

Chapter 7

Costs and Funding

There are few, if any, recommendations in this Transit Development Plan that can move forward to implementation without additional funding. This chapter attempts to estimate the costs associated with operating the CCTA system in the future. The costs for individual route recommendations are not provided here, as these would be calculated in the process of detailed implementation planning.

Table 7-1 below presents an analysis of future system costs and ridership. The table assumes that funding and costs will increase 5% annually through 2015, and then 4% annually through 2020.

Three levels of expenditure are shown in the table for 2020 system costs. All of these are net of fare revenue, which is assumed at 23% of operating cost. The first column represents the cost to operate the system as it exists at the end of FY2010 (including the restructured US 2 and Williston service). The second column represents the cost to operate present routes, but at a higher level of service. This “build-out” level of service assumes the following:

- Regular line-haul routes will operate seven days per week, with 16 hours of service on weekdays (6:00 a.m. to 10:00 p.m.) and 15-minute headways during peak periods and 30-minute headways during the rest of the day.
- Weekday service as operated in FY2010 on these routes will be operated on Saturdays
- Saturday service as operated in FY2010 on these routes will be operated on Sundays
- The three LINK Express routes will operate 8 round-trips per day
- Special-purpose routes will continue to operate as they do today

Finally, the third column represents the cost to operate the full expanded system as presented in the TDP. This includes the build-out of existing services and all of the new bus routes. Net costs for ADA complementary paratransit are also included, under the assumption that demand for ADA trips will grow in proportion to fixed route ridership and the amount of service operated.

Future ridership is also shown on the table. Estimates for FY11-FY13 are based on an average growth rate of 3.9% per year—exclusive of major service increases or new routes—that CCTA has experienced since FY2001.

Table 7-1 Forecast of System Costs and Ridership

Year	Maintain Current System		Build-out of System		Expanded System	
	Net Cost	Riders	Net Cost	Riders	Net Cost	Riders
FY2011	\$ 8,510,000	2,596,000				
FY2012	\$ 8,936,000	2,698,000				
FY2013	\$ 9,383,000	2,804,000				
FY2020						
Steady State	\$ 12,586,000	3,670,000	\$ 18,533,000	5,321,000	\$ 31,000,000	8,698,000
FY2020						
Optimistic	\$ 12,586,000	9,175,000	\$ 18,533,000	13,505,000	\$ 31,000,000	21,505,000

Notes:

1. Federal funding and costs are assumed to increase 5% annually through 2015 and 4% annually from 2016 to 2020.
2. All costs shown are net of fare revenue, assumed to remain constant at 23% of costs.
3. “Maintain Current System” is operation of the system as it exists in June 2010; “Build-out” represents a higher level of service on existing routes; “Expanded” means full implementation of all TDP recommendations.
4. Net cost of ADA complementary paratransit is included in estimates, assuming that demand for ADA trips grows in proportion to fixed route service.
5. Ridership on the current system is projected to grow at 3.9% annually, based on the experience of ridership change since 2001, excluding new routes and major service increases.
6. The “steady state” scenario assumes no major changes in transportation prices or land use policy. The “optimistic” scenario assumes that gasoline will retail for \$10 per gallon in 2020 (more than triple the current price), that there will be an increase in parking fees of \$5 per day at all locations that are within CCTA’s service area, and that land use decisions are made to focus new development in transit priority corridors, and that the new development is designed in a way consistent with TOD/POD principles. See below for more discussion of this scenario.

Impact on Transit Mode Share

Table 7-1 demonstrates that significant monetary investments will need to be made just to maintain the current system, not to mention implementing recommendations of the TDP. By 2020, the cost to operate the current system will have increased by 50%. The “build-out” system cost will be more than double the 2010 system cost, and the “expanded” system will require a four-fold increase in funding.

While future ridership (as shown in Table 7-1) is an important figure, the statistic most relevant to measuring whether CCTA is achieving its mission is perhaps the percentage of trips in the region that is made on public transportation, also known as the transit mode share. In a growing economy, transit ridership may be increasing, but the transit mode share may actually be

dropping if overall travel is increasing at a faster pace. On the other hand, if transit mode share is increasing, then it is clear that the region is moving toward a more sustainable transportation system with less reliance on the private automobile.

