

Table 1
Short Term Implementation Projects for FY13 Capital Program
Package of Phase I Projects

Exit 16 Improvements, Colchester (Project CircAlt IMP-03)

- ▶ **Project Description** - Improvements to the US 2/7 corridor between the Exit 16 interchange area and Rathe Road in Colchester to include: a Double Crossover Diamond (DCD) interchange design and additional turn lanes at Mountain View, Hercules and Rathe Road intersections. Under the DCD alternative, traffic on US 2/7 (northbound and southbound) crosses to the left side of the roadway for the short segment between the signalized ramp intersections, and then returns to the right side of the roadway once it passes the ramps.
- ▶ **Expected Benefits** – The US 2/7 improvements will substantially increase capacity and decrease congestion (improved Level of Service and volume /capacity ratio; decrease vehicle queuing) at the five intersections in the study area—especially the closely spaced intersections between the Interstate Ramps and Mountain View Drive. Improvements will also address safety issues—currently there is one high crash roadway segment and one high crash intersection (southbound ramps) in the study area.

The DCD design allows for left turners from and to the interstate ramps to enter or exit the corridor without crossing opposing traffic—it eliminates one of the most dangerous traffic movements; that of left turns across oncoming traffic. It also makes the traffic signal operation at the ramps more efficient by eliminating the left turn phase of the signal cycle which provides more green time for the remaining two signal phases. Transportation improvements are also expected to support economic development and employment growth in the Exit 16 area.

- ▶ **Estimated Project Cost** - \$5,000,000 (2011 Scoping Study)
- ▶ **Weblink to Study** - <http://www.ccmpto.org/I89/Exit16/>

VT2A/VT289 Interchange Improvements, Essex (Project CircAlt IMP-06)

- ▶ **Project Description** - Interchange improvements at the VT2A/VT289 interchange to include new controllers, video detection equipment so signals can automatically respond to directional changes in traffic demand, integration of both signals (if deemed necessary), additional lane on Susie Wilson Bypass and change from cable signals and supports to mast arms (new signals).
- ▶ **Expected Benefits** - The VT2A/VT289 intersection was not intended to be the permanent terminus of the Circ Highway. In its current configuration traffic routinely backs up in the peak periods. The intersection currently has 20 year-old controllers with no automatic traffic controls (loops or video detectors). Upgrades to the current signal hardware will improve traffic flow through this intersection and will improve safety.
- ▶ **Estimated Project Cost** - \$780,000 (2011 Staff Estimate)
- ▶ **Weblink to Study** - <http://www.ccmpto.us/library/VT15/index.php?rept=3>

Crescent Connector Road, Essex Junction (Project CircAlt IMP-11)

- ▶ **Project Description** – Construction of a new local road connecting VT 2A (Park Street) and VT117 (Maple Street) in the Village of Essex Junction. Project includes sidewalks, bike lanes and street trees.
- ▶ **Expected Benefits** – The new road will open up 6 1/2 acres of underutilized designated Village Center sites to economic development while increasing traffic efficiency and creating the potential for a multimodal transportation system. In addition to the sites directly improved by the

creation of this new (complete streets) road, adjacent sites will also garner benefits from the ability of drivers to get to and from their destinations in a less congested environment that creates less greenhouse gases.

- ▶ **Estimated Project Cost** – \$3,000,000 ((2011 Scoping Study)
- ▶ **Weblink to Study** - http://www.ccmpto.us/library/scoping/ejct_crescent_connector/

VT2A/James Brown Drive, Williston (Project CircAlt IMP-19)

- ▶ **Project Description** – Traffic signal at VT2A/James Brown Drive with crosswalks and pedestrian phasing, 2-way left turn lane between River Cove Road and Eastview Drive, sidewalk on the east side of VT2A, road connection from River Cove Road to James Brown Drive via Shirley Circle.
- ▶ **Expected Benefits** – The proposed improvements at VT2A/James Brown Drive will improve the functioning of this heavily congested area identified in the Circ FEIS. It will help manage and reduce turn conflicts along the VT 2A corridor, and allow motorists entering and exiting VT 2A to more safely move through traffic.
- ▶ **Estimated Project Cost** – \$1,500,000 (2009 Scoping Study)
- ▶ **Weblink to Study** - http://www.ccmpto.us/library/scoping/james_brown_drive/

Transportation Demand Management (TDM)/Transportation Systems Management (TSM), Regional

- ▶ **Project Description** – Transportation Demand Management (TDM) and Transportation Systems Management (TSM) programs offer strategies to reduce travel demand, specifically that of single-occupancy private vehicles, and to redistribute this demand in space or in time to improve the efficiency of our transportation system. The proposed suite of TDM/TSM measures will directly address vehicle miles traveled, energy use, air quality and other public benefits including increased access of low-income persons to good jobs, inexpensive reduction of roadway and parking congestion, and cost-effective incentives for timely and convenient travel.

