



# **Fiscal Year 2013**

## **ANNUAL WORK PLAN**

*(Unified Planning Work Program - UPWP)*

Chittenden County  
Regional Planning Commission

July 1, 2012 – June 30, 2013

*Mid-Year Adjustment*  
*As Approved by the Board of Directors*

*01/16/13*



CHITTENDEN COUNTY RPC  
*Communities Planning Together*

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Appendix A – CCRPC Budget Summary

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# Introduction and Purpose of the UPWP

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This document, the *Fiscal Year 2013 Annual Work Plan (Unified Planning Work Program)* (FY 2013 UPWP) defines the regionally agreed upon transportation and land use planning priorities and the roles and responsibilities of various participants in the planning process for Chittenden County. The work elements described are to be accomplished during the period between July 1, 2012 and June 30, 2013. The following sections provide an overview of the Chittenden County Regional Planning Commission (CCRPC) and describe how all of the municipalities, agencies, partners, stakeholders and other interests involved in the activities of CCRPC work together in a comprehensive, continuing, and cooperative process to meet critical transportation and land use needs of Chittenden County.

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## *Introduction to Transportation Planning*

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Each fiscal year (July 1 to June 30), the CCRPC prepares a Unified Planning Work Program (UPWP), which guides the CCRPC and summarizes transportation and land use planning activities and priorities for the member municipalities in Chittenden County. It shows who will do planning studies, when the work will be completed, and what the final products and benefits will be. The UPWP also serves as a management tool, a program budget and includes anticipated financial resources and expenditure information for the fiscal year covered.

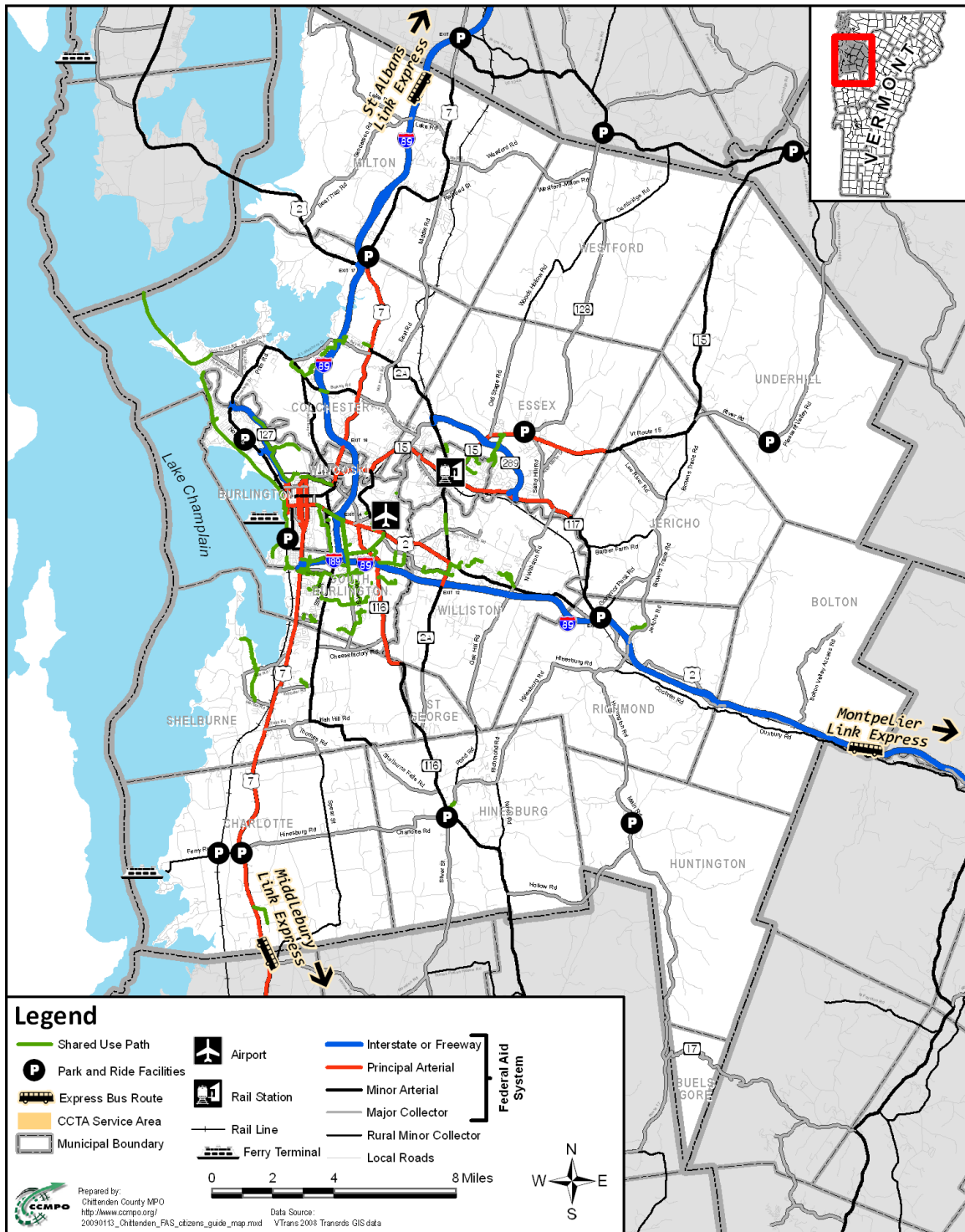
The process for developing the annual UPWP includes a careful consideration of critical transportation and land use issues facing the region and the analytical capabilities necessary to address them. This assessment is tied to the Regional Plan and Metropolitan Transportation Plan (MTP) goals established in the *2025 Metropolitan Transportation Plan*. Opportunities for public comment on the draft UPWP are typically available between January and May of each year, with a final public hearing in May prior to Board adoption of the document. This year the CCRPC held a public forum on January 18 to gather ideas and concerns from the public to assist in the development of this UPWP. Board adoption typically occurs in May.

In an effort to better link the work of the UPWP with the goals of the Regional Plan and 2025 MTP, this work plan is developed to focus the work plan elements on these goals. The purpose of the document is to provide the organization's work plan in a format that is more accountable to our long range goals.

### **Metropolitan Planning Area**

The CCRPC metropolitan planning area consists of the 18 Chittenden County municipalities, as shown on the map on the next page. In the year 2010, the population of the County was 156,545. The land area is 539 square miles. Chittenden County is currently defined as being in "attainment" for air quality under the Clean Air Act Amendments of 1990 (CAAA). Figure 1.1 shows the transportation facilities for which CCRPC has some responsibility.

# Chittenden County Transportation System



## Key Products of the Transportation Planning Process

SAFETEA-LU and its implementing regulations require that the CCRPC transportation planning process produce and manage the implementation of three principal products, all of which must be updated regularly:

- The Unified Planning Work Plan (UPWP);
- The Chittenden County Metropolitan Transportation Plan (MTP); and
- The Chittenden County Transportation Improvement Program (TIP).

CCRPC is also responsible to its membership and provides technical and planning assistance to the municipalities within the county and to the Vermont Agency of Transportation (VTrans).

## Metropolitan Transportation Plan

Federal law and regulations require that metropolitan areas such as Chittenden County develop and periodically revise and update a Metropolitan Transportation Plan (MTP). The MTP must have a minimum 20-year time horizon and consider needs and issues across all transportation modes. It must tie the plan for transportation investments to a clear statement of regional goals and priorities. Federal law also requires the MTP to address eight metropolitan planning factors to ensure the federal funds spent on the region's transportation system also address national level goals for transportation. The MTP must also be fiscally constrained, which means the projected capital and operating costs associated with all the transportation projects and programmatic actions in the MTP cannot exceed the projected level of financial resources available during the life cycle of the MTP.

## 2025 Metropolitan Transportation Plan

The MTP must be updated on a maximum five-year cycle. The **2025 Metropolitan Transportation Plan** was adopted by the CCMPO Board on January 19, 2005. This plan lays out 12 regional transportation goals as noted below:

1. Preserve and improve the physical condition and operational performance of the existing transportation system.
2. Support local and regional comprehensive planning and reinforce sustainable land-use patterns and growth centers.
3. Create a transportation system that offers constantly improving safety, accessibility, flexibility, and comfort for all users, including the elderly, the disabled, and youth.
4. Establish a transportation system that minimizes the time and total cost of moving people and goods, thereby allowing the economy of the Region to thrive.
5. Protect and enhance the region's built and natural environments, including land, water, and air resources.

6. Improve the transportation system in a manner that builds community, increases the vitality of neighborhoods, and minimizes disturbance caused by noise, glare, and vibration.
7. Provide levels of access and mobility that ensure people and goods can get where they need to go, when they need to go there.
8. Consider ways to improve transportation system efficiency before increasing transportation capacity.
9. Establish a transportation system that uses diverse sources of power and maximizes energy efficiency and conservation.
10. Develop a transportation system that features a variety of travel modes and encourages the reduction of single occupant vehicle use.
11. Educate the public – from children to seniors – about the implications of different development patterns and mode choice decisions.
12. Provide improvements to transportation facilities and services expeditiously through an inclusive and cost effective process.

On January 20, 2010, the CCMPO amended the 2025 MTP to bring it into compliance with regulatory changes which arose with the passage of SAFETEA-LU. This amendment allows the CCMPO to continue working on a more comprehensive 2035 MTP update that integrates with work on CCRPC's regional sustainability planning efforts described below.

### **2035 Metropolitan Transportation Plan**

The CCRPC is coordinating 2035 MTP activity with the Chittenden County Regional Sustainability Plan, an effort funded through the federal department of Housing and Urban Development (HUD). The FY11 scenario planning elements of the 2035 MTP included an analysis of land use alternatives and will inform the beginning of the process to prepare the Regional Sustainability Plan. The CCRPC has adjusted the development schedule of the long range planning documents (the Regional Plan and MTP) in order to better coordinate work on the Regional Sustainability Plan. This will provide the opportunity for these two critical policy documents to be developed together and benefit from the comprehensive planning activity surrounding the Regional Sustainability Plan.

### **Transportation Improvement Program**

The Transportation Improvement Program (TIP) implements the MTP through a prioritized and fiscally constrained four-year program of federally funded projects in Chittenden County. The TIP is updated on an annual basis and submitted for state and federal approval by the end of July. The TIP documents the anticipated timing and costs for transportation projects in Chittenden County from the planning through construction phases. Federal law requires the TIP to be fiscally constrained. In addition, documentation of private enterprise participation and financial capacity (as required for FTA Sections 3 and 9 programs) are included in the TIP. Projects in the

TIP must be prioritized and adhere to project selection criteria established by the CCRPC. Finally, the TIP development process must give the public ample opportunities to review and comment in a constructive manner prior to document finalization.

## **Transportation Funding**

The CCRPC receives funding for regional transportation planning from several sources, but there are two primary sources. Annually, the federal government, through the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA), provides about 80% of the CCRPC's funding. Under federal law these funds must generally be matched by the recipient at a ratio of 80% federal and 20% non-federal. A Memorandum of Understanding (MOU) between the CCRPC (formerly CCMPO), VTrans, the Chittenden County Transportation Authority (CCTA) and the Vermont Transportation Authority (VTA) includes guidance as to which agency provides the local match for various funding sources and work types. The responsibility for the non-federal matching funds for both FHWA and FTA funds is shared evenly between the CCRPC and VTrans at 10% each. CCTA provides 10% of funding passed through to them. For CCRPC, local jurisdictions are annually assessed for the CCRPC share of the 10% of the non-federal match. Occasionally, through mutually agreed arrangements, VTrans or the local governments may provide additional matching funds to leverage additional federal funds for certain specific planning purposes. Matching funds may also include the value of "in-kind" labor donated by volunteers and municipal staff in support of specific UPWP tasks.

### **Title VI, Environmental Justice, and Limited-English Proficiency (LEP):**

Planning must be done with the involvement and for the benefit of all the region's residents. The CCRPC is guided by federal Title VI (Civil Rights Act of 1964, As Amended) and environmental justice (EJ) mandates, and we strive to not only meet these mandates, but to create an overall transparent, inclusive planning process where Title VI, EJ, and LEP are integrated into all of our United States Department of Transportation (USDOT) federally funded programs and plans and is a guide for our public participation efforts.

Title VI of the Civil Rights Act of 1964, As Amended, states that "no person in the United States, shall, on the grounds of race, color, or national origin be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance." The Civil Rights Act of 1964, As Amended, has added sex (23 United States Code 324), age (Age Discrimination Act of 1975), and disability (Americans With Disabilities Act of 1990).

Federal Executive Order #12898 (*Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations*) defines environmental justice as, "*the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.*" President Clinton issued Executive Order 12898 on February 11, 1994, which reinforces the importance of fundamental rights and legal requirements contained in Title VI and the National Environmental Policy Act and introduces low-income populations as an emphasis area (when addressing socio-economic concerns). Fair treatment means that no group of people, including a racial, ethnic, or socioeconomic group, should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal

programs and policies. Recipients (such as Agency of Transportation, Metropolitan Planning Organizations, etc.) must identify EJ populations (EJ Mapping) and define a process to ensure that EJ populations participate in the Planning Process.

Federal Executive Order #13166 (*Improving Access to Services for Persons With Limited English Proficiency*) defines LEP as “ensuring that recipients of Federal financial assistance (recipients) provide meaningful access to their LEP applicants and beneficiaries.” Recipients must identify LEP populations (LEP Mapping) and define a process to allow for reasonable accommodation of LEP persons and populations in the Planning Process.

The CCRPC recognizes the importance of including all populations in our work and strives to meet the requirements outlined in legal statute for the benefit of all residents. More information on Title VI, EJ, and LEP is available in the 2008 Public Participation Plan.

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## ***Introduction to Land Use Planning***

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The CCRPC is one of Vermont’s 11 officially designated Regional Planning Commissions (RPCs). Each RPC was created by its member municipalities in 1966 and approved by the Vermont Agency of Commerce and Community Development specifically to undertake regional planning.

In Vermont, planning is performed collaboratively by the State, RPCs, and municipalities. Laws define how this collaboration is to work, specifying different responsibilities for each level of government. This means that the regional planning undertaken by each RPC is intended to be different from the planning undertaken by municipalities and the State.

Regional planning performed by RPCs is at an intermediate level between the most local planning performed by municipalities and the most general planning performed by the State. As a consequence, it makes sense that the regional planning responsibilities of RPCs are intended primarily to promote the coordination and collaboration of planning activities, both between each RPC’s member municipalities and between those municipalities and the State.

The State calls upon each RPC to fulfill the following duties:

- ✦ Promote the mutual cooperation of the RPC’s member municipalities and cooperate with neighboring states, regions, counties, and municipalities;
- ✦ Assist and advise municipalities in the preparation of plans, studies, and Bylaws regarding the appropriate development and use of the region’s physical and human resources;
- ✦ Prepare a regional plan at least every five years;
- ✦ Review proposed State capital expenditures for compatibility with the RPC’s regional plan and assist municipalities in assessing compatibility with municipal plans;
- ✦ Appear before District Environmental Commissions to aid in *Act-250* reviews of proposed developments and appear before the Public Service Board to aid in *Section-248* reviews of proposed utilities; and
- ✦ Confirm municipal planning programs and approve municipal plans.

In order to fulfill these responsibilities, the State empowers each RPC to exercise certain powers:

- ✦ Prepare studies, plans, and recommendations on a broad set of issues;
- ✦ Retain staff and consultant assistance, enter upon land with the prior approval of the owner to make examinations and surveys, hold public hearings, and require municipalities and the State to provide information;
- ✦ Carry out, with the cooperation of member municipalities, programs for the appropriate development and use of the region's physical and human resources; and
- ✦ Perform other acts or functions that the RPC deems to be necessary or appropriate.

## Acronyms

**3C's Process** A federally-mandated (via the Federal-Aid Highway Act of 1962) initiative, requiring a “Continuing, Cooperative, & Comprehensive” transportation planning process to be carried out by states, regions, and local communities.

**AA Alternatives Analysis** A study which explores the effect of a project on the overall transportation system. Information included in an AA are costs, benefits, and impacts of potential changes to the transportation system.

**AADT Annual Average Daily Traffic** A key statistical indicator for roadway counts (i.e. traffic volume), known as the ‘Annual Average Daily Traffic’, or AADT, has been developed to represent the average amount of vehicular traffic in both directions of travel, passing on a given point of road, over a 24-hour period, on a typical day (i.e. seasonally adjusted) of a specified year.

**AAP [Accepted Agricultural Practices](#)** The Accepted Agricultural Practices (AAPs) are required standards designed to reduce non-point source pollutant discharges through implementation of improved farming techniques.

**AARP [American Association of Retired Persons \(Formerly\)](#)** Established in 1958, AARP (formerly known as the American Association of Retired Persons, but is simply “AARP” today to reflect that membership is possible for non-retirees also) is a US-based non-governmental organization, non-profit, advocacy, and lobbying group for people age 50 and over.

**AASHTO [American Association of State Highway and Transportation Officials](#)** Publishes standards for transportation infrastructure for use throughout the U.S.

**ACCD [Agency of Commerce & Community Development](#)** The State agency that contains the departments of Economic Development, Tourism and Marketing, and Housing and Community Affairs.

**ACS [American Community Survey](#)** An ongoing nationwide survey that produces about U.S. population and housing. The ACS replaces the decennial census long form questionnaire (from the year 2000 and back), which collected this data every 10 years.

**ADA Americans with Disabilities Act** Federal legislation passed in 1990 that prohibits discrimination on the basis of disability.

**ADT [Average Daily Traffic](#)** The Average Daily Traffic (ADT) indicator of vehicular traffic flow (or bicycle & pedestrian traffic for that matter) is not a representation of the normally used “Annual Average Daily Traffic” (AADT). This is due to the lack of a full set of year-round data from which to develop seasonal coefficients necessary to calculate “AADT”. More accurately described, ADT is an estimate of general volume within the period of time counted only. For Bicycle & Pedestrian traffic counts obtained from infrared radiation sensor equipment, a common factor reducing the level of observation (i.e. undercounting) of data is lack of the pyroelectric sensor’s ability to detect adjacent-travelling bicyclists or pedestrians. In such case, it is good to do a simultaneous manual count for a few hours to verify the level of error.

**ADU Accessory Dwelling Unit** 24 VSA 4412 (1) (E): A dwelling unit that is located within or appurtenant to an owner-occupied single-family dwelling (an efficiency or one-bedroom apartment that is clearly subordinate to a single family dwelling and complies with the standards and conditions established by 24 VSA 4412 (1) (E) and (F)).

**AFF [American Factfinder](#)** An online application intended to assist the public in dissemination and reporting of Census data.

**AICP [American Institute of Certified Planners](#)** A non-compulsory planning certification recognized in the United States.

**AM [Access Management](#)** Techniques of Transportation infrastructure management intended to; reduce congestion and accident rates, lessen need for highway widening, conserve energy, and reduce pollution. Examples include; limiting entrance and exit of traffic on highways, use of medians and turn lanes, placement and timing of signals, as well as implementation of supportive local ordinances.

**ANR [Agency of Natural Resources](#)** A cabinet-level Vermont state agency that oversees environmental issues for the state and is responsible for SIP adoption (T3 VSA, Chapter 51).

**AO Administrative Officer** A person officially designated by a municipality to administer and enforce a bylaw. See 24 VSA 4448.

**APA [American Planning Association](#)** A nonprofit education and membership guild for professional planners.

**ARRA [American Recovery and Reinvestment Act of 2009](#)** A \$787 billion Recovery plan includes federal tax cuts and incentives, an expansion of unemployment benefits, and other spending on social entitlement programs. In addition, federal agencies are using Recovery funds to award contracts, grants, and loans around the country. The Recovery Act was intended to jumpstart the economy but many of the projects funded by Recovery money, especially those involving infrastructure improvements, are expected to contribute to economic growth for many years.

**ASFP [Association of State Floodplain Managers](#)** The Association of State Floodplain Managers is an organization of professionals involved in floodplain management, flood hazard mitigation, the National Flood Insurance Program, and flood preparedness, warning and recovery. ASFP has become a respected voice in floodplain management practice and policy in the United States because it represents the flood hazard specialists across many sectors and disciplines.

**ATMS [Advanced Traffic Management System](#)** ITS applications designed to enhance traffic movement usually along transportation corridors.

**ATR [Automatic Traffic Recorders](#)** A pneumatic triggered device, utilizing rubber tubes installed upon a roadway to count, classify, and record speed data. ATRs are the tool used to capture Total Vehicle volume (used to calculate AADT), truck & bus data, 85th percentile & 10 MPH pace speed data, et al.

**AVI [Automatic Vehicle Identification](#)** A type of ITS, AVI generally signifies the recognition and recording of motor vehicles, usually automobiles, as they pass through facilities for automatic collection of tolls, thus eliminating stops.

**BIA [Burlington International Airport](#)** Burlington International Airport is the preeminent Airport in the State of Vermont, located in South Burlington and owned by the City of Burlington.

**BMP [Best Management Practices](#)** The methods, measures, designs, performance standards, maintenance procedures, and other management practices intended to prevent or reduce adverse impacts.

**BRT [Bus Rapid Transit](#)** Fixed-route bus system operating on its own exclusive “Right of Way”.

**BTS [Bureau of Transportation Statistics](#)** The Bureau of Transportation Statistics (BTS) was established by the Intermodal Surface Transportation Efficiency Act of 1991. BTS administers federal transportation data collection, analysis, and reporting resources.

**CAAA [Clean Air Act Amendments of 1990](#)** Federal legislation that sets allowable levels, known as NAAQS, for various pollutants. Where these standards are not attained, officials must take specified actions within a mandatory time frame or face sanctions such as loss of federal highway funds.

**CATMA [Campus Area Transportation Management Association](#)** Organization formed by several institutions in Burlington's 'Hill Institutions' to jointly address localized transportation, commuter, and parking issues.

**CATS [Campus Area Transit System](#)** The University of Vermont's fare-free shuttle system serving the University community faculty, staff, students, and visitors. This system links all on-campus destinations and provides evening service to adjoining neighborhoods. Ridership during the school year averages 4,000 to 5,000 per day.

**CBD Central Business District** Often the geographic center or 'downtown' section of a city, town, or village, typifying a concentration of commercial, government, residential, and mixed-use buildings or development

**CCRPC [Chittenden County Regional Planning Commission](#)** Land use planning agency for Chittenden County, Vermont

**CCTA [Chittenden County Transportation Authority](#)** Operator of Chittenden County's regional bus system and rideshare services. Chartered in 1973 by the Vermont General Assembly, CCTA serves the communities of Burlington, Essex, South Burlington, Shelburne, Williston, Winooski and a portion of Colchester. There are also express route service to Montpelier, Middlebury, and St. Albans.

**CDBG [Community Development Block Grant](#)** A flexible federal program administered by the Department of Housing and Community Affairs that subsidizes a wide range of community development and economic development activities. Beginning in 1974, the CDBG program is one of the longest continuously run programs at HUD. The CDBG program provides annual grants on a formula basis to 1209 general units of local government and States.

**CDL Commercial Drivers' License** A CDL is required for those operating any type of vehicle with a Gross Vehicle Weight of 26,001 lbs. or greater (such as; tractor trailers, buses, and tow trucks).

**CE Categorical Exclusion** Federal and State regulations (see; NEPA) require environmental reviews to be performed before expenditure of public funds can be approved for "major projects." If a project does not meet the definition of "major project" then it may be eligible for what is called a Categorical Exclusion (CE). A CE is the absolute lowest level of environmental review possible for projects. For Vermont transportation projects, VTrans (The State DOT) is responsible for such designation.

**CEDS Comprehensive Economic Development Strategy** A special plan that documents an area's economic conditions and needs and proposes strategies and actions that is a condition of eligibility for participation in certain EDA programs. A strategy generally identifies infrastructure needs, timeframes, potential match funding sources, industries, and projects which will enhance economic benefit within a region.

**CIP Capital Improvement Program** A multi-year plan, which identifies equipment, infrastructure, property improvements, or other tangible purchases, as well as their schedule and financing strategies.

**CMAQ [Congestion Mitigation and Air Quality](#)** A program authorized by the 1991 ISTEA provided billions of dollars in funding for surface transportation and other projects that contribute to air quality improvements and reduce traffic congestion. The CMAQ program has been improved and reauthorized in all subsequent federal transportation re-authorization bills.

**CMP [Congestion Management Process](#)** Formerly known as a Congestion Management System (CMS), CMP is a federally-mandated program within Metropolitan Planning Organizations to address and manage congestion.

**CMS Congestion Management System** A systematic process for managing congestion and enhancing mobility through alternative transportation strategies and timely information to the traveling public.

**CSS Context-Sensitive Solutions** The process of CSS seeks to preserve aesthetics, historical context, and environmental resources in areas of proposed development, while maintaining efficiency and safety of the transportation system. It is a collaborative and interdisciplinary approach, involving a variety of stakeholders to develop facilities and infrastructure in harmony with their current physical setting.

**CSWD Chittenden Solid Waste District** Chittenden Solid Waste District

**CTA Chittenden Traffic Alert** A countywide and regularly updated listing of construction projects and special activities affecting transportation facilities throughout the region. Each Friday between April and November the CCMPO publishes Construction This Week in the Burlington Free Press to alert the traveling public to roadway work.

**CTC Continuous Traffic Counters** Operated by VTTrans, CTCs are permanently deployed traffic counters, which are capable of collecting traffic data for an entire year or longer.

**CWD Champlain Water District** Champlain Water District

**D&E Design & Engineering** Design & Engineering

**D-B Design-Build** Design-Build (D-B) is an efficient method to complete transportation projects, where designer engineers and construction contractors are brought together under a single contract. This contrasts to the traditional “Design-Bid-Build” (D-B-B) approach where two different contracting efforts must be undertaken in sequentially; 1. Obtaining engineering services on a negotiated-price basis, and 2. Obtaining construction services on the lowest-responsible-bid price basis.

**DCD Double-Crossover Diamond Interchange** See “Diverging Diamond Interchange”. The DCD is distinguished from the conventional diamond interchange in that it combines left-turning traffic with through traffic. This is accomplished by having both left-turn and through vehicles cross over to the opposite sides of the roadway at the ramp terminals.

**DEC Department of Environmental Conservation** The Vermont ANR department that administers most of ANR’s regulatory programs plus several voluntary pollution and waste reduction programs (including: air quality, environmental assistance, public facilities engineering, geology, environmental permits, solid waste, hazardous waste, surface water quality, water-shed planning, stormwater management, and drinking water supply).

**DHCA Department of Housing & Community Affairs** The Vermont agency that provides planning technical assistance and oversees housing and community development programs. See 3 VSA 2472

**DOT Department of Transportation** State agency responsible for coordination, operation, and safety of transportation facilities and services, including; highways, bridges, railroads, airports, etc.

**DPW Department of Public Works** Municipal entity responsible for repair and maintenance of streets, sewers, greenspace, and urban landscape. DPWs also designs and manage the construction of public facilities.

**DRB Development Review Board** Development Review Boards are quasi-judicial, citizen volunteer bodies created under Vermont Statute 24 VSA Chapter 117, intended to interpret and uphold zoning ordinances of their municipality. A municipality may create a DRB to consolidate the functions of a Zoning Board of Adjustment and the subdivision review functions of a Planning Commission (See 24 VSA 4460).

**DSS Decision-Support System** Computer assessment tool that examines the relationships between land use and transportation.

**DTA District Transportation Administrator** Administrative supervisor of regional transportation services or infrastructure.

**DU Dwelling Unit** One or more rooms, intended to be occupied by a household as separate living quarters containing cooking, sleeping, and sanitary facilities.

**EA Environmental Assessment** The purpose of an EA is to determine if there is sufficient evidence for a proposed project to require a more comprehensive Environmental Impact Study (EIS). Often an EA is a sufficient environmental document in itself when impacts of a project minor or can be mitigated.

**EAS [Essential Air Services](#)** Federal subsidy program for scheduled air services to rural communities

**ECOS [ECOS Project](#)** ECOS (standing for Environment. Community. Opportunity. Sustainability.) is the Chittenden County, Vermont Comprehensive Economic Development Strategy (CEDS). A CEDS is a regional strategy which reflects local economic development needs and priorities and recommends a regional approach to achieving sustainable economic development. A CEDS is a prerequisite for federal Economic Development Administration assistance.