There is no way to measure directly the transit mode share at any point in time, but it can be estimated using various data sources and assumptions. In 2000, the transit mode share was estimated to be 1.4% of all trips made within the six core communities of Chittenden County (Burlington, Essex, Shelburne, South Burlington, Williston, and Winooski).¹ By 2010, it is estimated that the transit mode share has increased to 2.4% based on the growth of CCTA ridership compared to overall traffic growth (calculated from VTrans and MPO traffic counts at nearly 130 locations in Chittenden County).²

Several factors will affect future transit mode share:

- **Transit service provided** – As CCTA increases its level of service and expands the system, more riders will be attracted.
- **Costs of automobile travel** – The two most obvious components of the cost of car use are the price of gasoline and the price of parking. To the extent that these rise relative to the cost of transit use (the fare), transit will become a more attractive option.
- **Land use and urban design** – Infill development and redevelopment according to TOD/POD principles (discussed in Chapter 5) will increase the market for public transportation.

It is important to note the rising automobile-related costs and TOD/POD will also promote the use of non-motorized travel modes. The mode share of bicycle and pedestrian transportation are not estimated here, but these would likely rise at least as fast as the mode share for public transportation.

There are two ways to consider the potential future transit mode share in the core of Chittenden County. Based on the experience of the past decade, we can extrapolate from the growth in mode share to calculate a year 2020 transit mode share. This extrapolation assumes that trends that occurred between 2000 and 2010 will continue at the same pace. These trends include the

¹ This figure is in line with data from the 2000 Census, which shows a transit worktrip mode share of 1.87% for these communities. The overall transit mode share would be expected to be below the worktrip mode share since transit vehicles tend to carry a preponderance of commuters.

² The method for calculating the transit mode share for all trips and worktrips is documented in a memorandum dated September 10, 2009. It involves using traffic count data, CCTA ridership data, and mode share estimates from the CCMPO regional model and the US Census Journey-to-Work data to create an index that can allow the mode share to be updated annually based on available traffic counts and ridership data.

expansion of CCTA service, investments in CCTA capital facilities, increases in the price of gasoline (which rose from about \$1.60 per gallon in 2000 to about \$2.80 in 2010), and increased residential and commercial development within transit-served areas. Using this assumption, the future transit mode share in 2020 would be about 4.2%.

Within the context of the TDP, it makes sense to consider the potential impacts of the recommended services and facilities. While the “extended trend” forecast assumes that much of the TDP would be implemented, we can explicitly forecast the impacts of the “build-out” and “expanded” scenarios described above. Because external factors, such as gasoline prices and development trends, play an important role in determining mode share, we need to make assumptions about those as well.

For the purpose of this calculation, the TDP will make “optimistic” assumptions about future prices and policy decisions, at least with respect to transit’s competitive position to the private automobile. Thus, it is assumed that gasoline will retail for \$10 per gallon in 2020 (more than triple the current price).³ It is also assumed that there will be an increase in parking fees of \$5 per day at all locations that are within CCTA’s service area. These two factors will make traveling by automobile much more expensive. Finally, it is assumed that land use decisions are made to focus new development in transit priority corridors, and that the new development is designed in a way consistent with TOD/POD principles.

Using a long-term cross price elasticity of 0.4 (from *Transit Price Elasticities and Cross-Elasticities*, by Todd Litman, VTPI, 2007), and CCTA’s experience with ridership at the Shelburne Road at Farrell Street stop, where a significant residential development was built over the past few years, the following figures were calculated for potential future transit mode shares (see Table 7-1 for corresponding cost and ridership figures):

- Under the “build-out” scenario with all of the “optimistic” policy and pricing assumptions, the 2020 transit mode share for the core of Chittenden County is forecast at 8.9%, more than double the “extended trend” forecast and nearly quadruple the current mode share. This 370% increase in mode share can be compared to 230% increase in net cost to operate the build-out scenario in 2020.
- Under the “expanded” scenario with the same assumptions, the 2020 transit mode share is forecast at 14.2%, more than triple the “extended trend” forecast and nearly six times the current mode share. This 590% increase in mode share can be compared to a 380% increase in net cost to operate the expanded scenario in 2020.

