

CHAPTER 3

REVIEW OF EXISTING SERVICES

INTRODUCTION

The chapter includes a description and assessment of existing transit services in the area, with the focus on CCTA and SSTA and the services that these agencies provide. This review is important because it provides the basis for designing new or revising existing public transit service improvements; in a manner that leaves effective current services intact, while adjusting services that could be improved. The consultant also developed an inventory of other publicly funded, private non-profit agency transportation services, as well as services provided by private for-profit companies (intercity bus, taxi, etc). A description of these services is presented at the end of the chapter.

REVIEW OF CURRENT CCTA SERVICES

CCTA provides fixed-route, Americans with Disabilities Act (ADA) paratransit, Medicaid transportation, and rideshare services to citizens of its service area in Chittenden County. Its member communities include Burlington, South Burlington, Essex, Winooski, and Shelburne. All of its services are operated within these towns, except for a fixed-route segment in Colchester, ridesharing services, and some Medicaid trips.

In addition, in recent years, CCTA has provided services in the town of Williston under the Job Access and Reverse Commute (JARC) program. These services have been funded 100 percent using state and federal funds (no local share has been required of the towns).

CCTA Governance and Member Responsibilities

The CCTA was created by Charter in February 1973. The CCTA Charter defines CCTA's mission, how CCTA operates, and what it can (and cannot) do. CCTA has the authority to purchase, operate, or provide for land transportation and has all the powers incident to a municipal corporation in Vermont. CCTA has the authority to operate within all of Chittenden County -- and may even operate in the municipalities in adjoining counties if those municipalities join the authority. Members include those municipalities that elect to join CCTA by a majority of its voters.

CCTA is governed by a Board of Commissioners consisting of two commissioners from each member municipality. The Commissioners are appointed by the legislative body of each municipality. Commissioners serve for three year terms. The rules governing the CCTA budget and assessments to member jurisdictions are also included in the charter. Basically, CCTA prepares an annual budget of estimated expenses (operating, capital, and debt service¹) and revenues (not including member assessment) that is presented to the public by the Board. Following the meeting, the Board adopts a final budget (with or without changes).

Funding and Local Commitment

Contributions needed from member municipalities are assessed using a fairly complicated formula, which has a significant impact on CCTA's opportunity to create new innovative services or expand to new towns:

- **New Services** (a service is considered a new service until it attains an annual revenue return of 29% or greater -- at which time it is billed as part of the general assessment

¹The cost of the debt service must be included in the annual budget of the authority and allocated among member municipalities along with operating expenses.

as an established service). The gross cost of the new service (operating and capital) minus estimated revenue is apportioned to each member.

- 7 **Established Services** (services with a 29% or greater annual revenue return) -- net costs or subsidies (operating and capital/debt services minus revenue)² are apportioned based on each municipality's percentage of weekly miles of service for the 12-month period preceding the adoption of the budget.

In addition, CCTA has the ability to negotiate special or one-time assessments with members or prospective members. This means that CCTA can negotiate special agreements to be paid for by a community for the purchase of equipment required for new service (could be cash, grant, or in-kind). The cost of paratransit services is assessed among member municipalities.

Expansion of services to any new areas in the region may require CCTA to reconsider its allocation of local costs to member jurisdictions. The structure of the formula means that any new service must achieve a 29 percent or greater annual revenue return to be included in the regular assessment -- without being in the regular assessment, the service is not eligible for Federal/state subsidies. The cost sharing formula is a major detriment to the implementation of transit services that have been recommended in this SRPTP. Under the current organizational structure, expansion of transit services into new areas would require those municipalities to pay the fully allocated (unsubsidized) cost of the services until they were established and meet the 29 percent farebox recovery requirement.³ Even in member towns, the requirement that new services meet a 29 percent farebox recovery before they can be included in the general allocation discourages innovation and non-traditional modes. CCTA is trying to address this issue; looking for a change from a locally funded to a regional funding mechanism.

²Net cost of service for all established services are considered equal for each mile of such service in the system.

³Under the CCTA charter, towns do not have to become members of the transit authority to receive service.

Service Summary

The menu of services includes fixed-route transit services, ADA paratransit, Medicaid transportation, and ridesharing services. Table 3-1 presents basic service characteristics for CCTA services at the beginning of this planning process.

There are 11 regular fixed-route services, most operating on half-hour or hourly headways. Seven of the 12 meet at the downtown Cherry Street Terminal, with the shuttles (PARC Shuttles, College Street Shuttle, and the CATMA Shuttle) and the Essex Center and Williston routes connecting to the system at other points. Buses pulse at the Cherry Street Terminal at quarter of and quarter after the hour. In addition, CCTA runs weekday neighborhood specials connecting Burlington residential neighborhoods to area schools and four shopping or church “special” services only on selected days. Figure 3-1 presents a system map of the CCTA fixed-route services.

CCTA also provides ADA complementary paratransit for persons whose disability precludes them from using the fixed routes. CCTA purchases this service from SSTA (the current agreement is for the years ended June 30, 1999 through June 30, 2003). CCTA also acts as the Chittenden County Medicaid program administrator/broker on behalf of the Vermont Public Transportation Association (VPTA). As such, CCTA arranges for the provision of transportation services to Medicaid clients, either through the provision of passes and tickets on the CCTA fixed routes, purchased van service from SSTA, taxis, or volunteers.

Total ridership on the fixed routes during FY2001 was 1.6M riders with an additional 18,000 riders on ADA paratransit. Almost 885,000 fixed-route revenue bus-miles of service were provided in FY 2001, in over 77,000 vehicle revenue hours; the system purchased almost 13,000 ADA services hours representing over 164,000 revenue miles. The system's annual expenses for FY2001 were \$5.35M, including operating and capital for fixed-route services (\$4.3M), ADA Paratransit (\$271,000), Medicaid paratransit (\$559,000), and Ridesharing (\$177,000)

The system is funded by a combination of fares, federal operating and capital grants, Vermont State funding grants, contributions from local municipalities, and advertising.

Table 3-1 - SERVICE INVENTORY FOR CCTA FOR FY2001 SERVICES
(Service Descriptions are Prior to November 2001 Service Changes)

Service Name	Service Type (FR, RD, DR)	Service Descriptor	Rural, or Small Town or Urban	Weekday Span of Service	No. Hours of Service			Days of Service (M-F, or Tues only)	Season: (Winter, summer)	Frequency of Service		Funding Source: (GP, JARC CMAQ, etc.)	Public Fare
					Weekdays	Saturday	Sunday			Peak (30 min., etc.)	Off-Peak (2 hours, etc.)		
Airport Route	FR	in-town fixed-route	urban	6:15 am - 10:19 pm	28	23	10	Sun-Sat	All	30 minutes	60 minutes	GP	\$1.00/one-way trip
Essex Route	FR	in-town fixed-route	urban	5:45 am - 10:20 pm	42	31	na	Mon-Sat	All	30 minutes	60 minutes	GP	\$1.00/one-way trip
Essex Center	FR	in-town fixed-route	urban	5:55 am - 9:55 pm	6	na	na	Mon-Fri	All	30 minutes	6:00-9:45 pm gap	GP	\$1.00/one-way trip
Lakeside/SoMeadows/Ledgewood	FR	in-town fixed-route	urban	6:15 am - 6:40 pm	13	13	na	Mon-Sat	All	30 minutes	30 minutes	GP	\$1.00/one-way trip
South End/Shelburne	FR	in-town fixed-route	urban	6:15 am - 10:55 pm	27	24	na	Mon-Sat	All	30 minutes	60 minute	GP	\$1.00/one-way trip
North Avenue	FR	in-town fixed-route	urban	5:45 am - 10:10 pm	29	23	na	Mon-Sat	All	30 minutes	60 minute	GP	\$1.00/one-way trip
Old North End Loop	FR	in-town fixed-route	urban	6:45 am - 6:40 pm	17	12	na	Mon-Sat	All	30 minutes	30 minutes	GP	\$1.00/one-way trip
Riverside/Winooski/Mill	FR	in-town fixed-route	urban	6:45 am - 11:30 pm	17	10	na	Mon-Sat	All	30 minutes	4 hours	GP	\$1.00/one-way trip
UVM Shuttle - winter	FR	in-town shuttle	urban	7:15 am - 6:00 pm	25	17	17	Sun-Sat	School Year	15 minute	15 minute	GP - College	Free
UVM Shuttle - summer	FR	in-town shuttle	urban	7:15 am - 9:00 pm	22	na	na	Mon-Fri	Summer	15 minute	30 minutes	GP - College	Free
P.A.R.C Shuttle	FR	in-town park and ride shuttle	urban	6:30 - 9:24 am; 1:14-10:05 pm	12	na	na	Mon-Fri	All	15 minutes	15 minutes	GP	\$15 per month
Hannaford	FR	in-town weekly shuttle	urban	12:50 - 3:15 pm	3	na	na	Tues	All	one round trip per Tuesday		GP	Free
Price Chopper	FR	in-town weekly shuttle	urban	9:30 am to noon	6	na	na	Tues	All	one round trip per Tuesday		GP	Free
Neighborhood Specials	FR	in-town school connections	urban	8:00 - 9:00 am; 3:00 - 4:00 pm	29	na	na	Mon-Fri	School Year	na	na	GP	\$1.00/one-way trip
Williston	FR	city to outlying area	suburban	6:25 am - 8:44 pm	14	na	na	Mon-Fri	All	30 minutes	30 minutes	JARC	\$1.00/one-way trip
Lane Press/Kimball Ave	FR	city to outlying area	suburban	6:25 am - 11:11 pm	8	na	na	Mon-Fri	All	30 minutes	5:00-9:25 pm gap	JARC	\$1.00/one-way trip
Teddy Bear Extension	FR	city to outlying area	suburban	7 trips per day	4	na	na	Mon-Fri	All	intermittant		JARC	\$1.00/one-way trip
Sunday Service	FR	in-town fixed-route	urban	8:30 am - 11:25 pm	na	na	8	Sun	All	intermittant		GP	\$.25/one-way trip
Other	FR	in-town	urban	varies	108	4	5	Sun-Sat	All	intermittant		GP	\$1.00/one-way trip
Paratransit (ADA)	DR	ADA in CCTA service area	urban	5:45 am - 11:00 pm	51	13	10	Sun-Sat	All	na	na	ADA	\$2.00/one-way trip
Paratransit (Medicaid)	DR	Chittenden County	urban/rural	8:00 am - 5:00 pm				Mon-Fri	All	na	na	Medicaid	na
Rideshare	Rideshare	Chittenden County	urban/rural	varies				varies	All	na	na	Rideshare	na

