

BRIEFING PAPER
SUMMARY OF EXISTING TDM-RELATED REGULATORY CONDITIONS

Chittenden County TDM Education, Outreach, and Support Program

October 26, 2004
Updated February 21, 2005



FITZGERALD & HALLIDAY, INC.

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INTRODUCTION AND GENERAL FINDINGS

The successful implementation of Transportation Demand Management (TDM) programs in Chittenden County, Vermont will depend, to some degree, on the extent to which TDM strategies are incorporated into the land development process. Municipal planning documents and land use regulations can encourage TDM measures, such as use of transit and other trip-reduction activities (e.g. ride-sharing), through policies, standards, and incentives built into the development approval process. This briefing paper summarizes existing TDM-related policies and regulatory conditions found in local municipal development plans and zoning regulations for eight communities in Chittenden County. It also considers how the provisions of Act 250 impact the land development process relative to TDM measures locally.

The municipalities researched comprise the Burlington metropolitan area. They were selected for assessment by the Chittenden County Metropolitan Planning Organization (CCMPO) because they represent priority areas for implementation of TDM strategies. The policies and regulations identified include those that promote concentration of mixed-use, high density development in targeted growth areas, which tends to create economies of scale that make use of TDM strategies more achievable, and those targeted to reducing automobile dependence or, more specifically, the volume of one person/one vehicle trips. It is notable that each of the municipal comprehensive zoning regulations includes a statement that a key intent is to implement the policies for the community expressed in the municipal development plan. Consequently, the zoning regulations incorporate TDM policies found in those plans, by reference.

The community plans that were reviewed indicate that towns and cities in the County place a high value on alternate modes of travel. The plans of development all recognize the need to address growing traffic congestion in the area and each articulates how the burden of too much traffic can undermine efforts to create a distinct downtown or village center. Most of the plans advocate strengthening options for walking, bicycling, and using public transit. However, where TDM-related measures are specifically recognized, there is, with the exception of the City of Burlington, limited detail on how to implement them.

Six of the eight community zoning regulations reviewed had some provisions to minimize parking, create high-density mixed-use community centers, and promote walking and bicycling. Few, however, incorporate direct requirements to provide transit access in developments. In addition, none of the communities except Burlington provide for financial and/or site design incentives for developers to integrate TDM concepts, such as priority parking space for carpools or including transit-oriented developments in site design.

Burlington regulations provide for a fee-in-lieu of parking program that allows fees collected to go to capital expenditures for mass-transit.

SYNOPSIS OF OFFICIAL COMMUNITY PLANS AND REGULATIONS

CITY OF BURLINGTON

2001 Municipal Plan of Development

Burlington City Council, June 4, 2001

Stated policies and recommendations which relate to TDM in this plan include the following:

Community Development Principles

- Concentrate mixed-use, high density development within growth centers
- Lessen dependence on the automobile by offering a range of transportation choices

Land Use Policies

- Encourage mixed-use development patterns, at a variety of urban densities, that limit the demand for parking and unnecessary automobile trips and support public transportation

Transportation System Plan

The Transportation System Plan chapter of the Burlington city-wide development plan includes a discussion of TDM. (page V-10), particularly under the chapter sub-heading titled “Parking is a Transportation Problem.” This discussion observes that providing alternate modes for commuting and development of remote parking facilities are good options for providing both employees and visitors with affordable parking and access to the downtown. It also recommends evaluation of the creation of a Downtown Transportation Management Association (TMA) to “plan, coordinate, and manage parking resources among major employers downtown”. The TMA would be an agency that would also promote TDM programs and initiatives. In addition, this sub-section recommends that the Parking and Mass-Transit Capital Fund be made a more attractive option for developers in place of constructing more parking spaces downtown.

Two other sub-sections of this chapter discuss the importance of other modes of travel and public transportation options. The latter section notes that allowing higher residential density downtown and at points along the public transit route could help to increase use of public transportation. These sub-sections are followed by a paragraph specifically on transportation demand management. That sub-section reiterates the recommendation for creation of a TMA for the downtown area to “develop and administer a range of TDM initiatives and to manage parking access”.

Related recommendations of the Transportation Action Plan within this chapter include:

- Begin development of a multi-modal transportation program on Main and Battery Streets

- Expand commuter rail service to Winooski, Essex Junction, and possibly beyond
- Expand AMTRAK service along the eastern shore of Lake Champlain
- Improve incentives for development to utilize the Parking and Mass-Transit Fund as an alternative to on-site parking
- Continue to develop connections into Colchester for the Burlington Bike Path
- Actively advocate strategies to ensure Chittenden County transportation projects are consistent with the goal of limiting sprawl

Zoning Ordinance, Burlington

May, 2004

The following provisions consider TDM-related issues of high density development, mixed-use development, parking management, and use of a Parking and Mass Transit Capital Fund.

Section 3.1.5 Mixed Use Districts Established: This section establishes mixed-use districts, focused on a diversity of commercial uses but allowing residential uses as well.

Section 3.2.8 Institutional Core Overlay: This overlay is intended to allow for future growth in the college campuses in Burlington without further intrusion into surrounding residential neighborhoods. Provision (f) states no new outdoor surface parking spaces will be permitted in this overlay zone unless they replace other existing spaces.