**EDA [Economic Development Association](#)** The federal office responsible for the provision of federal economic development assistance to economically depressed areas, especially to areas of high unemployment.

**EIS Environmental Impact Statement** Document that studies all likely impacts resulting from major federally-assisted programs. Impacts include those on the natural environment, economy, society, and the built (existing) environment of historical and aesthetic significance.

**EJ Environmental Justice** The fair treatment of people of all races, cultures, and income with respect to the development, implementation, and enforcement of environmental laws, regulations, programs and policies.

**EPA [Environmental Protection Agency](#)** The federal regulatory agency responsible for administering and enforcing environmental laws, including the Clean Air Act.

**FAA [Federal Aviation Administration](#)** U.S. Department of Transportation agency responsible for aviation related programs.

**FAI Federal-Aid Interstate** Originally authorized by the Federal-Aid Highway Act of 1956, a system for the allocation of funds by formula was developed for Interstates, which was based the most heavily travelled routes of the Federal-Aid Primary system. The Federal-Aid Highway Act of 1973, which required the use of “Functional Highway Classification” to update and modify the Federal-aid highway systems by July 1, 1976 replaced this classification scheme.

**FAP Federal-Aid Primary** Originally authorized by the Federal-Aid Highway Act of 1944, a system for the allocation of funds by formula was developed based on area, population, and route miles. The Federal-Aid Primary system was considered the primary travelled roads. The Federal-Aid Highway Act of 1973, which required the use of “Functional Highway Classification” to update and modify the Federal-aid highway systems by July 1, 1976 replaced this classification scheme.

**FAR Floor Area Ratio** A measurement used to determine the building volume permitted on a particular lot that equals the floor area of all of the buildings on a lot divided by the total land area of the lot. For example, an FAR of 3.0 applied to a 20,000 square foot lot would permit a building with up to 60,000 square feet of floor area. The owner also could construct a building with up four 15,000 square foot floors, five 12,000 square foot floors, six 10,000 square foot floors, and so on. The community’s building height regulations would limit how tall the building could be.

**FARS [Fatality Analysis Reporting System](#)** FARS is a federal census of crashes involving any motor vehicle on a trafficway, but only in fatal crashes. It is generally considered to be the most reliable national crash database. A large truck is defined in the FARS as a truck with a gross vehicle weight rating (GVWR) of more than 10,000 pounds. A bus is defined in the FARS as a large motor vehicle used to carry more than 10 passengers, including school buses, inter-city buses, and transit buses. FARS is maintained by the National Highway Traffic Safety Administration (NHTSA).

**FAS [Federal-Aid System](#)** Defined in 23 United States Code 101(a) as highways on the Federal-aid highway systems and all other public roads not classified as local roads or rural minor collectors. In the context of “Functional Classification”, highways on the Federal-Aid System consist of; 1. A road in an Urban area that is at least an “Urban Collector” or higher (Functional Classes 1, 2, 6, & 7). 2. A road in a Rural area that is at least a Rural Major Collector or higher (Functional Classes 11, 12, 14, 16, & 17). Highways not on the Federal-Aid System consist of; “Urban Local Access”, “Rural Minor Collector”, & “Rural Local Access” (Functional Classes 19, 8, & 9 respectively).

**FAS Federal-Aid Secondary** Originally authorized by the Federal-Aid Highway Act of 1944, a system for the allocation of funds by formula was developed based on area, population, and route miles. The Federal-Aid Secondary system was considered the “Farm-to-Market” roads. The Federal-Aid Highway Act of 1973, which required the use of “Functional Highway Classification” to update and modify the Federal-aid highway systems by July 1, 1976 replaced this classification scheme.

**FAU Federal-Aid Urban** Those roads within Urbanized Areas (UA) that are designated upon the Federal-Aid System (FAS), and are functionally classed as; 11 (Urban Interstate), 12 (Urban Other Freeway or Expressway), 14 (Urban Other Principal Arterial), 16 (Urban Minor Arterial), or 17 (Urban Collector).

**FBC [Form-Based Code](#)** A departure from the 20th century standard planning practice of developing municipal zoning codes based upon separation of land use. Form-based codes (FBC) facilitate a compatible building environment for public spaces by using physical form as the primary criterion behind a municipality’s zoning code. According to the Form-Based Codes Institute (FBCI); ‘Form-based codes address the relationship between building facades and the public realm, the form and mass of buildings in relation to one another, and the scale and types of streets and blocks. The regulations and standards in form-based codes are presented in both words and clearly drawn diagrams and other visuals. They are keyed to a regulating plan that designates the appropriate form and scale (and therefore, character) of development, rather than only distinctions in land-use types.’

**FBO Fixed-Based Operator** Provider of aviation support services at airports, such as; fueling, line, paint, avionics, aircraft maintenance, hangar, catering, and other ground and/or logistical services.

**FC [Functional Classification](#)** A Federal Highway Administration road designation scheme for rural, small urban, and urbanized areas. Functional classification defines the role that any particular road or street should play in servicing the flow of trips through a highway network. Standards for highway classification were developed during 1969-1971 using criteria and procedures specified in the 1968 National Highway Functional Classification Study Manual. The scheme may be expressed as: 1 = Rural Interstate, 2 = Rural Principle Arterial, 6 = Rural Minor Arterial, 7 = Rural Major Collector, 8 = Rural Minor Collector, 9 = Rural Local Access, 11 = Urban Interstate, 12 = Urban Other Freeway or Expressway, 14 = Urban Other Principal Arterial, 16 = Urban Minor Arterial, 17 = Urban Collector, 19 = Urban Local Access.

**FHWA [Federal Highway Administration](#)** U.S. Department of Transportation agency responsible for highways. **FOGL Fog Line** Reflective white lines painted along the shoulder of a road demarking the legally extent a motor vehicle is allowed to operate.

**FONSI Finding of No Significant Impact** If a “Finding of No Significant Impact” is concluded from an Environmental Assessment, a full EIS would not be required for the project.

**FOV Field of View** Field of View

**FPR [Department of Forest Parks & Recreation](#)** The Vermont ANR department that operates the State Parks system, manages State forests and natural areas, and provides assistance in the areas of forestry, recreation, and conservation education.

**FRA [Federal Railroad Administration](#)** U.S. Department of Transportation agency responsible for railroad programs.

**FTA [Federal Transit Administration](#)** U.S. Department of Transportation agency that administers federal funding to support a variety of locally planned, constructed, and operated public transportation systems throughout the U.S., including buses, subways, light rail, commuter rail, streetcars, monorail, passenger ferry boats, inclined railways, and people movers.

**FWD [Department of Fish & Wildlife](#)** The Vermont ANR department that manages Vermont’s fisheries and wildlife resources, enforces the state’s hunting and fishing laws, and studies and inventories non-game wildlife species and natural communities.

**FY Fiscal Year** The Fiscal Year for the State of Vermont and the CCRPC’s is July 1-June 30, while the TIP and STIP follow the Federal Fiscal Year (FFY) of October 1- September 30.

**GARVEE Grant Anticipation Revenue Vehicles (Bonds)** GARVEE Bonds are funding mechanisms that enable governmental entities to finance infrastructure or transit projects based on anticipated future revenues, which are then used to repay outstanding debt. A state may use future federal-aid funding obligations to reimburse the retirement of principal loans, interest charges, issuance, insurance, and other associated costs related to the sale of eligible debt-financing instruments.

**GBIC [Greater Burlington Industrial Corporation](#)** The non-profit Regional Development Corporation that has the mission of attracting, retaining, and expanding environmentally sensitive, high-paying jobs in the Champlain Valley and initiating and supporting advocacy, education, and collaborative programs in promoting its vision.

**GDP [Gross Domestic Product](#)** GDP is a statistic estimating total market value of goods and services produced by labor and property in a given geographical area, within a given year. GDP replaces the Gross National Product (GNP) indicator as the primary measure of U.S. production in 1991.

**GHG [Greenhouse Gases](#)** Identified by the Intergovernmental Panel on Climate Change (IPCC), anthropogenic greenhouse gases are recognized by the international scientific community as having the potential to bring about climate change. Such gases include; Carbon Dioxide (CO<sub>2</sub>), Methane (CH<sub>4</sub>), Nitrous Oxide (NO<sub>x</sub>), Carbon Tetrafluoride, Hexafluoromethanem, Sulfur Hexafluoride, and others.

**GIS [Geographic Information Systems](#)** A software system which assists in the development, storage, analysis, and display of locational or spatial information.

**GPS Global Positioning System** A navigation system utilising satellites to provide a GPS-receiver on Earth with accurate coordinates.

**GVW Gross Vehicle Weight** Gross Vehicle Weight

**HAL [High Accident Location](#)** A location on the federal-aid highway system that has experienced a minimum of five accidents over a five-year period and has an Actual Rate to Critical Rate Ratio (ARCR) of 1 or greater. The list of HALs is maintained by the Vermont Agency of Transportation – Highway Research Section.

**HAWK High-Intensity Activated Crosswalk** A pedestrian-activated beacon located on the roadside and on mast arms over major approaches to an intersection. The HAWK head consists of two red lenses over a single yellow lens. It displays a red indication to drivers when activated, which creates a gap for pedestrians to use to cross a major roadway.

**HAZMAT Hazardous Material** Classified by the U.S. Environmental Protection Agency (EPA), transport of HAZMAT is regulated by the U.S. Department of Transportation.

**HCM Highway Capacity Manual** Published by the Transportation Research Board (TRB), the HCM outlines fundamental information and computational techniques on the quality of service and capacity of highway facilities.

**HOV High Occupancy Vehicle** Vehicle carrying two or more people (i.e. a carpool). Roads may have lanes solely for HOV use, such as carpools, vanpools, and buses.

**HPMS Highway Performance Monitoring System** A GIS-based national highway information system that includes data on the extent, condition, performance, use, and operating characteristics of US highways.

**HRRR High Risk Rural Roads Program** A federal safety and funding provision addressing the high fatality and incapacitating injury rate, which occurs on rural roads (nationally, about 60% occur on Rural Major & Minor Collectors, as well as Rural Local Access roads).

**HSIP Highway Safety Improvement Program** Federal program assisting states to achieve a significant reduction in traffic fatalities and serious injuries on all public roads through the implementation of infrastructure-related highway safety improvements.

**HSR High Speed Rail** Intercity passenger rail service that is reasonably expected to reach speeds of at least 110 miles per hour (49 U.S.C. 26105 (b)(4)).

**HTF Highway Trust Fund** A financing mechanism established under federal law to account for tax receipts (primarily from motor fuel taxes) collected by the federal government and dedicated to surface transportation projects.

**HU Housing Unit** One or more rooms, intended to be occupied by a household as separate living quarters containing cooking, sleeping, and sanitary facilities.

**HUD United States Department of Housing & Urban Development** U.S. Housing & Urban Development

**IF Innovative Finance** A broadly defined term that encompasses a combination of specially designed techniques to supplement traditional federal financing methods for transportation-related projects. Often in the form of “Public-Private Partnerships”, locally authorized “Tax-Increment Financing”, et al., Innovative Finance for transportation seeks to; 1. Maximize the ability of states and other project sponsors to leverage Federal capital for needed investment in the nation’s transportation system; 2. More effectively utilize existing funds; 3. Move projects into construction more quickly than under traditional financing mechanisms; and 4. Make possible major transportation investments that might not otherwise receive financing.

**IHS Interstate Highway System** A subsystem of the NHS, the Interstate Highway System is also named the “Dwight D. Eisenhower National System of Interstate and Defense Highways”. The concept of the IHS was first formally studied under mandate by the Federal-Aid Highway Act of 1938, and was first authorized construction funds under the Federal-Aid Highway Act of 1952. It was not until the enactment of the Federal-Aid Highway Act of 1956, championed by President Eisenhower, that the Highway Trust Fund was established to finance construction of the entire network for the purpose of facilitating private and commercial transportation, and providing transportation routes for military supplies and troop deployments in case of an emergency or foreign invasion.

**ISTEA Intermodal Surface Transportation Efficiency Act of 1991** The purpose of this act was to develop a ‘National Intermodal Transportation System that is economically efficient,

environmentally sound, provides the foundation for the Nation to compete in the global economy and will move people and goods in an energy efficient manner.’ This act established the provision that MPO’s undertake development of a Transportation Improvement Program (TIP), a long-range plan, and an annual work program. It also required for states; a statewide planning process, a statewide transportation plan, and a statewide transportation improvement program (STIP).

**ITE Institute of Transportation Engineers** Founded in 1930, the Institute of Transportation Engineers is an international educational and scientific association of transportation professionals who are responsible for meeting mobility and safety needs. ITE facilitates the application of technology and scientific principles to research, planning, functional design, implementation, operation, policy development and management for any mode of ground transportation. ITE further promotes professional development of its members, supports and encourages education, stimulates research, develops public awareness programs and serves as a conduit for the exchange of professional information.

**ITS Intelligent Transportation Systems** Technology used to improve the efficiency of transportation systems.

**JARC Job Access/Reverse Commute** Transit improvement plan designed to meet the work-related transportation needs of low-income residents.

**JIT Just-In-Time-Delivery** A method of inventory control where products are delivered to stores or assembly lines only when needed to minimize the high cost of maintaining local inventory and warehousing. The effects on freight demand are to; increase the number of individual shipments, decrease their length of haul and costs, and increase the reliability of on-time delivery.

**JTW Journey-To-Work Data** Worker/Commuter home-based work trip sample data collected by the U.S. Census Bureau within the long form since 1960.

**LBCS Land-Based Classification Standards** American Planning Association (APA) standardised model used to categorise land use based on its characteristics. Such characteristics are defined as; Activity, Function, Structure, Site Development Character, and Ownership Type.

**LCRCC Lake Champlain Regional Chamber of Commerce** Lake Champlain Regional Chamber of Commerce

**LEHD Longitudinal Employer-Household Dynamics** Longitudinal Employer-Household Dynamics (LEHD) is an innovative program within the U.S. Census Bureau using modern statistical and computing techniques to combine federal and state administrative data on employers and employees to derive their commuting patterns. The process generalizes datasets to protect the confidentiality of people and firms that provide information. This data is often useful in determining commuter-sheds in tandem with the Census Transportation Planning Package (CTPP).

**LEPC Local Emergency Planning Committee** A committee under the Chittenden County Regional Planning Commission (CCRPC), LEPC function is to provide resources and guidance to Chittenden County communities through education, coordination and assistance in hazmat planning, as well as to assure public health and safety.

**LESA Land Evaluation & Site Assessment** Developed by the Soil Conservation Service, a LESA establishes the process set out in 6 VSA 8 for the identification of agricultural lands.

**LOS Level of Service** A system of indicating delay at signalized intersections, which is graded on a letter scale from A to F, generally outlined by the HCM as: A ≤ 10 sec, B = 10-20 sec, C = 20-35 sec, D = 35-55 sec, E = 55-80 sec, F > 80sec.

**LRTP Long Range Transportation Plan** A long-range document required by federal law that identifies facilities and programs that should function as an integrated metropolitan

transportation system and includes a financial plan that demonstrates how the long-range plan can be implemented. Federal requirement for MPOs and Agencies of Transportation to undertake every five years and looks out 20-25 years.

**LTAP Local Transportation Assistance Program** Federally funded program to enable local governments to improve their roads and bridges by providing training and information.

**LTF Local Transportation Facilities** Also known as “Local Enhancements”, LTF is a Vermont Agency of Transportation (VTrans) program established to assist local governments with project implementation for; Bicycle and Pedestrian Facilities, Safe Routes to School Projects, Park-n-Rides, Scenic Byways and other “Local” Projects.

**LUAM Land Use Allocation Module** The Land Use Allocation Module (LUAM) has been used by CCMPO & CCRPC to forecast future land use patterns. The primary data inputs are; housing & employment by type of Traffic Analysis Zone (TAZ) in the model, physical constraints data, and zoning data.

**MCD Minor Civil Division** A U.S. Census Bureau designated Minor Civil Division (MCD) is a legally specified (by State law) county governmental or administrative subdivision (e.g. township, gore, grant, unincorporated place, et al.). There states where MCDs do not exist. In such case the Census Bureau, in cooperation with state and local officials, delineates county subdivisions known as Census County Divisions (CCD). In some situations, the Census Bureau must complete the coverage of subcounty units by creating additional entities called unorganized territories (UTs) that it treats as being statistically equivalent to MCDs.

**MJAHMP Multi-Jurisdictional All-Hazards Mitigation Plan** Hazard Mitigation is a sustained effort to permanently reduce or eliminate long-term risks to people and property from the effects of reasonably predictable hazards. The purposes of this plan are to: 1. Identify specific natural, technological and societal hazards that impact the communities of Chittenden County; 2. Prioritize hazards for mitigation planning; 3. Recommend regional level goals and strategies to reduce any losses from those hazards; and 4. Establish a coordinated process to implement the plan, taking advantage of a wide range of resources.

**MOU Memorandum of Understanding** A document providing specific duties and responsibilities to be assumed by two or more parties in pursuit of a project or goal.

**MOVES Motor Vehicle Emission Simulator** EPA’s Office of Transportation and Air Quality (OTAQ) is developing the “MOtor Vehicle Emission Simulator” (MOVES). The successor to MOBILE6, this more recent emission modeling system estimates emissions for on-road and nonroad mobile sources, covers a broader range of pollutants, and allows multiple scale analysis from fine-scale analysis to national inventory estimation. MOVES is planned to serve as the replacement for MOBILE6 and NONROAD for all official analyses associated with regulatory development, compliance with statutory requirements, and national/regional inventory projections.

**MPA Metropolitan Planning Area** A location designated by the Chittenden County Regional Plan that is recommended to be a regional or sub-regional center for jobs, housing and community facilities that have an urbanized character.

**MPG Municipal Planning Grant** The Municipal Planning Grant (MPG) program is a state-funded program (administered by the Department of Economic, Housing and Community Development) intended to support Vermont towns with; technical assistance for town planning, implementation of plans and ordinances, encouragement of citizen participation and education, and innovative demonstration planning projects. No matching funds are required for this program.

**MPO Metropolitan Planning Organization** Federally established organization responsible for a cooperative, continuous, and comprehensive framework to make transportation investment decisions within their designated area.

**MS4 Municipal Separate Stormwater Sewer System** Roads with drainage systems, municipal streets, catchbasins, curbs, gutters, ditches, man-made channels, or storm drains, which are owned by a public body and are designed to collect or convey stormwater. MS4 does not include infrastructure that is a combined sewer or part of a Publicly Owned Treatment Works (POTW) as defined by 40 CFR 122.2.

**MSA Metropolitan Statistical Area** Defined by the U.S. Office of Management and Budget, an MSA is a county or a group of contiguous counties that contain at least one city of 50,000 inhabitants or more, or 2) An urbanized area of at least 50,000 inhabitants and a total MSA population of at least 100,000 (75,000 in New England). The contiguous counties are included in an MSA if, according to certain criteria, they are essentially metropolitan in character and are socially and economically integrated with the central city. In New England, MSAs consist of towns and cities rather than counties.

**MTP [Metropolitan Transportation Plan](#)** A federally-mandated long-range plan for transportation development and investment based on the goals in the CCRPC Vision Statement.

**MTS Metropolitan Transportation System** The multimodal network of highways, arterial and collector roadways, transit services, rail lines, Burlington International Airport, and other intermodal facilities critical to the movement of people and goods in Chittenden County.

**MUTCD [Manual on Uniform Traffic Control Devices](#)** Published by Federal Highway Administration (FHWA), this manual defines the standards used by road managers nationwide to install and maintain traffic control devices (signage, pavement markings, traffic signals, etc.) on all streets and highways.

**NAAQS [National Ambient Air Quality Standards](#)** Clean Air Act standards for widespread pollutants from numerous and diverse sources considered harmful to public health and the environment.

**NADO [National Association of Development Organizations](#)** Formed in 1967, NADO is an advocacy organization for federal programs and policies, which promote regional strategies and address local economic development needs.

**NCHRP [National Cooperative Highway Research Program](#)** A research program of the Transportation Research Board (TRB) that develops near-term, practical solutions to problems facing transportation planning agencies.

**NECR [New England Central Railroad](#)** A privately operated railroad company.

**NEPA National Environmental Policy Act** Federal law requiring federal agencies to integrate environmental values into their decision making processes by considering the environmental impacts of their proposed actions and reasonable alternatives to those actions.

**NGV [Natural Gas Vehicle](#)** NGV's use Compressed Natural Gas (CNG)- composed of Methane, or a less common Liquefied Natural Gas (LNG) as a cleaner alternative to petroleum-based fossil fuels.

**NHI [National Highway Institute](#)** NHI is the training and education arm of the Federal Highway Administration (FHWA), established by Congress in 1970.

**NHS [National Highway System](#)** As of 2008, the NHS is comprised of about 160,000 miles (256,000 kilometers) of roadway important to the nation's economy, defense, and mobility. The National Highway System (NHS) includes the Interstate Highway System as well as other roads important to the nation's economy, defense, and mobility. The NHS was developed by the Department of Transportation (DOT) in cooperation with the states, local officials, and metropolitan planning organizations (MPOs).

**NHSP National Highway System Program** The program provides funding for improvements to rural and urban roads that are part of the NHS, including the Interstate System and designated connections to major intermodal terminals. Under certain circumstances, NHS funds may also be used to fund transit improvements in NHS corridors.

**NHTS [National Household Travel Survey](#)** The NHTS is national survey of daily and long-distance travel. The survey includes demographic characteristics of households, people, vehicles, and detailed information on daily and longer-distance travel for all purposes by all modes.

Survey data are collected from a sample of U.S. households and expanded to provide national estimates of trips and miles by travel mode, trip purpose, and a host of household characteristics. NHTS updates information gathered by two series of travel surveys the Nationwide Personal Transportation Survey (NPTS) conducted in 1969, 1977, 1983, 1990, and 1995 and the American Travel Survey (ATS) (covering U.S. Long-distance travel information), which was conducted in 1977 and 1995. The 2001-2002 NHTS combines questions about daily and long-distance trip-making characteristics in one survey. The seventh series of NHTS was undertaken in 2008-2009 to include approximately 150,000 households across the nation.

**NHTSA [National Highway Traffic Safety Administration](#)** NHTSA was established in 1970 by the Highway Safety Act of 1970. Its mission is to; “Save lives, prevent injuries and reduce economic costs due to road traffic crashes, through education, research, safety standards and enforcement activity.”

**NOI Notice of Intent** A notice informing the public that an Environmental Impact Statement will be undertaken for a project.

**NRB [Natural Resources Board](#)** The Natural Resources Board (NRB) was created by Act 115 of the Vermont General Assembly to succeed the Environmental and Water Resources Boards on February 1, 2005. The NRB is a nine member board which is divided into two panels, the Land Use Panel and the Water Resources Panel. Each panel has five members, including the NRB Chair.

**NTD [National Transit Database](#)** The NTD was established by Congress to be the nation’s primary source for information and statistics on the transit systems of the United States. Recipients or beneficiaries of grants from the Federal Transit Administration (FTA) are required by statute to submit data to the NTD. Over 660 transit providers in urbanized areas currently report to the NTD through the Internet-based reporting system. There are 634 data points that the Chittenden County Transportation Authority (CCTA) must report on annually for the NTD.

**O-D Origin/Destination Study** A study of where person or vehicle trips begin and end. Such a study may also include trip purposes and frequencies.

**OBDS [Official Business Directional Sign](#)** An official Vermont Agency of Transportation designated business directional sign, which includes a legal business name, logo, directional arrow, and mileage from the business. Black OBDS signs indicate businesses, where brown OBDS signs represent recreational areas (brown signs requiring FHWA approval to use). Towns are assessed an installation fee and an annual maintenance fee for each sign.

**P&R [Park & Ride Facility](#)** A parking lot designated by the state or a municipality for the purpose of commuter travel, allowing for a mode shift from automobile to transit or carpool. According to the 2004 CCMPO Park & Ride Prioritization Plan, there is a distinction between an “Intercept” (or “Satellite”) lot and a “Park & Ride” lot. A Park & Ride lot’s purpose is for car and vanpooling with potential for low frequency shuttle or transit service. It may serve multiple trip destinations. It is characterized by its suburban or rural location, a surface lot (v.s. parking structure), and low to medium capacity. The private car is the dominant method of trip collection and distribution. These facilities are implemented through public funding. The purpose of an “Intercept Lot” is to provide a less expensive parking alternative to on-site locations within

activity centers or the urban core area and reduce SOV use in activity centers. These facilities may capture outgoing as well as incoming activity center traffic and serve as a transfer point from car to shuttle or transit. Characteristics include an urban/activity area fringe location, high capacity, surface or structured parking, and high frequency shuttle/transit connections to activity centers. Implementation funding is likely to come from Congressional earmarks and/or public private ventures.

**PC Planning Commission** The official body that prepares a Comprehensive Plan. This Plan uses the term to mean the Chittenden County Regional Planning Commission. See 24 VSA 4341 to 4346. A municipal planning commission is authorized also to prepare bylaws and studies for adoption by the Legislative Body and to perform other functions. See 24 VSA 4321 to 4328, 4384, 4460, and 4463.

**PCI Pavement Condition Index** A rating from 0-100 (with a corresponding qualitative rating from 'Failed' to 'Good'), reflecting the condition or level of wear of pavement along a road segment.

**PD [Project Development Process](#)** Otherwise known as "Scoping", the Project Development life-cycle of a transportation project generally has several steps: 1. Local Concerns Meeting. 2. Data Collection. 3. Alternatives Development. 4. Alternatives Presentation Meeting. 5. Alternatives Selection. 6. Report Preparation. 7. Report Acceptance by the State DOT (i.e. VTrans) Project Definition Team (PDT).

**PDR Purchase of Development Rights** The acquisition of development rights by a municipality to carry out the purposes of Chapter 117. See 24 VSA 4431.

**PDT Project Definition Team** Comprised of various VTrans department heads who review transportation projects.

**PE Preliminary Engineering** Project development phase in which project design is determined.

**PEF Pedestrian Environmental Factor** In traffic modeling, the PEF identifies the pedestrian and bicycle-friendly parts of the transportation network.

**PFC Passenger Facility Charge** A surcharge added to the price of an airfare and used for capital improvements at airports.

**PHF Peak Hour Factor** PHF is used to evaluate roadway capacity. It is the ratio of of total hourly volume to the maximum 15 minute rate of flow within the hour, that is;  $PHF = \text{Hourly Volume} / \text{Peak Rate of Vehicle Flow (within the hour)}$ .

**PL Planning Funds** Funds intended for planning purposes only. Such funds are intended to be exclusive of design or engineering of transportation projects, as well as operations or right-of-way acquisitions. Planning funds may however, be used for project scoping.

**PPM Parts per Million** A measure of air pollutant concentrations.

**PPP Public-Private Partnerships** Contractual arrangements between government agencies and private-sector entities to finance transportation projects.

**PRD Planned Residential Development** A type of Planned Unit Development that provides for a mixture of housing types or densities and typically involves Cluster Development.

**PSAP Public Safety Answering Pont** A facility that receives emergency calls (such as E-911) and dispatches public safety services.

**PSB [Public Service Board](#)** The regulatory agency responsible for reviewing proposed utilities and their rights-of-way (the Section 248 process).

**PUD Planned Unit Development** 24 VSA 4303 (19): One or more lots, tracts, or parcels of land to be developed as a single entity, the plan for which may propose any authorized combination of density or intensity transfers or increases, as well as the mixing of land uses. The plan, as authorized, may deviate from bylaw requirements that are otherwise applicable to the area in which it is located with respect to lot size, bulk, or type of dwelling or building, use, density,

intensity, lot coverage, parking, required common open space, or other standards. See 24 VSA 4417.

**QAPP Quality Assurance Project Plan** A QAPP documents the planning, implementation, assessment procedures, and quality control activities for any particular project. It integrates all the technical and quality aspects of the project in order to provide a blueprint for obtaining the type and quality of environmental data needed for a specific decision or use. All work performed or funded by EPA that involves the acquisition of environmental data must have an approved QAPP.

**RFP Request for Proposal** A formal invitation to organizations to bid on a scope of work for an outlined project.

**RFQ Request for Qualifications** A formal invitation to organizations to submit their qualifications and merits to undertake a scope of work for an outlined project.

