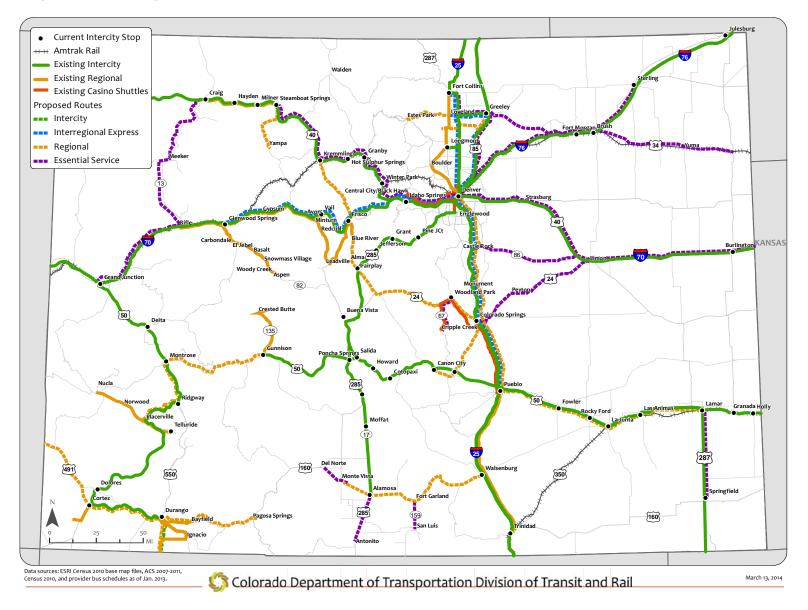


Figure 5.4: Existing and Proposed Service Routes



5: Network Development





INTERCITY SERVICES

The Colorado intercity network today is a substantial one, with about two-thirds of the service operating profitably and the remainder subsidized⁴. Almost all corridors provide viable connections to the national intercity bus network, air or rail travel, although many require an overnight stay for morning connections. The majority of the service is scheduled to arrive early enough in the day so that passengers can make connections to other services or modes or conduct some business.

One new intercity corridor providing a connection between Durango and Farmington, NM along US 550 is proposed, as shown in **Figure 5.5**. It would provide an important connection for residents of southwest Colorado and would strengthen ridership on the US 550 route. Implementation of such service would require participation from the State of New Mexico.

There are three corridors where intercity schedules result in residents having to spend two nights in order to have at least 4 hours in which they can conduct business. These corridors are:

- Lamar to Pueblo (US 50)
- Trinidad and Walsenburg to Denver (I-25)
- Steamboat Springs to Denver (US40/I-70)

There is one corridor (I-76, Sterling to Denver) where service exists but operates before 5:30 AM and returns after 9:30 PM, resulting in too long a day for many who need such service. Services are proposed in the category of "other essential regional services" to address these service quality issues.

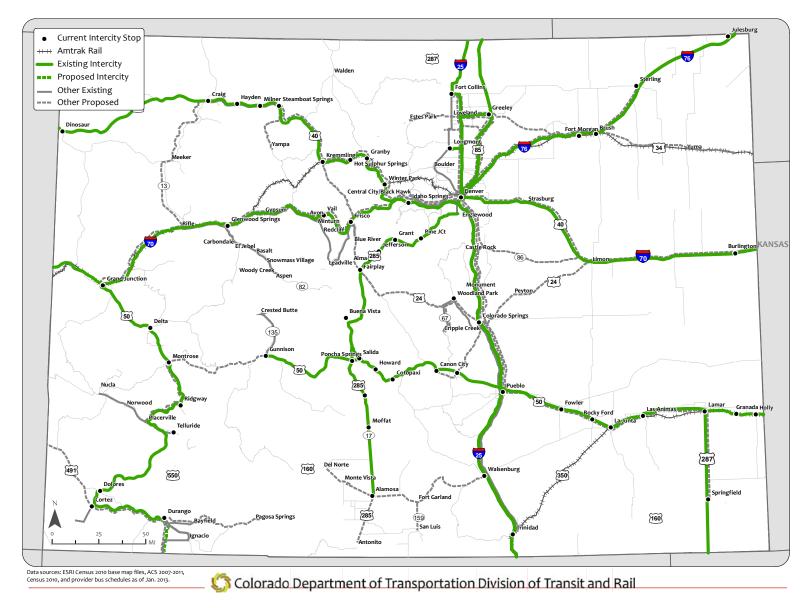
It should be noted that a number of regional services identified below could potentially be initiated or funded under Section 5311(f) if funding was available and a meaningful schedule connection to the national intercity bus network could be developed. The feasibility of most regional services is enhanced if service can be designed to serve multiple markets, including trips for intercity connections, medical purposes, personal business and other needs. A number of potential services were identified as proposed regional services in this study because the intercity market by itself did not appear to be sufficient to warrant service, but such routes could service intercity trips together with other markets if schedules and connections can be developed to serve multiple markets.