³ Between October 2006 and July 2008, the price of gasoline nearly doubled. The price of gasoline in 2020 is, of course, unknowable at this time, but a major price increase is not impossible. The purpose of the \$10 assumption is to choose a price that is at the upper bound of expectations to see what the impacts would be.

Funding

CCTA has achieved system growth since the 2002 SRPTP, but it has been limited by the available funding and there is general consensus within the community that the amount of service offered today is not meeting the transportation needs of the community. Perhaps the most severe constraint on system growth has been the inability of member municipalities to substantially increase their contributions toward CCTA operations. Local and state contributions are needed to match the federal funding that is used to pay for service. However, local government's primary source of funding is property taxes, and that revenue source faces both severe limits on how much can be collected and tremendous demands for its use.

The Chittenden County MPO and its partners have studied this question for many years. Six separate documents have been published since 1998 that have considered this subject, analyzed the options available, and made recommendations. These documents are summarized below.

Funding Alternatives Report, 1998.

This report was an outgrowth of the CCMPO's 1997 Long Range Transportation Plan, which called for the development of alternatives to the local property tax for funding public transportation. The report begins by noting that funding public transportation by a revenue source other than the local property tax had already been "an issue of local and regional concern for many years." After some background on CCTA funding and the local share, the report provides a survey of funding mechanisms from around the country. These include transportation user fees and non-user fees as well as broad-based taxes and allocations from the general fund. The specific funding sources include the following:

- Gasoline tax
- Sales tax
- Auto registration fees
- Auto purchase and use tax
- Toll revenue
- General Fund allocations
- Driver license fees
- Gambling/Lottery revenues
- Payroll tax
- Cigarette tax
- Mortgage recording fee
- Car/truck rental fees
- Alcohol tax
- Property tax
- Transit finance district
- Student transportation fees
- Transportation impact fees
- Transit advertising revenue
- Leasing of transit assets
- Leasing transit services
- Increase fares

The advantages and disadvantages of all of these strategies are described briefly in the report. It then proceeds to summarize a study of transit funding conducted by the State of Ohio in 1995

and develop a set of criteria for evaluating potential funding options, based on research by Ohio and Maryland. These criteria are shown in the following table:

CRITERION	DESCRIPTION
Produces sufficient and stable yields	Revenue generation will be sufficient to cover projected costs without resorting to other financing methods.
Public Acceptability	The alternative is shown to maximize public support and minimize opposition.
Political Feasibility	The relative ease at which the option can be legislatively approved; The level of acceptance of local elected officials.
Administrative simplicity	The ease and cost effectiveness of administering the alternative.
Equity	A demonstration that the alternative reflects peoples' ability to pay and does not unfairly burden lower income or fixed income citizens.
Flexibility	The alternative allows for investment across transportation modes and facilities.

From the long list of potential revenue sources shown above, the report then focused on five options and applied these criteria to each of them.

- **Increase the gas tax** – Adding one cent to the gas tax in Chittenden County would generate some \$600,000 (in 1998), but is considered to be politically challenging at best and raises equity issues.
- **Regional sales tax** – Adding one percent to the sales tax in Chittenden County (raising it from 5% to 6% at that time) would generate more than \$12 million, but it faces the same political and equity issues as the gas tax and it would face more competition from other public needs since it is further removed from transportation.
- **Auto/truck rental fees** – A 5% increase in rental fees would raise \$400,000 to \$650,000 in Chittenden County and is considered more politically feasible since much of the burden would fall on non-residents.
- **Student transportation fees** – Imposing a \$30 per semester fee on college students in Chittenden County would raise \$1 million, but it would also entail significant service changes to accommodate increased student demand. Note that since the report was written, CCTA has worked with local institutions to create the Unlimited Access program.
- **CCTA revenue enhancement initiatives** – These initiatives mainly involve increased advertising revenue.