Section 3.2.9 Trinity Campus Overlay: This overlay is intended to provide for future use of the Trinity campus. Provision (b) (3) states no new outdoor surface parking spaces will be permitted in this overlay zone unless they replace other existing spaces.

Section 3.4.1 Waterfront Core Official Map: This section establishes the boundaries of the Waterfront Core. It includes locations and dimensions of pedestrian easements, creating a waterfront pedestrian corridor.

Section 5.2.6 Exceptions to Maximum Density: This section provides for increases in the density of residential development for elderly housing in the Central Business District (CBD), and adaptive reuse of both residential and nonresidential structures in selected zones. Similarly, Section 14.1.15 provides for a density bonus for affordable (also called inclusionary) housing.

Section 6.1.11 Additional Review Criteria: CBD, CBD-T, and Waterfront Core Districts: This section articulates design criteria for developments in the referenced zones. Two of the design criteria emphasize the importance of pedestrian access and place it at a higher priority than vehicle access.

Section 10.1.19 Waivers: Under this provision, any of the parking requirements, both in terms of number and configuration of spaces, may be reduced or modified where the availability and projected use of alternate transportation modes can be demonstrated.

Section 10.3 Parking and Mass Transit Capital Fund: Under this provision, any development that would require more than 10 parking spaces in any of the five downtown zoning districts may have all or part of their required parking waived if the developer elects to make a contribution to the Parking and Mass Transit Capital Fund. Monies in this fund are set aside exclusively for the purposes of providing additional public parking spaces in the downtown or providing alternative transportation modes or facilities.

TOWN OF COLCHESTER

Colchester Master Plan

Colchester Planning Commission, 2002

It is notable that this plan emphasizes the value of completion of the circumferential highway to increase roadway capacity overall in the area and alleviate traffic congestion in Colchester. Thus, there is an emphasis on development as it relates to completion of this new limited access roadway. Stated policies which relate to TDM in this plan include the following:

Land Use Policies

- New residential development projects should be required to meet high standards for public improvements and to provide amenities to ensure safe and attractive neighborhoods including sidewalks. Designated target sidewalk locations are shown in the *Alternative Transportation Path Plan*, along with mapping for Class I bike paths throughout the Town.

Local Growth Centers Policy

- Local Growth Centers should be modeled upon the new urbanism which calls for higher density, compact, well integrated, mixed use development. These are to be the primary areas for new development in Colchester. Developers should be required to pay for the extension and upgrade of infrastructure required to support these densities and the amenities required to make these areas desirable and livable, including common parks, bike paths, walkways, and access to public transportation.

Public Transportation Policy (excerpted)

- The Town should continue to work with the CCTA (Chittenden County Transit Authority), CCMPO and Chittenden County Regional Planning Commission to assess the feasibility of expanding bus service to areas of Town not currently served.
- In anticipating increased demand and the eventual extension of bus service, development projects may be required to be designed to facilitate bus service even if the area is not currently on a bus route.
- The Town should support alternative sources to the local property tax for the funding of public transportation.
- Light-rail solutions should be explored to service growth centers where feasible. If light-rail mass transit solutions are proposed through Colchester, stations or stops within the Town should be encouraged.

- The Town supports ridesharing as a means of reducing traffic congestion and increasing efficiency in the use of land and energy resources.
- Bylaw revisions should be considered to allow reduced parking requirements where a business provides ridesharing incentives.
- The Town will work with the CCTA ridesharing program to promote ridesharing among Town employees, board members, and school employees.
- The development of commuter lots at appropriate locations will be encouraged by the Town and should be sited and designed to be compatible with their surroundings.

Town of Colchester, Vermont Zoning Regulations and Official Zoning Map

Adopted March, 1982 and Amended to March 16, 2004

A comprehensive update to the Colchester zoning regulations is currently underway. The following review is based on the current official regulations for Colchester. The following provisions consider TDM-related issues of high density development, mixed-use development, and travel by alternate modes.

Section 804 Design Guidelines: These design guidelines are established for uses in the General Development 3 District (GD-3). This district, as with all of the GD districts, is intended to provide areas for compact mixed-use developments. The GD-3 District is specifically intended for a mix of business and residential uses that complement each other. The design guidelines call for access for pedestrians and bicyclists.

Section 1504 Housing for the Elderly: This section provides for the granting of density bonuses if a given set of criteria are met. One of the criteria is that accommodations have been made for public or private transportation services.

Section 1818 Public Bus Shelters: This section allows for the placement of bus shelters within the street right-of-way.

Section 1829 Disabled Parking and Bicycle Parking: Bicycle parking or storage facilities are required by this section, at a ratio of one bicycle space for every 20 car spaces.

Section 2102 Permitted Uses with Special Required Conditions: This section is part of a set of requirements for development in the General Development 4 (GD-4) District. Any Planned Unit Development (PUD) in this district must include pedestrian access from the residential units to the commercial uses within the PUD and from parcels within ¼ mile of the PUD. Article 2102.3 (b) of this section sets out further detailed requirements for bicycle and pedestrian access in the GD-4 District.