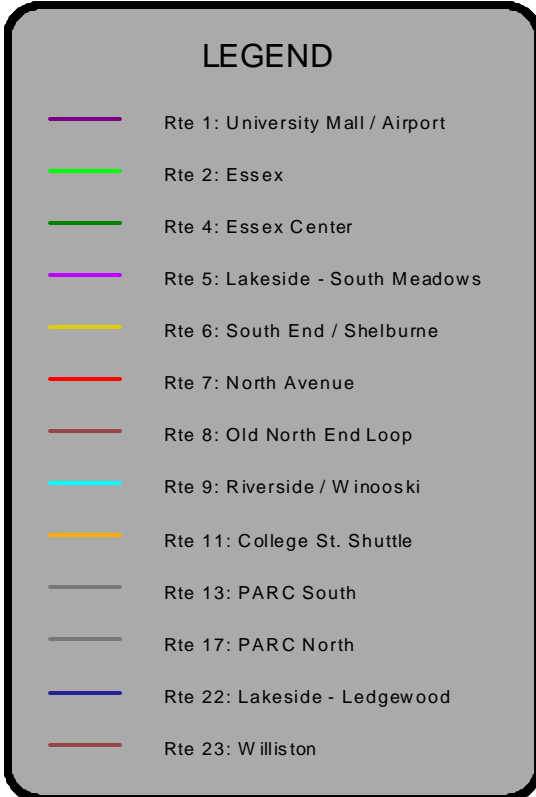
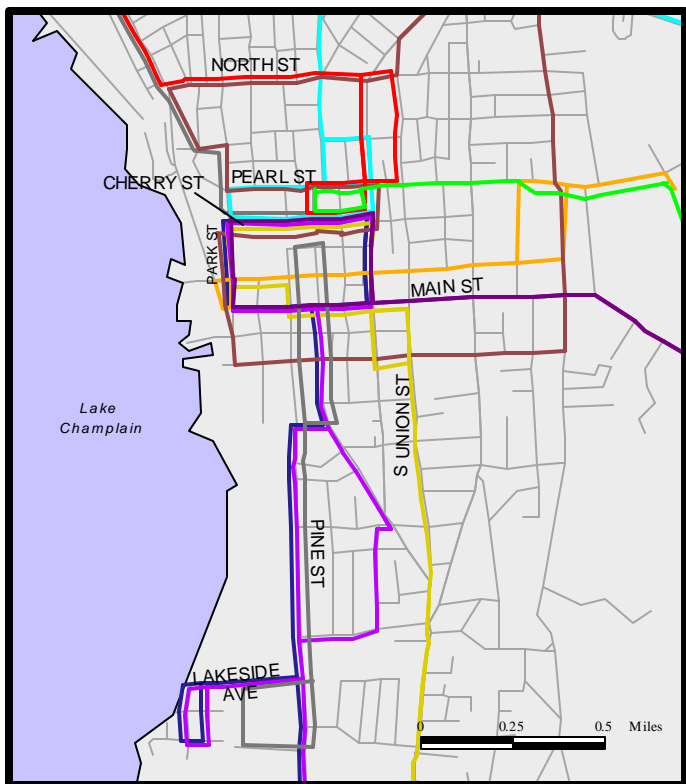
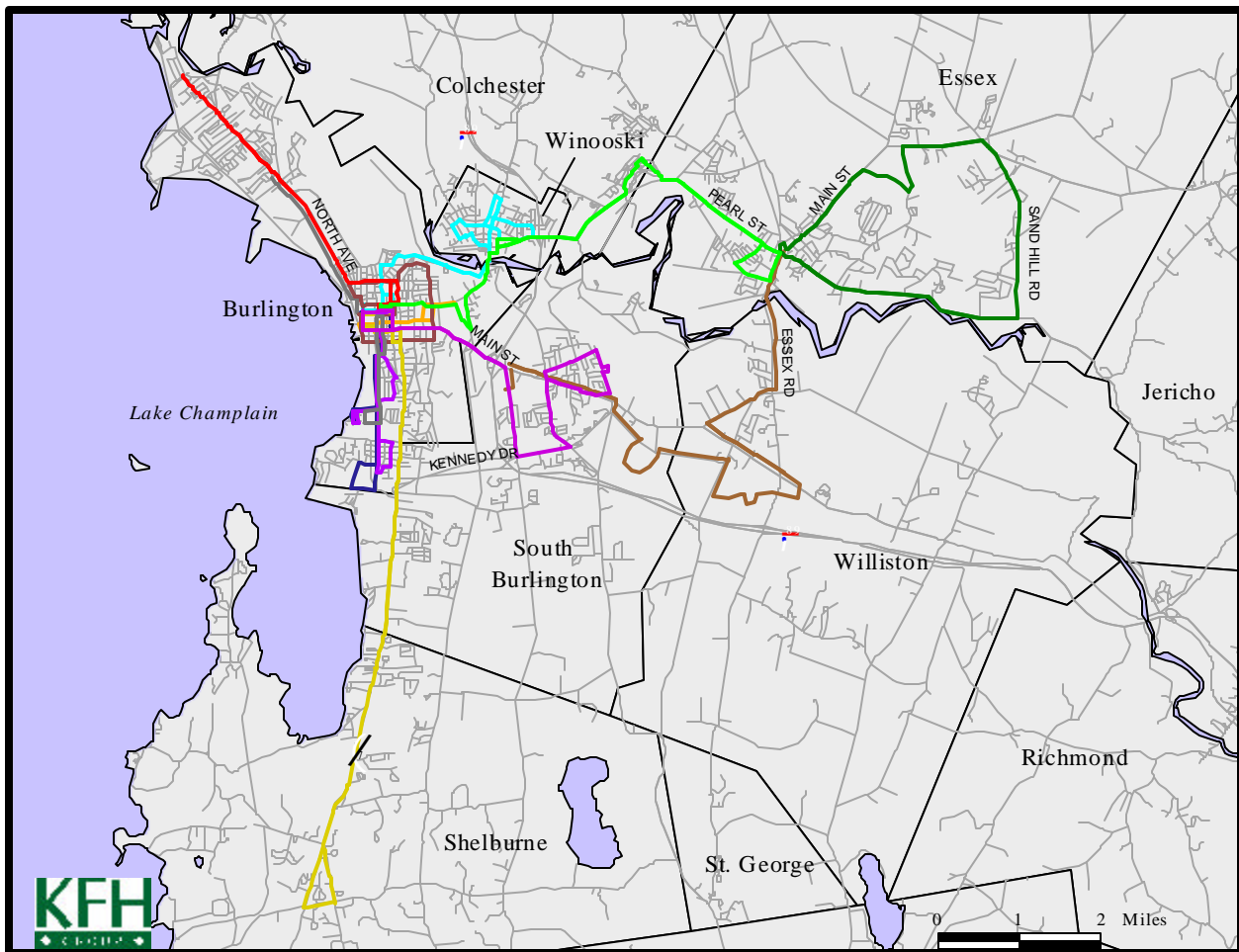


Figure 3-1: ROUTES OPERATED BY CCTA

Fares

The CCTA fixed-route fare policy is relatively simple, with a one-way trip priced at \$1.00, ten-ride tickets at \$8.25, and a 31 day pass at \$33. Discounts from these fares (approximately 50%) are available to youth ages 6 to 18 years old, persons 60 years of age and above, Medicare cardholders, and riders with a CCTA Disabled and Senior ID. The University of Vermont (UVM) students and staff can purchase passes at a 50 percent discount from the Campus Area Transportation Management Association (CATMA). There are no charges for transfers. Fares on the ADA paratransit are \$2.00 per one-way trip.

Some services are free thanks to support by the City of Burlington (College Street Shuttle), University Mall (University Mall Special), and Price Chopper (Price Chopper Special). Fares on the Sunday morning and afternoon special are \$.25 per one-way trip and the Downtown PARC service allows drivers to park and ride to downtown for a monthly pass of \$15.

CCTA Administration and Staff

CCTA has a staff of 69 persons. There are 12 administrative and supervisory positions including the General Manager who reports to the Board of Commissioner. In addition, the administrative staff includes an assistant General Manager, a Comptroller, three Customer Service Representatives/Receptionists, a Project Manager, and two marketing staff.

The Operations Manager supervises two assistant operations managers and the drivers (and is responsible for driver scheduling, dispatching, driver supervisions, and training as well as day-to-day operations). The Maintenance Manager oversees nine mechanics and three bus cleaners. The system currently has 48 bus drivers, all with Commercial Drivers Licenses (CDLs).

Fleet and Facility

The system is operated out of its own facility located on Industrial Parkway in Burlington. Vehicles are owned by the system and were subsidized by the Federal Transit

Administration (FTA). Local match on some of the vehicles was provided, in part, by VTrans. The facility has administrative offices, maintenance facilities, and a fueling station.

CCTA has a total of 41 operating vehicles for the fixed routes (see Table 3-2), all with wheelchair lifts, radios, fareboxes, and bike racks. The fleet consists of large and mid size transit buses (12 year). While the four back-up vehicles are in poor condition, and 1991 TMC RTS' are high mileage, the rest of CCTA's fleet is in excellent, low mileage condition. In addition, CCTA owns eight lift-equipped vans that SSTA uses to provide ADA complementary paratransit (see description of SSTA services). The system continues to plan for vehicle replacement in future years.

The system uses 35 vehicles to operate the regular route services (see Table 3-3). This includes 34 in the morning peak, 35 in the mid-day, and 35 in the p.m. peak. Fifteen vehicles are needed for the evening/night service.

CCTA Service Statistics and Performance

Ridership, Hours, and Miles

The estimated FY 2001 ridership, vehicle miles, and service hours for each of the CCTA fixed routes and ADA paratransit service, are presented in Table 3-4. As shown, the system operated over 90,000 revenue hours and 1M revenue miles in FY 2001. The estimated boardings were over 1.6 million riders, including 18,246 riders on the ADA paratransit.

Costs and Revenue

In FY 2001, the operating cost for CCTA services was \$4.96 million and the farebox revenue was \$985,136. The farebox recovery rate is somewhat misleading, since the system has some services that are free to the rider.

In addition to farebox revenue, the services are funded using Federal funds (Section 5307 formula operating grants) that are received from FTA, federal Job Access Funds received through VTrans, State of Vermont transit operating funds, various municipalities, and contributions for private sources.