After applying the criteria, the report concludes that the final three options should be the starting point for further explanation, but that the gas tax and the sales tax should not be taken off the table. The evaluation matrix from the report is shown below:

ALTERNATIVES	CRITERIA					
	Produces sufficient and stable yields	Public acceptability	Political feasibility	Administrative simplicity	Equity	Flexibility
<i>Gas Tax</i>	✓					✓
<i>Regional Sales Tax</i>	✓					✓
<i>Auto/Truck Rental Fees</i>		✓	✓		✓	✓
<i>Student Transportation Fees</i>	✓	✓	✓	✓		
<i>CCTA Revenue Enhancement Initiatives</i>		✓	✓	✓	✓	

Operational Analysis, System Plan, and Funding Alternatives for CCTA, 1999.

This report, prepared for CCMPO by a consultant, functioned as a miniature transit development plan, discussing existing services, performance, governance, needs, service concepts, and costs. The final section addresses the local funding issue. The report cites the 1998 Funding Study discussed above and estimates the amount of new funding that would be needed to implement the service increases recommended in the plan.

The primary recommendation made in this study is to increase the amount of state operating assistance that is provided to CCTA, as well as other transit agencies in Vermont. A portion of the state’s Transportation Fund should be earmarked for public transportation. If necessary, the gas tax should be increased statewide to help fund public transportation. The report notes that state support of CCTA (15% of operations at the time) is well below that of peer agencies in the northeast, which averaged 47%.

The report briefly mentions other funding options such as local sales taxes, local fuel taxes, local registration fees or local short-term vehicle rental fees, but essentially dismisses them as they would all require legislative action to permit a local option tax.

Chittenden County Transit Funding Report, 2002.

In 2001, the Vermont legislature commissioned a report on financing transit services in Chittenden County; a consultant completed this report in December 2002. According to the report, “the General Assembly recognized that public transit operations in Chittenden County are an integral component of a balanced intermodal transportation system. Further, it was recognized that the current practice of funding local contributions for transit operations through the local property tax, presently utilized to its maximum, is not a viable long-term source of revenue.”

The report actually had three separate goals:

- (1) Alternative, sustainable, regional revenue sources to replace the local property tax to support operating expenses for public transportation.
- (2) Improving the institutional relationships between public transportation providers in the region, which may include a proposal to integrate organizations or services, or both.
- (3) An intermodal public transportation system in the region that optimally serves the needs of the public at large, including human service agencies, economic development, commuters, tourists, and other visitors to the state.

After discussion of a regional, intermodal system, the report began its analysis of funding options. Drawing from the 1998 Funding Alternatives Report, this study identified the following criteria for a new funding source:

- Make sense from a regional perspective
 - able to be collected on regional basis
 - not negatively affect the region’s economy relative to rest of state (no border problems)
- Be able to produce the needed targeted local share for bus and paratransit – and be stable
- Be within the “taxing capacity” or tax levels of other states in New England
- Have public and political acceptability
- Be equitable to communities and taxpayers
- Be flexible as transit needs change.
- Ideally, be tied to the use of the automobile within the region.

The study then went on to discuss five options, though not the same five that were in the 1998 report.

- **Local dedicated sales tax** – Adding one percent to the sales tax in Chittenden County (raising it from 5% to 6% at that time). Advantages include sufficient revenue generation,

limited boundary issues, and ease of collection. Disadvantages include a disconnect from transportation and competition with other public needs such as education.

- **Sales tax on gas/motor fuels tax** – This tax was suggested as a percentage tax of the sales price, rather than a number of cents per gallon. Advantages include sufficient revenue generation, limited boundary issues, more local political support than a general sales tax, and a direct tie to automobile use. The only disadvantage identified was that a new mechanism for collection would be required and that money would pass through the state.
- **Regional short-term vehicle rental tax** – A 5% increase in the tax on car and truck rentals was estimated to raise about \$500,000 in Chittenden County. Advantages include ease of collection, no border problems, and greater political feasibility since much of the burden would fall on non-residents. Disadvantages include a lack of sufficient revenue, no direct tie to transportation use by county residents, and the fact that these rental fees had already been increased recently.
- **Annual vehicle registration fee** – Imposing a \$5 annual fee on top of the state fee would raise about \$650,000. Advantages include ease of collection and a direct tie to automobile use by county residents. The main disadvantage is that it generates insufficient revenue unless the fee is raised by such an amount as to make it politically infeasible.
- **Driver license fee** – Imposing a \$5 annual fee on top of the state fee would raise about \$630,000. Advantages include ease of collection and a direct tie to automobile use by county residents. Similar to registration fees, the main disadvantage is that it generates insufficient revenue unless the fee is raised by such an amount as to make it politically infeasible. Also, license fees had recently been raised.