TOWN OF ESSEX

2001 Town Plan, Essex, Vermont

Town of Essex, November, 2001

Stated policies and recommendations which relate to TDM in this plan include the following:

Vision Statement for Community Infrastructure (excerpted)

- The Circumferential Highway is critical to alleviating traffic congestion and making Essex more accessible. However, residents also want to control development along the highway and at its interchanges. Rather than widen Route 15 and other highways, residents prefer use of more efficient intersections, expanded bus service, and construction of sidewalks and multi-use trails.”

General Planning Goals (excerpted)

- The future will provide varied modes of transportation with automobile use balanced by increased availability of public transit, sidewalks and multi-use trails. Mixed-use development patterns and home-based employment may help reduce traffic congestion. Changes in travel patterns and more efficient intersection designs will avoid the need to widen existing highways. The Circumferential Highway will be completed allowing local streets to return to their primary function of providing access instead of through traffic.

Development will occur in growth centers in a compact manner as opposed to scattered development throughout the Town. Areas such as the Town Center will have a mix of commercial and residential development. Development form will be vertical, with taller buildings, as well as horizontal. These higher density areas will be accompanied by largely residential neighborhood growth centers. All the settled areas will have convenient access by non-motorized, multi-use trails to the surrounding open spaces, natural and recreational facilities as well as key developed areas such as schools, shopping and businesses.

Chapter 8: Transportation

- This chapter states that the primary transportation-related challenges facing the community are:
 1. To adequately fund the maintenance of existing roads, paths and trails
 2. To improve and increase the availability of alternative transportation modes such as paths, sidewalks, trails and public transportation; and
 3. To accommodate the regional traffic impacts through transportation improvements that do not significantly alter the character of the community.

Within this chapter is a sub-section on *Sidewalks/Bicycle Paths/Trails*. It notes that improving pedestrian access to the Susie Wilson Road area and the Essex Center,

Butler's Corners, and Lang Farm areas is a top priority for future path construction. In 2000, the Selectboard chartered a Trails Committee, which developed a list of paths for implementation.

- Within the sub-section of the Transportation chapter on goals, policies, and strategies, the following objectives and strategies were articulated to promote use of alternate modes of transportation:

Objective 2.4: Maintain commitments to existing public transit services.

Objective 2.5: Maintain a minimum acceptable level of service across the spectrum of transportation modes – vehicular, public transit, bicycle and pedestrian

Objective 3.3: Encourage a variety of public transportation alternatives

Strategy 3.3.2: Develop incentives to ride-share van pool or car pool.

Objective 3.4: Create a network of non-motorized, multi-use trails to connect residences to schools, work places, shopping centers and recreational areas.

Objective 4.3: Transit considerations shall be integrated in the land use planning and review process.

Chapter 11: Land Use and Development

Within this chapter are also a few TDM related objectives tied to specific planning subareas, including the following:

- Saxon Hill (excerpted)
 - Objective 3.1: Improved public transportation to this area should be encouraged to minimize land area needed for parking lots and to reduce traffic.
 - Objective 3.2: The developer should be encouraged to develop a transportation system management plan (TSM) which outlines a range of options to decrease vehicular trips to the park including:
 - a. Car pooling
 - b. Park and Ride facilities
 - c. Public transportation
 - d. Incentives for multiple occupant vehicle use
 - e. "Transit passes"
- Town Center goals also include incorporating a pedestrian/bikeway network and providing for alternative transportation systems.

Town of Essex Outside the Village of Essex Junction Official Zoning Regulations
Adopted February 7, 1972 and updated to August 25, 2003

The following provisions consider TDM-related issues of mixed-use development, traffic impacts, and travel by alternate modes.

Article VI: Center Road Residential District: One of the purposes of this district is to encourage a wide range of housing opportunities in areas served by public transportation

Article XIV Business Design Overlay Control District: The purpose of this overlay district is to create areas where specific design guidelines or controls would manage the character of development. Among the specific goals for the overlay district is “(D) Encouragement of Pedestrian Friendly Environment”. The strategy to serve this goal is to incorporate the construction of non-motorized, multi-use transportation infrastructure and facilities.

Articles XVII, XVIII, and XIX: These articles establish three separate mixed-use development zones. The common theme among them is a desire to promote a higher density of development in a mix of uses. The MXD-C district, which is based on predominantly commercial uses, includes a requirement that all development facilitate easy pedestrian and other non-automobile traffic.

Article XXV: General Regulations: This section sets out requirements for information to be included on a site plan. Subsection 25.1.2 (H) deals with review standards and traffic. It states that the Planning Commission may limit the traffic a site can generate if no on-site or off-site traffic mitigation is feasible.

Subsection 25.5.3 of Article XXV articulates additional parking requirements. Among these are possible requirements for bicycle parking (at the Planning Commission’s discretion).