Table 3-2 - VEHICLE INVENTORY - CCTA

No.	Model Year	Vehicle Identification Number (VIN)	Manufacturer	Model	Vehicle Type	Design Life	Fuel Type	Seats	Lift or Ramp	WC	Mobile Radio	Farebox	Owned or Leased	Funding Source	Condition	Current Odometer Reading	Miles operated in past 12 Months	Use
CURRENT VEHICLES:																		
303	1979	603405	GMC	RTS	Transit Bus	12 Year	Diesel	34	Lift	2	Mobile	Yes	Owned	FTA S.5307/5309	POOR	590,516	6,951	Backup
305	1979	603407	GMC	RTS	Transit Bus	12 Year	Diesel	34	Lift	2	Mobile	Yes	Owned	FTA S.5307/5310	POOR	593,537	7,471	Backup
307	1979	603008	GMC	RTS	Transit Bus	12 Year	Diesel	43	Lift	2	Mobile	Yes	Owned	FTA S.5307/5311	POOR	541,192	5,555	Backup
309	1979	603010	GMC	RTS	Transit Bus	12 Year	Diesel	43	Lift	2	Mobile	Yes	Owned	FTA S.5307/5312	POOR	552,460	6,923	Backup
401	1991	828463	TMC	RTS	Transit Bus	12 Year	Diesel	36	Lift	2	Mobile	Yes	Owned	FTA S.5307/5313	GOOD	347,176	31,503	Regular
402	1991	828464	TMC	RTS	Transit Bus	12 Year	Diesel	36	Lift	2	Mobile	Yes	Owned	FTA S.5307/5314	GOOD	367,405	31,496	Regular
403	1991	828465	TMC	RTS	Transit Bus	12 Year	Diesel	36	Lift	2	Mobile	Yes	Owned	FTA S.5307/5315	GOOD	406,383	37,237	Regular
404	1991	828466	TMC	RTS	Transit Bus	12 Year	Diesel	36	Lift	2	Mobile	Yes	Owned	FTA S.5307/5316	GOOD	371,422	32,717	Regular
405	1991	828467	TMC	RTS	Transit Bus	12 Year	Diesel	36	Lift	2	Mobile	Yes	Owned	FTA S.5307/5317	GOOD	365,788	30,143	Regular
406	1991	828468	TMC	RTS	Transit Bus	12 Year	Diesel	36	Lift	2	Mobile	Yes	Owned	FTA S.5307/5317	GOOD	367,574	33,261	Regular
407	1991	828469	TMC	RTS	Transit Bus	12 Year	Diesel	36	Lift	2	Mobile	Yes	Owned	FTA S.5307/5317	GOOD	344,504	27,086	Regular
408	1991	828470	TMC	RTS	Transit Bus	12 Year	Diesel	44	Lift	2	Mobile	Yes	Owned	FTA S.5307/5317	GOOD	349,842	20,208	Regular
409	1991	828471	TMC	RTS	Transit Bus	12 Year	Diesel	44	Lift	2	Mobile	Yes	Owned	FTA S.5307/5317	GOOD	328,756	23,870	Regular
410	1991	828472	TMC	RTS	Transit Bus	12 Year	Diesel	44	Lift	2	Mobile	Yes	Owned	FTA S.5307/5317	GOOD	308,757	16,555	Regular
411	1991	828473	TMC	RTS	Transit Bus	12 Year	Diesel	44	Lift	2	Mobile	Yes	Owned	FTA S.5307/5317	GOOD	315,056	17,928	Regular
412	1991	828474	TMC	RTS	Transit Bus	12 Year	Diesel	44	Lift	2	Mobile	Yes	Owned	FTA S.5307/5317	GOOD	324,637	17,268	Regular
413	1991	828475	TMC	RTS	Transit Bus	12 Year	Diesel	44	Lift	2	Mobile	Yes	Owned	FTA S.5307/5317	GOOD	314,516	16,482	Regular
414	1991	828476	TMC	RTS	Transit Bus	12 Year	Diesel	44	Lift	2	Mobile	Yes	Owned	FTA S.5307/5317	GOOD	314,407	19,511	Regular
501	1997	832629	Nova	RTS	Transit Bus	12 Year	Diesel	27	Lift	2	Mobile	Yes	Owned	FTA S.5307/5317	EXCELLENT	132,490	38,792	Regular
502	1997	832630	Nova	RTS	Transit Bus	12 Year	Diesel	27	Lift	2	Mobile	Yes	Owned	FTA S.5307/5317	EXCELLENT	108,998	29,335	Regular
503	1997	832631	Nova	RTS	Transit Bus	12 Year	Diesel	27	Lift	2	Mobile	Yes	Owned	FTA S.5307/5317	EXCELLENT	113,070	30,931	Regular
504	1997	832632	Nova	RTS	Transit Bus	12 Year	Diesel	27	Lift	2	Mobile	Yes	Owned	FTA S.5307/5317	EXCELLENT	109,844	36,935	Regular
505	1997	832633	Nova	RTS	Transit Bus	12 Year	Diesel	27	Lift	2	Mobile	Yes	Owned	FTA S.5307/5317	EXCELLENT	137,657	54,787	Regular
506	1997	832634	Nova	RTS	Transit Bus	12 Year	Diesel	27	Lift	2	Mobile	Yes	Owned	FTA S.5307/5317	EXCELLENT	105,858	34,720	Regular
507	1997	832635	Nova	RTS	Transit Bus	12 Year	Diesel	27	Lift	2	Mobile	Yes	Owned	FTA S.5307/5317	EXCELLENT	103,456	30,768	Regular
601	1998	833862	Nova	RTS	Transit Bus	12 Year	Diesel	43	Lift	2	Mobile	Yes	Owned	FTA S.5307/5317	EXCELLENT	95,631	40,781	Regular

Table 3-2 - VEHICLE INVENTORY - CCTA

No.	Model Year	Vehicle Identification Number (VIN)	Manufacturer	Model	Vehicle Type	Design Life	Fuel Type	Seats	Lift or Ramp	WC	Mobile Radio	Farebox	Owned or Leased	Funding Source	Condition	Current Odometer Reading	Miles operated in past 12 Months	Use	
602	1998	833863	Nova	RTS	Transit Bus	12 Year	Diesel	43	Lift	2	Mobile	Yes	Owned	FTA S.5307/5317	EXCELLENT	92,483	37,883	Regular	
603	1998	833864	Nova	RTS	Transit Bus	12 Year	Diesel	43	Lift	2	Mobile	Yes	Owned	FTA S.5307/5317	EXCELLENT	71,993	27,703	Regular	
604	1998	833865	Nova	RTS	Transit Bus	12 Year	Diesel	43	Lift	2	Mobile	Yes	Owned	FTA S.5307/5317	EXCELLENT	94,160	34,648	Regular	
701	2000	834923	Nova	RTS	Transit Bus	12 Year	Diesel	43	Lift	2	Mobile	Yes	Owned	FTA S.5307/5317	EXCELLENT	42,726	35,167	Regular	
702	2000	834924	Nova	RTS	Transit Bus	12 Year	Diesel	43	Lift	2	Mobile	Yes	Owned	FTA S.5307/5317	EXCELLENT	44,811	37,916	Regular	
703	2000	834925	Nova	RTS	Transit Bus	12 Year	Diesel	43	Lift	2	Mobile	Yes	Owned	FTA S.5307/5317	EXCELLENT	40,931	34,434	Regular	
704	2000	834926	Nova	RTS	Transit Bus	12 Year	Diesel	43	Lift	2	Mobile	Yes	Owned	FTA S.5307/5317	EXCELLENT	36,944	31,453	Regular	
705	2000	834927	Nova	RTS	Transit Bus	12 Year	Diesel	43	Lift	2	Mobile	Yes	Owned	FTA S.5307/5317	EXCELLENT	42,368	35,381	Regular	
706	2000	834928	Nova	RTS	Transit Bus	12 Year	Diesel	43	Lift	2	Mobile	Yes	Owned	FTA S.5307/5317	EXCELLENT	29,556	22,533	Regular	
801	2001	835296	Nova	RTS	Transit Bus	12 Year	Diesel	35	Lift	2	Mobile	Yes	Owned	FTA S.5307/5317	EXCELLENT	6,421	New Bus	Regular	
802	2001	835297	Nova	RTS	Transit Bus	12 Year	Diesel	35	Lift	2	Mobile	Yes	Owned	FTA S.5307/5317	EXCELLENT	5,008	New Bus	Regular	
803	2001	835298	Nova	RTS	Transit Bus	12 Year	Diesel	35	Lift	2	Mobile	Yes	Owned	FTA S.5307/5317	EXCELLENT	5,699	New Bus	Regular	
804	2001	835299	Nova	RTS	Transit Bus	12 Year	Diesel	35	Lift	2	Mobile	Yes	Owned	FTA S.5307/5317	EXCELLENT	5,359	New Bus	Regular	
805	2001	835300	Nova	RTS	Transit Bus	12 Year	Diesel	35	Lift	2	Mobile	Yes	Owned	FTA S.5307/5317	EXCELLENT	1,255	New Bus	Regular	
806	2001	835301	Nova	RTS	Transit Bus	12 Year	Diesel	35	Lift	2	Mobile	Yes	Owned	FTA S.5307/5317	EXCELLENT	4,615	New Bus	Regular	
901	2002		Chance Coach	OPUS	Low Floor	12 Year	Diesel	30	Ramp	2	Mobile	Yes	Owned		EXCELLENT	0	New Bus	Regular	
902	2002		Chance Coach	OPUS	Low Floor	13 Year	Diesel	30	Ramp	2	Mobile	Yes	Owned		EXCELLENT	0	New Bus	Regular	
903	2002		Chance Coach	OPUS	Low Floor	14 Year	Diesel	30	Ramp	2	Mobile	Yes	Owned		EXCELLENT	0	New Bus	Regular	
904	2002		Chance Coach	OPUS	Low Floor	15 Year	Diesel	30	Ramp	2	Mobile	Yes	Owned		EXCELLENT	0	New Bus	Regular	
101	2003		ElDorado	Escort FE	Transit Bus	7 Year	Diesel	25	Lift	2	Mobile	Yes	Owned		EXCELLENT	0	New Bus	Regular	
102	2003		ElDorado	Escort FE	Transit Bus	7 Year	Diesel	25	Lift	2	Mobile	Yes	Owned		EXCELLENT	0	New Bus	Regular	
103	2003		ElDorado	Escort FE	Transit Bus	7 Year	Diesel	25	Lift	2	Mobile	Yes	Owned		EXCELLENT	0	New Bus	Regular	
104	2003		ElDorado	Escort FE	Transit Bus	7 Year	Diesel	25	Lift	2	Mobile	Yes	Owned		EXCELLENT	0	New Bus	Regular	
ES ON ORDER:																			
105	2003		ElDorado	Escort FE	Transit Bus	7 Year	Diesel	25	Lift	2	Mobile	Yes	Owned						
106	2003		ElDorado	Escort FE	Transit Bus	7 Year	Diesel	25	Lift	2	Mobile	Yes	Owned						
107	2003		ElDorado	Escort FE	Transit Bus	7 Year	Diesel	25	Lift	2	Mobile	Yes	Owned						