The report concludes that a sales tax on motor fuels is the best option since it “has the advantage of generating enough revenue, being linked to transportation, being easier to collect than the gas tax on a regional basis, and increasing when gas prices go up (gas tax revenues generally decline as gas prices increase due to a reduction in sales).” A combination of two or three of the fee increases could also achieve the goal of replacing local property taxes as a source of funding, but none of these would be sufficient on its own.

Report of the Public Transportation Task Force to the CCMPO Board, 2004

Following the completion of the CCTA Short Range Transit Plan and the legislative study summarized above, the CCMPO convened a task force in April 2003 to move the recommendations in these documents to implementation. The task force conducted its work in 2004, with subcommittees devoted to funding and governance, and a series of community

meetings to solicit input from selectboards and other organizations. More than 50 meetings were held to gather initial ideas and then later to review and comment on task force recommendations.

Unfortunately, other than agreement that public transportation should not be financed by local property taxes, there was no consensus on an alternative funding source. For every supporter of a particular option, there was also a strong opponent of that option.

The task force created draft legislation that could be used to establish a regional public transportation district and give it authority to levy regional taxes. Seven types of taxes were identified:

- a) A five percent sales tax on motor vehicle fuel
- b) Short term rental car tax
- c) Vehicle registration tax
- d) Driver's license fee
- e) Vehicle excise tax
- f) Purchase and use tax
- g) Personal property tax on cars

The draft legislation also included a section on impact fees for public transportation, by which developers would contribute to fund that would support public transportation when new housing or commercial development occurs.

Ultimately, the task force recommended that another working group be established that would "help shape a policy plan that would limit the percentage of local property taxes required for match on certain routes."

CCMPO Policy Statement on Public Transportation, 2005.

In December 2005, the CCMPO Board issued a policy statement on the financing of public transportation.

Legislative action is needed to free CCTA from its funding constraints in order to meet the current and growing needs for public transportation service in Chittenden County. This can be achieved by either:

- Alternative methods to raise revenue locally/regionally and/or,
- By additional state funding of public transportation.

This policy statement reflects the conclusions of prior studies. All of these studies have considered various options, but have not settled on one particular option, though a sales tax on motor fuels was the preferred option in the 2002 legislative report. The alternative of increasing state funding was the conclusion of the 1999 plan.

CCMPO Blue Ribbon Commission on Innovative Finance, 2008.

In 2008, the CCMPO Board convened a five-member “Blue Ribbon Commission” (BRC) to “provide recommendations...regarding innovative finance strategies to advance the region’s transportation needs, including all modes...” Public transportation was just one of several topics addressed by the BRC. The Commission formed a working group on funding options which ultimately issued one recommendation:

A sustainable source of additional funding should be developed for regional transportation needs.

In conjunction with other recommendations regarding the formation of a Regional Transportation District, state law would be changed to allow a regional tax or user fee to be levied to fund projects in the Metropolitan Transportation Plan, and to support public transit. The BRC recommended that two dedicated funding sources be identified: one for public transportation and one for infrastructure development.

No specific type of tax or fee was identified, but the final report of the BRC did include a matrix that evaluated 17 types of funding sources. The sources were measured against six criteria including:

- Revenue adequacy/yield
- Stability/predictability
- Equity
- Ease of implementation
- Multimodal feasibility
- Relationship to economic efficiency

The results of this evaluation are shown on the next page in Table 6-2.

Other Regional and Local Funding Issues

Status of Colchester

The Town of Colchester currently receives transit service in the area of the town along Route 15 between Essex and Winooski, which is served by the Essex Junction route. The Essex Junction route connects three CCTA member municipalities, Burlington, Winooski, and Essex, and must travel through Colchester due to the configuration of Route 15, not because CCTA chooses to do so. Recognizing that they would receive service in this area whether or not the Town is a member of CCTA, Colchester elected not to join CCTA and has foregone the annual CCTA member assessment for over 30 years.