VILLAGE OF ESSEX JUNCTION

Village of Essex Junction Comprehensive Plan

Essex Junction Planning Commission, October 2002

Chapter III - 3.The Planning Challenge: Towards 2007 and Beyond

This chapter lists the most important issues that the community is facing and which define priorities for Essex Junction for the future. Goals stated in this chapter include one to promote responsible growth and to protect and enhance important “sensitive” areas. This translates to objectives to:

- Develop a transportation system plan for the village center
- Redefine zoning to encourage a mix of multi-family and commercial uses in current commercial and multi-family zones

Chapter V: Comprehensive Plan Elements

This chapter details the existing conditions, goals, and objectives for specific topic areas in the comprehensive plan. The following sections of this chapter have TDM-related goals and objectives.

- **Business/Economic Development:** This section of the plan states that a detailed transportation plan should be developed for the village center. The goals of the study include to “keep destinations within the village center within walking distance” and to plan for transportation alternatives, including bike paths, transit, and sidewalks. Another goal is to work with the railroad companies to minimize conflicts among railways, traffic, and pedestrians.
- **Utilities/Facilities:** One goal stated in this section is to provide the town with the “best possible sidewalks for the purposes of pedestrian travel at the most reasonable cost.”
- **Transportation:** This section of this chapter in the plan notes that the primary transportation issue for Essex Junction is traffic management. This means increasing safety and reducing congestion. Relevant objectives to address this issue and which incorporate TDM concepts include:
 - To cooperate with adjoining communities to develop strategies to reduce traffic within the village and more specifically to locate commuter facilities close to, or within the village
 - To review all development proposals for inclusion of an effective network of sidewalks and bicycle access
 - To encourage transit and pedestrian access to all parking facilities
 - To develop policies to require bicycle parking be provided at all major activity centers (i.e. shopping centers)
 - To build more bicycle paths and create bicycle lanes
 - To increase use of transit through continued cooperation with CCTA, an increase in bus routes serving Essex Junction, and provision of bus bays and shelters on major streets.
 - To cooperate with the CCTA in implementing education programs on the benefits of using transit
- The plan includes a map that is the Village of Essex Junction’s Comprehensive Bike Path Plan.

Village of Essex Junction Land Development Code

Adopted September 1992 and amended to April, 2004

The following provisions consider TDM-related issues of mixed-use development, traffic impacts, and travel by alternate modes.

Section 601 Multifamily Residential (M-F1): Subsection G of this section establishes regulations for Planned Unit Developments (PUD) in this zone. The general review standards that the Zoning Commission will apply in assessing an application for a PUD include a

requirement that the development plan show the relationship of the proposed project to all transportation facilities including mass transit, walkways, and bike paths. This review standard is restated for all other zones where PUD is allowed.

Section 604: Village Center (VC): The regulations relative to this zone state that due to its unique characteristics, there are no minimum parking standards. Applicants may pay a fee in-lieu of providing parking in this zone. The funds are set aside for parking lot construction and improvement.

Section 703: Parking and Loading: Subsection K.2 of this section provides details on the Parking Lot Fund and establishes procedures for payments of fees in-lieu of parking. Subsection K.11 requires bicycle parking in association with any parking lot which is to have 15 or more automobile parking spaces. It also encourages bicycle access for all parking lots.

Section 724: Planned Residential Development: The provisions for Planned Residential Developments provide that the Zoning Commission may allow an increase in density where certain conditions are met. One of those conditions is the construction of bicycle paths which connect neighborhoods or which are in conformity with a village-wide bicycle plan.

TOWN OF SHELBURNE

Town of Shelburne Comprehensive Plan Shelburne Planning Commission, April 2004

The Shelburne comprehensive plan was developed as a two-volume report. Volume I provides background for the plan while Volume II details the goals and objectives for the town along with strategies to implement them.

- Information in Volume I on the town transportation system discusses public transportation and bicycle and pedestrian facilities briefly. It observes that Shelburne is keenly aware of the need for increased mobility in the community while not adversely impacting the environment. Public transportation is seen as one mechanism for providing that greater mobility. The *Transportation* chapter also states that Shelburne is actively working to develop more bicycle and pedestrian access. It notes that the Planning Commission asks developers to provide bicycle and pedestrian easements as part of subdivision proposals. The Neighborhood Paths Committee has been researching informal paths in Shelburne and exploring how these may be incorporated into a comprehensive trail system.
- Objectives and strategies that would encourage the use of TDM contained in Volume II of the Shelburne comprehensive plan include:
 - The town should work to implement the 1988 Shelburne Village Plan, which would create a mixed-use, pedestrian friendly, multiple use area. The Village Center should be the core growth area of the town.

- Improvements to the pedestrian network in the Village Center should be implemented as well as pedestrian connections to other key destinations in Shelburne
- Encourage clustered commercial development along the Route 7 corridor and ensure that any land development be designed and built to facilitate use of the road by pedestrians, bicyclists, and bus patrons
- Review and amend the development regulations/standards for the Route 7 corridor to require consideration of the potential traffic impacts of development. The regulations should require mitigation of adverse traffic impacts, including contributions towards development of alternate modes of travel.
- Adopt an impact fee ordinance to help the town offset the infrastructure costs of new development. This could be applied to transportation system improvements including enhancements to access by alternate modes
- New development should be required to assist in the provision of mass transit services and facilities
- The use of public transportation should be encouraged through support for expansion of the system, use of promotional materials, and informational events
- The town should cooperate with private and public agencies and firms in coordinating existing and planned mass transit services
- Encourage the coordination of bus service with passenger rail to provide a multi-modal transportation system
- Develop a comprehensive bicycle and pedestrian path plan and continue to implement the Neighborhood Paths Committee path plan through the capital budget. This includes road widenings to incorporate bicycle lanes.