**Table 3-4 - OPERATING STATISTICS FOR SERVICES PROVIDED BY CCTA
(FY2001 - Prior to November 2001 Service Changes)**

Service Name	Service Type	Service Descriptor	Annual Revenue Hours	Annual Revenue Miles	Fully Allocated Annual Operating Cost	Annual Farebox Revenue (est)	Net Operating Deficit	Annual Boardings (Total)
Airport Route	FR	in-town fixed-route	8,517	108,863	452,776	\$155,268	297,508	249,652
Essex Route	FR	in-town fixed-route	12,408	120,042	601,263	153,438	447,824	246,710
Essex Center	FR	in-town fixed-route	1,638	30,935	102,214	8,800	93,413	14,150
Lakeside/SoMeadows/Ledgewood	FR	in-town fixed-route	3,520	50,394	195,306	63,711	131,594	102,440
South End/Shelburne/Teddy Bear	FR	in-town fixed-route	9,177	113,122	481,539	94,461	387,079	151,881
North Avenue	FR	in-town fixed-route	8,585	82,987	415,904	151,517	264,387	243,621
Old North End Loop	FR	in-town fixed-route	4,954	52,512	246,999	36,722	210,277	59,044
Riverside/Winooski/Mill	FR	in-town fixed-route	4,885	56,906	251,317	58,354	192,963	93,826
UVM/College St. Shuttle	FR	in town shuttle	6,509	45,550	289,038	-	289,038	170,986
P.A.R.C Shuttle	FR	in town park and ride shuttle	3,134	32,715	155,492	18,756	136,736	46,889
Hannaford	FR	in town weekly shuttle	139	1,618	7,149	-	7,149	2,281
Price Chopper	FR	in town weekly shuttle	304	3,740	15,941	-	15,941	4,661
Neighborhood Specials	FR	in town school connections	5,064	60,185	262,333	94,268	168,065	151,572
Williston	FR	city to outlying area	2,702	46,613	161,924	9,489	152,435	15,257
Lane Press/Kimball Ave	FR	city to outlying area	1,969	37,338	123,099	2,261	120,837	3,636
Sunday Service	FR	in-town fixed-route	438	5,511	23,152	3,373	19,779	5,424
Other	FR	in-town	3,147	35,088	159,524	6,962	152,562	11,194
Paratransit (ADA)	DR	urban	12,918	164,220	264,998	36,492	228,506	18,246
Paratransit (Medicaid)	DR	urban/rural	na	na	567,679	-	567,679	146,738
Ridesharing	Ridesharing	urban/rural	na	na	182,292	-	182,292	na
TOTAL			90,008	1,048,339	4,959,938	985,136	3,974,802	1,738,208

The FY 2003 budget for CCTA is presented in Table 3-5.

Coverage

The total population within the quarter mile transit shed for CCTA fixed routes is 51,930 persons (2000 Census data); including about 1,270 residents of Williston and 800 residents in Colchester that are served (but not in a member municipality). This means that about 57 percent of the residents in the member municipalities live within walking distance of a CCTA fixed-route (in 2000, a total of 86,834 persons lived in the member municipalities). About 35 percent of the total County population has access to fixed-route services. Widening the transit shed to a half mile on either side of the route increases the coverage in the CCTA service area to 69,432 or almost 76 percent of the member municipality population and 48 percent of the total County population.

Performance

CCTA is already both effective and efficient for a transit system of its size. As shown in Table 3-6, in FY2001 the system averaged almost 17 boarding per hour and 1.5 boarding per mile. The average operating cost per hour was \$52.79 and operating cost per mile was \$4.38. Thus, the total cost per rider was \$5.96.

Performance does vary by route with routes in the lower density outlying areas (Essex Center, Williston, Lane Press) less productive than the routes in the urban core. The Lane Press route was combined with the Airport and Williston routes in November 2001 in an effort to improve efficiency. With this change, even these routes in the lower density areas will have productivity figures that are good relative to other rural or small town transit systems in Vermont.

In addition to developing the performance measures for services within the CCTA system, each of CCTA's public transit routes was evaluated based upon performance assessment guidelines developed for Vermont systems. These guidelines are based on public transit data provided by the systems broken into two dimensions of categories:

Table 3-5 - CHITTENDEN COUNTY TRANSPORTATION AUTHORITY - FY03 BUDGET

	Enterprise					Total			
	Wide	Administrative	Marketing	Maintenance	Transportation	Fixed-Route	Medicaid	Rideshare	Paratransit
Revenues									
Passenger Revenue	\$1,039,794					\$998,080	\$0	\$0	\$41,714
Advertising Revenue	\$100,000					\$100,000	\$0	\$0	\$0
Planning Revenue	\$100,000					\$100,000	\$0	\$0	\$0
Interest Earnings	\$25,000					\$25,000	\$0	\$0	\$0
Sale of Equipment	\$0					\$0	\$0	\$0	\$0
Fees	\$6,900					\$6,900	\$0	\$0	\$0
Purchase of Services	\$906,408					\$150,000	\$602,713	\$153,695	\$0
Subtotal - Operating Revenues	\$2,178,102					\$1,379,980	\$602,713	\$153,695	\$41,714
Local Subsidy	\$1,717,219					\$1,550,779	\$0	\$0	\$166,440
Federal Formula	\$848,330					\$848,330	\$0	\$0	\$0
State Regular Subsidy	\$1,152,880					\$993,966	\$0	\$0	\$158,914
Federal Demo Subsidy	\$50,000					\$50,000	\$0	\$0	\$0
Subtotal - Subsidies & Grants	\$3,768,429					\$3,443,075	\$0	\$0	\$325,354
Total Operating Revenues	\$5,946,531					\$4,823,055	\$602,713	\$153,695	\$367,068
Expenses									
Payroll - Wages	\$2,467,877	\$127,532	\$58,746	\$398,002	\$1,816,130	\$2,400,410	\$33,911	\$33,554	\$0
Employee Benefits	\$839,705	\$48,907	\$16,881	\$149,143	\$604,137	\$819,068	\$10,787	\$9,850	\$0
Employee Development	\$14,600	\$2,476	\$1,156	\$1,008	\$8,280	\$12,920	\$730	\$950	\$0
Legal Fees	\$30,000	\$5,000	\$0	\$0	\$25,000	\$30,000	\$0	\$0	\$0
Travel, Meetings & Meals	\$2,800	\$2,800	\$0	\$0	\$0	\$2,800	\$0	\$0	\$0
Dues & Subscriptions	\$12,381	\$12,381	\$0	\$0	\$0	\$12,381	\$0	\$0	\$0
MPO Planning	\$50,000	\$50,000	\$0	\$0	\$0	\$50,000	\$0	\$0	\$0
Accounting Fees	\$9,000	\$6,000	\$0	\$0	\$0	\$6,000	\$1,500	\$1,500	\$0
Office Supplies	\$26,000	\$6,900	\$0	\$0	\$0	\$6,900	\$12,000	\$7,100	\$0
Communications	\$28,000	\$15,600	\$0	\$0	\$0	\$15,600	\$5,960	\$6,440	\$0
Computer Services	\$5,000	\$5,000	\$0	\$0	\$0	\$5,000	\$0	\$0	\$0
Insurance Premiums	\$446,374	\$18,080	\$1,528	\$17,495	\$409,271	\$446,374	\$0	\$0	\$0
Bank Charges	\$500	\$500	\$0	\$0	\$0	\$500	\$0	\$0	\$0
Bond Interest	\$18,446	\$18,446	\$0	\$0	\$0	\$18,446	\$0	\$0	\$0
Maintenance Uniforms	\$9,750	\$0	\$0	\$9,750	\$0	\$9,750	\$0	\$0	\$0
Tool Allowance	\$4,800	\$0	\$0	\$4,800	\$0	\$4,800	\$0	\$0	\$0
Cleaning	\$34,000	\$13,700	\$0	\$16,000	\$0	\$29,700	\$2,500	\$1,800	\$0
Contract Maint Revenue Vehicles	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Tires	\$31,806	\$0	\$0	\$31,806	\$0	\$31,806	\$0	\$0	\$0
Oil/Antifreeze	\$24,000	\$0	\$0	\$24,000	\$0	\$24,000	\$0	\$0	\$0
Fuel - Revenue Vehicles	\$220,802	\$0	\$0	\$220,802	\$0	\$220,802	\$0	\$0	\$0
Parts	\$129,120	\$0	\$0	\$129,120	\$0	\$129,120	\$0	\$0	\$0
Facility Maintenance	\$16,000	\$0	\$0	\$16,000	\$0	\$16,000	\$0	\$0	\$0
Kiosk & Shelter Maintenance	\$5,000	\$0	\$0	\$5,000	\$0	\$5,000	\$0	\$0	\$0
Small Tools Expense	\$1,000	\$0	\$0	\$1,000	\$0	\$1,000	\$0	\$0	\$0
Maintenance Supplies	\$16,000	\$0	\$0	\$16,000	\$0	\$16,000	\$0	\$0	\$0
Radio Maintenance	\$3,000	\$0	\$0	\$3,000	\$0	\$3,000	\$0	\$0	\$0
Utilities	\$75,697	\$0	\$0	\$64,872	\$0	\$64,872	\$5,325	\$5,500	\$0
Vehicle Registration & Fees	\$140	\$0	\$0	\$0	\$140	\$140	\$0	\$0	\$0
Driver Uniforms	\$14,400	\$0	\$0	\$0	\$14,400	\$14,400	\$0	\$0	\$0
Operating Supplies - Transportation	\$3,200	\$0	\$0	\$0	\$3,200	\$3,200	\$0	\$0	\$0
ADA - Purchase of Service	\$367,068	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$367,068
Medicaid - Purchase of Service	\$530,000	\$0	\$0	\$0	\$0	\$0	\$530,000	\$0	\$0
Rideshare	\$87,000	\$0	\$0	\$0	\$0	\$0	\$0	\$87,000	\$0
Misc. Marketing Expense	\$18,000	\$0	\$18,000	\$0	\$0	\$18,000	\$0	\$0	\$0
Rail Advertising	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Bus Advertising	\$6,000	\$0	\$6,000	\$0	\$0	\$6,000	\$0	\$0	\$0
Public Information	\$64,000	\$0	\$64,000	\$0	\$0	\$64,000	\$0	\$0	\$0
CMAQ Marketing Grant	\$62,500	\$0	\$62,500	\$0	\$0	\$62,500	\$0	\$0	\$0
Repayment of Bond	\$50,000	\$50,000	\$0	\$0	\$0	\$50,000	\$0	\$0	\$0
Capital Match Fund	\$222,565	\$222,565	\$0	\$0	\$0	\$222,565	\$0	\$0	\$0
Total Expenses	\$5,946,531	\$605,887	\$228,810	\$1,107,796	\$2,880,559	\$4,823,055	\$602,713	\$153,695	\$367,068