**ROD Record of Decision** A record of agreement that a proposed project meets all applicable requirements of an EIS. An ROD is issued by the designated lead agency in the study.

**ROW Right-of-Way** A pathway or road with a specific description (e.g. ‘Access and egress 22 feet wide from the centerline of Main Road in Huntington’). ROW may also entail rights to cross property to go to and from another parcel, to pass across another’s land, or right to cross without a specific description (e.g. a floating easement). Railroads own title to a right of way upon which to build permanent tracks.

**RPC [Regional Planning Commission](#)** Enabled by state law, RPCs assist communities within their region to develop local and invoke regional comprehensive land use, transportation and economic development plans which have regulatory recognition in Vermont Act 250 land use proceedings and state agency planning efforts.

**RSAR [Roadway Safety Audit Review](#)** A formal safety performance examination of a road or intersection by an multi-disciplinary team. An RSAR reports on potential safety concerns and investigates strategies to improve safety at the specified location. Issues that should be addressed in the report ought to include; 1. Aspects of a safety concern in or around the roadway, and 2. Opportunities to mitigate or eliminate identified safety concerns.

**RSMS Road Surface Management System** A program which assists local governments in identifying maintenance and repair strategies for roads.

**SAFETEA-LU [Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users](#)** On 10 August 2005, the new Federal surface transportation act (SAFETEA-LU) was signed into law, authorizing a \$286.4 billion transportation program for a 5-year period; FFY 2004-2009. This act covers all surface transportation programs, such as highways, highway safety, transit, freight, and transportation research.

**SCORP [State Comprehensive Outdoor Recreation Plan](#)** A comprehensive plan for outdoor recreation in each state is a requirement for receiving support from the Land and Water Conservation Fund (LWCF).

**SCS [Soil Conservation Service](#)** Soil Conservation Service

**SHSP [Strategic Highway Safety Plan](#)** Required by federal law (SAFETEA-LU, 2005), An SHSP identifies a State’s key safety needs, whilst guiding investment decisions to achieve significant reductions in highway fatalities and injuries on all public roads. The SHSP facilitates all State highway safety programs to work in concert to align all its resources to collectively address safety challenges on all its public roads.

**SIP State Implementation Plan** Clean Air Act plan which identifies how the state will attain and/or maintain NAAQS standards.

**SLUCM [Standard Land Use Coding Manual](#)** Developed by the Housing and Urban Development Agency in 1965, SLUCM was a predecessor to the more current LBCS (APA’s

Land-Based Classification Standards). The 1965 SLUCM provided a numeric coding schema using two, three, four, or more digits identifying land-use categories. An additional two to eight digits identified Ownership, Type of Structure an activity was housed, and Secondary Use Codes identifying additional land uses. SLUCM land uses categories were derived from Standard Industrial Classification (SIC) codes.

**SOV Single Occupancy Vehicle** Vehicle carrying only a driver.

**SPR State Planning and Research Funds** Funds intended for planning and research purposes. SPR funding requires that States allocate 2 percent of their apportionments received from federal programs (e.g. Interstate Maintenance, NHS, Surface Transportation, Highway Bridge, CMAQ, et al.) for State planning and research activities. From this 2 percent, States must then allocate 25 percent for research, development, and technology (RD&T).

**SRI [Substantial Regional Impact](#)** In the context of the State of Vermont planning practice, a proposed development has a Substantial Regional Impact (SRI) if a policy of this Regional Plan that is relevant to the determination of an issue in an Act 250 or Section 248 proceeding makes recommendations that are more specific about one or more characteristics, features, standards, or conditions relating to the proposed development than the recommendations of the municipal plan. SRI is an impact of Land Development that triggers the requirements of 24 VSA 4345a (16), (17), and 4348 (h). An SRI is not automatically in conflict with a regional plan. An SRI is not always an Adverse Impact. 24 VSA 4345a (17) requires each RPC to define SRI as the term is to be used with respect to its region in its Regional Plan. This Regional Plan discusses and defines SRI for Chittenden County at pages 1-14 to 1-18.

**SRTS [Safe Routes To School](#)** Mandated by federal law (SAFETEA-LU), “Safe Routes To School” is intended to benefit children in primary and middle schools (K-8) by encouraging them to walk and bike to school regularly, routinely, and safely. SR2S integrates elements of transportation, economics, health, physical activity, environmental awareness and safety.

**SSD Special Service District** A contiguous, designated area that receives a special type and/ or level of one or more public services or infra-structure that is paid for by a special tax levy on properties located in the area.

**SSTA [Special Services Transportation Agency](#)** Chittenden County non-profit organization providing paratransit services.

**STIP [Statewide Transportation Improvement Program](#)** The State’s four-year list of fiscally constrained transportation projects planned for implementation statewide.

**STP Surface Transportation Program** Federal program providing flexible funding for projects on any Federal-aid highway, including the NHS, bridge projects on any public road, transit capital projects, and bus facilities.

**STRAHNET Strategic Highway Network** A network of highways which are important for U.S. strategic defense policy and which provide defense access, continuity and emergency capabilities for defense purposes.

**TA [Technical Assistance](#)** The CCMPO technical assistance program provides technical support relating to transportation issues for member municipalities and agencies. Services typically provided through this program include: Traffic Counts, Speed Limit Recommendations, Traffic Signal Optimization, Traffic Control Warrant Analysis, Roadway Surface Management Studies, Small Area Transportation Studies, and Safety Studies.

**TAC Transportation Advisory Committee** A committee that recommends plans and programs to the CCMPO Board (formerly know as the Technical Advisory Committee).

**TAG Transportation Action Grant** A CCMPO sponsored competitive planning grant program designed to encourage innovative, action-oriented transportation planning initiatives in Chittenden County.

**TAZ Traffic Analysis Zone** Chittenden County is divided into 335 small areas. Each area has relatively similar characteristics within its boundaries. Often derived from Census Blocks, or Block Groups, TAZs represent land use data on housing and employment in the Travel Demand modeling process.

**TCSP [Transportation, Community and System Preservation Program](#)** Federal program that provides funding for planning grants, implementation grants, and research to investigate and address the relationships between transportation, community and system preservation.

**TDD Telecommunications Display Device** Apparatus that converts telephoned information to visual form on a computer screen. Useful to hearing or speech-impaired individuals.

**TDF Travel Demand Forecasting (Modelling)** A four-step (some consider it a five-step) process used to predict future traffic on a transportation network. The five steps, in order, are; 1. Trip Generation, 2. Trip Distribution, 3. Mode Split/Mode Choice, 4. Traffic Assignment, and 5. Model Validation and Reasonableness Checks.

**TDM [Transportation Demand Management](#)** Low-cost programs that focus on decreasing travel and the use of SOVs, and increasing the use of other modes.

**TDR Transferable Development Rights** A Bylaw that allows for development rights to be transferred from one or more designated sending areas to one or more designated receiving areas. See 24 VSA 4423.

**TE [Transportation Enhancement Program](#)** Federal funding program for projects designed to enhance transportation related quality of life. Such projects and programs generally relate to such activities as; Bicycle and pedestrian infrastructure and safety programs, Scenic and historic highway programs, Landscaping and scenic beautification, Historic preservation, and Environmental mitigation.

**TEA-21 [Transportation Equity Act for the 21st Century](#)** Enacted in July 1998, TEA-21 calls for integrating all modes of transportation – cars, trains, trucks, buses, ferries, walking and biking – into a single, efficient and ‘seamless’ transportation system. It mandates greater local control over transportation funding decisions through MPOs, such as the CCMPO.

**TIF Tax Increment Finance District** Locally designated area receiving targeted investments from increased property tax revenue.

**TIGER [TIGER Grants](#)** TIGER (standing for Transportation Investment Generating Economic Recovery) is a discretionary surface transportation grant program administered by the U.S. Department of Transportation.

**TIP [Transportation Improvement Program](#)** A list of federally funded projects planned for a four-year period and consistent with the goals of the MTP.

**TIS Traffic Impact Study** Also known as Traffic Impact Analysis (TIA), these are studies which collect and analyze information to determine need, impact, and impact mitigation for major roadway improvements. Some activities of a TIS include; Traffic counts, Crash evaluation, Capacity & Level Of Service calculation, Signal Warrant analysis, Development of condition diagrams, Forecasting future traffic volumes with new development and/or alternatives.

**TLC Transportation for Livable Communities** A CCMPO grant program that supports development that strengthens the link between transportation investments and community livability.

**TMA Transportation Management Association** A voluntary association of public organizations, private agencies, and businesses joined to develop cooperative transportation programs in a given area.

**TMA Transportation Management Area** An area designated by the US Secretary of Transportation, having an urbanized area population of over 200,000, or upon special request from the Governor and the MPO, or under special circumstances designated for the area.

**TMDL Total Maximum Daily Load** The sum of the individual wasteload allocations (WLAs) for point sources, load allocations (LAs) for nonpoint sources and natural background, and a margin of safety (MOS). TMDLs can be expressed in terms of mass per time, toxicity, or other appropriate measures that relate to a state's water quality standard.

**TOD Transit-Oriented Development** Mixed-use (residential, commercial, and industrial) development and zoning designed around commuter rail or bus facilities and infrastructure.

**TOD Transit-Oriented Design** High density and mixed use land development around transit system stops. TOD employs land-use, site design, and architectural principles that make it more conducive for transit (e.g., intersection designs to facilitate bus turning movements, bus pullout lanes, transit kiosks and shelters) and non-motorized travel (higher density, mixed uses within walking distances of each other, bike lanes, sidewalks, and streetscape features such as benches) and may include design features that are intended to restrict auto use (such as reduced off-street parking areas).

**TPI Transportation Planning Initiative** An effort by VTrans to ensure that the public plays a significant role in determining which transportation problems to be addressed and the scale of those improvements.

**TRB Transportation Research Board** TRB is one of six major divisions of the National Research Council, advising the President and Congress specifically on the development of transportation. TRB is a forum engaging engineers, scientists, and other transportation researchers and practitioners from the public, private, and academic sectors to promote progress and innovation through interdisciplinary research.

**TRD Transit-Ready Development** Similar to TOD, TRD prepares a neighbourhood, corridor, or area for future transit expansion with neighbourhood densities, road networks, pedestrian infrastructure, and public facilities designed as transit destinations.

**TSM Transportation Systems Management** Low-cost projects that focus on how the transportation system responds to people's needs. Most examples are in intersection and signal improvements, such as; signal timing optimization, controller/cabinet and signal head upgrades, vehicle detectors repair/replacement, turning lanes, grade separations, pavement striping, lane assignment changes, signage and lighting.

**UA Urbanized Area** First delineated in the 1950 Census, urbanized areas are densely settled territory, which the U.S. Census Bureau defined from 1950 to 1990 as having a population of 1,000,000 or more. Since the 2000 Census, Urbanized Areas are defined as: Core census block groups or blocks that have a population density of at least 1,000 people per square mile, and a total population of 50,000 or greater. Areas of the same population density, but having a total population ranging from 2,500 to 50,000 are defined in the 2000 Census as an "Urban Cluster" (UC).

**UGB Urban Growth Boundary** A regional boundary, which is created to efficiently utilize land and regulate urban/sub-urban development into agricultural, forest lands, and other natural areas. By zoning high density development within the UGB, there is greater leverage to encourage the continual redevelopment of land and buildings within urban cores (thereby keeping "downtowns" active), as opposed to unabated land consumption encroaching into natural areas. UGBs can further reduce infrastructure and transportation expenses by maintaining a local compact development strategy.

**UPWP Unified Planning Work Program** The CCRPC's annual work plan for local and regional planning projects.

**USDA United States Department of Agriculture** Formed in 1862, the USDA is the United States federal executive department responsible for developing and executing U.S. federal government policy on farming, agriculture, and food. It aims to meet the needs of farmers and ranchers, promote agricultural trade and production, work to assure food safety, protect natural resources, foster rural communities and end hunger in the United States and abroad.

**USDOT United States Department of Transportation** A federal department of the United States government overseeing transportation, established by Congress in 1966.

**UWR United We Ride** Federal initiative created by Executive Order #13330 intended to break down the barriers among Federal programs as they relate to transportation to ensure that transportation services are seamless, comprehensive and accessible. Specifically, UWR is tasked with seeking ways to simplify access to transportation services for persons with disabilities, persons with lower incomes, and older adults.

**V/C Volume to Capacity Ratio** An indicator of congestion levels measured by the number of vehicles per hour (volume) divided by the maximum number of cars the road is designed to handle (capacity).

**VAPDA Vermont Association of Planning & Development Agencies** Organization comprised of Regional Planning Commission directors and the Chittenden County MPO director, chartered to coordinate a combination of environmental and economic planning strategies

**VAST Vermont Association of Snow Travellers** VAST is Vermont's non-profit, private volunteer snowmobiling organization, responsible for maintenance of Vermont trails. VAST has thousands of members and is one of the oldest such organizations in the U.S.

**VCGI Vermont Center for Geographic Information** Initiated in 1994, under Act 204 (10 VSA Chapter 8), the Vermont Center for Geographic Information, Inc. (VCGI) is a non-profit public corporation tasked with the development and management of GIS data, and coordination of GIS activities for the State of Vermont.

**VCRD Vermont Council on Rural Development** Founded in 1992, the Vermont Council on Rural Development assists Vermont communities develop their capacity to create a prosperous and sustainable future through coordination, collaboration, and the effective use of public and private resources.

**VHD Vehicle Hours of Delay** An indicator reflecting the time it takes to travel a roadway during peak periods v.s. the time it would take to travel at a free-flow 35 miles per hour.

**VHFA Vermont Housing Finance Agency** The State agency that provides loans to housing developers, allocates federal and State Housing Tax Credits to facilitate housing development, and provides housing subsidies to qualifying households.

**VHT Vehicle Hours of Travel** Transportation performance measure that considers the amount of time trip-making takes.

**VLCT Vermont League of Cities and Towns** Founded in 1967, VLCT is a nonprofit, non-partisan organization serving Vermont municipal officials.

**VMS Variable Message Sign** Electronic highway signs where the displayed message can be changed to inform motorists of different road, traffic, or weather conditions, etc.

**VMT Vehicle Miles Traveled** An indicator of occurring traffic, calculated using Annual Average Daily Traffic (AADT) multiplied by the length of a particular road in question. One car traveling one mile represents 1 unit of VMT.

**VOBCIT Vermont Online Bridge & Culvert Inventory Tool** An online user-friendly application to record and update bridge and culvert data for structures owned by communities in Vermont. The Vermont Agency of Transportation (VTrans) was directed by the Vermont

Legislature to complete and deploy an integrated software product to handle data entry, access and status reporting of town bridge and culvert inventories currently collected by Regional Planning Commissions (RPCs), the Chittenden County Metropolitan Planning Organization, municipalities, and their contractors. Data within VOBCIT complies with the state “Bridge & Culvert Data Exchange Standard”.

**VPA Vermont Planners Association** A Vermont membership-based, non-profit organization of professional planners, citizen planners, landscape architects, engineers, housing and economic development specialists, and developers.

**VPD Vehicles Per Day** Traffic Volume or Capacity is generally expressed in “Vehicles Per Day” or “Vehicles Per Hour”.

**VRAC Vermont Rail Advisory Council** Instituted in 1993, VRAC was created to advise the Governor and The Agency of Transportation on rail issues. Meeting about 5-6 times per year, members are recruited from private rail industry, operators on state-owned railroads, freight shippers, environmental and economic development organizations, regional chambers of commerce, regional planning commissions, the House & Senate Transportation Committees, and travel and recreation organizations.

**VSA Vermont Statutes Annotated** The official codification of the laws enacted by the Vermont General Assembly (i.e. Legislature).

**VSS Vermont State Standards** Formally known as the “Vermont State Standard for the Design of Transportation Construction, Reconstruction and Rehabilitation on Freeways, Roads and Streets”, VSS was developed during the mid-1990’s, standardizing the physical design parameters and guidelines of Vermont bridges and roadways. VSS was initially created for two purposes: 1. To provide clear technical direction to the designers of transportation projects in Vermont. AND: 2. To achieve roadway and bridge designs which provide access, mobility and safety for users, and which are also sensitive to the social and environmental context of Vermont.

**VTa Vermont Transportation Authority** Operator of passenger rail services.

**VTR Vermont Railway** A privately operated railroad company.

**VTrans Vermont Agency of Transportation** Agency that establishes state policies and plans, and implements programs and projects, for all modes of transportation.

**W2GW Way To Go Week** Vermont annual TDM program that encourages the population to commute non-SOV for one week in the month of May.

**WPA Wellhead Protection Area** An area designated by the Vermont Department of Health to protect the quality of public water supplies.

**WRP Water Resources Panel** The NRB Panel that oversees the development of water resources management and wetlands protection policies for Vermont through (1) the adoption of State water quality standards and rules regulating, for example, the use of public waters, lake levels, and development impacts on significant wetlands and their protective buffer zones and (2) rulemaking authority to designate and protect significant wetlands and to designate outstanding resource waters.

**WVPD Winooski Valley Park District** The district that works to make the public waters of the Winooski River accessible for recreational activity by establishing a system of public parks along the Winooski River. See 24 VSA 4861.

**ZA Zoning Administrator** Local administrator in charge of enforcing municipal zoning regulations. The ZA also is responsible for providing information to the public, reviewing plans and documentation for compliance, and assisting applicants with their requests for variances.

**ZBA Zoning Board of Adjustment** A municipal-level, quasi-judicial body responsible for issuing Zoning Variances, Conditional Use Permits, and hearing appeals. The ZBA interprets the intent of law and sets local land use policy.

# **FY 2013 Annual Work Plan (Unified Planning Work Program)**

## **Transportation Work Plan Overview**

The CCRPC outlines the work that will be undertaken and the costs for this work in the Fiscal Year (FY) 2013 Annual Work Plan – Unified Planning Work Program (UPWP), which will begin on July 1, 2012 and end on June 30, 2013.

This work program breaks the work of the organization into four main areas with the twelve goals distributed as subtasks within them:

1. Existing System Preservation and Improvement Services
  - 1.1. Preserve and improve the physical condition and operational performance of the existing transportation system. (Goal 1)
  - 1.2. Consider ways to improve transportation system efficiency before increasing transportation capacity. (Goal 8)
2. Sustainability / Livability Services
  - 2.1. Support local and regional comprehensive planning and reinforce sustainable land-use patterns and growth centers. (Goal 2)
  - 2.2. Protect and enhance the region's built and natural environments, including land, water, and air resources. (Goal 5)
  - 2.3. Improve the transportation system in a manner that builds community, increases the vitality of neighborhoods, and minimizes disturbance caused by noise, glare, and vibration. (Goal 6)
  - 2.4. Establish a transportation system that uses diverse sources of power and maximizes energy efficiency and conservation. (Goal 9)
3. Multi & Intermodal Services
  - 3.1. Create a transportation system that offers constantly improving safety, accessibility, flexibility, and comfort for all users, including the elderly, the disabled, and youth. (Goal 3)
  - 3.2. Establish a transportation system that minimizes the time and total cost of moving people and goods, thereby allowing the economy of the Region to thrive. (Goal 4)
  - 3.3. Provide levels of access and mobility that insure people and goods can get where they need to go, when they need to go there. (Goal 7)
  - 3.4. Develop a transportation system that features a variety of travel modes and encourages the reduction of single occupant vehicle use. (Goal 10)
4. Involvement and Effectiveness
  - 4.1. Educate the public – from children to seniors – about the implications of different development patterns and mode choice decisions. (Goal 11)
  - 4.2. Provide improvements to transportation facilities and services expeditiously through an inclusive and cost effective process. (Goal 12)

This UPWP fulfills the requirement of United States Department of Transportation (USDOT) for an MPO (Metropolitan Planning Organization) to have a “Unified Planning Work Program” as specified in 23CFR 450.314(a). The UPWP is the actual contracting document for work in the transportation planning process under contract with VTrans and for work funded by FHWA, FTA, and VTrans.

Work areas are divided into Work Tasks. Generally, there are three parts to each Work Task: Objective, Description, and Products.

The Objective is a short statement to (1) identify the problems or opportunities within a functional area, (2) provide the specific purpose of a particular phase of the planning process, and/or (3) provide the primary reason for the work.

The Description outlines the approach for solving a particular planning problem or moving the work forward in its continuum, expressed in chronological work steps or components to the solution.

The Product lists specific target dates for reports, processes, meetings, et cetera.

The Budget is shown in Appendix A with the total cost of the project within the fiscal year and the sources of funding.

During the coming year, the CCRPC will develop indicators to gauge progress on the implementation of the major work of the organization. These indicators will be integrated into future versions of this document.

## **Land Use Work Plan Overview**

This document identifies the land use planning activities that the CCRPC plans to undertake from July 1, 2012 to June 30, 2013.

Following the descriptions of Work Program Projects, the FY2013 Work Program Budget is included in Appendix C. The work program budget does not include the administrative Projects that are included in the calculation of our indirect rate. There is also a separate FY2013 Budget that provides a detailed accounting of the anticipated Commission revenues and expenditures for FY2013.

The Work Program uses a three-tiered organizational system to describe the Commission’s planned FY2013 initiatives:

**Program Areas:** Each of these five major categories either implements a key aspect of CCRPC’s statutory mission or is a key feature of an organization that strives for excellence.

**Programs:** Each of these Program Area components consists of a set of Projects that share a central objective or feature.

**Projects:** Each of these Program components consists of a set of related tasks or activities.

The Program Areas and Programs combine to form a system for organizing the activities that the Commission undertakes. It is expected that the Program Area and Program categories will remain relatively constant from one work program year to the next and that only the Projects will change

from one year to the next. This also means that in a work program year, there may be Program categories that do not contain any Projects.

There are many uncertainties involved in developing any work program, such as the possibility of future changes in program priorities, funding, and staffing. This Work Program attempts to be prudent in recognizing these uncertainties. As needed during FY2013, the Commission will evaluate the Work Program and amend it to address changed circumstances and priorities.

For each Project, the Work Program identifies

- ◆ **Objective** – The purpose of the project;
  - ◆ **Description** – The approach to the project;
  - ◆ **Products** – The expected work products generated by or resulting from the project;
  - ◆ **Staff** – The CCRPC staff who are expected to work on the project;
  - ◆ **Partners** – The entities that are expected to assist CCRPC to implement the project;
  - ◆ **Timeline** – The expected deadline by which the project should be completed; and,
  - ◆ **Budget** – The expected budget for the project.
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# 1.0 Existing System Preservation and Improvement Services

## *1.1 Preserve and improve the physical condition and operational performance of the existing transportation system. (Goal 1)*

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### *1.1.1 Safety Program*

**Objective:** To enhance safety in Chittenden County by implementing low cost safety solutions for roadway sections and intersections; to assist municipalities with informal safety reviews at problem locations; and to continue coordination with VTrans in their ongoing safety initiatives.

**Description:** Safety programs and initiatives that focus on reducing crashes and addressing transportation safety issues are an important element of SAFETEA-LU. The CCRPC, through active participation in two of the Strategic Highway Safety Plan's (SHSP) committees (Infrastructure Focus Group and the Data Team ) is working with VTrans and other stakeholders to assist in the implementation of strategies identified in the SHSP that aim in the reduction of crashes on our highways. The CCRPC is involved with the High Risk Rural Roads program (HRRR) and the Highway Safety Improvement Program (HSIP). The HRRR prioritizes crash locations on rural roads, conducts Road Safety Audit Reviews (RSAR), and safety reviews for programmatic corridors to determine low cost safety solutions for the near term while proposing longer term solutions as well. The HSIP prioritizes the top 50 high crash locations throughout the state and proposes various alternatives to improve safety. The CCRPC will also continue to provide assistance to municipalities—through consultations and informal safety reviews—to identify safety solutions for problem locations.

**Products and Activities:**

- |   |                  |
|---|------------------|
| 1. Continued participation in the Infrastructure and Data Groups of the Strategic Highway Safety Plan (SHSP). | Ongoing          |
| 2. Continued participation in the HRRR and HSIP programs.   | Ongoing          |
| 3. RSARs and corridor field reviews.  | Summer/Fall 2012 |
| 4. Submit candidate locations/towns for the HRRR program.   | Spring 2013      |
| 5. Facilitate a regional SHSP forum in coordination with Partners   | Summer/Fall 2012 |

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### *1.1.2 Incident Management Training*

**Objective:** To improve the ability of municipal elected and appointed officials to interact effectively with emergency management personnel during transportation-related emergency situations such as natural disasters, train derailments, major highway crashes, aircraft crashes, etc.

**Description:** CCRPC will work with staff from Vermont Emergency Management and the Department of Homeland Security to implement training on the Incident Command System (ICS) for staff, local elected and appointed officials and emergency management personnel. CCRPC staff will consult with Homeland Security personnel to determine the number and type of classes needed to meet the demand for ICS training. If there is demand, at least two training courses will be offered. Staff will coordinate with Homeland Security personnel and facilitate the training arrangements.

**Product and Activities:**

- |  |           |
|--|-----------|
| 1. At least two (2) ICS training courses (100, 200, 248, 300, or 400) will be offered. | June 2013 |
| 2. At least five (5) CCRPC staff will be trained to the ICS 100/200 level.             | June 2013 |

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### ***1.1.3.1 Planning Technical Assistance and Coordination***

**Objective:** To provide technical planning assistance to CCRPC member agencies, local municipalities, VTrans, and other entities seeking guidance on transportation issues, project development, and/or coordination.

**Description:** This task is a combined staff/consultant effort to assist CCRPC member communities with transportation problem identification and resolution.

Planning Assistance activities conducted by or for the CCRPC includes, but is not limited to, the following categories of tasks:

- Safety analyses of transportation facilities
- Small area transportation studies
- Traffic control device recommendations
- Speed limit recommendations
- Bicycle and pedestrian planning assistance
- Highway facility capacity analyses
- Intersection control warrants
- Intersection design alternatives
- Access management analyses
- Coordination on planning studies unrelated to the Regional Plan and MTP (e.g., growth center planning)
- Coordination with municipalities on local planning studies
- Education, promotion and assistance in adopting the latest Town Highway & Bridge codes and standards as provided in “The ‘Orange Book’ a Handbook for Local Officials; 2011-2013”

Work effort is split between CCRPC staff and on-call consultants. CCRPC generally responds to requests for assistance as they are received, provided staff and consultant resources are available.

**Products and Activities:**

- |   |         |
|---|---------|
| 1. Transportation technical assistance studies. | Ongoing |
|---|---------|

- Chittenden County Truck Freight Network Analysis (FY12 carry forward) Fall 2012
  - VT Route 2 Bike/Ped Facility Conceptual Alignment Analysis (Richmond Village to I-89 Exit 11) FY13-FY14
  - Regional Culvert Geomorphic Capacity/Aquatic Organism Passage Assessments Spring 2013
  - Electric Vehicle Charging Station Planning Analysis Summer 2013
  - Jericho Transportation Plan Update Summer 2013
  - Underhill Sidewalk Feasibility Study Summer 2013
2. Recommendations to communities for identified transportation problems. Ongoing

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### ***1.1.3.2 VTrans Planning Assistance and Coordination***

**Objective:** To provide technical planning assistance to VTrans on transportation issues, project development, and/or coordination complimentary and in support of the Transportation Planning Initiative (TPI)

**Description:** This task represents CCRPC staff time spent on coordination with VTrans projects and initiatives.

CCRPC staff participation in VTrans studies will generally include coordination with local municipal and regional stakeholders, document review, advisory committee participation, and other technical tasks.

**Products and Activities:**

1. Coordination with VTrans on planning, project development studies and development review issues. Ongoing
2. Participate with VTrans in outreach efforts to update Modal Plans and to participate on the statewide committees such as Safe Routes to School, the Rail Council, and other statewide policy & planning related efforts. Ongoing
3. Update the 2012 list of projects that have been through scoping or technical assistance that have not been completed to date, complete with current status. February 2013
4. Communication with communities and VTrans in moving projects forward and addressing current and emergent barriers. Ongoing
5. Assistance for specific TPI Tasks not included elsewhere in the UPWP Ongoing

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### ***1.1.3.3 Locally Matched Planning Assistance***

**Objective:** To provide municipalities access to federal fiscal resources for planning purposes. Assist municipalities with technical aspects and manage the planning studies if requested.