⁴ Generally, routes operating on I-70, I-25, and on US 50/287 (Pueblo, Lamar, and Springfield to Oklahoma) are profitable. There is considerable service on I-25 with Greyhound services and the Hispanic carriers. Routes operating on US 40, I-76, US 285 (Alamosa to Denver), US 50 west of Pueblo, US 50 east of Pueblo to Kansas, US 550 (Durango to Grand Junction) and SH 9 are subsidized.



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Figure 5.5: Existing and Proposed Intercity Service Routes







INTERREGIONAL EXPRESS

Interregional bus services were investigated for North and South I-25 and the West I-70 corridor. This investigation showed that some areas are ready for service, with adequate demand, connecting local services, and park-and-rides available for use while other areas will require more development before they will be ready for service. For some of the areas needing further development, work is needed to identify how best to serve travelers going to dispersed destinations. For others there are policy or practical issues that need to be addressed. The Division of Transit and Rail can work to address such issues after the first phase of services are in place. These include:

- Commuter services into Colorado Springs, particularly from Pueblo
- For mid-range cities (such as Frederick/Firestone/Dacono, Castle Rock, Idaho Springs), what level of services is appropriate for CDOT to fund and under what conditions would stops be made in these communities?
- Service to the south Denver employment base around the Denver Tech Center
- Commuter services in the US 85 corridor, from Greeley to the Denver Metro area, potentially with a connection in Brighton to RTD services.

In the I-70 corridor, ECO Transit effectively serves most of the regional commuter bus market. However, key connecting services are needed to link existing investments in this corridor.

- Services between Glenwood Springs and Gypsum/Eagle
- Services between Frisco and Vail
- Service between Frisco and Denver

Interregional express services are proposed to operate in three corridors in the near-term, with future expansion possible into other commuter markets, as shown in **Figure 5.6**. These would have few stops, travel at high speeds, and have features such as wireless access and electric plugs on board the buses. They are geared to commuters but would serve all trip purposes. These high priority services are ones that connect existing systems, leveraging existing investments.