**Table 3-6 - PERFORMANCE MEASURES FOR CTA
(FY 2001 - Prior to November 2001 Service Changes)**

Service Name	Service Type	Boardings per Revenue Hour	Boardings per Revenue Mile	Total Operating Cost/Revenue Hour	Total Operating Cost/Revenue Mile	Total Operating Cost/Boarding	Revenue per Boarding	Net Deficit per Boarding	Farebox Recovery
Airport Route	FR	29.3	2.3	\$53.16	\$4.16	\$1.81	\$0.62	\$1.19	34%
Essex Route	FR	19.9	2.1	\$48.46	\$5.01	\$2.44	0.62	1.82	26%
Essex Center	FR	8.6	0.5	\$62.40	\$3.30	\$7.22	0.62	6.60	9%
Lakeside/SoMeadows/Ledgewood	FR	29.1	2.0	\$55.48	\$3.88	\$1.91	0.62	1.28	33%
South End/Shelburne/Teddy Bear	FR	16.6	1.3	\$52.47	\$4.26	\$3.17	0.62	2.55	20%
North Avenue	FR	28.4	2.9	\$48.45	\$5.01	\$1.71	0.62	1.09	36%
Old North End Loop	FR	11.9	1.1	\$49.86	\$4.70	\$4.18	0.62	3.56	15%
Riverside/Winooski/Mill	FR	19.2	1.6	\$51.45	\$4.42	\$2.68	0.62	2.06	23%
UVM/College St. Shuttle	FR	26.3	3.8	\$44.41	\$6.35	\$1.69	0.00	1.69	0%
P.A.R.C Shuttle	FR	15.0	1.4	\$49.61	\$4.75	\$3.32	0.40	2.92	12%
Hannaford	FR	16.4	1.4	\$51.43	\$4.42	\$3.13	0.00	3.13	0%
Price Chopper	FR	15.3	1.2	\$52.44	\$4.26	\$3.42	0.00	3.42	0%
Neighborhood Specials	FR	29.9	2.5	\$51.80	\$4.36	\$1.73	0.62	1.11	36%
Williston	FR	5.6	0.3	\$59.93	\$3.47	\$10.61	0.62	9.99	6%
Lane Press/Kimball Ave	FR	1.8	0.1	\$62.52	\$3.30	\$33.86	0.62	33.23	2%
Sunday Service	FR	12.4	1.0	\$52.86	\$4.20	\$4.27	0.62	3.65	15%
Other	FR	3.6	0.3	\$50.69	\$4.55	\$14.25	0.62	13.63	4%
Paratransit (ADA)	DR	1.4	0.1	\$20.51	\$1.61	\$14.52	2.00	12.52	14%
Paratransit (Medicaid)	DR	na	na	na	na	\$3.87	na	na	na
Ridesharing	Ridesharing	na	na	na	na	na	na	na	na
System Average		17.0	1.5	52.79	4.38	5.96	0.50	5.47	16%

- 1) services were classified as either
 - \$ demand-responsive,
 - \$ route deviation, or
 - \$ fixed-route, and

- 2) operating environments were classified as either
 - \$ rural,
 - \$ small town,
 - \$ urban, or
 - \$ ski area.

For each type of service, ranges of the following five operating measures were identified as being successful, acceptable, or in need of review:

- \$ Boardings per hour,
- \$ Boardings per mile,
- \$ Cost per mile,
- \$ Cost per hour, and
- \$ Cost per passenger.

Within this structure, most of CCTA's fixed-route services were classified as urban routes, although the Essex Center and Williston routes were classified as small town routes. Table 3-7 provides guidelines for service evaluation for this type of service, along with CCTA FY 2001 operating performance measures. Relative to other comparable public transit services in Vermont in FY 2001, the CCTA routes performed successfully or acceptably on the ridership measures except in a few cases. The Essex Center and Williston routes have much lower boardings per hour and miles than the rest of the system, but they meet the goals for small town routes. The only true urban fixed-route that needs to be reviewed from a ridership perspective is the Old North End route. From a boardings per mile perspective, both the Old North End and South End/Shelburne route should be reviewed (the South End/Shelburne route probably performs below average on the boardings per mile because of its long route length). The shuttles and Sunday services don't meet the ridership goals for urban fixed routes, but probably shouldn't be assessed as traditional urban fixed routes.

On the cost measures, many of the CCTA services fall into the "need to be reviewed" category. This probably indicates an anomaly in the way that the guidelines were developed; by definition, one-third of the routes statewide would be in the "needs review" category. Since

Table 3-7 - CCTA PEER PERFORMANCE ASSESSMENT RATING

Small Town Routes	Route Name	Boardings per Hour	Boardings per Mile	Cost per Mile	Cost per Hour	Cost per Passenger
	Needs Review	<3	<.2	>\$3.30	>\$45.00	>\$12.00
	Acceptable	3-7.5	.2-.6	\$2.25-3.30	\$35.00-\$45.00	\$5.00-\$12.00
	Successful	7.5<	.6<	<\$2.25	<\$35.00	<\$5.00
Essex Center	9 Successful	0.5 Acceptable	\$3.30 Acceptable	\$62.40 Needs Review	\$7.22 Acceptable	
Williston	6 Acceptable	0.3 Acceptable	\$3.47 Needs Review	\$59.93 Needs Review	\$10.61 Acceptable	
<i>Total Small Town</i>	7 <i>Acceptable</i>	0.4 <i>Acceptable</i>	\$3.39 <i>Needs Review</i>	\$61.17 <i>Needs Review</i>	\$8.92 <i>Acceptable</i>	

Urban Routes	Route Name	Boardings per Hour	Boardings per Mile	Cost per Mile	Cost per Hour	Cost per Passenger
	Needs Review	<17	<1.4	>\$4.50	>\$50.00	>\$3.00
	Acceptable	17-24	1.4-2.0	\$3.00 - \$4.50	\$40.00-\$50.00	\$1.75-\$3.00
	Successful	24<	.2<	<\$3.00	<\$40.00	<\$1.75
Airport - Umall	29 Successful	2.3 Successful	\$4.16 Needs Review	\$53.16 Needs Review	\$1.81 Acceptable	
Essex	20 Successful	2.1 Successful	\$5.01 Needs Review	\$48.46 Acceptable	\$2.44 Acceptable	
Lakeside	29 Successful	2.0 Successful	\$3.88 Acceptable	\$55.48 Needs Review	\$1.91 Acceptable	
South End/Shel.	17 Acceptable	1.3 Needs Review	\$4.26 Acceptable	\$52.47 Needs Review	\$3.17 Needs Review	
North Avenue	28 Successful	2.9 Successful	\$5.01 Needs Review	\$48.45 Acceptable	\$1.71 Successful	
Old North End	12 Needs Review	1.1 Needs Review	\$4.70 Needs Review	\$49.86 Acceptable	\$4.18 Needs Review	
Riverside	19 Acceptable	1.6 Acceptable	\$4.42 Acceptable	\$51.45 Needs Review	\$2.68 Acceptable	
College St. Shuttle	26 Successful	3.8 Successful	\$6.35 Needs Review	\$44.41 Acceptable	\$1.69 Successful	
PARC Shuttle	15 Needs Review	1.4 Acceptable	\$4.75 Needs Review	\$49.61 Acceptable	\$3.32 Needs Review	
Hannaford Shuttle	16 Needs Review	1.4 Acceptable	\$4.42 Acceptable	\$51.43 Needs Review	\$3.13 Needs Review	
Price Chopper Shut.	15 Needs Review	1.2 Needs Review	\$4.26 Acceptable	\$52.44 Needs Review	\$3.42 Needs Review	
Neighborhood Spec.	30 Successful	2.5 Successful	\$4.36 Acceptable	\$51.80 Needs Review	\$1.73 Successful	
Sunday Service	12 Needs Review	1.0 Needs Review	\$4.20 Acceptable	\$52.86 Needs Review	\$4.27 Needs Review	
<i>Total Urban</i>	21 <i>Acceptable</i>	1.9 <i>Acceptable</i>	\$4.60 <i>Needs Review</i>	\$50.91 <i>Needs Review</i>	\$2.73 <i>Acceptable</i>	

CCTA has most of the urban fixed routes in the state (along with Marble Valley Regional Transit District) and it makes sense that many of its routes would fall into the lower third or “needing to be reviewed”. However, in reviewing the cost per mile, cost per hour and cost per passenger within the system, all of the CCTA routes have similar costs. No routes stand out as needing special attention except perhaps the cost per passenger on the Old North End and South End/Shelburne routes (again, indicating the lower than average ridership on Old North End and the long distances on the Shelburne route). Even the Essex Center and Williston routes have acceptable cost per passenger when compared to other small town routes in the state.

While CCTA is already both effective and efficient when compared to its peers, the one issue that will be explored in the SRPTP is the potential to increase efficiency if the pulse were eliminated. Some routes have relatively long layovers at the Cherry Street Terminal or at the Mobil Short Stop on Shelburne Road (where buses are not providing miles of services, but are still accumulating hours, and therefore costs). While the system doesn’t want to add miles that are not productive, the study will explore whether the pulse is effective given routes of such varying lengths. Further, the creation of the new Downtown Transit Center at Union Station creates an opportunity for CCTA to move the downtown transfer point to improve efficiency (not all routes will have to go through the busy Cherry Street terminal section of downtown.)

Fixed-Route Profiles – Route-by-Route

The next section provides an overview on a route-by-route basis. Route profiles are provided in Appendix F. In November 2001, CCTA made a number of changes, including merging the Lane Press Route into the Airport and Williston routes. Service changes were made again in October 21, 2002. The descriptions below reflect these new routes, while the operating data in the previous section were for the old configurations (FY 2001).

While CCTA keeps a great deal of statistical data on a route-by-route basis, it does not currently keep data on boardings and alightings by stop or route segment (although these data will be available in the future from the farebox recordings). However, during the development of the 1999 *Operations Plan*, CCTA operations management was able to provide a great deal of information on the areas of activity based on operating experience -- that information is summarized here.