Table 6-2 Evaluation Matrix from Blue Ribbon Commission Report

Potential Funding Source	Revenue Adequacy / Yield	Stability / Predictability	Equity	Ease of Implement-ation	Multimodal Feasibility	Relationship to Economic Efficiency	Est. Annual Chit. Cty. Revenue (2008)	Assumptions/Calculation	State (S) or Regional (R) Implement-ation	Currently Authorized?
Gasoline Excise (per gallon) Tax	p	p	t	x	t	p	-\$1 million	1¢/gallon	S	State level only
Diesel Excise Tax	p	p	t	x	t	p	< \$0.5 million	1¢/gallon	S	State level only
Indexed Gasoline Excise Tax	t	t	p	x	t	p	~ \$1 million +	1¢/gallon + CPI	S	No
Motor Fuel Sales Tax	t	p	p	x	t	p	-\$3 million	1% on gas sales	S	No
Value Added Tax	x	t	t	t	t	p	Mid	Varies with industries covered	S/R	No
Registration Fee	x	t	t	x	p	t	\$1-2 million	\$5-\$10 per year on each reg vehicle	S/R	State level only
Personal Property Tax on Vehicles	x	x	t	t	t	t	\$9-10 million	\$5,000/vehicle x 1% tax	S/R	No
Vehicle Sales Tax	t	t	x	x	t	p	\$2-4 million	1% - 2% on each vehicle sold in CC	S/R	State level only
Tolling New Lanes / Facilities	x	t	x	p	p	x	Low-Mid	Minimal new highway lanes	S/R	No
VMT Fees	x	t	t	p	p	x	Mid-High	Significant VMT in CC	S/R	No
Local Option Sales Tax	x	x	t	x	x	p	\$10-20 million	1% on retail sales in CC	R	Yes w/restrictions
Impact Fees	t	t	x	x	t	t	Mid-High	Regionalized fees > municipal fees	R	Yes w/restrictions
Innovative Financing - Debt	x	x	t	p	x	t	Mid-High	Regionalized debt capacity > mun capacities	S/R	Yes w/restrictions
Public-Private Partnerships	x	t	x	p	t	x	Low-Mid	Few CC projects approp for PPPs	S/R	Yes w/restrictions
Payroll Tax	x	x	t	t	x	p	\$10-41 million	.25%-1% of total annual CC wages	S/R	No
Business Energy Tax Credit	t	t	x	t	x	x	Low-Mid	35% tax credit on eligible private spending	S	No
Special Assessment Districts	x	x	x	t	x	x	Mid-High	Similar to successful BID initiatives	R	?

KEY: x Excellent t Fair p Poor

The section of Colchester served by transit is dominated by large non-profit institutions, including Fanny Allen, Camp Johnson, and Saint Michael's College, as well as Fort Ethan Allen which includes a large amount of UVM student housing. From the Town's perspective, they do not receive a great deal of tax revenue from the institutions along Route 15, but those institutions generate the majority of transit demand for the transit service in this specific corridor. One option would be for Colchester to approach the institutions for initial payments to cover the cost of transit service along the Route 15 corridor.

Impacts on CMAQ Funding

New services in the CCTA service area are typically funded through a Congestion Mitigation/Air Quality (CMAQ) grant. These grants are three-year demonstration grants that provide 80% federal funding and require a 20% local match. During the three-year demonstration period, CCTA is responsible for the 20% local match and VTrans (using Federal Transit Administration money) provides the 80% federal funds. At the conclusion of the three-year demonstration period, VTrans has historically picked up the 80% cost of the route if the route has proven to be successful, and CCTA remains responsible for the 20% local match. This places a burden on VTrans to identify a source of the 80% funding.

If a regional funding source was available to CCTA, the burden on VTrans after the three-year demonstration period ends could be significantly reduced. For example after the conclusion of the three year demonstration project, VTrans share might be reduced to 40% of net cost rather than the current 80%. Additionally, CCTA would have a funding source that would be appropriate to support the 20% share of regional and inter-regional services, which might make more sense than attempting to create coalitions among very small municipalities along corridors. It may also avoid the regional equivalent of the Colchester syndrome (service without payment).