Figure 5.6: Proposed Interregional Express Routes

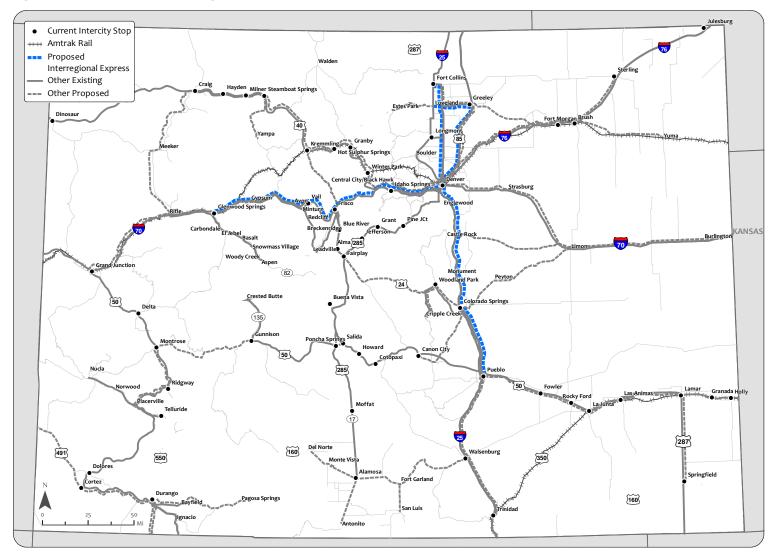






Table 5.8 shows the proposed interregional services, with three corridors listed for near-term development. The I-25 services will operate in segments of the corridor with significant commuter traffic. While there are commuters in the I-70 corridor, the more important impetus for this service are to link existing transit investments and to establish a presence in the I-70 corridor and begin to build the infrastructure, protocols, and working relationships that will provide a foundation for expanding services when appropriate. This includes protocols for sharing tickets with private providers and for marketing the diversity of services in the I-70 corridor. An option is for CDOT to work in partnership with ECO Transit to operate services between Frisco and Vail, running their Leadville bus through Frisco instead of Minturn. This would initially fill an existing gap with little added cost.

CO Springs-Denver	Peak hours plus one mid-day	Near-term (2015)
Fort Collins-Denver	Peak hours plus one mid-day	Near-term (2015)
Glenwood Springs-Denver; Vail- Denver	One to two round trips	Near-term (2015)
Pueblo-CO Springs	Peak hours	Mid-term
Greeley-Denver	Peak hours	Mid-term
Canon City-CO Springs	Peak hours	Mid-term

Table 5.8: Interregional Express Service Recommendations

The regional commuter bus service plan in Appendix B addresses the recommended first phase: North I-25 from Fort Collins to Denver, South I-25 from Colorado Springs to Denver, and limited service between Glenwood Springs and Denver.

REGIONAL SERVICES

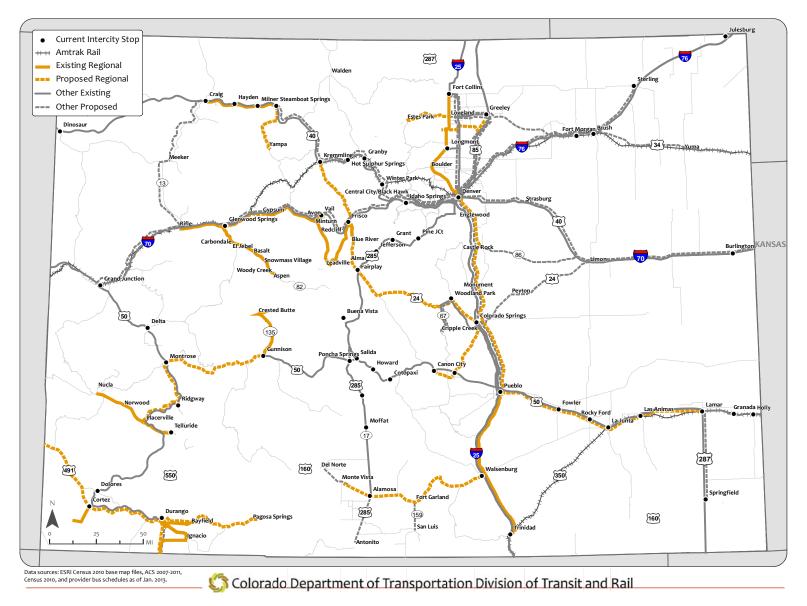
Regional services have generally developed around the resort communities and in Metro Denver. The FLEX service between Fort Collins and Longmont and the SUCAP Road Runner service are also are in this category. For most regional services, employment trips are a substantial portion of the market served.

A variety of regional routes are proposed, serving diverse trip purposes, as illustrated in **Figure 5.7**. Services may range from ones with a single round trip to ones offering many trips in a day. Generally all these have at least five days of service each week.





Figure 5.7: Existing & Proposed Regional Routes







Some regional routes are warranted for implementation in the near-term, while others are more appropriate for development in the mid-term or beyond. The connecting services in Eagle County would serve employment and other trips and take advantage of existing investments in the corridor. The FLEX service between Fort Collins serves diverse trip purposes, including employment and education, and maintaining this productive service is important.