**Description:** Each year, a number of local transportation planning needs go unmet due to constraints on the availability of non-federal match for CCRPC planning funds and/or CCRPC staffing resources. This task allows member communities to conduct authorized

transportation planning work in their jurisdictions in coordination with CCRPC and VTrans. CCRPC will administer cooperative work agreements with municipalities, review billings, and monitor project progress. CCRPC staff could also actively manage these studies if requested by the municipalities. Communities provide all match required as a prerequisite for inclusion in this program.

Funding under this program will be paid out on a reimbursable basis. For each authorized project, the municipality is required to execute a cooperative planning work agreement with the CCRPC prior to beginning work or incurring project costs. Municipalities that manage their studies must submit monthly progress reports and bill the CCRPC on a monthly basis. The municipality will be required to submit a final report/product for each study or project to the CCRPC before receiving final payment for the work. For studies that are actively managed by the CCRPC, the technical planning assistance process will be followed and the municipality will be charged for their local share of the study costs. Funds for the Locally Matched Planning Assistance Program are allocated based on direct requests from the municipalities and the availability of federal transportation planning funds (PL Funds) usually in the order in which they are received until the annual funding is exhausted. All work should be completed by June 30, 2013 unless prior agreement is obtained from CCRPC to extend the study completion date.

**Products and Activities:**

- |   |             |
|---|-------------|
| • Island Line Coordination (FY12 Carry Forward)                 | Summer 2012 |
| • Lamplite Acres Green Street Study (FY12 Carry Forward)        | Summer 2012 |
| • Burlington Downtown Improvement District Transportation Study | Summer 2013 |
| • Waterfront Bikepath Intersection Analysis                     | Summer 2013 |
| • Chittenden County Ortho Photo Program                         | Summer 2013 |
| • Essex/Essex Junction Bike/Ped Plan Study                      | 2013/2014   |
| • Kimball Ave. Ped Crossing Feasibility Study                   | Summer 2013 |

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#### ***1.1.4.1 CIRC Alternatives Planning (Staff)***

**Objective:** To allow staff coordination of planning and scoping studies to further projects in lieu of the Circ Highway.

**Description:** Staff will coordinate consultants work on scoping and planning studies for the projects identified by the CIRC task force as described in 1.1.4.2.

**Products and Activities:** Project management Ongoing

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#### ***1.1.4.2 CIRC Alternatives Planning (Consultants)***

**Objective:** To hire consultants to complete planning and scoping studies to further projects in lieu of the Circ Highway.

**Description:** Consultants will be hired to complete scoping and planning studies for the projects identified by the CIRC task force.

**Products and Activities:**

1. VT 2A/289 Alignment analysis Phase II (Phase 1 Planning Study) - Essex
2. Crescent Connector/Railroad Street Scoping(Phase 1 Planning Study) – Essex Junction
3. Scoping of 2 intersections on VT 127 (Phase 1 Planning Study)- Colchester
4. Williston-Essex Transportation Network Study (Phase 1 Planning Study)
5. Pearl Street Post Office Square to Five Corners Scoping (Phase 1 Planning Study)– Essex Junction
6. VT 15 Multi-Use Path scoping (Phase 1 Planning Study) – Essex Junction, Essex, Colchester
7. Colchester/Essex Transportation Network Analysis (Phase 2 Planning Study)
8. North Williston Road Flood Plain Elevation Scoping Study (Phase 2 Planning Study) - Essex
9. Scoping Studies TBD Following Williston/Essex Transportation Network Study (Phase 2 Planning Study)
10. VT15 Commuter Park and Ride Scoping Studies (Phase 2 Planning Study)
11. CIRC process facilitation and coordination

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***1.1.4.3 CIRC Alternatives Phase I Implementation (Consultants)***

**Objective:** To hire consultants to implement Phase I CIRC Alternatives programmatic activities.

**Products and Activities:**

1. New Bike Commuter Incentive Program (Local Motion)
2. Expand and Enhance TDM Circuit Rider Program (CATMA)

***1.2 Consider ways to improve transportation system efficiency before increasing transportation capacity. (Goal 8)***

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***1.2.1 Transportation Systems Management (TSM) & Intelligent Transportation Systems (ITS)***

**Objective:** To improve transportation operations for roadways and intersections including promoting good access management goals; provide guidance for implementing the recommendations of CCRPC's Intelligent Transportation Systems (ITS) Plan; coordinate with VTrans; and continue the signal optimization program.

**Description:** Transportation Systems Management (TSM) programs that improve the safety and efficiency of existing roadway networks with low cost solutions are included in the MTP and have been supported by the Board. TSM programs include Intelligent Transportation Systems (ITS) projects, intersection improvements, traffic calming and traffic signal optimization. In this work element, the CCRPC will continue its active role in evaluating and providing recommendations to improve the safe and efficient flow of traffic including private and commercial vehicles, buses, pedestrians and bicycles. These tasks will be accomplished with continued coordination with VTrans. Staff will work to insure recommendations for ITS project implementation continue as detailed in CCRPC's ITS Plan. In addition the CCRPC staff will remain an active participant coordinating with VTrans' staff

on ITS projects in Chittenden County. The signal optimization program will continue under this work task with an emphasis on selecting corridors and/or isolated intersections which will result in the greatest benefit for the region.

Training to member municipalities and other relevant parties on traffic operations, access management and related subjects will also be provided through this program.

**Products and Activities:**

- |  |               |
|--|---------------|
| 1. Transit signal priority implementation assistance.  | June 2013     |
| 2. Assist municipalities with improving transportation operations for roadways and intersections including good access management practices. | Ongoing       |
| 3. Identification of corridors to include in the signal optimization program.  | Ongoing       |
| 4. Host regular forum with Chittenden County road foremen and Local Roads to promote information sharing.                                    | Semi-annually |
| 5. Review and update CCRPC's ITS Plan  | June 2013     |

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### ***1.2.2 Efficiency Improvements (ITS Applications) – CCTA***

**Objective:** To evaluate, plan and design ITS applications for deployment.

**Description:** To evaluate ITS applications, develop plans, specifications and RFP's for ITS systems at the Downtown Transit Center, transfer locations, bus stops, onboard buses, multimodal applications, signal priority, automated vehicle location, passenger information systems, on time performance tracking, computer aided dispatch, traffic signals to support transit operations, and at CCTA's operations and maintenance center.

**Products and Activities:**

Requests for Proposals for ITS applications that lead to project implementation; examine Transit Signal priority for Shelburne Road Corridor and locations on US 2; Google Transit trip planning system; continue progress toward real-time passenger information and schedule improvement tools. CCTA will provide monthly updates on the progress being made related to ITS implementation throughout the region.

June 2013

## **2.0 Sustainability / Livability Services**

### ***2.1 Support local and regional comprehensive planning and reinforce sustainable land-use patterns and growth centers. (Goal 2)***

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#### ***2.1.4 Transportation Land Use Planning & Review***

**Objective:** To ensure close coordination of regional and municipal transportation and land use planning and permitting and to proactively collaborate with municipalities and the state regarding transportation, land use and project development issues and to provide objective reviews of transportation issues in both local development proposals, as requested, and Act 250 permit applications in accordance with the CCRPC's Guidelines and Standards for

Reviewing Act 250 and Section 248 Applications. To ensure that transportation is viewed in a multi-modal context in development proposals—including highways, railways, public transit, pedestrian and bicycle facilities—and to review the cumulative impacts of development proposals on the transportation system.

**Description:** As a result of the merger of the CCMPO and CCRPC there is a need to revamp the process for collaborative review (especially for transportation interests) of municipal plans, municipal bylaws, state designations (growth center, new town center, Vermont neighborhoods, village centers, and downtowns), and state and municipal permits under Act 250 and Section 248. Additionally, two CCRPC Policies may also need to be revised: “Guidelines and Standards for Confirmation of Municipal Planning Processes and Approval of Municipal Plans” and “Guidelines and Standards for Reviewing Act 250 and Section 248 Applications.”

The policies and procedures will have to be amended to reflect a merged organization. In addition, this review should include examining ways for CCRPC staff to participate earlier in the planning and permitting processes to address transportation issues as early as possible. Ways to better integrate CCTA, Local Motion, CarShare Vermont, and other transportation partners into these processes should also be developed.

This project was initiated in FY10 and will continue through FY13 with a focus on improving the involvement of municipalities and other interested parties. CCRPC staff will consult with CCTA and our member municipalities and then draft a revised procedure for consideration by the Executive Committee. This consultation may involve the formation of a committee or other involvement and education activities as appropriate. It may be that additional policy guidelines are needed to address the state designation processes. The Executive Committee will make a recommendation regarding the MOU and Policy amendments to the Board, as appropriate.

In order to assist municipalities in speeding the process for municipal plan confirmation and improve bylaws implementing recommendations of the *Regional Plan* and *Metropolitan Transportation Plan*, CCRPC staff will develop a checklist and/or model language. The checklist and/or model language will include relevant considerations from transportation plans (such as the *2035 Metropolitan Transportation Plan*, *Transit Plan*, and *Regional Pedestrian/Bicycle Plan*) and the *Regional Plan*. Staff will develop the checklist and/or model language in consultation with CCTA planners, municipal planners, and planning commissions. CCRPC staff will prepare a recommendation to CCRPC for consideration and approval of the checklist and/or model language. Educational forums targeting planning commissions, development review boards, Selectboards, and the development community may be conducted.

CCRPC reviews Act 250 applications and traffic impact studies as an expert party when requested by the municipalities, VTrans, the District Environmental Commission and on as needed basis for developments of (potentially) regional significance. The CCRPC will continue reviewing Act 250 applications in accordance with the CCRPC’s policy and will continue its coordination with VTrans on these reviews. In addition, the CCRPC will continue to provide technical assistance, as requested, to both the District Environmental

Commission and municipalities for the review of traffic/ transportation effects of development projects.

#### Transportation and Land Use Planning: Meeting State Land Use Planning Goals

VTrans would like to engage the RPC in a dialogue to identify opportunities and challenges in the area of transportation to reaching statewide planning goals articulated in 24 V.S.A. Chapter 117 §4302. With assistance from Smart Growth America, VTrans will be conducting a study to demonstrate that transportation policies and programs that support state land use goals (24 V.S.A. Chapter 117 §4302) and the Federal partnership (DOT, HUD, EPA) for Sustainable Communities will strengthen the economy and help the Agency achieve its vision of a safe, efficient and multimodal transportation system. The study will evaluate existing VTrans policies and programs, document what is working well, and identify improvements and what is missing from existing programs and policies. RPCs will be represented on the Project Steering Group, may be asked to provide data and other information to assist with completing the study, and will review and comment on work products.

#### VTrans Fair Share Cost Method for Transportation Impacts

Under current permitting processes in Vermont, some land development proposals do not contribute a fair, proportional share of the cost to build transportation infrastructure necessary to accommodate growth. All land development, even small projects, generate some amount of demand for transportation; but timing in the permitting process, rather than demand, determines whether or not a particular project triggers thresholds that require modifications to intersections, roads or other transportation infrastructure. Several development proposals may be approved in an area without making any contribution towards constructing new transportation infrastructure because their incremental impacts are relatively minor when considered on a case-by-case basis. The incremental impacts eventually consume available capacity and one “last” development is saddled with the full cost of reconstructing a road or intersection. Had the “last” development been proposed sooner, it too may have been permitted without any transportation mitigation costs. Some municipalities have addressed the fairness issue by establishing impact fees. Impact fees require a financial contribution from all development proposals for transportation projects, regardless of timing, typically based on the amount of traffic they generate. In Vermont, Impact fees may only be established by municipalities and are applied and administered at the local level. Impact fees are still uncommon throughout the state, and the fairness issue has been a recurring problem in the Act 250 permitting process. However, neither VTrans nor the Natural Resource Board has the authority to establish impact fees. Thus, there is a need to develop a system by which district environmental commissions and VTrans can ensure that all development proposals contribute a fair share towards transportation projects that will be necessary to accommodate growth.

VTrans, with consultant assistance, will be conducting pilot studies in several locations to identify the practical challenges to establishing a transportation fair share cost system, and developing recommendations for a mechanism that could be applied through the VTrans state roadway access permit application (Section 1111), Act 250, or through other means as determined in the study. Likely pilot study areas are within the Central Vermont, Chittenden County and Northwest regions. It is possible that one other pilot location will be included to represent a major ski area; which often affect longer corridors than typical commercial development projects.

**Products and Activities:**

- |   |                |
|---|----------------|
| 1. Draft Procedure (CCRPC's for Act 250/Section 248)  | Winter 2012/13 |
| 2. Land Use/Transportation Plan and/or Bylaw Checklist or Models  | Winter 2012/13 |
| 3. Educational forums as needed   | June 2013      |
| 4. Monthly reports itemizing specific activities accomplished   | Ongoing        |
| 5. Act 250 Permit Review  | As necessary   |
| 6. Review of traffic impact studies for municipalities  | As necessary   |
| 7. Assistance & participation in HUD Regional Sustainability Grant Project  | Ongoing        |
| 8. Continue to participate in a statewide dialogue about the role of transportation planning, local land use regulations and state and federal transportation policies and identify the role they may play in reaching the Statewide Land Use Planning goals. | Ongoing        |
| 9. Serve on a Fair Share Cost study advisory committee  | Ongoing        |
| 10. Provide related Fair Share Cost studies, local plans, transportation data, land use data and other information for the pilot study areas.   | Ongoing        |
| 11. Assist with developing Fair Share Cost future land use assumptions for the pilot study area, which may involve some level of build-out analysis.  | Ongoing        |
| 12. Assist with developing and recommending Fair Share Cost transportation infrastructure improvements to accommodate projected development.  | Ongoing        |
| 13. Lead outreach to municipal officials and participate in local meetings to gather input on Fair Share Cost future land use, potential development proposals, and desired transportation projects.  | Ongoing        |
| 14. Review and comment on all Fair Share Cost work products and recommendations   | Ongoing        |

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## ***2.2 Protect and enhance the region's built and natural environments, including land, water, and air resources. (Goal 5)***

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### ***2.2.2 Land Use Data Update and Maintenance***

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**Objective:** To keep the CCRPC databases and GIS layers and mapping up-to-date and functional for CCRPC transportation modeling, project scoping and other uses related to integrated transportation and land-use planning including unanticipated CCRPC technical assistance requests not included elsewhere in this work plan.

**Description:** Under this task, CCRPC staff will update various Geographic Information System (GIS) data layers (e.g., housing and employment points, infrastructure data, the Vermont Online Bridge and Culvert Inventory Tool, sign inventory, bikepaths, sidewalks, crosswalks, bus stops, sewer service areas, and data for use in the CCRPC's planned environmental tasks, etc.). These data updates include data needed for the Land Use Allocation Module (LUAM) of CCRPC's Transportation Model. As appropriate, staff will seek municipal review of the data. This work will include ongoing housekeeping of the CCRPC GIS data library. Staff will be coordinating a 15 cm orthophoto buy-up for the county. This task will also include updated transportation-related data for the annual Regional Indicators report.

From time to time, the CCRPC undertakes work requested by municipal clients or others not built into the annual work plan. Such work may require CCRPC technical assistance including preparation of land-use or other data, training / assistance, or GIS analysis.

**Products and Activities:**

- |  |             |
|--|-------------|
| 1. Updated Vermont Online Bridge and Culvert Inventory Tool data             | Ongoing     |
| 2. Updated housing, commercial/industrial and employment data                |             |
| 3. Development of sign inventory data for Winooski, Essex Junction & Jericho | Summer 2012 |
| 4. Updated TIP maps and graphics   | Ongoing     |
| 5. Updates to LUAM   |             |
| 6. Acquisition of 15 cm imagery for the county                               | Spring 2013 |
| 7. Recommendation regarding UrbanSim from delivery of UVM summary            | Winter      |
| 2012Monthly reports itemizing specific work accomplished                     | Ongoing     |
| 8. 2013 Regional Indicators report   | Annually    |

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### ***2.2.3 Transportation Environmental Planning***

**Objective:** According to the FHWA “Transportation planning and project development must reflect the desires of communities, and take into account the impacts on both the natural and human environments. Transportation projects are closely examined to see how they might impact the community, the natural environment, and our health and welfare. Before any project can move forward to construction, the FHWA must address and comply with laws related to the environment. These laws cover social, economic, and environmental concerns ranging from community cohesion to threatened and endangered species.” Working in collaboration with partners, the CCRPC plans to advance progress towards integrating a comprehensive Transportation Environmental Program in Chittenden County to address impacts associated with the implementation of transportation projects and activities.

**Description:** Numerous environmental issues may be affected by the transportation system, including air quality, climate, noise, stormwater runoff, habitat disturbance and archaeological and historic resources. CCRPC staff will work in coordination with VTrans Environmental Section and Operations Environmental Program staff and other affiliated local, regional, state and federal organizations to address a variety of transportation environmental issues and impacts. Other focal areas include maintenance of an Online Resource Mapping Tool to provide geo-spatial data to our user community on environmental resources, and integration of transportation related stormwater related activities to support ongoing CCRPC programs addressing fluvial erosion hazards, water quality, flood prevention, and advancement of All Hazard Mitigation Plans.

#### Transportation System Resiliency Planning

The purpose of this activity is to develop and apply a planning process to systematically improve the resiliency of the transportation system so that it continues to provide basic mobility and access during disasters, especially flooding. In addition, a resilient transportation system would be designed in a manner that would not exacerbate the consequences of disasters (for example - by restricting or accelerating river flow in a manner that causes damage to adjacent property, buildings and other infrastructure systems).

The process will integrate transportation and river management planning. Its major steps will include identification of transportation infrastructure vulnerable to flooding and erosion, assessment of risk, identification and evaluation of mitigation strategies (including river management, infrastructure, and land use options), and development of implementation plans.

The purpose of this study is to develop a methodology that can be applied throughout the state by VTrans, RPCs, and municipalities with support from ACCD and ANR. The ultimate goal is to identify specific actions that could be funded and implemented before the next disaster through existing transportation programs, through other state agency programs, or by municipalities as appropriate.

A pilot study will be conducted for one watershed in the state, and the related transportation corridor. VTrans will be coordinating with the Agency of Natural Resources and the Agency of Commerce and Community Development on identifying a pilot study location. VTrans will also contact RPCs for feedback on possible study locations and their interest in participating in this study.

### **Products and Activities:**

1. Complete a web-based summary of environmental issues Summer 2013
2. Continuous monitoring and improvement of transportation environmental program integration and development Ongoing
3. Updates to TAC and CCRPC Board as necessary Ongoing
4. For the Transportation System Resiliency Planning participation by CCRPC(s) may include participation on an advisory committee and should a watershed/study area in Chittenden County be selected, the following would be expected:
  - Provide GIS data , relevant studies and other information as available
  - Assist VTrans with outreach efforts and gathering feedback from municipalities and other stakeholders
  - Assist VTrans with identifying and evaluating mitigation strategies
  - Assist VTrans with developing a process that is practical to apply by RPCs in other areas of the state. Summer 2013

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### ***2.2.3.2 Transportation Environmental Planning: Energy, Air Quality and Climate Action Planning***

**Objective:** To identify and recommend policies and actions at the regional, local and individual level that would help the region reduce energy consumption, air pollution and climate change and be resilient to future climate change impacts. In 2010 CCRPC completed a report exploring air quality issues in Chittenden County, *Keeping Our Air Clean: Local and Regional Strategies to Improve Air Quality in Chittenden County*. In FY2011 CCRPC evaluated potential frameworks for conducting energy and climate action planning. During FY2012, CCRPC conducted a greenhouse gas inventory for Chittenden County and convened a steering committee to start developing a climate action plan for Chittenden County. Completion of the climate action plan will be a focus in FY2013.

**Description:** This project is viewed as the next phase previous efforts in the areas of air quality, energy and climate action. Transportation makes up 46% of green house gas (GHG) emissions in Vermont, and over 35% of ozone-precursor emissions in Chittenden County. In order to achieve the goals of the State to reduce the state's GHG emissions by 25% from 1990 levels by 2012; 50% by 2028; and, if practical, 75% by 2050, it will take a concerted effort not just by the state, but also by the region, municipalities, employers, and individuals. Similarly, maintaining compliance with federal air quality standards (or returning to compliance) will also require concerted efforts.

CCRPC is continuing a multi-year energy and climate action planning effort for the region. Because energy use – particularly in the transportation sector – is the common and dominant source of both air pollutant emissions and GHG emissions in Chittenden County, air quality will be incorporated into the broader energy and climate action planning effort. Activities and tasks are intended to complement and support climate action planning at the state and local levels, as well as develop a regional energy, air quality and climate action plan.

Efforts in FY2012 were focused in several key task areas: Identifying best practices; engaging energy and climate action interested organizations; selecting an emissions inventory tool; preparing a baseline emissions inventory; and, identifying a wide range of potential strategies to reduce energy consumption and GHG emissions, and promote resiliency to the impacts of climate change.

Specific tasks for FY13 are:

- Energy and Climate Action Networks and Outreach – Staff will continue to engage and partner with key agencies and organizations (e.g., municipalities, municipal energy/climate action committees, DPS, VTrans, ANR, VECAN, VEIC, VNRC) involved in energy and climate action planning at the state, regional and local levels. The networks will be utilized to local initiatives that will be used to help guide project activities. These networks will also be important in providing support to municipal energy and climate action planning. Working with these partners, staff will organize periodic Regional Energy Forums to identify needs and share information among municipal and other groups undertaking energy and climate action planning in Chittenden County. Additionally, with guidance from the Advisory Committee, staff will develop and roll-out education materials. Initially, this will involve preparing web-based educational materials related to resources and strategies identified in previous air quality research as well as identified resources and materials developed for this project.
- Emissions Inventory – Utilizing the selected emissions estimation tools, staff will finish developing an emissions inventory for the county and municipalities if this is not completed in FY12. Emissions inventory work at the municipal scale is intended to complement and support existing efforts at the state and municipal levels, including strengthening energy elements of municipal plans. Develop processes for an annual update the inventory to establish trends and identify whether progress is being made towards emissions targets.
- Emissions Targets – Based on the emissions inventory, forecasted emissions and established state and local emissions targets, develop and implement a process to establish regional emission targets.
- Priority Implementation Strategies – Review emissions targets and potential implementation strategies with the Regional Sustainability Planning Steering Committee.

- Energy, Air Quality and Climate Action Plan/Guide – Building on the tasks above and previous work, staff will develop appropriate regional emissions targets and performance measures for Chittenden County. Recommended strategies to reach these targets will be identified and, where possible, modeling work done to demonstrate the potential effectiveness of the recommended strategies in accomplishing the emissions targets. Because sustained efforts will be needed to accomplish emission targets, the plan/guide will take into account the need for future updates.

#### **Products and Activities:**

- |  |                |
|--|----------------|
| 1. Regional Energy Forums and municipal/partner engagement.                    | Ongoing        |
| 2. Complete allocation of regional emissions to municipalities.                | September 2012 |
| 3. Forecast future regional emissions based on trend and mitigation scenarios. | October 2012   |
| 4. Develop regional greenhouse gas emissions targets                           | December 2012  |
| 5. Prioritize potential implementation strategies.                             | June 2013      |
| 6. Draft regional energy, air quality and climate action plan/guide.           | June 2013      |

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#### ***2.2.3.3 Transportation Environmental Planning: Online Resource Mapping***

**Objective:** To maintain an online resource mapping tool to improve early resource agency consultation and project delivery.

**Description:** The primary purpose of this project will be to make it easier to identify natural resources, cultural resources and assist with the agency consultation process. This work is to maintain the online resource mapping tool implemented in FY 2011. Maintenance may include updating and adjustment of software or hardware to keep the tool up to date. As new GIS layers are developed they will be added to the tool.

#### **Products and Activities:**

- |  |         |
|--|---------|
| 1. Maintenance of online mapping tool.                   | Ongoing |
| 2. Develop of online maps as requested by municipalities | Ongoing |

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#### ***2.2.3.4 Transportation Environmental Planning: Wildlife Connectivity***

**Objective:** The Vermont Department of Fish and Wildlife and the Vermont Agency of Transportation have been working collaboratively to address terrestrial and aquatic wildlife movement and transportation corridors. These efforts have focused on the following:

- GIS and other tools to help identify sensitive areas along state transportation corridors
- Project level reviews and corridor planning efforts that incorporate consideration of terrestrial and aquatic wildlife movement and habitat impacts
- Education and outreach internally at VTrans and with local and regional planners regarding the issue of terrestrial and aquatic wildlife and transportation

**Description:** The Vermont Agency of Transportation (VTrans) and the Vermont Department of Fish and Wildlife (VDFW) have identified terrestrial and aquatic wildlife movement and habitat connectivity as important factors to consider in the transportation project development process from three perspectives: human safety, environmental stewardship, and fiscal responsibility. The goal of this effort is to gather sufficient data

regarding terrestrial and aquatic wildlife movement and habitat conditions to make substantive recommendations, in conjunction with VDFW, so that terrestrial and aquatic wildlife movement and ecological connectivity can be considered in relevant planning efforts (such as corridor plans or integrating conservation, transportation, and land use planning efforts), roadway maintenance and management (such as guard rail placement or signage), and the design and construction of appropriate VTrans projects. Through this process terrestrial and aquatic wildlife movement and habitat connectivity can become an integral part of the environmental review process at VTrans – similar to how historic, archaeological, and other natural resources are considered. It is hoped that this effort will take terrestrial and aquatic wildlife movement and habitat connectivity beyond an issue of compliance and become a more standard consideration for transportation projects in Vermont where appropriate.

CCRPC staff will continue to work on the multi-phased Wildlife Connectivity and Transportation project in which the organizations will collaborate with Jericho, Richmond and Underhill on their Regional Connectivity Project to help package and distribute their methodology, data sets, and other resources to other towns (Phase I) and then work directly with staff and volunteers in Bolton, Hinesburg, and Huntington to apply the Phase I methodology (Phase II). Staff will work with VNRC and DFW to guide the Chittenden Uplands Forests, Wildlife & Communities Steering Committee (comprised of representatives from Jericho, Hinesburg, Huntington, Richmond and Williston) on natural resource protection at the landscape level. A future Phase III would be to work with VTrans to refine wildlife and transportation Best Management Practices (BMP) currently in development and apply those BMPs at the local level to Jericho, Underhill, Richmond, Bolton, Hinesburg, and Huntington.

Data collection, BMP development and outreach will be coordinated to the extent possible with:

- Fluvial Erosion Hazard planning being undertaken by CCRPC and ANR/DEC,
- Efforts to address aquatic organism passage in Chittenden County watersheds,
- Efforts to improve water quality, and
- Regional and municipal hazard mitigation plans and river corridor planning.

In addition, CCRPC will assist municipalities as requested in preparing funding requests for mitigation projects along transportation corridors such as culvert replacements, drainage improvements, etc. that help address wildlife movement and/or aquatic organism passage.

### **Products and Activities:**

- |   |           |
|---|-----------|
| 1. Work with towns to package and distribute wildlife tracking methodology, data sets, and other resources as a way to incorporate wildlife and transportation into municipal planning. | Ongoing   |
| 2. Funding applications, as opportunities arise.  | Ongoing   |
| 3. Work with VTrans to encourage municipalities to use BMP  | June 2013 |

## ***2.3 Improve the transportation system in a manner that builds community, increases the vitality of neighborhoods, and minimizes disturbance caused by noise, glare, and vibration. (Goal 6)***

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### ***2.3.3 Regional Corridors and Circulation***

**Objective:** Conduct Corridor and Circulation Studies for regional corridors in Chittenden County that experience significant congestion and safety issues as well as increasing developmental pressures. Studies will assess corridor issues and future needs (all modes of transportation, land use, demographics, etc.) and develop short and long term solutions for the corridor. Convene and facilitate the US 2, VT 15, Western Corridor and Colchester Avenue working groups in order to ensure that recommended strategies are moving towards implementation.

**Description:** Conduct Corridor Studies of significant regional corridors, following processes outlined in the *Vermont Corridor Management Handbook* (2005). These studies will review and analyze current and future corridor conditions; develop corridor vision and goals; and evaluate strategies to address congestion, safety and other issues within the corridor and area of influence. Circulation studies will address critical congestion and safety needs for all modes along a segment of a regional corridor.