Route 1 - University Mall/Airport

This route operates on weekdays from 6:15 a.m. to 10:19 p.m. on half hour headways, with less frequent service after 6:15 p.m. On Saturdays, the route is operated on half hour headways from 9:15 a.m. to 6:15 p.m. with hourly service in the early morning and evening. On Sundays the route operates hourly from 8:45 a.m. to 7:35 p.m.

This route links downtown with University Mall, a key system trip generator and the major regional shopping mall. The route also serves The Pines, a senior housing complex, the South Burlington school and city offices, medical offices at Timber Lane, a senior housing facility at Country Park, some employee ridership at the Airport, and Pillsbury Manor on Williston Road.

In November 2001, CCTA modified this route to serve Lane Press on weekdays during commuter hours (eliminating the Lane Press route). The route allows people wishing to go further out Williston Road to connect to the Williston Route at University Mall. This route is heavily used on Saturdays, and there have been requests for an everyday version of the Sunday shopper routing from the South End to Dorset Street via I-89.

Route 2 - Essex

This route offers service every half-hour from 5:45 a.m. to 9:45 p.m. on Monday through Friday. On Saturday, the route operates every half-hour from 9:15 a.m. to 6:15 p.m., with hourly services in the early morning and evening. There is a deviation through the Pinecrest neighborhood on weekday peak hours, and to the IBM complex in Essex Junction at peak times, and there are several other service variances depending on school days.

The route is the longest in the system -- a full run takes 1.5 hours. Key areas of activity on the route include St. Michael's College, from Fanny Allen Hospital to downtown, Champlain Industries in Fort Ethan Allen, UVM Student Housing at Fort Ethan Allen, the Medical Office Park at the Fort, the Amtrak Station in Essex Junction, and IBM. A portion of the route runs through Colchester, which is not a CCTA member -- however, several key destinations are located in Colchester, which may produce approximately a third of the ridership on this route. The Pinecrest deviation has ridership, but adds to the problems meeting the scheduled times.

The IBM destination has ridership, but use of 12-hour shifts and 4-day on/3-day off patterns affects ridership.

Route 4 - Essex Center

This route is a semi-rural loop connecting the town of Essex to CCTA's Route 2 at Essex Junction. It operates on weekdays from 5:55 a.m. – 10:25 a.m., from 1:00 p.m. - 6:00 p.m., with one shortened last run from 9:50 p.m. - 9:55 p.m. Headways vary from 30-60 minutes. Productivity is lower than other CCTA routes (8.6 trips per hour), but is good when compared to services in other rural areas of the state.

Route 5 - Lakeside

This route operates from 6:15 a.m. to 6:40 p.m. on half hour headways from downtown. However, because it has two deviations, not all portions of the route operate every half hour. Lakeside Community is served on all runs with alternating runs serving either South Meadows or Ledgewood/CCTA. The schedule is the same on Saturdays.

One of the major stops on the way into and out of downtown is the senior housing at 230 St. Paul Street which produces riders to and from downtown, but not to points further south. Another major stop is Howard Community Services on Pine Street at Flynn. This route has several deviations to different neighborhoods. The South Meadows area is an area of transit activity, with some density and moderate income residential development. The Lakeside Community has higher density, and has both older riders and youth -- a significant area of transit activity.

Route 6 - South End/Shelburne

This route operates on weekdays between 6:15 a.m. and 8:20 p.m., with half hour headways from Cherry Street to and from the Mobil Short Stop, and intermittent trips serving Shelburne. One last run is operated from 10:30 p.m. – 10:55 p.m. Selected trips also continue to the Teddy Bear Factory to coincide with shift changes. Saturday service operates from 6:15

a.m. to 8:20 p.m. on hourly headways in the morning and evening and half-hour headways in the mid-day; four Saturday trips continue to Shelburne Village

All the runs that do not continue to Shelburne layover at the Short Stop for 25 minutes before starting the inbound trip, which is the amount of time that the run to Shelburne would have taken. The run all the way to Shelburne is tight. Ridership from Shelburne includes summer visitors and employees at the Shelburne Museum, and school ridership at the Shelburne Middle School and the Waldorf School on school days. There is some on/off activity between Shelburne and the Short Stop on Shelburne Road, with most activities further in between the Short Stop and downtown. Ridership to the Teddy Bear Factory has been good.

Route 7 -- North Avenue

This route operates weekdays from 5:45 a.m. to 10:10 p.m., on half-hour headways until 6:15 p.m., when it goes to an hourly headway. On Saturdays, the route is operated on half hourly headways from 9:15 a.m. to 5:45 p.m. with hourly headways in the early morning and evening hours. The portion of the route that loops downtown on College Street operates in the morning between the start of service and 10:40 a.m., and on the last trip of the day. The route goes into Heineberg Road only during the day (9:00 a.m. to 4:25 p.m.).

There is ridership from North Avenue/North Street in the morning to South Prospect where, for UVM students and staff, a walk allows connection with the CATS Shuttle. In between these times, College Street is served by the College Street Shuttle, which is free. Key origin/destination points include the Birchwood Terrace Nursing Home, the Flynn School, Lyman C. Hunt, the Ethan Allen Shopping Center, Burlington High School, the area of North Street between North Avenue and North Winooski, the campus area (in the morning), and downtown.

Route 8 - Old North End Loop

The Old North End Loop provides 15-minute headways in weekday peak hours and half-hour frequencies for the remainder of the time. The route covers the high-density, lower-income (north of Pearl St.) and student areas (south of Pearl St.) of the old North End. Service is

operated from 6:45 a.m. to 6:40 p.m. on weekdays and Saturdays. Productivity is relatively low, particularly in terms of trips per hour of service (compared to other routes in the system). The eastern portion of this same service area is covered by the UVM Off-Campus Shuttle in the evenings.

Route 9 - Riverside/Winooski

The Riverside/Winooski route operates on half-hour headways from 6:45 a.m. to 7:00 p.m. weekdays, with one final run at 11:00 p.m. (via Colchester Avenue). Saturday service operates on hourly headways beginning at 6:15 a.m. and running to 6:40 p.m. The section of the route serving Tigan Street and Weaver Street in Winooski is not served in the midday except on one trip, and is not served on Saturdays until the afternoon.

This route has activity from a transit dependent population in the Elmwood/Archibald areas, and also at the Salmon Run and Riverside Apartments prior to crossing the river into Winooski. Champlain Mill is a regional destination, and also a transfer point to the Essex routes. Tigan Street produces some employment ridership and trips to the sheltered workshop located there. Other activity is school related in the morning and afternoon, as the Tigan Street area is close to JFK Middle and High Schools. The Courtyard and 83 Barlow are senior housing locations that generate some ridership. Winooski is basically fully-developed, and aside from regional trips to Champlain Mill, most ridership is transit dependent.

Route 11 – College Street Shuttle

The College Street Shuttle is a free weekday service that operates from the UVM campus and FAHC-MCHV medical campus down College Street to Union Station. During the fall and winter months, the shuttle operates on half hour headways from 6:15 a.m. - 7:15 a.m. and from 6:00 p.m. -7:15 p.m. and on 15 minute intervals from 7:15 a.m. – 6:00 p.m. The College Street Shuttle hours expand in May for the summer through Columbus Day and operates weekends from 11:00 a.m. to 9:00 p.m.

Route 13 and Route 17– PARC North, PARC South, and CATMA Shuttle

The PARC South Shuttle (Route 13) allows commuters working in downtown Burlington to park at the General Dynamics lot south of the City and take the shuttle into downtown (Bank Street). The shuttle ride is between 6 and 9 minutes (depending on the time of day) and operates every 15 minutes. The service operates weekdays from 6:30 a.m. to 1:23 p.m. In addition to the PARC Shuttle, CCTA also recently began operating a CATMA Shuttle that runs every 15 minutes from the PARC South lot to destinations on the Hill.

The new PARC North Shuttle (Route 17) allows commuters to park at the Elks Club on North Avenue and take the shuttle into downtown (Cherry Street). The shuttle ride is five minutes and operates every 15 minutes. The service operates weekdays from 7:05 – 7:55 a.m. and from 4:35 – 5:55 p.m.

For the two PARC services, CCTA has a \$15 monthly pass which includes parking and riding, although the regular fare is also accepted. All Downtown PARC shuttle riders are eligible for CCTA's Guaranteed Ride Home program.

Route 23 – Williston

The Williston Route starts at University Mall (where it connects to CCTA Route 1), serves shopping and employment locations in Williston/Taft Corners, and then proceeds north to the Amtrak station in Essex Junction. Since it is not part of the pulse, service is provided on varying 40-50 minute headways depending on traffic volumes at different times of the day. The route operates from 6:25 a.m. – 7:50 p.m. on weekdays. Service is less frequent on Saturdays, but the span of service is similar, 6:25 a.m. to 8:07 p.m.

This route, which serves the non-member town of Williston, is funded under a JARC grant. In November 2001, CCTA merged the Kimball Avenue portion of the old Lane Press/Kimball Avenue JARC route with the Williston route to improve productivity.

CCTA Sunday Specials

CCTA operates several specialized services to provide shopping opportunities for seniors and the general public. On Sunday mornings, the Sunday Morning Special connects senior housing with area churches and on Sunday afternoons CCTA operates limited service connecting the senior centers and other apartments with shopping locations. The service is funded by the City of Burlington and there is utilization, though productivity is below system averages. On Tuesdays, the “Hannaford Special” connects senior housing sites in the area with the University Mall Hannaford grocery store. Also on Tuesdays, the “Price Chopper” takes seniors from Burlington and Winooski to and from the Shelburne Road Price Chopper. These services are funded by the University Mall and Price Chopper. All shopper shuttles are open to the general public.

Neighborhood Specials

These are extra bus routes operated in the City of Burlington during the morning and mid-afternoon periods. They operate on school days only, and are open to the general public. Nine routes operate in the morning and eight in the afternoon. Most operate similar to the regular fixed routes, but deviate to serve specific neighborhoods and schools. Burlington students can ride these routes or the regularly scheduled services -- the City does not operate a school bus system. As might be expected, these routes serve Burlington students, and are among the more productive routes.

Provision of ADA, Medicaid, and Ridesharing Services by CCTA

The CCTA fixed routes described in the previous section provide services to the general public in the member municipalities, including transportation to and from school, work, medical, shopping, and recreational activities. Recognizing that fixed-route transit services cannot meet the needs of all residents, CCTA also uses other modes of operation or methods to provide transportation to subpopulations or market segments not served by its fixed routes. While CCTA does not currently operate any paratransit services directly, the authority contracts for and administers funding for those services, both within its current service area and for the remainder of the County.