Table 5.9 on the following page summarizes the proposed regional services in this category. In Chapter 7: Financial Plan there are detailed lists of existing and proposed regional services for near, mid, and long-term development, with each of these routes included⁵. Ultimately the development of services will depend upon perceived need for service in a given corridor, use of existing services and available financial resources. Service development in the near-term and mid-term is emphasized here. Long-term network expansion will include the development of more extensive services in the I-70 corridor and expansion of service frequencies in the regional corridors that garner the most ridership.

OTHER ESSENTIAL REGIONAL SERVICES

These services are designed to meet the needs of travelers needing to travel to regional urban centers for services and return on the same day. These services are proposed to operate three days weekly, to serve people with regular travel needs, such as those attending college classes or accessing a dialysis center. They would operate on a flexible route at the destination end, with a fixed schedule for traveling from rural to urban areas. These essential services would operate from areas within 200 miles of a regional service center (3.5 hours drive time) and allow for a single day trip with 4 – 5 hours to conduct business. In some areas they may start with service one day a week.

Some of these services are presently operated by various entities in a demand response mode. In those corridors where service exists, many only travel if there are enough riders signed up for the trip. At the same time, there may be multiple providers operating in the corridor – an Area Agency on Aging, a Veterans' volunteer driver program, and a private Medicaid Non-Emergency Medical Transportation (NEMT) provider.

⁵ The tables in Chapter 7 breakdown the routes by segments whereas here they are listed on a corridor basis and the service objective is identified. It is necessary to break service into segments to cost out the correct level of service. In some cases different levels of service are recommended for different segments within a corridor.



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Corridor	Service Characteristics	Time frame
Yampa - Steamboat Springs	Develop vanpool, then 2 daily trips	Mid or long-term
Kremmling - Silverthorne	Initially vanpool, then employment-oriented schedule	Near or mid-term
Glenwood Springs - Gypsum/Eagle	Develop into full schedule, matching ECO & RFTA services	Near term
Gunnison - Montrose	Provide connections to ICB route on US 550; may consider extending to Grand Junction	Near to mid-term
Montrose - Placerville/Telluride	Currently vanpool; develop into employment-oriented schedule	Near to mid-term
Cortez - Durango	Peak hour and possibly mid-day service.	Near to mid-term
Cortez – Monticello, UT	Would feed Cortez route and Utah's 191 ICB route serving Blanding, Monticello, and Moab.	Near to mid-term
Pagosa Springs - Bayfield	Connect to Road Runner service into Durango. Peak hour and possibly mid-day trips.	Near to mid-term
Monte Vista-Alamosa-Walsenburg- Pueblo	Orient to same-day service to Pueblo and possibly CO Springs. Transfer passengers in Walsenburg or Pueblo.	Near-term
Trinidad - Denver	Orient to same -day service to Denver. Transfer passengers at Walsenburg.	Near-term
Lamar-La Junta-Pueblo-CO Springs	Orient to same -day service to CO Springs. Transfer passengers in Pueblo.	Near-term
Fairplay-CO Springs	Limited service AM and PM peaks; also serves Florissant, Divide, Woodland Park	Near to mid-term
Estes Park-Loveland	AM and PM peak; develop service now provided by Via on demand response basis and open to broader markets.	Near-term

Table 5.9: Summary of Proposed Regional Services – Regular



The recommended base network of other essential regional services addresses the needs in corridors where it is now difficult to use transit for basic mobility to urban centers. The network also addresses the need to use transportation resources as effectively as possible in corridors where having regularly scheduled services would provide a means to coordinate trips. Operating on a flexible route at the destination provides the ability to meet a wide range of travel needs and reduces the need for duplicative services. The recommended essential services are illustrated in **Figure 5.8** and described below.

<u>Craig-Rifle-Grand Junction</u>: Connects to existing services on I-70, enabling people to travel from Rifle to Grand Junction and for residents of Craig and Meeker to travel along SH 13 to Glenwood Springs and points east. Serves a population of 24,600, including Rifle.

<u>Steamboat-Kremmling-Winter Park-Idaho Springs</u>: Allows for same-day service to the Denver area. Serves a population of 20,500 in incorporated municipalities. Initiates public transit between Winter Park and Metro Denver area along US 40 and I-70.