All corridor studies recommend that a *Corridor Working Group* be formed at the end of the study process to ensure that recommended corridor strategies are implemented. Active Corridor Working Groups have been formed and meet at least once annually to coordinate implementation activities for the US 2, VT 15 and Western corridors. All Corridor Working Groups will plan to meet at least once during fiscal year 2013 to track the progress of implementing the corridor plan recommendations. These groups include representatives from all participating municipalities and institutions along the corridor, state agencies, regional transportation groups and organizations, local businesses and other stakeholders.

#### **Products and Activities:**

1. US 2, VT 15, Western Corridor, Colchester Avenue, and Shelburne Road Working Groups Progress Reports Once a year
  2. Regional Corridor/Circulation Studies June 2013
    - Main Street (US 7) - Winooski: This is a circulation study to address severe peak hour congestion and queuing issues on US 7 in Winooski (FY12 Carry Forward)
    - Williston Road Complete Streets (Phases II & III) (FY12 Carry Forward) – South Burlington
    - Exit 17 Circulation Study - Colchester
    - Industrial Avenue (Route 2 to Route 2A) – Williston (FY12 Carry Forward)
    - VT 116 Corridor Study – Hinesburg
    - Shelburne Road Corridor Study – South Burlington (FY12 Carry Forward)
-

### 2.3.3.1 Local Corridors and Circulation

**Objective:** Conduct Corridor and Circulation Studies for municipal (local) corridors that experience significant congestion, safety issues and increased development pressures.

**Description:** This task will focus on significant local corridors. Local corridor studies will be conducted according to the *Vermont Corridor Management Handbook* (2005) to the extent possible. Studies will assess corridor issues (congestion, safety, etc.) for current and future conditions (transportation, land use, demographics, etc.) and develop short and long term solutions for the corridor.

**Products and Activities:**

1. North Avenue, Burlington – North Street to Plattsburg Avenue

June 2013

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### 2.3.4 Lake Champlain Byway Development

**Objective:** To work with its member municipalities and others to aid in the further development of the Lake Champlain Byway.

**Description:** Eight of the County's communities (Milton, Colchester, Winooski, Essex Junction, Burlington, South Burlington, Shelburne and Charlotte) are member communities of the Lake Champlain Byway, a State designated Byway. From north to south, the formal route is 134 miles (215 km) long and consists of U.S. Route 2 through the Champlain Islands, U.S. Route 7 through Chittenden County and then south to seven different communities in Addison County. The Byway's Chittenden County Corridor Management Plan, first approved by the municipalities in 2002 is currently being updated to a 2012 version.

The mission of the National Scenic Byways (NSB) Program is to provide resources to the byway community to create unique travel experiences and enhance local quality of life through efforts to preserve, protect, interpret, and promote the intrinsic qualities of designated byways. The Byway is managed by the Lake Champlain Byway Council, a registered Vermont Non-Profit Corporation. The purpose of the Corporation is to undertake and support projects that balance the promotion, preservation, enjoyment, and stewardship of the Byway's intrinsic resources. The Council's 13-member Board is comprised of one member each of the following eight organizations: Northwest Regional Planning Commission, Lake Champlain Islands Chamber of Commerce, Chittenden County Regional Planning Commission, Lake Champlain Regional Chamber of Commerce, Addison County Regional Planning Commission, Addison County Chamber of Commerce, Lake Champlain Bikeways and the Lake Champlain Basin Program and five at-large seats.

Through securing competitive NSB grants, the CCRPC and the Council have completed a variety of projects such as the installation of interpretive panels and roadside Byway trailblazer signs, the publication and distribution of marketing brochures, activity guides and posters, development of a website, [www.lakechamplainbyway.com](http://www.lakechamplainbyway.com) and cell phone audio interpretation, assisting communities with the design and installation of wayfinding signage, informational kiosks, portable toilet shelters and other visitor amenities. All of these projects

serve to improve the visitor and traveler experience but also aid in improving livability for local residents as well.

Under this task CCRPC staff will engage in variety of tasks to aid in the long term development and sustainability of the Byway. While the NSB grants have enabled the completion of various projects to aid in the traveler experience, NSB grants do not fund all of the efforts necessary to run and improve the Byway and its Council.

**Products and Activities:**

1. Participation at Byway Council, VT Byways Summit, VT Byways Council, Travel Information Council, and related meetings; consultation with VTrans (unrelated to grant specific activities) Ongoing
2. Project identification, consultation, outreach, and grant writing with member municipalities and with organizations managing intrinsic resource sites. Ongoing
3. Maintenance of Byway website, Facebook page & fielding Byway inquiries Ongoing
4. Participation at related national and regional meetings such as the National Scenic Byway Conference, the National Association for Interpretation and similar conferences. Ongoing
5. Integration of 2011 Corridor Management Plan into MTP and Regional Plan June 2013
6. Reporting to CCRPC Board and Committees Ongoing

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## ***2.4 Establish a transportation system that uses diverse sources of power and maximizes energy efficiency and conservation. (Goal 9)***

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### ***2.4.1 Alternative Fuels Planning***

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**Objective:** To continue the analysis of alternative fuels appropriate for use in Chittenden County, identify projects and programs, and determine appropriate roles for the CCRPC.

**Description:** CCRPC will continue to collaborate with the CCTA, the UVM Transportation Research Center (TRC), the Vermont Clean Cities Coalition, Vermont Gas, Vermont's Regional Planning Commissions, VTrans, electric utility companies serving the region, Vermont Energy Investment Corporation (VEIC), the Vermont Department of Public Service (DPS) as well as other stakeholders to incorporate alternative fuels strategies into an energy plan for our region. CCRPC seeks to support and expand alternative fuel options for local government, businesses and individuals.

**Products and Activities:**

1. TRC and Clean Cities Program coordination Ongoing
2. Project Get Ready involvement and coordination Ongoing
3. Expanding CCRPC role in alternative fuels options analysis Ongoing
4. Partnership with local, regional and state partners to implement programs and projects as opportunities arise Ongoing

## 3.0 Multi & Intermodal Services

***3.1 Create a transportation system that offers constantly improving safety, accessibility, flexibility, and comfort for all users, including the elderly, the disabled, and youth. (Goal 3)***

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### ***3.1.1 Create and Improve Transit – CCTA***

#### **Market Research and Data Collection**

**Objective:** To provide information for use in service planning

**Description:** Continue and update ongoing market research and data collection for service planning, shelter and stop placement. This includes projects such as online demographic research, phone surveys, employer start/end time research. Participation in and coordination with State, regional and local transportation entities, committees, and training events.

**Products and Activities:** Data and information to be used in planning new service development, service changes and to gain insight into regional views of CCTA. This could include such projects as phone and web surveys and the analysis of census data. CCTA will provide a copy of all market research analyses that are completed.

June 30, 2013

#### **Coordinated Human Service and Paratransit Planning**

**Objective:** To work with Chittenden County human service providers and municipalities and CCRPC to efficiently and effectively coordinate human service and ADA paratransit transportation.

**Description:** Hold coordinating meetings for Senior and Disabled human service transportation and ADA paratransit, work with human service transportation contractors, cab companies, municipalities, human service providers, the CCTA Board and the State of Vermont. Development of plans, policies and procedures necessary to implement these services.

**Products and Activities:** Jointly provided coordinated human service transportation services provided in as cost effective a manner as possible to meet the agency/client needs, as well as policies, procedures to implement these services. Research and development of paratransit scheduling software. Continue, in conjunction with CCTA Board and with input from the ADA committee, analyses of eligibility criteria/eligibility process and other measures to manage program efficiently. CCTA will provide a summary of the coordination meetings held, procedures updated, and services implemented in the monthly reports CCTA submits to the CCRPC.

Ongoing

## **Passenger Shelters & Signage**

**Objective:** To continue the planning of our passenger shelter replacement and expansion program in order to provide shelter for bus patrons. To coordinate bus stop sign locations.

**Description:** This project is to design, site and permit new shelters at higher ridership locations (based on ridecheck data). It will also provide for replacement older shelters that are worn out and or provide inadequate protection from the elements. Installation of shelters has been shown to increase bus ridership by creating some permanence around a bus route as well as the obvious protection from the elements. Staff will identify stop locations and coordinate with operations, utilities, and with property owners to provide adequate and appropriate bus stops.

**Products and Activities:** Site plans for three shelters with solar lighting and bike storage racks. CCTA will provide monthly progress updates on the shelter program, including a summary of any ongoing planning, permitting, or construction activities. Ongoing

## **Vehicle Needs Planning & Cost Comparison**

**Objective:** To provide input on the size and type of buses to be purchased in CCTA's ongoing replacement program.

**Description:** Operating and maintenance costs are collected for each bus and group of buses by size. With every bus purchase, CCTA analyzes ridership data, bus scheduling, driver scheduling, and capital carrying needs to determine the proper mix of bus sizes to optimize these multiple competing goals. This data is also useful for comparing the potential current vehicle life cycle costs of vehicles of varying sizes and for benchmarking these costs against the cost of alternative fueled vehicles, as operating and maintenance cost is one of the major considerations. It is also crucial in helping determine when buses are truly worn out (when the cost of maintaining an old bus exceeds the capital costs of purchasing a new one).

**Products and Activities:** Current data on bus size, fuel type, propulsion systems to guide in bus purchase decisions. CCTA will provide summaries of activities in support of this element in monthly reports from CCTA to CCRPC. Ongoing

## **Regional Public Transportation Expansion**

**Objective #1:** To plan regional and inter-regional transit services.

**Description:** Completion of a Transit Development Plan (TDP) in CCTA's non-urban counties without current TDP's: Franklin, Grand Isle, and Lamoille.

**Products and Activities:** Complete TDP for Franklin, Grand Isle, and Lamoille Counties. Examine opportunities for interregional service, shuttle services, intercept lots, and feeder services. March 31, 2013

**Objective #2:** To pursue funding sources other than property taxes to support public transportation expansion in CCTA's service area region. Ongoing

**Description:** Continuation of the previous efforts to develop a funding source other than the property tax.

**Products and Activities:** New local and regional services funded through means other than the property tax. Monthly reports on activities directed towards this goal. Ongoing

**Objective #3:** To share the Transit Development Plan with our Chittenden County municipal members.

**Description:** Meetings with members of Selectboards, Planning Commissions, DRB's and municipal staff to explore the opportunities to improve public transportation and also the opportunities to make transportation more efficient and effective by better linking land use and transportation.

**Products and Activities:** Meetings with municipal officials and staff to explain CCTA's plans and to improve the land use/transportation link. June 30, 2013

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### ***3.1.6 Public Transportation Planning by CCRPC***

**Objective:** To effectively conduct, coordinate, communicate, and participate in transit-related planning activity in the region.

**Description:** In coordination with municipalities, regional partners and the state pursue a transit funding strategy that decreases reliance on the local property tax and encourages more municipalities to participate in a regional public transportation system; communicate with municipalities and other interested groups the needs and benefits of public transportation; monitor and propose appropriate legislative policy for Board consideration; and consider the special transportation needs of an increasingly elderly population.

**Products and Activities:**

1. Public transportation communications and coordination with interested parties Ongoing
2. Participation in CCTA's ADA and Elders and Persons with Disabilities Transportation Committees Ongoing
3. Collaboration with CCTA to implement elements of the Transit Development Plan Ongoing

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## ***3.2 Establish a transportation system that minimizes the time and total cost of moving people and goods, thereby allowing the economy of the Region to thrive. (Goal 4)***

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### ***3.2.1 Transportation Improvement Program (TIP) Development and Management***

**Objective:** To develop and maintain a transportation spending program that supports CCRPC's short-term plans and programs and helps move the region toward the goals embodied in the Metropolitan Transportation Plan. This includes developing the TIP, monitoring the status of Chittenden County projects throughout the year to facilitate necessary revisions to the TIP, and providing input to the local communities and Chittenden County Legislators to assist with project advancement.

**Description:** The Transportation Improvement Program (TIP) for Chittenden County is the regional four-year budget for implementation of transportation improvements. The TIP is based on the region's priorities as laid out in the MTP. The TIP is submitted to VTrans as the region's input for the Statewide Transportation Improvement Program (STIP).

Before approving the CCRPC TIP, the CCRPC's process must satisfy the following conditions:

1. Projects in the TIP must conform to the adopted Metropolitan Transportation Plan.
2. Projects in the TIP must be prioritized per CCRPC's adopted prioritization process.
3. The public shall have an opportunity to help develop, review and comment on these projects before they are approved by the CCRPC.
4. The TIP must be fiscally constrained.

As projects move from project development through design to construction, numerous factors may cause the projects to be delayed. These may include unexpected design changes, environmental and permitting issues, and right-of-way issues. CCRPC staff will track project costs and schedules in order to identify the need for amendments to the TIP, to notify local communities and Chittenden County Legislators regarding project delays, and to identify funds that may be available for advancing other prioritized projects. Before approving amendments to the CCRPC TIP, the adopted CCRPC Amendment Procedures must be followed.

#### **Products and Activities:**

1. An adopted FY2013 to FY2016 TIP that includes projects that conform to the Metropolitan Transportation Plan. The FY 2013-2016 TIP will be completed and submitted for the Governor's approval in July 2012
2. A draft FY2014 to FY2017 TIP that includes projects that conform to the MTP. The FY2014-2017 TIP will be completed and submitted for the Governor's approval in July 2013
3. Assist VTrans in the annual STIP hearing process as needed.
4. CCRPC projects will be prioritized and submitted to VTrans as required by April of 2013

4. TIP amendments as needed.
5. FY2012 Annual Listing of Projects Obligating Funds to be made available on CCRPC website
6. TIP Summary

July 2011

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### ***3.3 Provide levels of access and mobility that insure people and goods can get where they need to go, when they need to go there. (Goal 7)***

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#### **3.3.1 Access and Mobility – CCTA**

##### **Ridecheck**

**Objective:** To obtain information on where and when people are boarding buses for use in route planning and placement of stop amenities (stops, shelters, benches, and informational signage).

**Description:** Continuation of a project begun in FY 03 to survey every trip on every route at least once annually for weekdays, Saturdays and Sundays. The survey will include the following information at each stop: number of passengers boarding, number of passengers de-boarding, and bus load. CCTA will develop surveys of the system, hire and train surveyors to sample the trips, check surveys, compile survey results, create reports, and consider changes based on results. This project incorporates timepoint and route variation database updating since it is necessary for this project as well as the timepoint analysis.

**Products and Activities:** Updated information in spreadsheet report format on CCTA route, route segment and stop performance. This data is considered in route restructuring noted in section 3.1. This information is provided to the MPO for use in the regional model, as well as municipalities and VTrans for other planning purposes and will be provided to CCRPC.

June 30, 2013

##### **Time Point Analysis**

**Objective:** To publish bus schedules based on actual operating experience.

**Description:** Based on driver, passenger and operations management reports, CCTA considers the validity of timepoints and running times on individual routes. This project is implemented based on quantitative observations and or a GPS based system depending on the magnitude of the problem(s).

**Products and Activities:** Updated on-time performance data reports and analysis thereof for incorporation in schedule updates at least twice a year. CCTA will reflect the results of the timepoint analysis in its updated web and paper schedules as well as in ongoing reports to the MPO.

June 30, 2013

## Rider Surveys

**Objective:** To obtain demographic information on riders for service planning and marketing, and to obtain feedback on services from riders.

**Description:** Develop surveys, hire and train surveyors, tabulate surveys and create summary report.

**Products and Activities:** Survey results to be used in marketing existing services, feedback for internal improvement, and for use in service changes. This could include such projects as on-board customer service surveys and paratransit rider surveys. CCTA will provide a copy of all survey questions, summary reports, and analyses to CCRPC. June 30, 2013

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### 3.3.4 2035 Metropolitan Transportation Plan (MTP) and ECOS (Regional) Plan

**Objective:** To continue work on content for the 2035 MTP in the context of integrating the MTP into the development of CCRPC's Regional Sustainability Plan.

**Description:** A new MTP schedule was established in FY11 to allow the CCRPC to synchronize MTP development with the CCRPC Regional Plan development schedule. This change was made to coordinate these activities with the HUD funded Regional Sustainability Plan (ECOS). FY13 anticipated tasks include:

- Continue to model and analyze transportation scenarios. We anticipate an iterative modeling process that will mix and match many projects within a hybrid transportation scenario.
- Identify and refine transportation priorities as needed, for inclusion in the ECOS plan
- Complete the public survey that largely replicates the 2000 and 2006 versions and note any attitudinal shifts over time. The chief purpose of the survey will be to objectively measure public opinion in Chittenden County regarding performance of the region's transportation system and the potential strategies available to address existing and future deficiencies.
- As needed, assist VEIC in data development regarding their locational efficiency work task in the Regional Sustainability Plan.
- Revise MTP content as appropriate with updates from the Regional Sustainability Plan.

**Products and Activities:**

1. Perform transportation and land-use modeling analyses. Ongoing
2. Draft and revise transportation related text for Regional Sustainability Plan and MTP. Ongoing
3. Complete public opinion survey. July – September
4. Municipal, resource agency, and public outreach on status, strategies and projects. Ongoing

### ***3.3.5 Freight Transportation Planning***

**Objective:** To develop appropriate strategies to enhance and facilitate multimodal freight movements in Chittenden County and balance the utilization of the rail and highway transportation systems in the county.

**Description:** CCRPC staff will continue to identify and evaluate issues with the freight transportation network in Chittenden County and work with stakeholders to develop strategies to address these issues. Recommended freight strategies from the Western Corridor Transportation Management Plan will also be advanced.

**Products and Activities:**

1. Identify high-use goods movement roadways in Chittenden County. Identify physical and operational obstacles that impede the safe and efficient movement of freight on county roadways—develop and prioritize strategies to address such impediments. Fall 2012
2. Participate in outreach efforts with VTrans to implement outcomes of the Statewide Freight Study, assist in enhancing their stimulus application for projects along the Western Vermont rail corridor and keep pulse on efforts to advance the “Boston to Montreal High-Speed Rail” planning effort Ongoing
3. Participate in the Vermont Rail Advisory Council and subcommittee activities Ongoing

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## ***3.4 Develop a transportation system that features a variety of travel modes and encourages the reduction of single occupant vehicle use. (Goal 10)***

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### ***3.4.1 Pedestrian/ Bicycle Transportation Planning***

**Objective:** To advance and monitor the regional Pedestrian/Bicycle Plan implementation efforts; to document pedestrian and bicycle planning efforts; to effectively coordinate the planning and provision of bicycle/pedestrian facilities both within Chittenden County and with neighboring regions; and to educate and inform the public on the benefits of bicycle/pedestrian and other non-single occupant vehicle (SOV) travel modes.

**Description:** Fulfilling the objectives of this work task will be accomplished through implementation and management of the sidewalk grant program; preparation for and attendance at pedestrian/bicycle meetings of CCRPC, VTrans, municipalities and others; pedestrian and bicycle data collection; Safe Routes to School (SRTS) consultations and coordination; continue pedestrian/bicycle planning and education efforts that advance other UPWP work tasks and demonstrate our commitment to active transportation programs; provide status reports on local, regional and inter-regional pedestrian/bicycle efforts when necessary; coordinating with municipal pedestrian/bicycle committees, those from adjoining regions, and local and regional planners in order to coordinate the planning for trails, shared use paths, on-road bicycle facilities and sidewalks in Chittenden County as well as the facility links to municipalities outside the region; coordinating inter-regional path plans such as the Island Line and Cross Vermont Trail and local level efforts to assure implementation

of the CCRPC Regional Pedestrian/Bicycle Plan; begin data reporting for performance measures as stated in the Plan; assisting, as needed, local path committees and pedestrian/bicycle organizations such as Local Motion and the Lake Champlain Bikeways, to advance the plans and implementation of pedestrian and bicycle infrastructure consistent with CCRPC priorities; and working with interested parties, the media, and schools to inform/educate on the benefits on non-SOV travel.

#### VTrans' State System On-Road Bike Facility System Assessment

The purpose of this task is to inventory and evaluate on-road bike facilities along Vermont state highways. The results will assist VTrans with proactively satisfying statutory requirements related to on-road bike facilities while developing and implementing roadway construction, rehabilitation and paving projects. The project includes identifying where modifications to state roads are necessary to accommodate bikes and where modifications to state roads are not necessary because an existing road already provides adequate access. The project may also serve as an outreach resource for VTrans, RPCs, municipalities and the general public to help explain why some roads are widened and other don't need to be. It will be conducted in partnership with the RPCs and with assistance from a consultant.

#### **Products and Activities:**

1. Pedestrian/bicycle data collection July, August 2012
2. Administer/manage the sidewalk grant program (implementation funds for this task will come from non-UPWP sources.) April, May 2013
3. Monitor baseline data for performance measures as stated in the 2008 Regional Pedestrian/Bicycle Plan Ongoing
4. SRTS coordination activities including mapping, inventory & traffic counts Ongoing
5. Monitor progress of Federal authorization legislation and potential grant opportunities Ongoing
6. Meetings with local committees and other groups to advance pedestrian/bicycle facilities in coordination with Local Motion Ongoing
7. Administer and manage pedestrian/bicycle planning efforts Ongoing
8. Presentations and other educational material Ongoing
9. Develop a strategy to advance one or more regional gaps, such as Muddy Brook Crossing Fall 2012
10. Identify and map state roads where biking is most desirable and/or where there is currently higher use by biking and walking. The identification of desirable routes could be based on adopted regional or local bicycle and pedestrian plans, recreational/tourism publications, commuting patterns, local knowledge, or other sources. Summer 2013
11. Provide supplemental data as available on roadway features (especially shoulder and travel lane widths) that will be used by consultants to evaluate existing conditions. Summer 2013
12. Review and comment on all work products generated by the consultant and VTrans Ongoing

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### **3.4.1.2.1 Regional/Inter-Regional Pedestrian/Bicycle Coordination – Local Motion**

#### **Objective:**

Support for implementation of Chittenden County Regional Bike & Ped Plan through targeted Close the Gaps and Complete Streets Activities

#### **Description: *Close the Gaps-Complete Streets Technical Support***

1. Building Local Capacity: Provide town and regional walk-bike committees with technical assistance and enhance staff capacity to provide support.
2. Advancing Regional Connections: Help lead the emergence of a regional bicycle network in collaboration with municipal and regional partners (Close the Gaps)
3. Strengthening Local Policies: Work with interested municipalities to revise local ordinances to better support walking and biking.
5. Cultivating Diverse Funding Sources: Identify and pursue creative ways to get bike-ped improvements funded.

#### **Products and Activities: *Close the Gaps-Complete Streets Technical Support***

- |   |         |
|---|---------|
| 1. Direct technical assistance  | Ongoing |
| 2. Identification and mapping of regional priority corridors, comprehensive assessment of completed/planned/unaddressed needs | Ongoing |
| 5. Direct assistance to two communities to cultivate funding and leadership in Burlington Bike Path Task Force                | Ongoing |

#### **Description: *Walk-Bike Promotion and Outreach***

1. Local Motion runs the Vermont Bike Challenge (part of the National Bike Challenge) from May through August to encourage people of all backgrounds bike more often. Participants log their miles online, get points based on how often and how far they ride, and compete on behalf of their employer, town, and team for prizes and glory. With over 1200 registered riders and nearly half a million miles in 2012, Vermont won the Challenge nationwide last year! Local Motion will build upon the 2012 success and refine outreach strategies, training materials and recruitment/training of volunteers to enhance the 2013 Bike Challenge. The Challenge runs from May 1 through August 31. Local Motion will be promoting it heavily starting in March through direct outreach to businesses and individuals statewide. For all outreach in Chittenden County, Local Motion will cross-promote the Go Chittenden suite of services.

2. Compilation and manipulation of a comprehensive set of county-wide walk-bike related data layers. These layers will serve as the foundation for production of a series of local and regional walk-bike maps over the next one to two years, with the Island Line map noted below as the first in the series. Development and publication of a completely revised Island Line map, to coincide with the reopening of the Causeway and the expansion of bike ferry service. This map will replace the current “artistic” map with one developed to a high standard of accuracy that will include connecting facilities and other information designed to maximize usage of the entire trail (from Oakledge Park in Burlington to South Hero) as a regional recreation and transportation resource.

3. Educating the Public about Walking and Bicycling: Raise the profile of walking and biking through a coordinated series of outreach events. Walk-Bike Month, which is May will include countywide outreach, with a special emphasis on Burlington (as BDPW gives us additional funding to lead that effort).

Products and Activities: *Walk-Bike Promotion and Outreach*

- |  |                    |
|--|--------------------|
| 1. Refined outreach strategies and training materials, recruitment and training of volunteers, retention of enhancements for the 2013 Bike Challenge | Spring/Summer 2013 |
| 2. Develop data set for future use to create Regional Bike-Ped Commuter Maps, including a revised Island Line map                                    | Spring 2013        |
| 3. Publication of e-news articles, interactive outreach program, Bike Month 2013 roll out, coordination of two high profile bike-ped events          | Spring 2013        |
| 4. Participate in Go! Chittenden County Partner Meetings & Activities  | Ongoing            |

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### ***3.4.2 Reduce SOV (Service and Operations Planning & Development) – CCTA***

**Objective:** To respond to community requests and internal analyses on potential service changes.

**Description:** Evaluation of current service, obtain and review data and reports, elicit community input, consider community requests, determine mileage, time and cost for new service, propose new transit service, develop service implementation plans, write bus and driver schedules for new service. Projects include but are not limited to: North Avenue, Riverside, City Loop and new commuter routes.

**Products and Activities:** New and revised bus routes and schedules. For all major service changes, CCTA is required to hold a public hearing, CCTA will provide a copy of all public hearing PowerPoint presentations, any other handouts, and the official hearing minutes by July 15, 2013. Service proposals to support grant applications. Examine new services for “choice” riders; take steps to increase the number of Smart Business Program Members.

Ongoing

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### ***3.4.3 Transportation Demand Management (TDM) - CCRPC***

**Objective:** To advance regional TDM efforts in coordination with Local Motion, CarShare Vermont, CATMA, GoVermont, VEIC, CCTA and other regional partners and continue to advance TDM efforts funded through the FY12 federal TCSP grant award.

**Description:** To advance TDM efforts when and where appropriate; to examine the applicability of Transportation Management Associations and TDM programs in areas experiencing parking and travel constraints; to continue park and ride planning and coordination with VTrans; to increase the levels of non-SOV travel throughout the year by focusing on periodic program activities; and to coordinate efforts with CarShare Vermont to educate the public about car-sharing and promote its role in a transportation system.

The Way to Go! Commuter Challenge program advocates and provides incentives for individuals to travel using non-SOV modes during this week-long event and through other potential program activities. This project includes extensive business, school, and public outreach through a variety of communication methods in order to market to a large audience. Work may also include updating and maintaining the program website ([www.waytogovt.org](http://www.waytogovt.org)) and administering the registration database. CCRPC will assist Chittenden County partners to promote and manage our regional efforts as part of the statewide WTG program, led by the Vermont Energy Investment Corporation (VEIC).

**Products and Activities:**

- |  |                  |
|--|------------------|
| 1. Work with TDM partners to advance programs funded through the FY12 federal TCSP grant award | Ongoing          |
| 2. Coordination meetings with VTrans on park and ride development                              | Ongoing          |
| 3. TMA/TDM feasibility applications in selected areas as requested                             | Ongoing          |
| 4. Assist CarShare Vermont with outreach planning  | Ongoing          |
| 5. Transportation Management Association Program Expansion                                     | Ongoing/May 2013 |
| 6. Support VEIC as Way to Go! (WTG) project contractor   | Ongoing/May 2013 |
| 7. Way to Go! Commuter Challenge marketing   | September – May  |
| 8. Work with WTG partners and VEIC on outreach and promotional activities                      | June 2013        |
| 9. Assist VTrans with Outreach to Local Energy Committees for Go Vermont                       | Ongoing          |

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### ***3.4.3.1 Transportation Demand Management (TDM) – Consultants***

**Objective:** Motor vehicle dependence makes our transportation system inefficient, inequitable, and unsustainable. Transportation professionals refer to the application of strategies and policies to reduce travel demand, specifically that of single occupancy private vehicles, or to redistribute this demand in space or in time to improve the efficiency of our transportation system as Transportation Demand Management (TDM). Similar to the energy conservation movement which looks at conserved energy as the least expensive kilowatt hour to produce, likewise increasing the efficiency of the current transportation system by managing it more efficiently is the least expensive way to improve mobility, save energy, and reduce air pollution.