Town of Shelburne Zoning By-laws

Adopted January, 1963 and amended to December 14, 1999

The Town of Shelburne zoning regulations do not include any provisions that encourage high density, mixed-use development or use of alternate modes of transportation. The regulations do acknowledge the issues of traffic congestion on Route 7. There are scattered provisions that strongly discourage any new developments that would be high traffic generators with sole access onto Route 7. Since the *Town of Shelburne Comprehensive Plan* was recently adopted, it can be expected that future zoning regulation amendments may incorporate the TDM related provisions called for in the plan.

CITY OF SOUTH BURLINGTON

South Burlington Comprehensive Plan

South Burlington City Council and Planning Commission, April 2001

Stated policies and recommendations which relate to TDM in this plan include the following:

Comprehensive Plan Goals - Land Use Distribution (excerpted)

- It is a goal of this City to encourage a land use pattern generally consisting of a higher density, compact urban core in the Dorset Street/Market Street area (i.e. proposed City Center), continued investment and growth in the City's existing developed corridors (i.e., Shelburne Road and Williston Road corridors), and generally decreasing densities and less intensive uses toward the more rural communities to the south and southeast.

City Center Recommendations

- This growth area is centered on the Dorset Street/Market Street area of the City. The area is intended to be the downtown or physical center of the City, "where people and visitors can live, work, and shop within a physically attractive, pedestrian friendly environment."
- Recommended actions for this area include (excerpted)
 - To promote a "critical mass" of activity with densities achieved through zoning
 - To require developers to provide necessary infrastructure, including sidewalks and public transit amenities, in return for increased densities.
 - To provide public street environments in which pedestrians, vehicles, and bicyclists co-exist safely

Transportation (excerpted)

- It is a goal of this City to improve and expand all modes of transportation including private automobile, public bus transit, air, rail, biking, walking, ridesharing and private sector involvement. Such expansion and improvement shall be consonant with equal access for all income levels and abilities, reasonable costs, orderly and continued economic growth, existing and proposed land use, the fixed supply of land, the increasing cost of energy, and other goals of this plan.
- Recommended actions in this section include:
 - The City should continue its membership in CCTA and work with the agency to continue and expand bus service throughout South Burlington
 - The City should encourage development along the Vermont Railway
 - Development proposals should include design features to accommodate bus service
 - The City and CCTA should explore improvements that would make Williston and Shelburne Roads more transit-friendly
- TDM is mentioned directly in one brief paragraph in this chapter. The paragraph states that the City should work with the private sector to explore opportunities to implement

TDM. Such TDM techniques should be considered as possible mitigation measures for potential adverse traffic impacts of development.

City of South Burlington Land Development Regulations

June 28, 2004

The following provisions consider TDM-related issues of mixed-use development, traffic impacts, and travel by alternate modes.

Section 5.08 Supplemental Standards for All Commercial Districts: This section expresses the intent for development in all of the City's commercial districts to make efficient use of land, promote mixed-uses, and provide shared parking and sidewalks. Parking requirements may be modified where residences are located within walking distance (1/4 mile) of commercial uses. This parking reduction provision is also restated as part of the industrial and airport zoning districts.

Section 8 Central District: This district was formed to promote the sustainability of the City center or downtown. It encourages a traditional town center pattern of development with a pedestrian-oriented circulation network. The Development Review Board may waive parking requirements in this district and may also accept fees in-lieu of parking. Parking requirement waivers can be provided where a proposed development includes the construction of mass transit stops.

Section 10.02 Traffic Overlay District: This section of the zoning regulations establishes a performance-based approach to traffic and access management for selected congested roadway corridors in South Burlington. Every proposed development in the overlay zone is assigned a traffic generation budget through a methodology detailed in the regulations. Consequently, where a development is proposed that would generate traffic in excess of its allowed budget, that budget may be adjusted when measures such as improved "pedestrian and/or transit access" are provided.

Section 11 Design Review Overlay District: This section of the regulations establishes areas within which the Design Review Board will evaluate the conformity of a proposed development with building design standards and will evaluate overall visual impact. There are three separate design districts created. In Design District 1, developments are required to conform to the City Center Streetscape Guidelines, which include providing a covered pedestrian promenade along Market Street to promote walking.

Article 13.09 Bus Shelters: This subsection of Article 13 provides that the Development Review Board may utilize its site plan review authority to regulate the location and design of bus shelters.

TOWN OF WILLISTON

2000 Williston Comprehensive Plan

The Williston Planning Commission, January 2001

Stated policies and recommendations which relate to TDM in this plan include the following:

Vision Statement (excerpted)

- The long-term vision for Williston is a compact and well-delineated area of development in the northwest quadrant of the Town, surrounded by low-density rural areas to the east and south. The Taft Corners intersection area serves as the Town's employment and commercial center. It is envisioned as a compact, mixed-use area, serving regional needs in Chittenden County, with residential uses close to commercial development. This center is intended to favor walking and to bring about a strong feeling of community.