<u>Sterling-Fort Morgan-Denver</u>: Provides for same-day service during normal traveling hours along I-76. Paired with service on US 34, allows residents to transfer in Fort Morgan to access services in Greeley, Loveland, or Fort Collins. The municipal population of the rural municipalities in this corridor is 32,700.

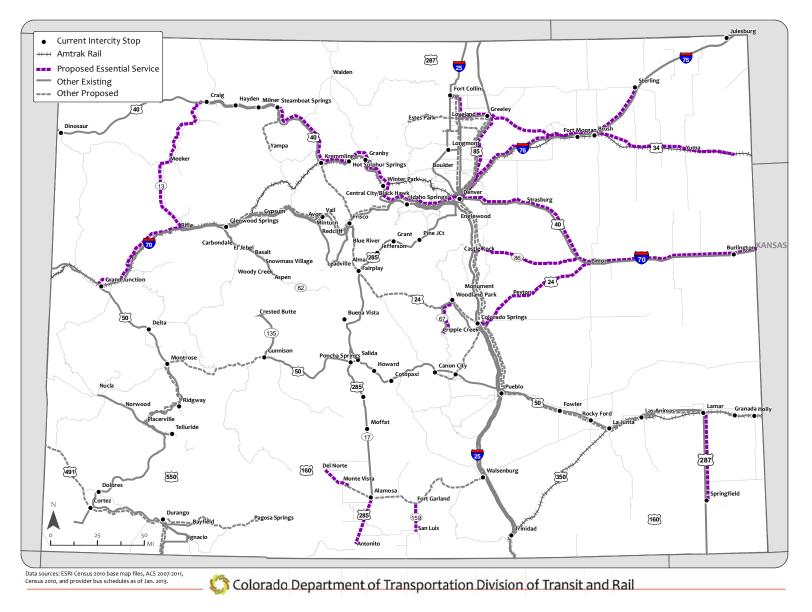
<u>Wray - Fort Morgan - Loveland - Fort Collins</u>: Serves the US 34 corridor, connecting rural residents to services in Greeley, Loveland, and Fort Collins. Paired with service on I-76, allows residents to transfer in Fort Morgan to access services in Denver. The municipal population of the rural municipalities in this corridor is 23,500. This includes the Morgan County residents that are also included in the I-76 corridor population.

<u>Greeley-Denver via Highway 85</u>: Oriented to serving the small towns along the corridor, as well as connecting major urban areas. Stops are in Evans, La Salle, Gilcrest, Platteville, and Fort Lupton. The municipal population of the rural municipalities in this corridor is 13,000. Evans, part of the Greeley Evans small urban area, adds another 19,000 residents.



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Figure 5.8: Proposed Essential Regional Service







<u>I-70 East Services</u>: This consists of three routes. Service from Burlington to Denver would operate 3 days a week, with service between Limon and Denver split between I-70 and Highway 86. Service between Limon and Colorado Springs would also operate, allowing passengers from east I-70 to access either Colorado Springs or Denver. These services would likely begin on a limited basis. The population of rural communities in the I-70 corridor, including Limon, Bennett, Strasburg, Byers, and Deer Trail, is 15,300. The population of Elbert county communities on Highway 86 is 1,900; Limon doubles this by adding an additional 1,900. Rural communities between Limon and Colorado Springs add 1,500 people that would have access to this route.

<u>Springfield-Lamar</u>: This route along US 287 would be operated 1-3 days a week, as needed, connecting the 1,500 people in Springfield to the regional route operating between Lamar and Pueblo where connections could be made to other services traveling along I-25.

San Luis Valley: Three short routes on SH 160, US 285, and SH 159 are identified to connect outlying communities to Alamosa and to regional services operating to Walsenburg and points north on I-25. Alamosa serves as a regional hub with a college, medical center, and dialysis center. Residents in communities along these routes have relatively high use of NEMT services and Veterans need routine access to VA facilities as far away as Denver. The frequency and structure of these routes should be determined through a service planning exercise. The communities served by these routes have a population of 19,800, of which 8,800 is in Alamosa.

<u>Cripple-Creek-Divide-Woodland Park</u>: This route would be paired with service on US 24 from Fairplay to Colorado Springs, offering limited demand response services in Woodland Park for residents whose travel needs can be met in Woodland Park. Cripple Creek and Woodland Park have a population of 8,400.