In March of this year the U.S. EPA Office of Transportation and Air Quality issued a study entitled *Potential Changes in Emissions Due to Improvements in Travel Efficiency* EPA-420-R-11-003. The study was intended to determine the effectiveness of various strategies for reducing vehicle miles traveled (VMT) and corresponding potential for reductions in emissions in metropolitan areas.

The study used regionally derived travel model data (including data from the CCRPC) and other travel activity information and planning analysis to estimate potential emission reductions from urban areas of varying sizes and characteristics. The results were applied to other urban areas of similar characteristic to estimate reductions on a national scale.

The travel efficiency strategies evaluated in the EPA study included:

- employer-based travel demand management, such as flexible work hours; incentives and support for carpooling; subsidies/discounts for transit, pedestrian and bike modes; and telecommuting;
- land use policies, such as transit-oriented development, smart growth, increase in density, and mixed use developments;
- transit-related strategies, including improved transit service and fare reductions or subsidies; and
- pricing strategies, including parking pricing and VMT fees/congestion pricing.

The study found that progressively greater levels of VMT reductions and emissions reductions could be achieved by combining the targeted strategies. It looked at seven scenarios, with the first being region-wide travel demand management - then adding land use changes, then transit elements, and finally, pricing strategies.

In Chittenden County, we are fortunate to have a diverse range of organizations that provide transportation alternatives to driving alone, including GoVermont (VTrans), the Chittenden County Transportation Authority, CarShare Vermont, Local Motion, the Campus Area Transportation Management Association (CATMA), and Vermont Energy Investment Corporation (VEIC). Each of these organizations provides complimentary services to aid in the integration of existing and planned TDM strategies and policies. What we do not have, however, is a regional TDM program that provides direct funding for organizations such as these, as well as for municipalities, to coordinate their TDM activities and expand services. Coordination and integration of TDM strategies to incentivize the utilization of alternative modes of transportation is critical to ensuring their use and effectiveness, as outlined in the EPA report cited above.

### **Description:**

#### ***Neighborhood-based VMT Reduction Social Marketing Program – CarShare Vermont***

CarShare Vermont, Local Motion, CCTA and other partners seek to implement a far-reaching grassroots behavior change campaign that encourages residents of targeted neighborhoods to learn about and try sustainable transportation alternatives to driving. Borrowing from the highly successful In Motion program introduced by King County Metro in Seattle, Washington, local partners will deploy proven community-based social marketing strategies to address the motivations of local residents by providing information, converting awareness to action, and offering real incentives to encourage healthier travel behavior. The first phase of program development will include market research to gather information about what factors motivate or discourage the use of sustainable transportation options. Then program partners will develop neighborhood-specific “getting around” guides that provide information about how to utilize the various transportation services, as well as fully integrated community maps that display bus routes, walking routes, CarShare pods, and bike facilities, as well as nearby amenities and attractions. In an effort to normalize the use of sustainable transportation choices, the program will also issue free bus passes, CarShare memberships, and bike tune-ups to 25 households from various neighborhoods that agree to turn in the keys to at least one of their vehicles for at least six months. Participating households will be required to document their experiences. Program partners will provide matching funds in the form of in-kind staff support, as well as financial resources.

**Products & Activities:**

Summer 2013

- Conduct market research to gather information about what factors motivate or discourage the use of sustainable transportation options
- Develop neighborhood-specific “getting around” guides
- Promotional incentives for at least 25 households to engage participation
- Directly expose 1,000 households to a suite of sustainable transportation options; add at least 25 new users to CarShare Vermont.
- Participate in Go! Chittenden County Partner Meeting & Activities

Ongoing

**Car Share Expansion Assessment - *CarShare Vermont*****Description:**

1. Utilize U.S. Census and other datasets to conduct preliminary market research in Hinesburg and Essex Junction to determine viability of CarShare expansion into these communities
2. Conduct in-depth market research in Hinesburg and Essex Junction to determine viability of CarShare expansion into these communities
3. Based on outcomes of 1 & 2 above, conduct community outreach to promote awareness of the use of car sharing for residents of Hinesburg and Essex Junction
4. Provide a final determination regarding the expansion of CarShare VT services into Hinesburg and Essex Junction

**Products & Activities:**

1. Report on the basic operational criteria to support car sharing in Hinesburg and Essex Junction including a basic understanding of the community’s transportation assets

Fall 2013

2. Determination of potential demand and interest in car sharing through survey and focus groups of businesses and the public; mapping of potential members; identification of community champions and volunteers; development of community database for continued outreach and communication; identification of funding opportunities for implementation

Winter 2013

3. Implementation of at least two public events to increase awareness of CarShare VT; attend community meetings to present information regarding CarShare VT; develop outreach and communications materials for utilization at events, for posters, on Front Porch Forum, newspapers, etc.

Winter/Spring 2013

4. Prepare a final assessment and progress report for Hinesburg and Essex Junction

Summer 2013

***Regional Bike Rack Program Coordination – Local Motion******Summer 2012***

There is growing demand across the region for bike racks from businesses, schools, building managers, etc. Ordering one bike rack at a time can be cost prohibitive because a vendor cannot give quantity pricing on one unit and shipping costs are significant. Additionally, property owners do not often have the time to research the bike racks that are well designed and as a result many suboptimal racks are placed around the county each year.

Local Motion is willing to coordinate a regional bike rack program where we can provide racks to property owners and managers. Our proposal is to fund the program’s coordination

through the CCRPC but acquire the racks through alternative non-federal funding so as to allow the greatest flexibility with acquisition, resale and placement.

**Products & Activities:**

Coordinate a regional bike rack program and place 25 racks around Chittenden County in FY12. (FY12 Carry Forward)

***Transportation Management Association Program Expansion – CATMA***      ***Ongoing***  
CATMA was formed in 1992 to jointly plan for and manage parking and transportation for its members in Burlington. Current members include Champlain College (Champlain), Fletcher Allen Health Care (FAHC), the American Red Cross (ARC), City of Burlington, Chittenden County Regional Planning Commission (CCRPC) and the University of Vermont (UVM) who have agreed to share resources, infrastructure, and associated facilities to better coordinate land use and lessen environmental impacts associated with parking and transportation. To mitigate traffic impacts on campuses and city streets, a comprehensive strategy of transportation system management (TSM) measures has been developed that includes:

- peak hour traffic control measures
- shuttle systems serving shared satellite and off-site parking facilities and intra-campus travel

Currently, the shuttles serve more than 2 million riders each year with a combined fleet of 21 vehicles. This system operates within the core area of the institutions and lessens traffic on adjacent streets. The intra-campus routes interface with the regional CCTA bus system at key locations throughout the core.

In addition, significant incentives are offered as transportation demand management (TDM) options. These options include:

- carpool/vanpool incentives
- staggered work and class scheduling
- a joint, confidential carpool matching program (RidesWork)
- mass transit subsidies and an Unlimited Access Program
- incentives to park at off-site locations
- pedestrian walkways and bikeway system
- flex time policies
- an emergency ride home program
- bike/walk incentives program
- telecommuting
- monthly drawings to local restaurants for all registered alternate commuters

The CATMA program framework would be utilized to establish a regional Employee Transportation Coordinator (ETC) program at the workplaces of major regional employers. On site coordinators would be assisted by CATMA staff in the deployment of TDM services to their employees. Existing CATMA resources such as ride matching for car pooling, marketing, education and outreach, and incentive programs would be deployed through the CATMA offices to the ETC for the major employers involved in the program. CATMA staff would coordinate with other TDM resource partners such as GoVermont (VTrans), the

Chittenden County Transportation Authority, CarShare Vermont, and Local Motion to develop and implement

**Products & Activities:**

1. Expansion of CATMA program services through the development of a Regional Employee Transportation Coordinator (ETC) program deployed through the CATMA offices to no less than four major employers during the first year.
2. Participation in Go! Chittenden County Partner Meetings & Activities Ongoing

***Scoping of Park & Ride Lots in Chittenden County – Selected Consultant(s)***

Based on the outcomes of the 2011 Chittenden County Park, Ride, and Intercept Facility Plan update, staff will coordinate the selection and implementation of a limited number of scoping projects for the siting of new and/or expanded Park and Ride lots in Chittenden County.

**Products & Activities:**

Expansion of park and ride facilities in Chittenden County through scoping of new/upgraded facilities - Richmond Village June 2013

***Way to Go! Commuter Challenge – Vermont Energy Investment Corporation***

This program advocates and provides incentives for individuals to travel using alternative modes during the Way to Go! Commuter Challenge and other potential program activities. This project includes extensive business, school, and public outreach through a variety of communication methods in order to market to a large audience. Work also includes updating and maintaining the program website ([www.waytogovt.org](http://www.waytogovt.org)) and administering the registration database. CCRPC will assist Chittenden County partners to promote and manage our regional efforts as part of the statewide WTG program, led by the Vermont Energy Investment Corporation (VEIC).

**Products & Activities:**

Ongoing

- Serve as project contractor
- Implement outreach and promotional activities
- Project website maintenance and development
- Manage registration database
- Baseline and tracking data to assess success of program
- Conduct a statistically valid follow up survey to more accurately measure 2012 program successes
- Participate in Go! Chittenden County Partner Meetings & Activities

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#### ***3.4.4.1 Project Definition/Scoping Studies – CCRPC***

**Objective:** To advance prioritized projects through the planning process by providing project definition and scoping services.

**Description:** The project definition process includes some or all of the following steps: identifying transportation problems to be solved, obtaining early public and elected officials' participation, studying alternatives, evaluating environmental and engineering constraints, selecting a preferred alternative for design, and developing a conceptual design for that

alternative. CCRPC conducts a variety of project definition studies, including those under part of the VTrans project development process called scoping. The scoping process evaluates alternatives at a concept level and does a screening level review of environmental constraints. Scoping typically concludes with the acceptance of a locally preferred alternative. CCRPC performs scoping studies in accordance with the VTrans Project Development Manual. CCRPC will coordinate with VTrans on selection of projects for scoping.

CCRPC also provides scoping services for projects intending to apply to the Transportation Enhancement program and for improvements to be funded with 100% local funds.

CCRPC selects projects for project definition and scoping studies based on the accepted prioritization process, with input from the TAC and VTrans. The available CCRPC financial resources for project definition and scoping studies will be first dedicated to completing studies carried over from prior year(s), and then to new candidate studies, which will be addressed generally in order of the priority assigned them under the CCRPC's prioritization process.

Municipalities provide 3% local cash match for scoping projects in their communities. This creates ownership of the project and helps provide additional non-federal match.

***Completion of Scoping, Corridor and Technical Assistance projects does not guarantee state and or Federal funding will become available for project implementation in the future.***

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#### **3.4.4.2 Project Definition/Scoping Studies (Consultant)**

The projects that are currently under contract with consultants, and could potentially carry over into FY13 are in Table 4.

**Table 4 FY12 Scoping Studies – Regional and Locally Matched**

<b>MTP Category</b>	<b>Project</b>	<b>Status</b>	<b>Completion Goal</b>	<b>Regional or Locally Matched</b>
Bike and Pedestrian	Holy Cross Road and West Lake Shore Drive Pathway, Church Road to Prim Road, Colchester	Project expected to be completed in FY12	Summer 2012	Locally Matched
Preservation	US7/Middle Road/Railroad Street, Milton	Project expected to be completed in FY13	Fall 2013	Locally Matched
	North Williston Road/Mountain View Intersection, Williston	Project expected to be completed in Summer 2012	Summer 2012	Locally Matched
	US7/Harbor Road, Shelburne	Project expected to be completed in FY13	Fall 2013	Regional

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## Project Definition/Scoping Projects for Consideration in FY2013

The candidate projects in Table 5 are projects that will be considered and do not represent projects guaranteed to be undertaken in FY2013.

**\*Table 5 Projects, Regional and Locally Matched, for Consideration in FY2013**

MTP Category	Project	Regional or Locally Matched
Capacity Increase	<ul style="list-style-type: none"><li>Burlington: Railyard Enterprise Project</li></ul>	Locally Matched
Function and Performance Preservation	<ul style="list-style-type: none"><li><b>Burlington: Pearl Street/Prospect Street Intersection Improvements</b></li></ul>	<b>Regional</b>
Bridge Preservation	<ul style="list-style-type: none"><li>No project identified at this time.</li></ul>	<ul style="list-style-type: none"><li></li></ul>
Bike/Pedestrian	<ul style="list-style-type: none"><li>No project identified at this time.</li></ul>	<ul style="list-style-type: none"><li></li></ul>

**\*Determination of funding category re: local match requirement, to be determined.**

**Products and Activities:** The project definition process results in the completion of a project definition or scoping study document. Ideally, the study will document an accepted locally preferred alternative.

*Completion of Scoping, Corridor and Technical Assistance projects does not guarantee state and or Federal funding will become available for project implementation in the future.*

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### 3.4.4.3 Project Definition/Scoping Studies – Locally Matched

**Objective:** To allow municipalities to access CCRPC planning funds to conduct project definition and scoping studies.

**Description:** Occasionally CCRPC receives more requests for project definition and scoping studies than can be accommodated within the available budget. Among the factors that establish the budget is the availability of non-federal match for CCRPC planning funds and CCRPC staffing resources. This task allows CCRPC member communities to conduct and provide the non-federal match for project definition and scoping studies in their jurisdictions. CCRPC will assist with consultant selection and will initiate and oversee the consultant contracts. CCRPC will also review billings and monitor project progress.

**Products and Activities:** The project definition process results in the completion of a project definition or scoping study document. Ideally, the study will document an accepted locally preferred alternative.

*Completion of Scoping, Corridor and Technical Assistance projects does not guarantee state and or Federal funding will become available for project implementation in the future.*

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#### **3.4.4.4 Exit 14 Slip Lane/Intermodal Intercept Facility – Locally Matched**

**Objective:** To complete scoping of a slip lane/intermodal intercept facility at I-89 Exit 14, which was initiated in FY11. This project will not proceed without concurrence of the City of South Burlington.

**Description:** To complete a scoping study for a slip lane/intermodal intercept facility.  
December 2012

*Completion of Scoping, Corridor and Technical Assistance projects does not guarantee state and or Federal funding will become available for project implementation in the future.*

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#### **3.4.5 Transportation Assistance Program (TAP)**

**Objective:** To allow communities and organizations in Chittenden County access to resources to further programs and/or initiatives that will advance new types of transportation solutions, develop new types of transportation capacity, and enhance community character and quality of life.

**Description:** The Transportation Assistance Program (TAP) is the result of the evolution of the Transportation Action Grants (TAG) program, a competitive grant program in FY10 and FY11. TAP allows Chittenden County communities and organizations to leverage available transportation funding dollars in ways that will create action on a local or regional initiative. Similar to the Technical Planning Assistance program, funding will be available on a first come, first served basis as resources allow, and projects will require a 20% local, non-federal match. Depending on the project cost, municipalities may use CCRPC consultants on retainer or seek outside consultants through an RFP process.

Many types of projects will be considered for this program (provided they meet FHWA funding criteria) including:

- Transportation-Land Use planning and ordinance development
- Transit Oriented Development planning;
- Connecting transportation issues to a broader range of issues (land use, economy, energy, environment, wildlife, etc.);
- Incentivizing the creation of new types of transportation infrastructure, systems, and/or governance structures;
- Assisting in the creation of new financial models and methods for accomplishing transportation improvements;
- Advancing programs or concepts for alternative forms of transportation;
- Providing new research on issues of significance to Chittenden County transportation issues;

- Create plans and projects that strengthen the link between transportation investments and community needs; and/or,
- Other similarly focused and eligible transportation planning functions.

**Products and Activities:** Each project will deliver work products identified in their scopes of work. Project completion dates will be determined on a case-by-case basis.

## 4.0 Involvement and Effectiveness

### *4.1 Educate the public – from children to seniors – about the implications of different development patterns and mode choice decisions. (Goal 11)*

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#### **4.1.1 Education – CCTA**

##### **Public Involvement**

**Objective:** To include the public in the decision making process for new and changed service.

**Description:** CCTA advertises, develops materials for and holds public meetings and hearings to gain feedback on changes. CCTA also engages in general public outreach to our service area through attendance at meetings on other topics.

**Products and Activities:** Public hearing, outreach resulting in information for the Board and staff to consider in service in planning processes and implementation as well as a feel for the needs and priorities of the areas we serve. In past years, public involvement has included attendance at public hearings related to major transportation projects, Burlington NPA meetings, bicycle/pedestrian meetings, local concerns meetings, and specific transit related meetings called for by municipalities or private entities. CCTA will provide a summary of all public involvement conducted in a particular month in the monthly reports CCTA submits to the CCRPC. Ongoing

##### **Multimodal and Regional Coordination and Planning**

**Objective:** To participate in MPO, State and municipal land use and transportation planning to integrate public transportation into these areas. CCTA involvement in transit and transportation plans and projects managed by municipalities, the MPO, and the State of Vermont.

**Description:** CCTA will attend and participate in MPO, State and municipal projects that are relevant to public transportation such as zoning rewrites, municipal plan development, corridor studies, transportation studies, transit and transportation facilities and infrastructure, park and ride development, and land use planning. CCTA will be actively engaged in the MPO's MTP and Park and Ride Plan.

**Products and Activities:** Meeting attendance and collaboration to better integrate public transit into other modes and planning processes. CCTA will review and comment on plans and projects relevant to CCTA's operations and constituents. Summaries of CCTA's involvement and comments will be provided in the monthly reports CCTA submits to the CCRPC. Ongoing

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### ***4.1.3 Traffic Alert Program***

**Objective:** To continue to inform the public and affected public agencies of the impacts of construction to the transportation system.

**Description:** Construction activity updates to the traveling public and public agencies distributed weekly through fax, media, and internet outlets during the construction season. This is a form of Intelligent Transportation System (ITS) that assists the traveling public. Consultant assistance is expected to complete this task.

**Products and Activities:**

1. Weekly traffic alert updates issued for the duration of the construction season (late April through early November 2012).
2. Maintain the data entry system used for the web-based alert log ([www.ccrpcvt.org/trafficalert](http://www.ccrpcvt.org/trafficalert)).
3. Potential development of a system to access traffic alerts easily from a mobile devices through an optimized website or smart phone app.

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### ***4.1.4 Public Participation, Communications & Legislative Monitoring***

#### **Public Participation and Communications**

**Objective:** To educate and involve the public in regional transportation planning to create an interested, concerned and involved citizenry; to implement the recommendations of the 2008 Public Participation Plan; to increase public awareness of the importance of transportation, of CCRPC projects and programs, and of accomplishments by CCRPC across a wide variety of media such as newspaper articles, television segments, and the electronic media; to positively portray the image of CCRPC, its work and accomplishments; to increase the number of successfully implemented and funded projects; and to provide communication between CCRPC and its municipalities, committee members, the private sector, the public, and within the organization.

**Description:** CCRPC staff, along with consultants when necessary, will implement the policies and recommendations of the 2008 Public Participation Plan. Staff will monitor public involvement in CCRPC projects and meetings against performance measures identified in the Plan. Staff will be responsible for carrying out public involvement activities for the various CCRPC projects as outlined in the Plan. CCRPC staff and consultants will continue to manage outreach activities for projects and programs, keep the website up to date, and use emerging tools and technologies to inform, educate, and involve the public.

The CCRPC's public involvement process identifies strategies for engaging the public, including minority and low-income populations, in transportation decision-making. These strategies are based on considerations arising from the Title VI of the Civil Rights Act of 1964, As Amended, Executive Order #12898 (EJ), and Executive Order #13166 (LEP). The identification of minority or low-income populations is necessary to ensure that strategies are used to include the affected communities/populations in our transportation decision-making processes, including those traditionally underserved in transportation planning. The CCRPC has created a demographic profile of the metropolitan planning area that includes the identification of the locations of socio-economic groups, including low-income and minority populations as covered by the Executive Order on Environmental Justice and Title VI provisions, and LEP populations as addressed by the Executive Order on Limited-English-Proficiency.

### **Products and Activities:**

1. Annual evaluation of public participation in CCRPC activities June 2013
2. Continue to explore and implement new outreach and public involvement techniques Ongoing
3. Annual Reports for Communities August 2012
4. Outreach and Education Ongoing
5. Electronic newsletter of recent news and upcoming events Monthly
6. Press releases and press conferences to highlight projects and programs As needed
7. Direct outreach to low-income, Limited English Proficiency (LEP), and minority populations as identified by CCRPC maps of those socio-economic groups, and strengthen relationships with advocacy groups representing their interests. Ongoing
8. Incorporation of Title VI components into CCRPC Public Participation Plan and training, outreach and education for staff, Board members and officials regarding Title VI requirements 2013/2014
9. Attending meetings with partners and stakeholders As necessary
10. Active participation in national, regional, and state organizations Ongoing

### **Legislative Monitoring**

**Objective:** To advise state and federal legislators on CCRPC policies, plans, programs and the legislative impact on them, and to advise CCRPC officials of the impact of legislation on CCRPC policies, plans, and programs.

**Description:** CCRPC staff needs to have the opportunity and capability to review legislative initiatives and inform the CCRPC of the potential impact these initiatives may have on the transportation system overseen by the organization. Participation in organizations such as the National Association of Development Organizations (NADO), the Association of Metropolitan Planning Organizations (AMPO), the American Planning Association (APA), the Institute of Transportation Engineers (ITE), the Vermont Association of Planning and Development Agencies (VAPDA), the New England Association of Regional Councils (NEARC) and the Vermont Planners Association (VPA) provide the CCRPC with valuable updates and connections to national trends and information on transportation policy. CCRPC intends to investigate participation in the Association for Commuter Transportation (ACT) during this year.

From time to time, staff and/or policy officials will meet with legislators to explain the impact of proposed legislation on the transportation program of the county. This activity will allow staff to review and critique relevant federal and state transportation, environmental quality, and related planning-oriented legislation introduced during the year. Staff will maintain an information base on such legislation and distribute information to the Board and TAC as appropriate. In addition, as directed, staff will prepare information pertaining to bills and regulations for the CCRPC to transmit to legislative bodies and legislators. The Executive Director will be responsible for this in coordination with the Executive Committee. The objective is to have informed legislators, CCRPC Board, and staff with the ability to expeditiously respond to pending legislative actions that affect the region's transportation system. CCRPC will continue to have an increased presence in Montpelier. At a minimum, CCRPC will sponsor a Chittenden County Legislative Briefing in Montpelier at the start of the 2013 session.

**Products and Activities:**

- |   |               |
|---|---------------|
| 1. Information on pending legislative and regulatory actions          | As needed     |
| 2. Communication of policies, plans and programs to elected officials | As needed     |
| 3. Host Legislative gathering prior to session to share information   | December 2012 |

**Project Development Outreach and Coordination**

**Objective:** The purpose of this task is to partner with RPCs to develop and implement stakeholder and public outreach plans tailored to the local context for specific road and bridge projects. As the Agency of Transportation works to meet the increased demand to accelerate project delivery, a more comprehensive approach to public outreach needs to be developed. To that end VTrans would like to foster a more active communications and outreach strategy involving close coordination between the Agency, RPC's, the Agency of Commerce Community Development, regional chambers and local government to assist in identifying and addressing concerns and to minimize the disruption to the traveling public, and the economic and social impacts to affected communities.

**Description:** VTrans has a more immediate need for assistance from RPCs for the outreach components of accelerated project delivery. Thus, the VTrans and RPC roles described below focus on outreach tasks that could support accelerated project delivery, which will often involve closing a road or bridge for some period of time. Accelerated project delivery creates an opportunity for RPCs to work in partnership with VTrans and have a more active role throughout the project development process. Over time, VTrans anticipates more involvement by RPCs in all types of projects, whether or not they are part of the accelerate project delivery program.

*Typical VTrans Role*

- Initiate contact with RPCs to request support in developing and implementing the outreach process for a specific project in their region.
- Conduct meetings, with RPC support. Ensure that the appropriate VTrans project managers, technical experts and consultants are available to participate and support the meetings. Provide all necessary documents, graphics, plan, maps, etc.

- Work with stakeholders and RPCs to develop strategies for managing project-related disruptions.
- Help communities connect with outside resources and offer strategic support and best practices.
- Utilize enhanced lines of communication to help regional stakeholders deal more effectively with project impacts.

**Products and Activities:**

The outreach process is currently under development and is incorporating lessons learned from recent accelerated projects. All RPC FFY 2013 work programs should account for a base level of involvement in the outreach process including: helping VTrans identify issues and concerns, identifying the key stakeholders to contact, and participating in information gathering discussions with identified stakeholders when appropriate. Some regions will have more accelerated projects than others and a greater level of effort is anticipated. VTrans recommends the level of effort assumed for each region based on the best available information. As the outreach process evolves, it is possible that RPCs will have a larger role in the process including: assist VTrans with designing and implementing the outreach process; providing information to establish existing conditions, issues and opportunities, and assisting VTrans and the affected communities with identifying and evaluating strategies to address impacts to the travelling public, residents, businesses and the community at large.

Ongoing

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***4.2 Provide improvements to transportation facilities and services expeditiously through an inclusive and cost-effective process.  
(Goal 12)***

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***4.2.1 Improve Facilities – CCTA***

**Maintenance and Facility Planning**

**Objective:** To assure CCTA has adequate passenger facilities, support equipment and facilities to operate and maintain current and expanded service and to serve our customers well.

**Description:** Consideration of equipment and facility replacement needs for current and planned service. Development of plans and specifications to maintain, replace and upgrade as needed and as funds allow.

**Products and Activities:** Complete the site selection process for the Downtown Transit Center. Bids and RFP's for equipment and facility repair, upgrades and replacements. Assistance with municipal projects that support this objective. CCTA will provide monthly updates on all maintenance and facility planning efforts.

Ongoing

## Performance Tracking

**Objective:** To track performance measures used in service planning and evaluation.

**Description:** Analysis of individual routes and the CCTA system as a whole using widely accepted performance measures, including cost per passenger, passengers per hour, passengers per mile, passengers per trip, and farebox recovery rate. Additionally, part of the performance tracking will involve comparison to a national peer benchmark as well as comparison with past CCTA performance (time trend analysis).

**Products and Activities:** Monthly and annual updates of service oriented performance data for use by Staff, CCTA's board as well as funding entities such as the State of Vermont and the Federal Transit Administration, including such things as the National Transit Database reports and CCTA's internal performance report. CCTA will provide copies of monthly ridership reports including a graphic tracking of Link Express route ridership. Additionally, CCTA will provide an annual summary of route-by-route performance. The annual summary will be provided by: August 15, 2013

## Financial Planning

**Objective:** To assure CCTA has adequate funds to meet operational and capital needs for current and planned service.

**Description:** Analysis of indirect and direct service costs, development of service cost models, and development of short and long term finance plans for the operating and capital budget. This is not finance department budget preparation work, but rather planning work such as evaluation of existing service costs, as well as future service and capital needs to support and implement the TDP, TIP and the Long Range Plan. This work requires knowledge of planning concepts and future service planning goals, which is a Planning Department knowledge base. The accurate determination of the economic feasibility of proposed service depends on a firm understanding of operating costs and ridership potential.

**Products and Activities:** Annual updates of financial information for use in the budgeting and planning process. Comprehensive data to be used in the planning for future service implementation. Ongoing

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### 4.2.3 Small Community Service Program

**Objective:** To assist Chittenden County communities in analyzing and addressing their local transportation challenges.

**Description:** Many communities in Chittenden County have limited staff available to address all of their municipal responsibilities and services. Often these communities report that they either do not know about funding or service opportunities in the transportation sector, or they have no staff time available to apply for such programs or services. This program provides a "circuit rider" type of service to these communities.