Transportation Policy Statements (excerpted)

- The Town policy will be to take an integrated approach to transportation, including private automobile, public bus and other transit, bicycle, pedestrian, and other non-motorized modes. The Town will encourage pedestrian and bus travel by establishing compact development centers. Trail locations and rights-of-way for new public roadways and the alternative transportation path network will also be established.

Taft Corners Commercial Center Goals

- The general concept for this area is to create a Williston "downtown" immediately surrounding the Taft Corners intersection. It is intended that the density and diversity of uses in this commercial center facilitate, if not encourage, non-automobile travel. In general, non-automobile travel should be encouraged by facilitating public transit, by providing pedestrian and bicycle friendly walkways throughout the area, and by connecting to other parts of Town and neighboring communities.
- To accomplish these objectives, the Plan notes that the function of Routes 2 and 2A should change from their current status as primary carriers of local and regional through-traffic to carriers of local or destination-oriented traffic. "Traffic calming" measures, such as central raised medians and landscaping along the road corridor, are proposed. Construction of non-auto improvements, including transit routes, bicycle paths and sidewalks, should have priority over road widening.

The Village Goals

- A final key element in preserving the character of the Village is the emphasis on easily accessible pedestrian facilities and the "taming" of automobile traffic in the area. The Town will continue its efforts to provide a network of sidewalks and recreation paths that connect the various areas of the Village. In the center village area in particular, roads must be seen as accessible for both automobiles and pedestrians/cyclists.

Transportation Goals (excerpted)

- Town must encourage, promote and support alternatives to single occupancy automotive usage. Alternatives must be competitive in terms of both cost and convenience
- The Town, and the region, must take steps to shape transportation demands rather than accommodate them
- Transportation plans must include the expansion of multi-use paths, bikeways, greenways and sidewalk systems to connect neighborhoods and key locations within the Town and to connect to neighboring towns. This will promote all forms of pedestrian and non-motorized forms of transportation.

Future Transportation Network - Transit Improvements (excerpted)

- First, the Town should work aggressively with the Chittenden County Transportation Authority (CCTA) to establish viable transit options—at least to the Town’s major commercial areas
- The Town strongly supports the establishment of express bus service between Williston and major destinations in the region. This service should be associated with the planned park and ride facility to be located near Exit 12 of I-89
- Ultimately transit options should be extended to residential neighborhoods
- The Town must work with the CCTA and the Vermont Legislature to revise the process by which towns can join CCTA, so that the costs of joining are not prohibitive. As an alternative or supplement to CCTA, the Town should work with the School District to explore the possibility of using school buses to meet non-school transit needs
- The Town must require commercial developers to make provision for transit service as part of their subdivision or site plan approval
- The Town should work to make residential neighborhoods friendlier to potential transit service. Neighborhoods should be interconnected and have multiple entrances so that transit vehicles are not required to make inefficient trips down dead end streets
- The Town should encourage the School Board to continue its search for ways to make the school transit system as efficient as possible while reducing ride times and wait times for students

Town of Williston, Vermont Zoning Ordinance

Adopted July 26, 1990 and amended to May 17, 2004

The following provisions consider TDM-related issues of increased density, mixed-use development, traffic impacts, and travel by alternate modes.

Section 3.2.8 Transfer of Development Rights: This section of the regulations defines “transfer of development rights” (TDR). Subsequent subsections of the regulations for several of the zoning district sections allow for TDR. The TDR is a process where the right to develop land identified as prime open space may be transferred and sold for use on other property, in targeted locations. This increases density of development in the targeted growth areas and protects valued open space from development, thus reducing sprawl.

Section 3.8 Taft Corners District: This section establishes the Taft Corners District as the heart of Williston’s commercial center. The district is intended for a mix of uses “creating a

true multi-function downtown area”. The description of the district states that the density intended makes it conducive to the use of transit. Transit stops, including bus pull-offs, should be considered for any development site layout. Adequate provision must also be made for bicycle parking and pedestrian circulation. Finally, it notes that the district may be supported in part by remote parking in order to minimize automobile traffic. Specific design guidelines for this district, contained in Section 4.21.3, describe criteria for walking and bike paths.

Section 3.10: Mixed Use District: This district is intended to provide a transition from the downtown to the more rural residential area to the east. The regulations state that the Mixed Use District should be connected to the downtown area by narrow roads and pedestrian/bicycle paths to maintain a pedestrian scale environment.

Section 4.1.2 Special Provisions Applicable to the C-1C District: The C-1C District is a mixed-use district that is intended to provide a transition from the Taft Corners District to the more commercial auto-oriented area to the south. Site plan design requirements for this district include a statement that the applicant must work with the Town to provide transportation alternatives to private automobiles. In addition, public walkways must be created with development, and surface parking must not dominate the visual setting.