Priority services are those that provide essential connections to communities where existing ICB services are not viable for one-day trips into the nearest regional urban area. As noted earlier, the priority corridors based on intercity time schedules are:

- Lamar to Pueblo
- Trinidad to Denver
- Steamboat Springs to Denver
- Sterling to Denver

While Northeast Colorado Association of Local Governments does fund and operate service between Sterling and Denver, the provision of State operating support could make this service more regular (operating three days a week) and allow the local area to use their transit resources to provide other transit services, such as providing feeder service to the regional route.



Priority may also be given to corridors where there is a high level of demand and where duplicative services exist among human service providers. Such duplicative services might include a Veterans program, county or regional services, and privately provided NEMT services. The corridor between Monte Vista, Alamosa, and Walsenburg, connecting to cities along I-25, is an example of this.

SUMMARY OF COMBINED REGIONAL NETWORK

The regional network described above is scaled to provide varying levels of service to areas with different economic and population characteristics. Higher levels of service would be provided near resort communities and in congested corridors, building or strengthening the presence of transit services in these corridors. A base level of service would be provided to Colorado residents in rural areas, with an emphasis on providing a coordinated network of services that would meet needs for education, medical and dental services, and other trip purposes.

Today there are a good number of instances where:

- Outlying entities operate through communities nearer to the urban center but usually do not pick up passengers along the way. As a result the closer in community also needs to operate service.⁶
- Services are funded by different programs and not open to riders from the general public or from other programs. Both NEMT and Veterans' programs provide extensive regional services in many corridors, often with duplicated services.

The proposed regional network plan would not necessarily eliminate all duplicative services, but it would provide a framework for providing services open to a broad segment of the population and assist in making rational decisions about how best to use Colorado's limited transportation resources. In many cases detailed service and financial planning would be required to determine the best way to provide services in a corridor. Ultimately this will result in the highest level of services for the rural residents and the most effective use of resources.

The planning done for this report was carried out at a fairly high level and is meant to provide an understanding of what a comprehensive network would include and the order of magnitude of its service levels and costs. Detailed service planning will be needed in these corridors to refine the plans and develop an implementation plan for each corridor.

⁶ An example is that East Central Council of Governments (ECCOG) provides limited service on I-70, while rural Arapahoe County provides services for Strausburg, Byers, and Bennett. ECCOG also provides limited service from Limon to El Paso County, and Fountain Valley Seniors also provides limited service on Hwy 24 for Calhan and Ramah.

The barriers to developing such a cohesive network include:

- Lack of financial resources and the importance, to local officials, of spending local revenues for the benefit of local residents
- Different planning boundaries, so that regions rarely consider services provided by those in other regions
- Program and funding barriers that require fairly sophisticated cost accounting to be able to share passengers among programs. There are not at present agreed upon standards among state departments on how revenue and expenses would be shared among programs if passengers were carried on a single vehicle.

The use of FASTER funds for providing interregional transit services and the potential option for a statewide tax initiative for transportation and transit provides an impetus to consider how such a regional network could be implemented. Additional revenues are important to develop a network that is comprehensive enough to result in both more effective and more efficient mobility options.

Equally important are the individual steps that will serve as building blocks to a comprehensive system. These might include:

- Service planning studies that cover travel corridors, including more than one planning area, to determine the best way to use existing operational and financial resources to provide the most effective mobility. These are described on pages 5-16 to 5-21.
- Pilots in a particular corridor where it appears there are duplicative services or the existing services are expensive.
- Statewide transit travel information using the latest technology to assist riders in finding out what services are available and how to use them.
- Creating a means to share ticketing across multiple public and private providers.
- Identifying how costs and revenues can be allocated among state level programs that use Federal dollars. Guidance is now available on this topic for Federally-funded programs (Transit Cooperative Research Program Report 144, Sharing the Costs of Human Services Transportation, August, 2012). This will enable State agencies to address the policy and administrative issues related to using program funds to provide rides on shared services.

The administrative and planning activities can and should be carried out as Colorado works to identify how to fund a regional network that provides comprehensive and viable services.