Other CCTA Services Within the Service Area

Within its current service area, CCTA contracts with SSTA to provide ADA paratransit services for persons with disabilities who are unable to use the fixed routes. ADA paratransit service is provided seven days a week during the same hours that service is provided by the fixed routes. ADA paratransit is provided to all locations within three quarters of a mile of the CCTA bus routes, even if the area is not a member of CCTA. The service is curb-to-curb, although SSTA provides door-to-door services as needed (this can include helping people into and out of buildings). Fares, which are retained by SSTA, are \$2.00 per trip.

The Vermont Association for the Blind and Visually Impaired (VABVI) has a contract with CCTA to certify persons as eligible for ADA paratransit. The general philosophy in eligibility determination is to be inclusive and paratransit drivers are asked to report when they have questions regarding whether a person may not be eligible. While VABVI uses two categories of eligibility 1) unrestricted, permanent eligibility (unconditional eligibility), and 2) restricted or conditional eligibility, no one is currently certified in the conditional category.

Approximately 65 trips per weekday are provided under ADA paratransit. Ridership has been increasing at a rate of almost a half percent a month over the past several years to a level of over 18,000 annual one-way trips in FY 2001.

Countywide Programs

CCTA also has two programs that operate county-wide -- Medicaid and Ridesharing. CCTA is VPTA's Medicaid broker for all of Chittenden County (including those areas outside the CCTA service area). For Medicaid clients able to take the fixed routes, CCTA provides passes and for those unable to use the fixed routes, CCTA uses volunteers, taxi operators, and SSTA. CCTA also leases vehicles to the Town of Essex and Village of Essex Junction to allow those municipalities to directly provide door-to-door services for seniors and persons with disabilities.

Medicaid - CCTA is the broker for the Medicaid transportation program in Chittenden County. Medicaid clients needing transportation contact CCTA, which then uses its staff to determine the least expensive method of transportation they can use. If the client can use the bus and lives close enough to the bus line, CCTA provides them with a bus pass, tokens, or a ticket (depending on how often they need to make Medicaid eligible trips). If the person cannot use the bus, CCTA determines whether they can use a taxi or need wheelchair-accessible van service (provided by SSTA or Winooski/others). Volunteers are also used occasionally. The CCTA Medicaid expenses in FY 2001 were \$567,679, including the cost of administration and purchase of taxi and van services (but not including the \$206,334 cost for CCTA passes and tickets that were distributed to Medicaid clients). The FY 2002 budget for the Medicaid program is \$428,080 (again, not including the cost of CCTA bus passes and tickets distributed to Medicaid clients). The FY 2002 budget is lower than the FY 2001; but expenses are running higher than anticipated and CCTA expects to provide more rides than originally budgeted for FY 2002.

Rideshare - CCTA administers the Statewide Vermont Ridesharing Program for Chittenden County (a separate Rideshare Program for students and employees of CATMA institution is operated by CATMA). CCTA maintains a database of commuters traveling within and to/from the county and advertises its ridematch services extensively. Individuals looking for a ride or who are interested in forming a carpool or vanpool can call CCTA for assistance. CCTA staff attempts to find a match and give individuals phone numbers of possible carpool

candidates. The Rideshare program matches more than one thousand new residents each year with carpooling and vanpooling partners.

CCTA also has been assisting groups of commuters who are interested in setting up private vanpools by helping with vehicle leasing options, compiling lists of vanpool candidates, or helping organize and promote the vanpool. CCTA offers a **Guaranteed Ride Home** program for carpool and vanpool participants. The program covers cab fare home in the event of a personal emergency (up to \$50). CCTA FY2001 expenses under the Rideshare program were \$182,292; the budget for FY 2002 for the Rideshare program is \$154,536.

OTHER PUBLIC TRANSIT SERVICES IN THE AREA

Description of SSTA Services

SSTA is a private non-profit corporation founded in 1982 to assist in the provision of transportation service for the elderly and disabled. SSTA provides a number of paratransit and brokerage services in Chittenden County, including CCTA's ADA Paratransit and Medicaid van paratransit, paratransit for general public elderly, and disabled persons in Williston, Colchester, Richmond, Milton--Hinesburg (under S. 5310 program), and other human service transportation. SSTA also provides drivers for the hospital shuttle services under contract.

The agency provides ADA paratransit services from 5:45 a.m. – 11:00 p.m. Monday – Friday, 6:15 a.m. – 9:20 p.m. on Saturday and 9:00 a.m. – 5:00 p.m. on Sunday. Other paratransit services are provided Monday through Friday from 8:00 a.m. – 5:00 p.m. ADA fares are \$2.00 per one-way trip and the S. 5310 elderly and disabled service has a \$1.00 per trip donation.

The agency has a total of 36 vehicles in its fleet (all wheelchair accessible), eight of which were provided by CCTA for the ADA Paratransit service. The fleet includes 27 vans, one minivan, and the eight vans owned by CCTA. In total, it is estimated that SSTA provided about 145,640 trips in FY 2001, over 18,000 under the ADA paratransit program. The agency provided approximately 668,000 vehicle miles and 51,000 vehicle hours of service during this period. The overall budget for SSTA was \$1.24M including funding from CCTA, Medicaid, S. 5310 purchase of service (on behalf of a variety of human service agencies) and direct contracts

Table 3-8 - SSTA Peer Performance Assessment Rating

Urban Demand Responsi	Route Name	Boardings per Hour	Boardings per Mile	Cost per Mile	Cost per Hour	Cost per Passenger
	Needs Review	na	na	>\$2.25	>\$30.00	>\$15.00
	Acceptable	1.4-2.74	.1 - .27	\$1.60-\$2.25	\$25.00-\$30.00	\$10.00-\$15.00
	Successful	na	na	<\$1.60	<\$25.00	<\$10.00
	SSTA Services Overall	2.4 <i>Acceptable</i>	0.22 <i>Acceptable</i>	\$1.86 <i>Successful</i>	Not Available <i>Being Developed</i>	\$8.54 <i>Successful</i>

with other human service agencies. SSTA recently moved into a new facility in Colchester that was subsidized with FTA (80%), and VTrans (10%) funds. Local funds for this project were provided by SSTA.

SSTA services were also evaluated based upon performance assessment guidelines developed for Vermont systems. All SSTA services were considered fixed-route demand-responsive. Table 3-8 presents the statewide guidelines for such services along with SSTA measures. SSTA service is successful for the three cost measures and acceptable for the ridership measures. Following is a review of the services that SSTA provides.

ADA Paratransit

CCTA contracts with SSTA to provide its ADA complementary paratransit under a recently negotiated contract awarded through the bid process (three years with two optional renewal years). Under this contract, paratransit is provided both to individuals who are eligible for trips under ADA (who get unlimited service) and for a few ~~A~~grandfathered individuals certified for paratransit prior to ADA (who can ride 4 times a month). To maximize efficiency, ADA client trips are consolidated into the overall SSTA system and SSTA provides this service using the same fleet and drivers as it uses to provide services under its other contracts. Vehicles provide a variety of trips throughout the day, mixing ADA trips into human service agency trips, meal delivery, etc.

Trip reservations are taken by SSTA. Trips can be reserved 14 days in advance. Requests are taken as late as 4:00 p.m. the day before the ride, although SSTA also accepts requests on the same day if space is available. About half the trips under the ADA program are under subscription, so that about 30 call-in riders must be scheduled each day. The number of subscription trips could be higher, but CCTA has requested that SSTA maintain a maximum of 50 percent subscription rate. Computer assisted scheduling is utilized on the day prior to travel and after the trips are scheduled, riders are called and informed of the specific time they will be traveling. Riders may cancel reservations at any time.

During FY 2001, the expenses reimbursed by CCTA under the contract was \$254,758. The newly negotiated contract calls for CCTA to pay SSTA at a rate of \$22.50 per hour for the first 1,000 hours each month and \$19.50 for any additional hours. Passenger fares are deducted

from the invoices. SSTA estimates the cost per hour by recording the number of trips and estimating an average time per trip (40 minutes). SSTA is compensated for all hours of service including hours for cancelled and no-show trips.

Medicaid

SSTA also provides some of CCTA's Medicaid services transportation. SSTA expenses under the Medicaid program were \$165,796 in FY 2001.

Human Service Transportation

SSTA also provides transportation for human services agencies and has a number of S.5310 purchase of services arrangements. SSTA charges the agencies \$30.00 per hour for services. SSTA also contracts with the Town of Williston to provide paratransit to seniors and individuals with disabilities. The following agencies receive contracted transportation service from SSTA for paratransit, elderly, and/or Medicaid transportation assistance:

- ? Cathedral Square
- ? CCTA
- ? Committee on Temporary Shelter
- ? Champlain Senior Center
- ? Champlain Valley Agency on Aging (including meals and people)
- ? Champlain Vocational Services
- ? Fletcher Allen Health Care
- ? Milton Family Community Center.
- ? Visiting Nurses Association

SSTA also contracts with the Towns of Colchester, Richmond, and Williston to provide paratransit to seniors and individuals with disabilities.

Other Human Service Agencies Operating Transportation Services

It appears that SSTA provides most of the human service client transportation in the County. All of the agencies listed above rely exclusively on outside assistance for their

transportation needs, except for CCTA and some modest service by Champlain Vocational Services and Milton Family Community Center. Agencies that do not own or operate vehicles, as well as those who provide their own additional complimentary service were sent surveys that asked a variety of questions about their programs and how their clients accessed their program sites. Agency clients primarily depend upon SSTA service, but also utilize public transit and taxi transportation. Champlain Vocational Services and the Milton Family Community Center are the only two local human service agencies that transport passengers with agency owned vehicles. Champlain Vocation Services operates four vans all greater than five years old. They are not planning on replacing them after reaching their useful life since they do not want to be a “mass” transportation provider. The Milton Family Community Center has a 15 passenger van in which they primarily transport preschool children three days a week (Monday, Wednesday, and Friday).

Campus Area Transportation Management Association

CATMA is a joint project of the University of Vermont, Fletcher Allen Health Center, Champlain College, the American Red Cross, and the City of Burlington. CATMA was created to deal with parking and transportation issues on [the Hill](#). In 1992, CATMA was established as the formal association of these institutions to be a private, non-profit planning and management entity, with private and public sector participation.

In addition to planning, CATMA has coordinated a number of transportation demand management initiatives, including a rideshare program, staggered work and class scheduling, satellite parking lots, shuttle bus services, bike and walk incentives, and subsidies to CCTA among the member institutions. The CATMA Ridesharing program for student and staff provides information to individuals about carpool alternatives along with information on parking facilities, parking shuttles, and public transit. Like CCTA, CATMA offers a Guaranteed Ride Home program.