**Products and Activities:**

1. Outreach to communities about the various programs, services, and funding opportunities available Ongoing
2. Assistance to communities in preparing applications to services, programming and funding opportunities Ongoing
3. Periodic updates about new or potential opportunities (grants, funding sources, or other resources), to celebrate successes in other towns, and to convey other relevant and/or timely information Ongoing
4. CCRPC point-of-contact for town staff and officials Ongoing

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#### ***4.3.2 Transportation Advisory Committee (TAC)***

**Objective:** To provide a structure through which representatives of the CCRPC municipalities and representatives of other stakeholders in the region can come together in a collaborative process to make decisions on planning and technical aspects of regional transportation issues.

**Description:** This task includes only the staff time required to provide agendas, minutes and mailings for all Transportation Advisory Committee (TAC) and subcommittee meetings that are not project specific. Outcomes will include TAC deliberations, reports, and products; CCRPC staff preparation and distribution of TAC information and minutes. A staff planner is responsible for this work. For specific ad hoc and sub-committees, additional staff may be assigned as is necessary. Activities of the TAC and its subcommittees help provide the CCRPC Board, staff, and member communities with information necessary to make effective planning decisions.

**Products and Activities:**

1. Transportation Advisory Committee (TAC) meetings and minutes Monthly
2. Ad hoc and special sub-committee meetings and minutes As necessary

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#### ***4.3.4 Training – CCTA***

**Objective:** To increase planning staff knowledge of transportation in order to improve planning and management of the system.

**Description:** Staff will attend local, regional and national training on general and specific areas of expertise that relate to the areas outlined in this work program.

**Products and Activities:** Improved public transportation services through improved staff knowledge. Training will be undertaken as dictated by budget, needs, and course availability. CCTA will provide a summary of all training attended and received by Planning Staff in a particular month in the monthly reports CCTA submits to the CCRPC. Ongoing

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#### ***4.3.7 Data Collection and Maintenance***

**Objective:** Collect, maintain, and distribute transportation-related data for planning needs and public inquiry.

**Description:** CCRPC collects data to support our planning needs. Data collected includes the following:

- › Automatic Traffic Recorder (ATR) counts (countywide as needed and resources permit)
- › Intersection Turning Movement counts
- › Bicycle & Pedestrian shared-use path volumes
- › Park & Ride lot usage
- › Parking infrastructure inventory (GIS-based)
- › Pavement sample data used to derive Pavement Condition Index (PCI)
- › Transit usage
- › Safety data on crash locations and frequencies
- › Environmental data on air and water quality
- › Employment, housing, and population data for use in modeling
- › Census data
- › Orthoimagery and Digital Terrain Model data preparation and distribution
- › Town Highway Major Collector (THMC) Sufficiency Data
- › Traffic Signal/Stop Sign Warrant Analysis (South Burlington) – Kimball Ave./Gregory Dr./Community Dr.; Dorset Street (Kennedy Dr. to Williston Rd.); Spear St./Nowland Farm Rd./Deerfield Dr.
- › Milton Sidewalk Network Inventory
- › Milton Stormwater Structures and Outfall Inventory
- › Speed Studies on a limited number of roads in Williston
- › Sign Inventories – Essex Junction, Winooski, Jericho
- › Pavement Management Inventories – Milton, Winooski, South Burlington
- › Culvert Inventory – Essex
- › Other data as necessary

Once data is collected, it is organized and maintained in the CCRPC data library. The data library is updated regularly on the CCRPC website for access by local municipalities, consultants, and other interested parties.

Traffic data collection is accomplished by hiring temporary transportation technicians (usually college students) during the summer months and purchasing or maintaining traffic counting equipment. CCRPC has Eco-Counter infrared bicycle & pedestrian counters and MetroCount ATRs which will be deployed to collect explicit bi-directional bicycle and pedestrian data on shared-use paths, urban/suburban pedestrian throughways, and sidewalks.

**Products and Activities:**

- |   |                |
|---|----------------|
| 1. Transportation data for use in CCRPC planning activities   | Ongoing        |
| 2. CCRPC data library website updates   | Ongoing        |
| 3. AADT, Turning Movement, and Bicycle & Pedestrian data & reports.   | Ongoing        |
| 4. Update the parking infrastructure database.  | Ongoing        |
| 5. Update Park & Ride usage counts  | November 2012  |
| 6. Pavement Condition data and/or reports for municipalities requesting assistance in their pavement planning programs.                     | December 2012  |
| 7. Assist CCRPC with update of their culvert and signage inventories.   | September 2012 |
| 8. Assist UVM Transportation Research Center with collection, processing, and estimation of bicycle & pedestrian traffic within the region. | Ongoing        |

- |  |         |
|--|---------|
| 9. Participate in the Town Highway Major Collector Sufficiency Data Program in partnership with VTrans and other regions (~25 miles of roadway data) | Ongoing |
| 10. Assistance with VTrans Access Management Classification Updates  | Ongoing |
| 11. Assist VTrans in update of Functional Classification Maps  | Ongoing |
| 12. Coordination of regional imagery update needs analysis   | Ongoing |

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#### ***4.3.7.1 Vermont Online Bridge & Culvert Inventory Tool (VOBCIT) Update***

**Objective:** Update VOBCIT software and coordinate statewide RPC utilization of new system.

**Description:** The primary users' goal for VOBCIT is that it be a complete inventory of all appropriate municipal structures statewide, with accurate locations and up-to-date attribute information. Secondary goals include ease of entering and extracting data, integrated GIS capabilities, and linkage to other data (eg. ANR geomorphology data). Potential futures include extending the data schema to support hazard reporting, cost, and damage assessment, and interoperability of the data with other online tools and data. Internal structural goals include identifying an appropriate management structure to oversee the VOBCIT website, and providing incremental ongoing maintenance over the long term. Best practice goals include cybersecurity, accessibility for disabled persons (Section 508 compliance), and a modern/maintainable software architecture.

**Products and Activities:**

Updated VOBCIT Software (Consultant)

Summer 2013

#### ***4.3.8 Transportation Model Maintenance and Enhancement***

**Objective:** To ensure the regional transportation model continues to provide state of the art analysis capabilities in support of CCRPC planning needs.

**Description:** CCRPC completed an update of the regional transportation model in FY2011 to enhance the model's capabilities to analyze traffic flow over the entire day instead of just the AM and PM peak hours. A FHWA sponsored peer review completed in FY12 has helped establish priorities for future model investments.

This work item is funding a multi-year consultant contract expiring in March 2013 to provide ongoing upgrades and support as CCRPC identifies additional model needs and continues work over future fiscal years. Specific tasks for FY2013 are still in development, and may include, but are not limited to the following:

- Update base year land use information to reflect 2010 conditions and consider recalibration of the model to this year. This work is contingent on first receiving the Census Transportation Planning Package (CTPP) data for small area geographies, which is currently scheduled for delivery in late FY2013.
- Additional review and updates of the non-motorized and transit mode choice models to better capture relationships between these modes and land use characteristics.
- Improved air quality and greenhouse gas emissions analysis techniques.
- Refinements to the truck freight modeling components.

- Investigation and improvement of external trip representation for travelers with origins or destinations outside Chittenden County.
- Development of tools and techniques to use the regional transportation model in concert with microsimulation tools such as VISSIM and TransModeler
- Transition to an activity-based model structure which would be more sensitive to “trip chaining” travel behaviors, such as trips from work to the grocery store, then daycare, and then returning home.

**Products and Activities:**

- |   |           |
|---|-----------|
| 1. Updated 2010 base year travel demand model | July 2013 |
| 2. Ongoing model updates and maintenance      | Ongoing   |

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***4.3.11 Performance Measures and Indicators re: HUD Regional Sustainability Grant and VTrans current activities***

**Objective:** To develop and track measures to show how our transportation system and the CCRPC as an organization is performing with regards to the implementation of the U.S. Moving Ahead for Progress in the 21<sup>st</sup> Century (MAP-21) performance measurement standards and HUD Regional Sustainability Grant action outcomes and other appropriate VTrans activities.

**Description:** For organizations to succeed in their mission, all involved must have clear objectives and a way to measure progress. This initiative will develop a suite of external and internal measures and indicators to gauge the progress of the CCRPC and of our transportation system’s ability to successfully meet the goals of the MTP and our vision.

**Products and Activities:**

- |  |             |
|--|-------------|
| 1. Integrate Performance Measures developed through the ECOS Indicator process into an annual performance evaluation system for public distribution, integrating MAP-21 performance monitoring as required | Summer 2013 |
|--|-------------|

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## **5.0 Project/System Management & Implementation (Non-PL Funded)**

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### ***5.1.1 Signal Optimization & Operations Services***

**Objective:** To work collaboratively with VTrans and local municipalities to enhance regional signal optimization and operations services.

**Description:** In cooperation with the VTrans Operations Division, VTrans Program Development Division and local Departments of Public Works, CCRPC staff will offer services to enhance signal timings on the state highway routes in coordination with the local timing systems

**Products and Activities:**

1. Enhanced Signal Operations with assistance as requested

Ongoing

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**5.1.4 Transportation Program Management Services**

**Objective:** To provide contract technical assistance to the municipalities of Chittenden County by performing Municipal Project Manager services for Local Transportation Facilities (LTF) and other similar project development activity contracts undertaken by the municipalities (such as Sidewalk Grant Program implementation activities).

**Description:** Many communities in Chittenden County do not have an adequate number of trained staff members to effectively undertake the administration and project management components of the LTF and other project implementation programs. The CCRPC would provide contract services to undertake Municipal Project Management in support of local municipalities to assist them in advancing local transportation projects.

**Products and Activities:**

1. Municipal Project Management for Transportation Projects
2. Jericho Safe Routes to School construction project management

As needed

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**5.1.5 Chittenden County Transportation Demand Management (TDM) Pilot Program (non-PL funded activities)**

As a complement to the activities described in Task 3.4.3, Chittenden County strives to initiate a TDM program whereby funds can be provided to organizations and municipalities that deliver services and infrastructure that meaningfully improves transportation system efficiency and provides outcomes such as a reduction in vehicle miles traveled (VMT), improvement of air quality, and reduction of congestion. Potential sources of funding for the Chittenden County TDM Pilot would be Federal Transit Administration (FTA) and Federal Highway Administration (FHWA) programs such as Congestion Mitigation and Air Quality Assistance (CMAQ), Surface Transportation Program (STP) and STP Transfer.

**Projects (per TCSP grant) Include:**

- CarShare Vermont Expansion
- Establishment of Regional Multi-modal transit hubs (including Winooski)
- Neighborhood based VMT reduction social marketing program
- Develop Regional Bike-Walk Tools
- Employee Transit Pass Pilot Program
- Transportation Management Association Program Expansion/TDM circuit rider

# 6.0 Organizational Development and Management

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## 6.1.1 *Commission and Executive Committee Meetings*

**Objective:** To support effective meetings and decision-making by the CCRPC.

**Description:** Prepare/distribute agendas/minutes & prepare for/attend meetings of the Board and Executive Committee.

**Products:** effective meetings

**Staff:** C. Baker, M. Boomhower, B. Ferenc

**Timeline:** Ongoing

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## 6.1.3 *Work Program and Performance Measures*

**Objective:** To develop and implement a unified planning work program that furthers the mission of CCRPC including the *Regional Plan* and *Metropolitan Transportation Plan*.

**Description:** Review and revise the current UPWP and budget semi-annually and prepare the upcoming year's UPWP and budget. Develop internal performance measures and track progress.

**Products:** FY2013 work program amendments as necessary; FY2014 UPWP, performance measure results

**Staff:** C. Baker, M. Boomhower, B. Ferenc, F. Cohen, All Staff

**Timeline:** June 2013

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## 6.1.4 *Budget, Bookkeeping, Payroll, Audits, and Analysis*

**Objective:** To develop and maintain a budget and financial records of the CCRPC.

**Description:** All aspects of financial planning, budgeting, and accounting.

**Products:** Accurate financial records; quarterly P & L statements, journal entries, revised FY2013 budget, FY2014 budget, invoices, record retention policy, and other reports

**Staff:** F. Cohen, B. Ferenc, C. Baker M. Boomhower

**Timeline:** Ongoing

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## 6.1.5 *Grant Writing& Non-Programmatic Research*

**Objective:** To obtain additional grants that further CCRPC's mission, the *Regional Plan* and *Metropolitan Transportation Plan* and to participate in research efforts not funded directly through program resources.

**Description:** Research and write grants for CCRPC initiatives when clear targets of opportunity present themselves. Participate in the UVM *Analysis of Complex Governance Network Dynamics* research to develop tools to better shape the design and implementation of transportation policy in Chittenden County.

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**Products:** grant applications and the following products for the UVM research study:

- Staff, Board, Committee and partner stakeholder participation in the sharing of data and participation in surveys and focus groups resulting in periodic reports to the CCRPC pertaining to governance and process enhancement opportunities available to the CCRPC
- Delivery (in 2014) of a decision support model designed to monitor and support regional (transportation) plans and implementation strategies by UVM researchers

**Staff:** C. Baker, M. Boomhower, J. Potter, D. Albrecht, P. Brangan, R. Mahony, M. Needle, P. Luciano, B. Davis, D. Roberts, P. Keating, C. Forde

**Timeline:** Ongoing

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### ***6.2.1 Staff Professional Development***

**Objective:** To develop and improve staff resources.

**Description:** Participate in training opportunities

**Products:** Improved staff abilities and satisfaction

**Staff:** All Staff

**Timeline:** Ongoing

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### ***6.2.2 Staff Meetings***

**Objective:** To achieve the highest level of staff coordination and achievement possible.

**Description:** Prepare for and attend staff meetings.

**Products:** Improved coordination and effectiveness.

**Staff:** All Staff

**Timeline:** Ongoing

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### ***6.2.3 Personnel Administration***

**Objective:** To improve the effectiveness of staff in achieving the objectives of our UPWP.

**Description:** Conduct annual employee evaluations. Meet with individual staff as needed.

**Products:** annual and semi-annual performance reviews

**Staff:** C. Baker, M. Boomhower, All Staff

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**Timeline:** Ongoing

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#### ***6.2.4 Computer System Administration***

**Objective:** To improve and maintain the technology to support CCRPC.

**Description:** Maintain and upgrade server, network, computers, printers, and software.

**Products:** Well- performing information technology system

**Staff:** P. Brangan, D. Roberts

**Timeline:** Ongoing

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#### ***6.2.5 General Administration***

**Objective:** To achieve effective and efficient support of the CCRPC.

**Description:** Maintain files and records (including the library), complete routine office functions, and respond to general information requests.

**Products:** Effective operations

**Staff:** All Staff

**Timeline:** Ongoing

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## **7.0 -10.0 (Intentionally left out)**

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# 11.0 Regional Plan Update

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## 11.1.1 2013 Regional Plan Update

**Objectives:** Prepare and adopt by April, 2013 a *Chittenden County Regional Plan* that

- ◆ Is consistent with the goals of Chapter 117 (24 VSA 4302),
- ◆ Conforms with all other statutory requirements,
- ◆ Is compatible with approved municipal plans and adjoining regional plans, and
- ◆ Establishes policies with sufficient clarity and specificity to enable them to be used in subsequent decision-making and *Plan* implementation.

**Description:** In 2006, the *Regional Plan* was restructured as a policy plan to more properly recognize CCRPC's advisory role. The process of developing the *2013 Regional Plan* will be informed by the Regional Sustainability Planning process as described in Task 11.1.2 below. The remaining work and schedule is:

October, 2012 CCRPC endorses *Public Hearing Draft 2013 Regional Plan* for public release, review, & comment & warning of 1<sup>st</sup> of at least 2 required public hearings.

March, 2013 CCRPC adopts *2013 Regional Plan* at March CCRPC meeting. (*Plan* must be adopted by affirmative vote of at least 60% of the Commissioners representing municipalities.)

April, 2013 CCRPC's adoption of the *2013 Regional Plan* takes effect 35 days after the date of adoption, unless CCRPC receives certification from the legislative bodies of a majority of CCRPC's member municipalities vetoing the *Plan*.

This task will serve as leverage match and is part of Task 11.1.2 Regional Sustainability Project.

**Products:** as described above

**Staff:** C. Baker, R. Mahony, M. Needle

**Partners:** municipalities, regional partners, interested parties, public

**Timeline:** April, 2013

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## 11.1.2 Regional Sustainability Project

**Objectives:** Conduct a comprehensive updating of plans and priorities in Chittenden County with a focus on improving decision making, increasing accountability, and implementing priority actions.

**Description:** This federal grant is provided by a partnership of HUD, DOT and EPA to support regional planning for sustainable development. We obtained a \$995,000 grant in the implementation category. The work of the Steering Committee will run for two years and including 9 meetings starting in March 2011 and ending in January 2013.

Here are the tasks with deadlines:

1. Partnership Agreement – 65 partner organizations – 20 town reps and 45 state/regional/county organizations (representing housing, economic development, environment, agriculture, energy, public safety, health, and education) signed the agreement in May 2011.
2. Regional Vision and Goals – approve in October 2011.
3. Analysis and Indicators – Conducted housing, economic development, land use, transportation, natural resources, public health, education and energy analyses. Analysis reports accepted in January 2012. Developed draft indicators tied to the goals to increase accountability and measure progress with acceptance scheduled for July, 2012.
4. Priorities and Plans
  - a. Implementation Priorities – review and prioritize implementation actions based on what will best further the goals – drafts in July, action in October 2012.
  - b. Update Plans – using all of the preceding task results, the responsible organizations will update the Regional Plan, Metropolitan Transportation Plan, Comprehensive Economic Development Strategy, and Burlington Legacy Plan. Drafts start in 2012 and action will occur when appropriate in late 2012 or early 2013.
5. Merger – Implemented actions to merge the CCMPO and CCRPC including legal, accounting and marketing work. Completed by June 2012.
6. Priority Action Items – Invest \$280,000 in high priority implementation action items – draft in October, action in December 2012. All work to be completed by January 2014.
7. Project Administration – Sub-grant and consultant contract execution and tracking. Invoicing. To be completed by January 2014.
8. Public Engagement - There will be an extensive public engagement process. Our public engagement objectives include:
  - Having the Selectboard Chairs and Agency leaders actively participate in quarterly meetings ending in December 2012 (9 meetings) and effectively communicating information to and from their organizations.
  - Respecting and building upon the previous work done by all organizations.
  - Achieving regional agreement on the deliverables above through an active engagement process including a comprehensive set of communication tools to engage as many people as possible in the process; making special efforts to involve under-represented populations.

**Products:** as described above

**Staff:** C. Baker, R. Mahony, M. Needle, F. Cohen,

**Partners:** municipalities, regional partners, interested parties, public

**Timeline:** January, 2014

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## 12.0 *Regional Plan Implementation*

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### **12.1.1 - Act 250 and Section 248 Reviews**

**Objective:** To review proposed projects seeking Act 250 and Section 248 permits for statutory and *Regional Plan* conformance and develop recommendations to the Commission.

**Description:** As described in CCRPC adopted “Guidelines and Standards for Reviewing Act 250 and Section 248 Applications” as may be amended.

**Products:** Permit recommendations as appropriate

**Staff:** R. Mahony, M. Needle

**Partners:** PAC, Ad Hoc Regulatory Review Committee, CCTA, municipalities

**Timeline:** June 30, 2013

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### **12.1.2 Confirm Municipal Planning Processes**

**Objective:** To confirm municipal planning processes and review Municipal Plans for statutory requirements necessary to apply for municipal grants and levy impact fees. It is anticipated that the following plans may be reviewed in FY13: Bolton, Buels Gore, Charlotte, Colchester (could be FY12), Essex Junction and Milton.

**Description:** As described in CCRPC adopted “Guidelines and Standards for Confirmation of Municipal Planning Processes and Approval of Municipal Plans” as may be amended.

**Products:** recommendations as appropriate, approved municipal plans

**Staff:** R. Mahony, M. Needle

**Partners:** PAC, Ad Hoc Plan Review Committee, CCTA, municipalities

**Timeline:** June 30, 2013

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### **12.3.1 Regional Stormwater Education Program**

**Objective:** To implement a public education program on stormwater management primarily to participating Phase II municipalities and non-traditional MS4s, focusing on issue awareness and prevention.

**Description:** CCRPC will provide administrative and contractor management assistance to the Regional Stormwater Education Program Committee. CCRPC maintains a separate financial account for RSEP that includes payments to contractors for educational programs. If the MS4 permittees desire, this project may be combined with the Chittenden County Stream Team (see Project 12.3.3).

**Products:** Public education program to facilitate MS-4 compliance with Minimum Control Measure #1 in compliance with DEC MS4 Permit

**Staff:** D. Albrecht, F. Cohen

**Partners:** Regional Stormwater Education Program Committee, Champlain Water District; DEC

**Timeline:** June 30, 2013

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### ***12.3.3 Chittenden County Stream Team – Public Involvement and Participation Program***

**Objective:** To implement a program to be known as the Chittenden County Stream Team. The project will support and extend stormwater mitigation efforts in the County's impaired waters.

**Description:** Impaired streams in Chittenden County are located within the municipalities of Milton, Colchester, Winooski, Burlington, Essex Junction, Essex, Williston, South Burlington and Shelburne. The project will engage these nine municipalities and three entities (University of Vermont, Vermont Agency of Transportation and the Burlington International Airport) in Chittenden County who are subject to the Municipal Separate Storm Sewer Systems (MS4) permit under Phase 2 of the Federal Clean Water Act. The impaired streams are Allen Brook, Bartlett Brook, Centennial Brook, Englesby Brook, Indian Brook, Morehouse Brook, Munroe Brook, Potash Brook and Sunderland Brook.

The program engages citizens across an eight community area (at this time, Colchester is not participating in implementing projects to reduce non-point source pollution and stormwater volume at the local level. The project utilizes social networking tools to form a cadre of concerned citizens and professionals interested in hands-on activities to reduce the harmful effects of stormwater. The project then organizes a series of community action projects and stormwater awareness workshops to engage the Stream Team members and citizens at large in discussion and use of key Best Management Practices designed to address the negative effects of stormwater.

Governed by an MOU similar to the RSEP effort, MS-4 does enable CCRPC to administer the program and hire a contractor to carry out the following tasks to facilitate compliance with Minimum Control Measure #2:

1. Regular Tasks:
  - Maintain Facebook page with regular postings;
  - Maintain website
  - Recruit and maintain volunteers
  - Organize quarterly Steering Committee meetings
  - Maintain a simple spreadsheet to track hours and expenses and activities
  - Communicate regularly with the CCRPC
  - Build relationships with and leverage expertise from other organizations working on water quality issues
2. Event-driven tasks
  - Host a Spring kickoff event
  - Hold outreach events at spring farmers' markets or other spring/early summer events in three municipalities per year to continue to reach new volunteers;
  - Complete three workshops or projects in each year
  - Provide guidance to volunteers on techniques and materials
3. Annual Tasks
  - Prepare an annual summary of how CCST met the MCM-#2 requirements
  - Recognize volunteers

**Products:** public involvement program in compliance with Dept. of Environmental Conservation MS4 Permit. Specific products are: Three workshops/projects; four outreach events; maintenance of Stream Team website and Facebook page.

**Staff:** D. Albrecht

**Partners:** Stream Team Steering Committee; Department of Environmental Conservation

**Timeline:** June, 2013

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### ***12.5.1 Brownfields Assessment Program***

**Objective:** To implement a program to promote Brownfields redevelopment by providing information and conducting assessments of eligible Brownfield sites.

**Description:** Chittenden County has received a grant from US EPA through September 2013 to continue environmental studies of eligible brownfield sites; the grant contains both petroleum site and hazardous site funds. The program will use assessment grant funding to assist property owners and prospective developers with environmental site assessments, and cleanup and redevelopment planning. Priority is given to our three target communities; Burlington, Winooski and Essex Junction. Our goal is to promote Brownfields redevelopment that returns these properties to constructive use. We are particularly interested in redevelopment projects that will increase affordable and workforce housing, create jobs, or will provide green space.

The Brownfields Advisory Committee plays a key role in setting priorities, site selection criteria and site selection. The site selection guidelines give preference to properties in centers that have existing infrastructure and redevelopment plans meeting identified needs for housing, jobs or green space.

Task 1 – Cooperative Agreement Oversight – CCRPC staff will conduct grant management activities such as quarterly and annual reporting to EPA, updating the ACRES database, and recordkeeping. This task includes sending staff to Brownfields conference/regional workshop/training events during the grant period.

Task 2 – Community Engagement – CCRPC staff will provide staff support for up to six Brownfields Advisory Committee meetings per year. Outreach materials (e.g., brochure, presentations, articles and website) will be updated at the beginning of the grant and as needed. Six outreach meetings/presentations are planned per year per grant.

Task 3 – Site Assessment Activities – Using petroleum site funds, an historic tank inventory will be conducted for Winooski and an area wide assessment will be conducted for Essex Junction village center. Deliverables for each community will include a report, map and GIS dataset.

Site identification and selection activities are included in this task. This includes meetings with municipal staff, community groups, property owners or developers related to specific areas or sites. Staff will conduct preliminary research on prospective sites to evaluate known issues, assessment needs and potential site eligibility. Staff will assist property owners in preparing application forms and program agreements.

CCRPC expects to conduct a supplemental assessment for Burlington's Urban Reserve during FY13.

Staff time for project management includes coordinating with consultants, site owners, state regulators and EPA; reviewing proposals, QAPPs, and Phase I and II reports; and coordinating

site-specific public outreach related to assessment activities. Travel costs for site visits and coordination meetings are included.

**Task 4 – Site Reuse and Cleanup Planning** – Site reuse and cleanup planning activities will depend on the needs of the site; only some assessed sites will need site reuse and cleanup planning assistance.

Site reuse and cleanup planning projects expected in FY13 include cleanup assessment for Moran/Waterfront North and redevelopment planning assistance for the Bright Street site.

Staff time for project management includes coordination, review of reports and proposals, and coordinating site-specific public outreach. Project management for an additional reuse/cleanup study is also included in the hazardous substance grant. Travel costs are included.

**Products:** Educational materials; Presentations; Assessment Work Plans; Assessment Reports

**Staff:** J. Potter, D. Albrecht

**Partners:** Brownfields Advisory Committee, ANR, EPA, municipalities

**Timeline:** September, 2013

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### ***12.5.2 Lake Champlain Byway Program***

**Objective:** To implement projects in member municipalities of the Lake Champlain Byway [ Milton, Colchester, Winooski, Essex Junction, Burlington, South Burlington, Shelburne and Charlotte ]; Educate local residents & businesses and maintain & promote the Corridor & Byway; Participate in regional & state byway planning & implementation; Serve as fiscal agent for the Byway Council.

**Description:** This Project is divided into seven sub-tasks based on funding agreements with VTrans. All consultant/contractor work under this Project is supervised by staff and general project oversight is provided by the Lake Champlain Byway Council which includes representatives from the Chambers of Commerce and RPCs serving Grand Isle, Chittenden and Addison Counties.

**Sub-task 1 Byway 03-001 Grant** – *Completed.*

**Sub-task 2 Byway 06-004 Grant** - The project improved signage and visitor information, provided interpretive information, and created various minor improvements for multi-modal travel. Remaining tasks in FY13 include design and potential fabrication of two informational kiosks. This project started in August 2007 and should be completed by December, 2012.

**Sub-task 3 Byway 06-006 Grant** - The project developed a Chittenden County Byway communities activities brochure and poster, expanded development of the byway website, [www.lakechamplainbyway.com](http://www.lakechamplainbyway.com) and facilitated discussions between CCRPC and Byway communities on Byway activities, Remaining tasks in FY13 include development of cell phone audio tours at key interpretive venues and publication of an FAQ flyer about the Byway. This project started in August 2007 and should be completed by June 2013.

*Starting with the FY07 Byway grant, the CCRPC has provided professional grant implementation services to the Lake Champlain Byway Council*

**Sub-task 4 Byway 07-001 Grant** - This project has developed a French and English version of a Byway marketing brochure, revamped the Byway's website to provide detailed information

about the Byway's intrinsic resource sites, constructed two portalet shelters in the Islands and developed outdoor travel information panels about the Byway as a whole and its respective counties. Final task for FY13 include trailblazer installation in the Byway towns of Grand Isle and Addison Counties. This project started in June 2008 and should be completed by December, 2012.

Sub-task 5 Byway 08-005 Grant –The project funds staff time of CCRPC, Northwest RPC and Addison County RPC to update the respective county's Byway Corridor Management Plans. This project started in March 2009 and should be completed by June 2013.