Funding for TDM/TSM programs in the Circ project area would complement and enhance county-wide TDM efforts funded through a recently awarded FHWA Transportation, Community and Systems Preservation (TCSP) Grant. This TCSP-funded program brings together numerous regional transportation partners to establish a TDM pilot program and directly change transportation behavior within the county. The project is a comprehensive and collaborative effort to achieve regional transportation goals outlined in the CCMPO's Metropolitan Transportation Plan, as well as to address national policy objectives including the need to conserve energy, reduce reliance on energy imports, lessen congestion, and clean our Nation's air.

The following are complementary TDM/TSM projects that would target the Circ project towns as part of the overall countywide TDM pilot program:

VT15 and VT2A Transit Shelters – Construction of 10 solar shelters along VT15 with bicycle racks in Colchester and Essex and 6 solar shelters with bicycle racks in Williston. Transit shelters are an important passenger amenity that increase the attractiveness and convenience of transit, which helps build ridership. Transit shelters provide a seated waiting area and protection from the elements, and lighted shelters offer a greater sense of security for those traveling at night. Shelters also serve as a type of marketing tool, making people aware that

transit serves a particular area, and by including schedule information at shelters, individuals can easily access specific route information. Estimated Cost: \$512,000

Signal Improvements in the Circ Study Area (10 Signals) – Signal optimization can improve traffic flow through existing signalized intersections and can increase the capacity of the intersection. Updated signal equipment can also improve capacity through existing intersections and thus reduce delay and improve level of service. Estimated Cost: \$300,000

Conduct a CarShare assessment analyses in Colchester, Williston, and Essex to determine the best locations for two CarShare Vermont pods; open new locations accordingly and support operations for one year. Estimated Cost: \$75,000 (\$15,000 for pod assessment analysis and \$60,000 to purchase and operate two cars).

Expand and enhance the TDM Circuit Rider role in the region with a focus on major employers in the Circ project area. CATMA will meet and present employers with information on TDM and provide a TDM Toolkit consisting of a variety of incentives, services and programs that can be implemented at their workplace. Estimated Cost: \$10,000

Create a TDM marketing and outreach effort targeted at the Circ study area to focus on carpooling/ridesharing, transit where available, walking and bicycling, and encouraging employers in the area to consider telecommuting or more flexible work schedules. Estimated Cost: \$20,000

Enhance Local Motion's bike commuter EAP (Employee Assistance Program) by creating a TDM challenge fund. This fund would be used to match employer funds to provide one-on-one bicycle commuting mentoring for employees to help them translate interest into action. A flat fee charged per employee covers the costs to work with them for however long it takes to get them to their first bike commute. This would directly result in 100+ additional bike commuters getting on the road, and would leverage another 100+ bike commuters whose training would be funded by the employers themselves. Estimated Cost: \$15,000 over two years.

- ▶ **Expected Benefits** – Together the components of this project will:
 1. Improve the efficiency of our transportation system by reducing the number of single occupant vehicles (SOV) on our roadways, increasing public transportation ridership, allowing families to downsize vehicle ownership by providing short-term car-share vehicles, and converting SOV commuters to bicycle commuters;
 2. Reduce the impacts of transportation on the environment by decreasing the number of SOVs on the roads, lower auto-derived greenhouse gas emissions by decreasing VMT, and reducing auto-derived pollutants from entering our waterways by encouraging walking, biking, transit, and use of fuel efficient car-share vehicles;
 3. Reduce the need for costly future investments in public infrastructure by creating a mode shift to non-SOV travel. A combined effort to reduce VMTs and SOVs means less wear and tear on our roadways, and reduced traffic congestion decreases demand for additional roadway capacity.
 4. Provide efficient access to jobs, services, and centers of trade by making it easier to combine modes, improve access to public transit, and reduce the reliance of private automobiles to reach employment destinations.

- ▶ **Estimated Project Cost** – \$932,000