Section 4.11 Off-Street Parking: Subsection 4.11.2 of this section allows for reductions in the amount of required parking where “other operating conditions will result in lowered parking demand”.

TOWN OF WINOOSKI

Winooski, Vermont Municipal Development Plan

December 2002

Stated policies and recommendations which relate to TDM in this plan include the following:

Future Land Use Planned Action

- This plan calls for investigation of mixed-use redevelopment of several areas, to include shops, services and employment opportunities, in addition to residential uses.

Future Land Use/Transportation Interface Goal (excerpted)

- Provide safe, convenient, economic and energy efficient transportation systems that respect the integrity of the natural environment, including public transit options and paths for pedestrians and bicyclists. Sidewalks are provided throughout the community and are recommended where needed; bicycle lanes and paths are promoted in this plan. The community is a charter member of the Chittenden County Transit Authority. The City anticipates the arrival of commuter rail.

Alternative Transportation (excerpted)

- Winooski will continue to strengthen its existing alternative transportation systems and will work to develop a more extensive and broader range of alternative options. Winooski recognizes the benefits of transportation modes which help reduce automotive use.

Pedestrian passage is considered an essential component of the city's transportation network. Extension of the sidewalk system where needed has been requested by the City Council. Two short cuts across public property, which should be recognized as important, exist between North and Main Streets through the Highland Industrial Park, and between Main and George Streets through the Winooski School property. These, and other pedestrian ways, are acknowledged in the plan as links in Winooski's transportation chain and should be improved and preserved to the extent possible. The City of Winooski will seek funding for, and put in place, improved pedestrian crossings along major highways which traverse the community. It is the policy of the City of Winooski to improve pedestrian crossings and shorten distance of pedestrian crossings through reduction in the number of traveled lanes and in lane widths.

- A citywide system of bicycle ways is planned for commuting and recreational use. Winooski will seek funding through regional, state and federal authorities to design and construct the network. Winooski's proposed cycleway network is coordinated with bike routes in Colchester and Burlington as part of Chittenden County's Alternate Transportation Path Plan.
- Winooski will continue to support and encourage the use of the CCTA as a means of providing an alternative to private vehicles. Regular-rider/potential-rider surveys should be conducted to determine which sectors of the city require or can support additional service. Based on these surveys, the City plans to advocate for changes in service to reflect these needs.
- Winooski will lend support to the expansion of CCTA's regional service, to the extension of a commuter rail system, and to increased efforts to popularize the use of mass transit between the suburbs and the urban core. Winooski see the opportunity to utilize existing rail lines and to develop a public rail transportation system.

Winooski Zoning Ordinance

Adopted October 1981 and amended to February 2004

The Town of Winooski zoning regulations do not include any provisions that encourage high density, mixed-use development or alternate modes of transportation.

ACT 250 PROVISIONS

Act 250 is Vermont's Land Use and Development Law. The law creates a process for state-level review of relatively large-scale developments. Commercial or industrial development on more than 10 acres, residential development providing 10 or more housing units, and land subdivision of 10 or more lots must get an ACT 250 Permit. The permitting threshold for size and character of development or subdivision, however, varies depending on whether the subject community has zoning and whether the development is proposed in a "designated downtown" where higher density and/or mixed income housing and/or mixed-use development is an objective.

Act 250 created nine District Commissions with responsibility for considering permit applications in their geographic area. The commissions are charged with evaluating permit applications against 10 criteria, which must serve as the basis for their decisions. The criteria relate to environmental quality, natural resource conservation, scenic beauty, and orderly development at a scale that communities can absorb without unreasonable financial or community character burdens. The District 4 Commission has review responsibility for development applications under Act 250 in Chittenden County. Three of the 10 permit application evaluation criteria relate to TDM. These include *Criteria 5) Traffic*, *Criteria 9) Conformance with Capability and Development Plan*, and *Criteria 10) Local and Regional Plans*.

Criteria 5 is intended to promote roadway safety and minimize congestion, and can also address traffic on waterways, railways, airways, or other means of transportation. The Act 250 application forms include a requirement to demonstrate that the proposed project "will not cause unreasonable delays or unsafe conditions for users of existing pedestrian, bicycle, and/or public transportation facilities." The District Commission can consider all of the potential traffic impacts of a proposed development. The commission cannot deny an application based on this criterion alone, but can impose 'reasonable' conditions on a permit to address traffic concerns. These could include use of TDM measures to reduce traffic congestion.

Criteria 9 addresses public and private infrastructure capacity as it relates to orderly growth. It has 11 subsets or subcategories for evaluation. Of these, the following provide an opportunity to consider TDM as a means to minimize sprawl and impacts to public infrastructure:

- **Criteria 9(A) Impact of Growth:** The projected growth from a project, when added to other growth expected in the town or region, must not unduly impact the jurisdiction's financial capacity to provide services
- **Criteria 9(K) Development Affecting Public Investments:** A project must not adversely impact public investments such as schools, roads, or other facilities, including transit facilities that are located adjacent to the development. This means it cannot preclude access to transit.
- **Criteria 9(L) Rural Growth Areas:** Projects in what are designated as 'Rural Growth Areas' must be planned to "economize on the cost of roads, utilities, and land usage."