Another important consideration with regard to CMAQ funding is the possibility that Vermont will fall out of attainment of air quality standards as defined in the Clean Air Act. Because all parts of Vermont are currently "in attainment," the State has full discretion on how to allocate its CMAQ grant from the federal government. Thus, a portion of CMAQ is used for paving and other projects not directly related to congestion mitigation or air quality. If a portion of Vermont was no longer in attainment of standards (most likely Chittenden County where the heaviest traffic volumes are), the State would be forced to spend all of the money in the non-attainment area on projects that would help the area get back into attainment. While this could mean more money for public transportation in Chittenden County, there are other negative consequences of falling out of attainment (besides the negative health effects of poor air quality), and the current freedom to choose projects would be severely compromised.

Rather than risk falling into non-attainment, investments in public transportation now, using CMAQ and other funding, as a hedge against non-attainment, will both enhance the

sustainability of the transportation system in Chittenden County and preserve the freedom to use CMAQ funds statewide for the best available and most needed projects.

MPO Programming Discretion UPDATED TEXT COMING SOON!

Given the congestion, air quality, energy, and urban form concerns in Chittenden County, there seems to be a greater local appetite for new transit services than in other parts of the state. The market for transit service is also grossly different because of significant differences in population and employment densities as well as traffic volumes; productivity for transit in Chittenden County is much higher than in other markets in Vermont.

The CCMPO develops a Transportation Improvement Plan annually. This document is intended to program federal transportation projects for funding in our region. In actual fact, it is only one of three documents that must all be aligned in order for federal transportation dollars to flow to projects. The other two documents are the State AOT capital program and the State Budget. This three step process hinders the region's ability to advance new transit projects.

If the CCMPO were able to program a portion of its annual funding without approval via the capital program and the budget, more transit services as envisioned within this document would likely be implemented. At the least, the decision for road capacity growth or transit improvements would be made in the area that is most affected by those decisions.

Benefits of Public Transportation

The discussion of costs and benefits of public transportation usually focus on the financial costs of operation, the number of riders, fare revenue and other easily calculated values. The impacts of transit, however, go well beyond these types of figures. Several sections of this TDP have highlighted the role of public transportation in the economic vitality and future sustainability of Chittenden County. The mobility afforded to all residents and workers is also a critical benefit offered by CCTA. While these types of benefits are difficult to quantify, it is possible to place some numbers on the environmental benefits of public transportation.

In FY2009, the LINK Express commuter routes operated by CCTA carried over 117,000 passengers. With an average trip length of roughly 30 miles, this bus ridership represents over 3.5 million miles not driven in cars. These saved miles translate into 193,545 pounds of carbon monoxide, and 2,815,200 pounds of carbon dioxide not being emitted. Carbon monoxide is a poisonous gas that is one of the main air pollutants controlled by the Clean Air Act, and carbon dioxide is the primary gas causing global climate change. Of course, the buses that CCTA operates create emissions of these gases as well, but for the LINK routes, the net savings in carbon dioxide is over 1.2 million pounds. (Diesel engines emit very little carbon monoxide.)

Conclusion

It has been clear for many years that the current funding mechanism for public transportation is insufficient to support the expanded transit system that most Chittenden County residents believe is needed. Through expanded use of federal funds and diligent work at the local level to increase local contributions and membership, CCTA has managed to pursue its mission to the extent possible. However, the ambitious agenda in this TDP is impossible without a significant change in the funding structure. The imperatives of supporting economic vitality, reducing traffic congestion, improving air quality, mitigating the severity of climate change, and enhancing mobility for all citizens argue strongly for a much more robust public transportation system.

At the federal level, the imminent reauthorization of surface transportation funding for the next 5-6 years offers a major opportunity. SAFETEA-LU, the most recent federal law to provide transportation funding, lasted through FFY 2009, but was extended. It is not clear when Congress will pass a new reauthorization law, but there is a significant amount of work and lobbying going on.

At the state and regional level, it is clear that the recognition of the unsustainability of the current funding structure must be converted into action. There is no means of raising revenue that will be completely painless for all parties. Most economists and environmental scientists believe that increasing taxes on motor fuels is a necessary step toward curbing CO₂ emissions. One of the major barriers to this option is the lack of political support. Perhaps the multiple imperatives of lessening the burden on local property taxes, supporting public transportation and reducing carbon emissions will finally result in some action.