Sub-task 6 Byway 08-006 Grant –This project has enabled the CCRPC to complete a recreational and cultural sites inventory in its 8 byway communities and then pay design firms to create detailed designs and cost estimates for 1-2 prioritized improvements projects in each of its 8 towns to use in future grant applications. Remaining tasks include completion of design and cost estimates in three to four towns. This project started in April 2009 and should be completed by June 2013.

Sub-task 7 Byway 09-002 Grant – This project will design and produce several maps and guides to provide detailed interpretive information about the Lake Champlain Byway to travelers. Specific deliverables will include two, county-level intrinsic resource locator maps and affiliated web content, several town-level maps with details on local intrinsic resources, and two, simple brochures, one a water recreation guide to Lake Champlain and the Byway's other waterways and the other, a winter activities guide. This project started in May 2010 and should be completed by September, 2015.

Sub-task 8.1 Byway 10-002 Grant –This project funds the Byway's efforts in collaboration with Local Motion, to develop bicyclist rest areas at four sites along the Lake Champlain Bikeway in Grand Isle County. Local Motion acts as the implementation agent and CCRPC acts as the Fiscal Agent on behalf of the Council. The project started in November 2011 and should be completed by June 2013.

Sub-task 8.2 Byway 11-001 Grant –This project funds the Byway's efforts in collaboration with Local Motion, to develop bicyclist rest areas at four sites along the Lake Champlain Bikeway in both Grand Isle County and Chittenden County. Local Motion acts as the implementation agent and CCRPC acts as the Fiscal Agent on behalf of the Council. The project started in November 2011 and should be completed by June 2013.

**Products:** as described above

**Staff:** D. Albrecht

**Partners:** Lake Champlain Byway Council, corridor municipalities; LCRCC; VTTrans

**Timeline:** as described above

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### ***12.7.2 Broadband Technology Planning***

**Objective:** To assist VTA in implementing the state broadband plan at the local level across sector-specific broadband partnerships.

**Description:**

1. The subgrantee will work directly with the VT Regional Planning Commissions to establish Regional Technology Planning Teams. The Regional Technology Planning Teams will be comprised of representatives from member municipalities, business and technology, education,

and health care. Teams will coordinate their strategic planning with Regional Development Corporations, Dept. of Public Service,, VT Telecommunications Authority, VT Agency of Commerce and Community Development, and e-Vermont.

2. The subgrantee will work directly with the VTA's Director of Broadband Coordination and Outreach to manage the activities of the Regional Technology Planning Teams. The Regional Planning Commissions are expected to play a significant role in implementing the state broadband plan at the local level across sector-specific broadband partnerships.

3. The Regional Technology Planning Teams will;

- a) Develop a strategy to formulate integrated technology plans with local and regional stakeholders. Regional technology plans will be formalized and made available to the Director of Broadband Coordination and Outreach,
- b) Develop a database of contacts in communities and local sectors to assess where promising opportunities exist and where model programs that support development of broadband adoption and/or access are under way. This work will be shaped by the strategies described in the Vermont Telecommunications Plan and other ongoing state-level efforts,
- c) Work with the state Director of Broadband Coordination and Outreach to facilitate two-way communication in implementing the state vision for broadband adoption and use throughout their communities. The local teams will identify existing and new partnerships that will leverage various groups' expertise in order to build sustainable economic development and stronger communities throughout Vermont.
- d) Reach out to the different sectors in communities to outline statewide efforts underway and support local efforts,
- e) Aggregate local feedback in a quarterly update and act as liaisons to the state Director of Broadband Coordination and Outreach representing local communities' efforts, priorities and concerns,
- f) Present the unique goals and needs of the various regions to help the State's efforts with broadband providers align with Regional Technology Plans,
- g) Establish relationships with RPC's member towns, local chambers of commerce, Regional Development Corporations, non-profits, schools and agriculture and human service outreach organizations to allow them to immediately start building capacity, determine technical needs and develop a regional technology plan for broadband adoption,
- h) Select key partnerships that will benefit through a coordinated use of information technology. Key partnerships include government services, education and healthcare and may include private sector areas such as professional services, value-added agriculture/specialty foods, tourism, etc., and will be identified through review of economic and community development plans and stakeholder outreach,
- i) Determine local and regional technology needs and existing programs to identify IT capacity gaps across those partnerships and strategies to address the gaps and needs,
- j) Set achievable goals for improved technology use within each identified partnership,
- k) Submit to the RPC coordinator a Draft Regional Technology Plan for achieving the goals to include: a timeline, benchmarks, specific recommendations for training, demand creation, and institutional service applications and other improvements that will increase utilization of local government, educational and health technology, and make final Plans available on appropriate websites and at town offices.

- 1) Convene local and regional events to disseminate information about the Regional and State Telecommunications Plans, other statewide initiatives such as myVermont.gov, BroadbandVT.org, broadband availability, and future expansion as well as IT improvements becoming available for governmental, educational and private groups,
4. The subgrantee will be responsible for;
    - Project budget and timetable targets,
    - Coordinating RPC development of Regional Technology Planning Teams,
    - Preparation of quarterly project reports, and
  5. The subgrantee, through the activities of the Regional Technology Planning Teams, will be responsible for the following outcomes;
    - Creation of Regional Technology Planning Teams and new cross sector partnerships
    - Creation of Regional Technology Plans(s)
    - Identification of broadband technology gaps and needs
    - Creation of a sustainable adoption strategy
    - Recommendations for action
    - Increased regional awareness through local events
    - Identification of ways to leverage existing programs to support related sectors.
    - Providing an annual report to the Director of Broadband Outreach and Coordination that describes the above activities and measures their results

**Products:**

1. Publish Regional Technology Plan on websites July 1, 2012
2. Convene regional broadband technology events (or partner with another existing event where Information Communication Technology is a natural partner – for example any economic development or community event) June 30, thru September 30, 2012

**Product:** as above

**Staff:** P. Brangan

**Partners:** municipalities, Department of Public Service, VCGI, VTA

**Timeline:** September 2012

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### ***12.10.2 Local Emergency Planning Council Assistance***

**Objective:** To assist municipalities through LEPC with emergency management planning and administration.

**Description:** CCRPC will provide staff support to the Local Emergency Planning Council.

**Product:** agendas, meeting summaries

**Staff:** P. Luciano

**Partners:** municipalities, Department of Public Safety (DHS, VEM)

**Timeline:** June 2012

### ***12.10.3 Emergency Management Performance Grant (EMPG)***

**Objective:** To assist municipalities and emergency services providers with emergency management planning and administration.

**Description:** The following subtasks are as described in the sub-grant agreement. These may be slightly different in the revised sub-grant agreement for FY11 to be executed.

Task 1 - CCRPC will continue to coordinate the revision and completion of municipal Rapid Response Plans (17 RRP) and Emergency Operations Plans to ensure alignment with the National Incident Management System (NIMS) and National Response Framework (NRF). As part of RRP and EOP development, CCRPC will document any evacuation and sheltering plans at the local levels. CCRPC will continue local and regional level planning for preparedness by developing/enhancing logistics and resources management plans by including local resource lists in RRP and EOPs when available. CCRPC will continue to work toward an improved catastrophic incident plan to address pandemic flu in order for better prevent, protect against, respond to and recover from this incident. This work will include participation at state level meetings and review of any local plans on this topic.

Task 2 - CCRPC will continue to promote continuity of operations and recovery strategies for municipalities and businesses, especially post-flood.

Task 3 - There remains a large need for local officials to understand ICS. CCRPC will arrange for at least one (1) Local Incident Command System (ICS) training sessions in order to enhance public education and awareness of community disaster preparedness and in order to continue to implement NIMS throughout the region. VEM will provide training personnel.

Task 4 - CCRPC will continue ongoing administrative support and outreach to local communities and Local Emergency Planning Commissions (LEPCs) on compliance issues and emergency planning tools, and participate in local exercises. This task involves the administration of LEPC expenses, the arrangement and holding of LEPC meetings, the hosting fees and maintenance of the LEPC1 website, and ad hoc calls from towns and LEPC members on emergency issues.

Task 5 - Participate in VEM-sponsored Train the Trainer and DisasterLAN training. This task assumes two state trainings and two local trainings.

Task 6 - CCRPC will promote National Flood Insurance Program (NFIP) coverage for all applicable Vermont residents and businesses by providing technical assistance for the review and administration of flood regulations, in cooperation with VTDEC.

Task 7 - CCRPC will assist VEM with the documentation and planning for commodity points of distribution (CPODS) in key localities.

Task 8 - CCRPC will conduct outreach concerning hazard mitigation planning and preparedness. Continue to conduct hazard identification, risk assessment and impact analysis by hazard and develop/enhance All-Hazard Mitigation Plans and integrate these plans into local and regional land use plans, incorporating Disaster Resistant Community policies. Provide technical

assistance for the review and update of regional/local hazard mitigation plans and identified community hazard mitigation priorities. Assist communities in receiving, reviewing, and submitting hazard mitigation program grant applications (HMGP, FMA, PDM) to include benefit/cost training. Promote the inclusion of municipal status/compliance activities relative to the ERAF Incentives draft.

Task 9 - (intentionally blank)

Task 10 - Following town meeting, CCRPC will provide VEM an Excel list of updated EMDs with phone numbers, cell numbers, email addresses, etc in a format supplied by VEM.

Task 11 - CCRPC staff will promote the emergency management director and coordinator (EMD, EMC) certification program to all EMDS within each region. Funding will be available to assist EMDs and communities towards preparedness for those who reach Level I and Level II certification.

Task 12 - CCRPC will assist communities to apply for available grants such as generator grants, HMGP, EMD etc.

Task 13 - CCRPC will update the critical facility list that was originally created through Homeland Security funds several years ago and work collaboratively with VEM, HSU and VCGI to collect some new additional data as well as update the old.

**Product:** as described above

**Product:** as described above

**Staff:** P. Luciano

**Partners:** municipalities, Department of Public Safety (DHS, VEM)

**Timeline:** July 2012

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#### ***12.10.4 Emergency Management Performance Grant (EMPG) – Central VT***

**Objective:** To assist Central Vermont municipalities and emergency services providers with emergency management planning and administration.

**Description:** The following subtasks are as described in the sub-grant agreement.

Task 1 - CCRPC will continue to coordinate the revision and completion of municipal Rapid Response Plans (17 RRP) and Emergency Operations Plans to ensure alignment with the National Incident Management System (NIMS) and National Response Framework (NRF). As part of RRP and EOP development, CCRPC will document any evacuation and sheltering plans at the local levels. CCRPC will continue local and regional level planning for preparedness by developing/enhancing logistics and resources management plans by including local resource lists in RRP and EOPs when available. CCRPC will continue to work toward an improved catastrophic incident plan to address pandemic flu in order for better prevent, protect against,

respond to and recover from this incident. This work will include participation at state level meetings and review of any local plans on this topic.

Task 2 - CCRPC will continue to promote continuity of operations and recovery strategies for municipalities and businesses, especially post-flood.

Task 3 - There remains a large need for local officials to understand ICS. In cooperation with CCMPO, CCRPC will arrange for at least one (1) Local Incident Command System (ICS) training sessions in order to enhance public education and awareness of community disaster preparedness and in order to continue to implement NIMS throughout the region. VEM will provide training personnel.

Task 4 - CCRPC will continue ongoing administrative support and outreach to local communities and Local Emergency Planning Commissions (LEPCs) on compliance issues and emergency planning tools, and participate in local exercises. This task involves the administration of LEPC expenses, the arrangement and holding of LEPC meetings, the hosting fees and maintenance of the LEPC1 website, and ad hoc calls from towns and LEPC members on emergency issues.

Task 5 - Participate in VEM-sponsored Train the Trainer and DisasterLAN training. This task assumes two state trainings and two local trainings.

Task 6 - CCRPC will promote National Flood Insurance Program (NFIP) coverage for all applicable Vermont residents and businesses by providing technical assistance for the review and administration of flood regulations, in cooperation with VTDEC.

Task 7 - CCRPC will assist VEM with the documentation and planning for commodity points of distribution (CPODS) in key localities.

Task 8 - CVRPC will conduct outreach concerning hazard mitigation planning and preparedness. Continue to conduct hazard identification, risk assessment and impact analysis by hazard and develop/enhance All-Hazard Mitigation Plans and integrate these plans into local and regional land use plans, incorporating Disaster Resistant Community policies. Provide technical assistance for the review and update of regional/local hazard mitigation plans and identified community hazard mitigation priorities. Assist communities in receiving, reviewing, and submitting hazard mitigation program grant applications (HMGP, FMA, PDM) to include benefit/cost training. Promote the inclusion of municipal status/compliance activities relative to the ERAF Incentives draft.

Task 9 - (intentionally blank)

Task 10 - Following town meeting, CCRPC will provide VEM an Excel list of updated EMDs with phone numbers, cell numbers, email addresses, etc in a format supplied by VEM.

Task 11 - CCRPC staff will promote the emergency management director and coordinator (EMD, EMC) certification program to all EMDS within each region. Funding will be available to assist EMDs and communities towards preparedness for those who reach Level I and Level II certification.

Task 12 - CCRPC will assist communities to apply for available grants such as generator grants, HMGP, EMD etc.

Task 13 - CVRPC will update the critical facility list that was originally created through Homeland Security funds several years ago and work collaboratively with VEM, HSU and VCGI to collect some new additional data as well as update the old.

**Product:** as described above

**Staff:** P. Luciano, Central Vermont RPC staff

**Partners:** Central Vermont municipalities, Department of Public Safety (DHS, VEM)

**Timeline:** July 2012

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### ***12.10.5 Hazardous Materials Emergency Preparedness (HMEP) Grant – Tier II***

**Objective:** To perform administration and quality control of the Tier IIs.

**Description:**

- A. On behalf of the LEPC, perform administration and quality control of the Tier IIs that are being submitted by the Section 11002 and 11021/11022 facilities within the district. All of the Section 11002s will be accomplished prior to doing the Section 11021/11022s.
  - 1. Set up a systematic review of Tier IIs which are submitted on March 1 of each year to verify their completeness, correctness and thoroughness. This validity check should include the following items.
    - a. Correct Reporting Year date entered.
    - b. Facility identification block contains the facility's complete physical E911 address.
    - c. Correct SIC/NAICS Code and Dunn & Bradstreet Numbers. Get facility to add, if any.
    - d. Ensure Federal Employer Identification number is entered.
    - e. Complete address for Owner/Operator block.
    - f. Name, Title and two (2) telephone numbers each (daytime and 24-hour) for two (2) Emergency Contact persons.
    - g. Ensure that Chemical Abstract Service Number agrees with the Chemical Name and vice versa.
    - h. Make sure that there is an X in either the Pure or Mix blocks, as well as the Solid, Liquid or Gas blocks. Check to see that only Extremely Hazardous Substances (EHS) have an X in the EHS block.
    - i. If brand and/or trade names have been used for Chemical Name, make sure that the EHS Name is included.
    - j. Check to see that the Physical and Health Hazards have been correctly marked.
    - k. Ensure that the facility is reporting Inventory in Pounds in either Active Ingredient pounds or Total pounds and that they are not just using range codes, 01, 02, 03 etc.
    - l. Make sure that the facility is not reporting its dry chemicals in pounds and wet chemicals in gallons.
    - m. Check the Days on Site block for an entry.

- n. Ensure that proper Storage Codes are being used for the Container Types, Pressure and Temperature.
- o. Ensure that all Container Types are being reported, i.e. Drums, Cans and Jugs , if chemical is present in all three containers.
- p. Ensure that Storage Locations are entered for the various Container Types.
- q. Ensure that Certification block is filled out with signature, title and date.
- r. Ensure that Option Attachments blocks are checked, if there are any.
- s. Data entry into Tier2Submit or CAMEO application, if applicable.
- t. Filing of any received Tier II forms.
- 2. Cross reference with the Vermont Emergency Management Tier II database, for the region, to verify that all facilities that are required to submit annual Tier IIs are doing so.
  - a. Verify that Tier IIs are not missing for each required reporting year.
- B. Contact those facilities that contain four (4) or more errors as listed in A. reveals missing Tier IIs, to educate the Facility Representative on the proper completion of Tier II forms.
  - 1. Review sample Tier II and Instructions provided by Vermont Emergency Management.
  - 2. Submit corrected Tier IIs from site visits to the SERC and the local fire department.
- C. Prepare and submit to Vermont Emergency Management a report of the Tier IIs reviewed, identifying those with no errors, those with minor errors and those with major errors. Identify those facilities which required onsite visits for focused attention in regards to preparing accurate Tier II forms.
- D. Incorporate the results of this planning project into the annual update of the LEPC's hazardous materials emergency response plan.

**Product:** as described above

**Staff:** P. Luciano

**Partners:** LEPC, SERC, Vermont Emergency Management

**Timeline:** September 2011

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### ***12.10.7 Fluvial Erosion Hazard Mapping and Planning***

**Objective:** To improve the Chittenden County Multi-Jurisdictional All-Hazards Mitigation Plans with additional fluvial erosion risk assessments.

**Description:** This project is divided into two sub-tasks based on sub-grant agreements with VEM approved by FEMA for pre-disaster mitigation (PDM) efforts.

This grant-funded project (PDM08) is an update of existing plans by performing fluvial erosion risk assessments & incorporating the data in the plans; results will be included in the next plan update.

The project started in September 2008. Tasks 1 through 5 have been completed. These were:

Task 1: Conducted fluvial erosion risk assessments on streams, especially in those areas experiencing residential and commercial development or where key infrastructure is at risk.

Task 2 provided fluvial hazard ratings for each assessed stream reach.

Task 3, completed by VTANR-RMP staff was completion of the QA/QC of the risk assessment data and hazard rating

Task 4 updated Chittenden County's fluvial hazard database to readily illustrate hazard rating data on a geographic basis.

Task 5 was the development by CCRPC staff and its contractors of detailed River Corridor Plans for high-priority rivers wherein the necessary precursor Phase 1 and Phase 2 research has been conducted. Funds were used to update the Huntington River Corridor Plan and the Brown River Corridor Plan.

The remaining task, Task 6, by CCRPC and VTANR staff, consists of outreach and education with each community to update their local Hazard Mitigation Plan through incorporating the new and/or updated fluvial hazard data. The new risk assessment data will enable communities to heavily refine their mitigation strategies and identify discrete mitigation projects.

Task 7 will involve FEMA review of the draft updates with subsequent **approval by each municipality**.

**Product: Fluvial Erosion Hazard Map; River Corridor Management Plan; Revised AHMPs**

**Staff: D. Albrecht, P. Luciano**

**Partners: municipalities, ANR, VEM, FEMA**

**Timeline: September 2008 to September 2012**

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## 14.0 Technical Assistance and Education

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### *14.1.1 Municipal and Regional Technical Assistance*

**Objective:** To provide direct planning assistance to our municipalities and the region.

**Description:** Based on requests, provide planning research, data analysis, bylaw review, and GIS services to municipalities and the region addressing a wide variety of topics. Municipal priorities set by Agency of Commerce & Community Development will also be addressed under this Project. If funding is found, more staff resources will be devoted to those tasks and those tasks may expand. Staff work will be tracked by municipality to improve reporting.

Based on recent communications, some tasks for next year may include, in no particular order, assistance with the following:

1. Engagement with ANR, VLCT, our municipalities, and other MS4 permittees to monitor potential stormwater regulatory changes and solutions and assist with research, coordination and implementation,
2. Municipal Planning Assistance,
3. Merger implementation actions related to public policy,
4. Permit and State Designation Policy Reform,
5. Bolton Bylaw Updates,
6. Winooski Bylaw Update,

7. Colchester Economic Development analysis,
8. Regional Police Study – Phase 2,
9. Mapping of wastewater and water supply service areas;
10. Housing assistance, and
11. Develop a method to annually update housing and commercial databases and employ method to produce data for the purpose of tracking commercial and residential development related to affordability, location, amount, and other relevant attributes.
12. Update data necessary for monitoring Regional Indicators (see also Task 2.2.1)
13. Other tasks as requested and resources allow.

**Products:** data, maps, research, reviews, draft bylaws, reports

**Staff:** R. Mahony, P. Brangan, M. Needle, C. Baker, J. Potter, D. Albrecht, C. Leonard

**Partners:** municipalities, ACCD

**Timeline:** June 2013

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#### ***14.1.1.22 Floodplain Map & Bylaw Update (HMGP 09)***

**Description:** In support of Vermont's Department of Environmental Conservation, CCRPC and Central Vermont RPC will assist our municipalities participating in the National Flood Insurance Program to update and adopt Flood Hazard Bylaws, meeting Federal standards by end of 2010. We will provide resources and assistance as requested regarding municipal bylaws and mapping. This will involve multiple meetings with each municipality as needed, describing the NIFP and the process to reconsider and update local bylaws. RPC staff will then be available for further discussion, review of draft bylaw updates, and potential facilitation during public meetings. We may also provide mapping or databases to assist communities in communicating to their residents. The Vermont League of Cities and Towns' Water Quality Coordinator will also provide support to the municipalities in the two regions and is funded with State funds. Central Vermont RPC will be sub-contractor to CCRPC. VLCT is working under an agreement with the State of Vermont and is providing most of the match for this project with State funds. This task began in FY10.

**Products:** data, maps, research, reviews

**Staff:** P. Brangan, C. Baker, P. Luciano, C. Leonard, D. Albrecht

**Partners:** municipalities, ANR

**Timeline:** August 2012

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#### ***14.1.1.24 Landslide Mapping and Hazard Assessment***

**Objective:** The purpose of this project is to advance the state of landslide mapping and landslide hazard assessment in Vermont by developing and testing a protocol to map potential hazard areas. The protocol will provide regional and municipal planning agencies a methodology to assess landslide hazard in their respective areas.

**Description:** Task 1 - The maps and protocols will be assessed for their usefulness both in general land use development planning (zoning bylaws, land use ordinances, etc.) and in mitigation efforts at the municipal and regional level. Suggestions to make the maps and

protocols more usable will be incorporated as appropriate. The protocol will be evaluated and revised to enhance its applicability to the entire state of Vermont.

**Task 2 – Present project results -** The protocol will be presented by the CCRPC and the VGS to the other ten regional planning commissions that comprise the VAPDA for use in their assessments of landslide hazards in their respective regions. CCRPC and VGS will also meet with the town planning agencies in which the study sites are located to present the maps from this project and the protocol.

**Task 3 – Incorporate results into Multi-Jurisdictional and State Hazard Mitigation Plans -**

Following the presentation of this work to the Vermont Association of Planning and Development Agencies (VAPDA), it is anticipated that other regional planning commissions and the State Hazard Mitigation Plan (Vermont Emergency Management, 2007) will incorporate the protocol into their hazard plans as well.

This protocol and the hazard maps of the study sites will serve as a model for landslide hazard assessments throughout Vermont. It is anticipated that the regional planning commissions will introduce this protocol to the municipalities, so that they can use it to fulfill their goals of hazard assessment.

**Products:** landslide hazard maps and protocol

**Staff:** D. Albrecht, P. Luciano

**Partners:** VGS, municipalities, VEM, VAPDA

**Timeline:** June 2013

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#### ***14.1.1.25 Energy Efficiency and Conservation***

**Objective:** To implement a program to integrate energy planning with regional and local planning, improve effectiveness of local energy planning, and fund eligible energy projects.

**Description:** This project uses federal Energy Efficiency and Conservation Block Grant (EECBG) funding to implement a three-part energy program:

**Task 1: Integrated Planning – Working with a Regional Energy Committee,** CCRPC will work to integrate energy conservation and renewable energy generation into all aspects of local and regional planning, including land use regulation, transportation and environmental planning. CCRPC will review and update the Energy Chapter of the *Regional Plan* and assist municipalities with updating their municipal plan energy chapters and municipal bylaws. CCRPC will also provide technical assistance to municipalities to incorporate energy into local planning and land use regulation.

**Task 2:** completed.

**Task 3: Regional Energy Grant Program –** CCRPC will manage subgrants awarded for eligible municipal and non-profit energy projects. Ten subgrant awards were made based on criteria developed by the Regional Energy Committee; most of these sub-grant funded projects have been completed. This task includes EECBG reporting requirements.

**Products:** updated Regional Plan Energy Chapter, data, research, reviews, draft bylaws/municipal plan elements, grant reporting

**Staff:** R. Mahony J. Potter, C. Baker, F. Cohen

**Partners:** Regional Energy Committee, Subgrant award recipients, USDOE

**Timeline:** December 2012 (DOE grant)

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### ***14.1.2 Education, Outreach and Partnership***

**Objective:** To increase awareness and understanding of Chittenden County planning issues, resources, and solutions within our region and the state.

**Description:** Outreach and education efforts will include efforts such as: newsletters, Annual Report, web page, press releases, news articles, interviews, workshops, the Annual Regional Planning Conference, VIT sessions, Planners Lunches, Planning Commission/DRB training, TOEC training, etc. The webpage will be updated as a tool for our municipalities and the public. Maintain directories and mailing lists. Legislative activities will be monitored and, as needed, policy positions will be developed. Legislative briefings and testimony may be provided. Activities will be undertaken to promote CCRPC's relationships with our partners including: municipalities, GBIC, LCCC, CCTA, CSWD, NVRC&D, and others. Deepen existing relationships & establish new relationships with organizations to further CCRPC's mission. .

**Products:** newsletters, web page, presentations, regional forums, database, and other engagement products

**Staff:** C. Baker, Communications Coordinator, All staff

**Partners:** municipalities, VAPDA, ACCD, VLCT, LCRCC, GBIC, NVRC&D

**Timeline:** June 2013

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### ***14.2.1 Technical Assistance to Non-Municipalities***

**Objective:** To provide regional and state agencies with technical planning assistance.

**Description:** Respond to requests for information, data and maps, provide assistance and disseminate information on planning issues to the public and organizations (such as other RPCs). Monitor the progress of the regional landfill in Williston proposed by the Chittenden Solid Waste District. Support the Agency of Natural Resources' efforts to prepare, revise and implement watershed plans.

**Products:** data, analysis, maps

**Staff:** M. Needle, P. Brangan, C. Leonard

**Partners:** local and state agencies

**Timeline:** June 2012

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### ***14.2.3 Wetlands Restoration (604b)***

**Objective:** To support ANR/DEC's efforts regarding fluvial erosion hazard.

**Description:** Work with five to six member municipalities within the region to review water quality protection elements in their municipal plans, zoning bylaws and subdivision regulations and compare those documents with the State's publication, *Local Planning and Zoning Options for Water Quality Protection*. Additionally, train the CCRPC Board in relevant aspects of water quality programs and issues.

The specific tasks are outlined below:

- 1) Compare the content of all relevant municipal plans, zoning bylaws and subdivision regulations against the State's *Local Planning and Zoning Options for Water Quality Protection*.
- 2) Put the review information into a draft report for for each municipality's use, accompanied by suggested additions that could be used as municipalities consider future changes to their plans, bylaws or regulations.
- 3) Present the draft report to each municipality's planning commission and discuss the potential additions with same.
- 4) Provide a 60-90 minute water quality training to CCRPC Board members. Training will focus on low impact development, green infrastructure, fluvial erosion hazards, stormwater regulatory programs, surface water quality conditions of the region including impaired waters, status of total maximum daily load implementation for applicable waters.
- 5) Provide final report, consisting of revised draft reports (#3 above), to the State no later than 9/15/2012.

**Products:**

1. reports to municipalities
2. CCRPC Board training

**Staff:** R. Mahony

**Partners:** DEC, Municipalities

**Timeline:** September 2012

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#### ***14.2.4 Stream Geomorphic Assessment Software***

**Objective:** To support ANR/DEC's efforts to improve stream geomorphic assessment software.

**Description:** CCRPC will administer a contract to a computer programmer to complete the incorporation of existing SGAT V4.57 functionality from ArcView **3.X** into ArcView 9.X. CCRPC will test the ArcGIS SGAT extension on 2 projects that have previously had the SGAT V4.57 run on them. CCRPC will compare the older files to the new files and determine if any substantive differences exist. CCRPC will write a report outlining their findings and will communicate the outcome to the contractor hired to complete the SGAT migration.

**Products:** Report outlining findings

**Staff:** P. Brangan

**Partners:** ANR/DEC

**Timeline:** December 2012

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