Criteria 10 requires projects to demonstrate that they conform to municipal and regional plans of development. In addition, projects must demonstrate that they do not conflict with local capital improvement plans.

Four recent ACT 250 permits for large developments in Chittenden County that included requirements for TDM measures as conditions of approval are summarized below:

- **IDX:** In February, 1999 this company was granted an ACT 250 permit for an office building with parking and a storage facility in South Burlington on Route 7. The conditions of approval of this permit included a requirement that IDX prepare and submit a final TDM Plan within six months of the issuance of the permit. In addition, IDX must submit an annual report to the District #4 Environmental Commission describing the status of the implementation of the TDM Plan. As part of the 'Findings of Fact' made part of the approval of the ACT 250 permit, it was stated that IDX committed to implementing recommendations of the traffic study for the project including a package of TDM measures that may include carpool/vanpool services, free bus passes, bike/pedestrian facilities, and flex-time.
- **Fletcher Allen Health Care Inc.:** In March 2001 this company was granted an amendment to its existing ACT 250 permit for expansion of the Medical Center Hospital of Vermont (MCHV) campus. Conditions of the amended permit include a requirement to work with CATMA to expand Fletcher Allen's participation in TDM programs for the MCHV campus. This must be accompanied by updated traffic studies every six months to monitor changes in traffic patterns and potential congestion problems.
- **University of Vermont (UVM):** The ongoing implementation of the master plan for the university has included more than ten individual projects. The university has an overall ACT 250 permit which has required numerous amendments in response to ongoing refinements in the construction of campus projects. In general, the amendments to the ACT 250 permit have required strategic locations for parking and expanded shuttle bus service.
- **Champlain College:** The ongoing development of the Champlain College campus has raised issues similar to those for UVM. TDM requirements of the college's ACT 250 permit have been similar to those required for UVM, including expanded shuttle bus service.

CONCLUSIONS

The community plans that were reviewed indicate that towns and cities in Chittenden County place a high value on alternate modes of travel. The plans also recognize the need to address growing traffic congestion in the area and each articulates how the burden of too much traffic can undermine efforts to create a distinct downtown or village center. Most of the plans

advocate strengthening options for walking, bicycling, and using public transit. However, TDM is not consistently considered as a means to reduce single-occupancy, non-automobile travel. Where TDM-related measures are recognized, with the exception of the City of Burlington, there is little detail on how to implement them.

Zoning provisions designed to minimize parking, address traffic congestion, create high-density mixed-use community centers, and promote walking and bicycling are common among the regulations reviewed. Few, however, incorporate direct requirements to provide transit access in developments or use other mechanisms for TDM to reduce total vehicle trips generated by development. In addition, none of the communities except Burlington provide for financial and/or site design incentives for developers to integrate TDM concepts, such as priority parking space for carpools or paying a fee in-lieu of parking which could then be used to develop more public transportation. This may be due to the fact that traditional zoning approaches have focused on trip generation and the physical development of the roadway system as a critical piece of any development proposal. It is a relatively new concept for both private developers and planning and zoning commissions to consider opportunities to reduce trip generation rather than accommodate it with more roadway capacity. It is noteworthy that Vermont municipalities are specifically given the authority to allow a trade-off of required parking spaces for employee use of transit through the state's enabling legislation for zoning (V.S.A. Title 24 Part 2, Chapter 81, Section 4407 (4)). This authority is not widely used by Chittenden County municipalities.

It is also notable that all of the comprehensive municipal plans reviewed are very current, being less than five years old. It often takes several years for zoning regulations to be updated to reflect the objectives in a comprehensive plan and implement some of the recommended strategies. It may well be that zoning updates planned for Chittenden County communities in the coming few years will include provisions that more directly and clearly require application of TDM as a traffic impact mitigation tool.

ADDENDUM

ZONING UPDATES

Since TDM Briefing Paper #1 was completed in October, 2004, four of the communities researched as part of that analysis have been working towards or have completed a comprehensive update to their zoning regulations. These include:

- Burlington - Draft completed of full set of by-laws revisions as of October, 2004
- Colchester - Complete update of zoning regulations adopted November 30, 2004
- Essex - Complete update of by-laws adopted December 20, 2004
- Winooski – Zoning ordinance update in process. Comments are being solicited on a first draft.

The Essex regulations for parking and access by alternate modes have not changed.

New items of particular note in the completed update of the Colchester regulations relative to TDM options include:

- The design requirements for several zones include a provision that transit stops should be considered as integral parts of the site configuration.
- Section 10.01 Off-Street Parking and Loading and Circulation: Subsection D.5: “Properties with a required number of parking spaces exceeding 250 spaces shall be classified large scale parking facilities. New construction or any change to existing uses that requires additional parking on site will require the applicant employ parking mitigation to reduce the number of surface parking spaces. Qualifying parking mitigation shall include but not be limited to: structured parking, parking shuttles, employee carpool plans, incentives for employees to use alternative transportation such as bicycles, a mass transportation plan for employees such as purchasing bus or train passes for employees, telecommuting plans for employees, shared parking, and other similar plans.”