CATMA members provide shuttle bus service between their institutions and remote parking facilities as part of an integrated parking and infrastructure plan. Currently, the shuttles serve more than 1.7M riders each year with a combined fleet of 20 vehicles (including services provided by all CATMA members such as the University CATS system and the Fletcher Allen

Shuttles). The shuttle services are open to students, faculty, and staff. These shuttle services are being operated under contract with a private operator and some interface with CCTA routes.

CATMA and the City of Burlington also subsidize CCTA's College Street Shuttle Route. All CATMA members offer employers (and students) a CCTA bus pass/ticket subsidy of 50 percent.

University of Vermont, Campus Area Transportation System (CATS)

A member of CATMA, the University of Vermont also operates a seven day a week on-campus shuttle known as CATS. CATS services are free for UVM students, faculty, and visitors, and in general, services are only open to students and staff, but residents in the area can apply for a **AGood Neighbor** pass to use the CATS bus at night. CATS is owned by the University and operated by the University's Department of Transportation and Parking Services. The program utilizes nine vehicles that are accessible to persons with disabilities, five of which are needed to meet peak services.

CATS operates three shuttle services:

- ? **On campus route** - serves the UVM campus. Services are available from 7:25 a.m. - 12:20 a.m. on weekdays and 5:00 p.m. - 12:20 a.m. on weekends. Frequencies range from every nine minutes during peak times to 25 minutes during the off-peak.
- ? **Commuter route** - service between the Gutterson commuter parking lots (east of the UVM campus between East Avenue and Williston Road) and the UVM campus. Buses operate Monday through Friday from 7:15 a.m. – 12:20 a.m. while school is in session (after 3:30 p.m. the commuter services is provided by the on-campus route). Frequencies are every 17 minutes.
- ? **Off-campus route** - services connecting the UVM and Champlain College campuses with a variety of locations in downtown Burlington. This service operates hourly seven nights a week from 6:40 p.m. until 12:20 a.m., only while school is in session. The service does not begin until after CCTA service hours on the Old North End Loop (which the route duplicates to a great extent).

In addition, CATS operates paratransit services for persons with mobility impairments and charters and has a **ASafeRide** demand-responsive program (from 11:00 p.m. to 3:00 a.m.) which escorts students home at night. In the 1999/2000 school year, CATS carried 592,157

riders, 75 percent of which were provided on-campus. Only 16 percent of the trips were for the commuter parking shuttles and 1.5 percent were provided off-campus at night.

Commuter Rail

Until March 2003, the Champlain Flyer provided commuter rail service on the tracks of the Vermont Railway from Charlotte, via Shelburne, and South Burlington, and into Burlington. On weekdays, the service operated about eight round trips -- on hourly headways in the morning and afternoon/evening peak hours (6:00 a.m. - 9:30 a.m. and 3:00 p.m. - 7:00 p.m.). On Saturday and Sunday, the Flyer operated five round trips – two in the morning and three in the afternoon/evening.

At Union Station, passengers could transfer to the College Street Shuttle for distribution in downtown Burlington. The station is also linked to bicycle trails, the ferry system, and the intercity bus network. CCTA's free College Street Shuttle met every train at Union Station during the week and the University Mall/Airport route met the trains on the weekend. Direct connections were also possible from the South Burlington stations to other businesses via the South Burlington Business Shuttle, currently operated by Mountain Transit. Transfers from the train to CCTA buses were free.

Since the Champlain Flyer has been discontinued, commuter services from riders from Charlotte could use transit into Burlington by connecting with Route 6 in Shelburne. Planning for different commuter rail service between Union Station and Essex Junction is underway. CCMPO is conducting a feasibility study in this corridor. Planning is also underway for a demonstration commuter rail project from St. Albans to Essex Junction. Currently Amtrak provides rail passenger service from St. Albans to Washington, D.C. with the *Vermonter* daytime service stopping in Essex Junction to serve the Burlington area, but there is no passenger service between Essex Junction and Union Station in downtown Burlington. VTrans is planning to extend Amtrak rail service from Rutland to Burlington eventually.

Burlington Downtown Transit Center

This Burlington Downtown Transit Center is being designed as an intermodal terminal to be located on a lot adjacent to Union Station in Burlington, which is on Main and Battery Streets. The transportation terminal will permit CCTA to relocate its transfer function from Cherry Street to next to the train station. The train station serves the Charlotte-Burlington commuter rail, and potentially the proposed Essex Junction-Burlington commuter rail and Amtrak. It will also include linkages to regional bicycle trails, ferry connections, and pedestrian access to the downtown retail core -- as well as a 50-75 car parking garage.

The bus components of the Downtown Transit Center will be located adjacent to the actual Union Station building on the block bounded by Battery, Lake, Main, and College Streets. Connector services will be needed to link this facility to downtown, and these are anticipated to include the College Street Shuttle and a revised North/South Circulator, according to the Burlington Multimodal Transportation Center Final Report.

PRIVATE TRANSPORTATION IN THE AREA

Intercity Bus - Vermont Transit

Vermont Transit is a wholly-owned subsidiary of Greyhound Lines, Inc., based in Burlington. It operates the intercity bus station in Burlington, and offers the majority of the services. The station is currently located at 345 Pine Street in a temporary location; no move to a new location is anticipated in the short term. The station is served by the CCTA Lakeside Route in both directions. Vermont Transit buses also drop passengers at St. Michael's College and the University of Vermont.

The services operated by Vermont Transit and Greyhound Lines are intercity in nature, using high-deck over-the-road coaches (which are not wheelchair lift-equipped) with limited stops and schedules oriented to arrival times in distance major cities. Services are operated on three corridors from Burlington. One route operates from Burlington to Rutland via Route 7, where some schedules continue on Route 7 to Bennington, and then head west to Albany and connections to New York City. The other corridor from Rutland operates from Rutland to

Bellows Falls, with some schedules continuing to Springfield, Massachusetts and New York City, and others to Boston. There are three daily round-trips from Burlington to Rutland (Timetable 63). Southbound trips leave Burlington at 7:30 a.m., 11:00 a.m., and 4:30 p.m. Northbound trips arrive at 12:10 p.m., 5:00 p.m., and 9:20 p.m. There are flag stops (no scheduled time, customers must flag the bus down on the road) in Shelburne and Charlotte (at the junction of Routes 7 and F5), with a scheduled stop at Vergennes.

The second corridor is from Burlington to White River Junction, with buses continuing from there to Springfield/New York or to Boston. This service is operated as part of a Montreal-Burlington-Boston Route. There are eastbound departures from Burlington to White River Junction at 2:05 a.m., 8:15 a.m., 10:35 a.m., 2:30 p.m., and 6:20 p.m. Northbound arrivals in Burlington are at 5:45 a.m., 3:00 p.m., 6:55 p.m., 9:55 p.m., and 10:20 p.m.

The other portion of these routes is the service from Burlington to St. Albans and Montreal. It is operated as Greyhound Lines service, using through buses from Boston via Burlington. Departures to Montreal are at 6:00 a.m., 8:30 a.m., 3:20 p.m., 7:00 p.m., and 10:00 p.m. Arrivals from Montreal are at 2:00 a.m., 8:00 a.m., 10:30 a.m., 2:25 p.m., and 6:15 p.m.

As can be seen from the choice of stops and schedules, Vermont Transit has focused its service completely on intercity trip needs. These services are not useful for commuting to/from Burlington.

Taxis and Private Bus Operators

Private operators in the region represent potential resources to the community and potential contractors for service. Following is a review of the taxi and private bus operators in the County. We also identified two private bus companies, Mountain Transit and Matheiu Transit (of Westford), and a number of charter bus companies.

Everywhere Taxi of Vermont

Everywhere Taxi of Vermont is based in Burlington, but will take passengers anywhere that they request. The company owns two vehicles which are cell-phone equipped. Rates are

\$1.65 per mile for the first ten miles, and \$1.35 per mile after that. Everywhere Taxi contracts with the Special Olympics to provide transportation.

Adam's Taxi

No one was available at the office of Adam's Taxi in Richmond when the KFH Group called. The message on the answering machine gave another number that would go directly to the driver. This suggests that Adam's Taxi is a very small operation, with one phone-equipped vehicle.

Leo Cab/Yellow Cab

Leo Cab and Yellow Cab are two of several consolidated taxi companies operating out of a single address in Burlington. Nine radio-equipped vehicles serve most of Vermont as well as traveling into New York, New Hampshire, and even Canada. Within Burlington, fares follow the city-mandated zone system. The company contracts to provide transportation for schools and deliveries for businesses, but does not directly serve any human service agencies.

Winooski Taxi Service

Winooski Taxi Service, in Winooski, serves Chittenden and Franklin Counties. They have ten vehicles. Fares are determined based on a zone system. For example, as of early July, 2001, it cost \$5.25 to travel from Winooski to Burlington, but the representative said that rates would be going up before the end of the month. Winooski Taxi Service contracts with CCTA, Howard Community Service, and some other human service agencies.

AAA Taxi

Winooski-based AAA Taxi serves all of Vermont, and even makes trips to Montreal. The company has a single radio- or phone-equipped vehicle. Fares to the Burlington airport, at least, were determined to follow a strict metered rate schedule of \$1.65 per mile for the first ten

miles, and \$1.35 per mile thereafter. It is not known whether AAA Taxi contracts with any agencies.

Champ's Taxi

Champ's Taxi, based in Essex Junction, transports passengers throughout the New England area and further. Champ's has one vehicle, which is outfitted with both cell phone and radio. Fares, when calculated by distance, are roughly \$2.00 per mile, but the company also has other pricing systems, for example, zones. Champ's Taxi contracts with Medicaid as well as with several colleges.

Solo Taxi

Burlington-based Solo Taxi is a husband-and-wife operation that serves the Burlington airport, but also goes to any other destination, including Montreal, Boston, or Lake Placid. The single vehicle is phone-equipped. For metered airport service, there is a \$2.00 drop fee, and then rates are \$1.65 per mile for the first ten miles, and \$1.35 per mile after that, as with other taxis serving the Burlington airport. Solo Taxi does not contract because, for a small company, it is not worth the paperwork hassles to bill customers, etc.

Other Taxi Operators

Other taxi operators identified but not contacted include Ladue's Taxi in Essex Junction, and Morf Transit/Benways Taxi in Burlington.

Amtrak

Amtrak's "Vermont" runs from Washington., D.C. to St. Albans, Vermont with an intermediate stop at Essex Junction; the Essex Junction station is seven miles from downtown Burlington. As described under the commuter rail service, plans are being made to provide

commuter rail services between Essex Junction and downtown Burlington. The Vermonter operates one trip daily in each direction.