

Table 2
Alternatives to the Circ Implementation Projects -- Project Descriptions and Expected Benefits
November 3, 2011

Reference Number	Project ID		Municipality	Project	Project Description	Expected Benefit	Estimated Cost	Notes	Weblink to Studies
Recommended for FY13 Capital Program									
1	CircAlt	IMP-03	Colchester	Exit 16 Improvements	Improvements to the US 2/7 corridor between the Exit 16 interchange area and Rathe Road in Colchester include: a Double Crossover Diamond (DCD) interchange design and additional turn lanes at the 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.	This DCD 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.	\$5,000,000	Evaluated in Exit 16 Circulation Study, 2009 & Interstate 89 Exit 16 Scoping Study, 2011.	http://www.ccmpto.us/library/l89/Exit16/
2	CircAlt	IMP-06	Essex	VT2A/VT289 Interchange Improvements	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).	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.	\$780,000	Recommendation from the Route 15 Corridor Study (2008).	http://www.ccmpto.us/library/VT15/index.php?rept=3
3	CircAlt	IMP-11	Essex Junction	Crescent Connector Road	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.	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.	\$6,000,000	Evaluated in Village Connector Road Analysis, 2010 and Crescent Connector Scoping Report, 2011. Projects needs to be added to MTP	http://www.ccmpto.us/library/scoping/ejct_crescent_connector/
4	CircAlt	IMP-19	Williston	VT2A/James Brown Traffic Signal	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.	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.	\$1,500,000	Evaluated in James Brown Scoping Report, 2009	http://www.ccmpto.us/library/scoping/james_brown_drive/
5	CircAlt	TRN-01	Transit	VT 15 Transit Shelters	Construction of transit shelters along VT15 in the CCTA service area.	Construction of transit shelters supports transit service on VT15 and improves the transit environment and safety for riders.	\$320,000	10 solar shelters with bike racks in Colchester and Essex	
6	CircAlt	ITS-01	Regional	Transportation Demand Management	TDM strategies through employer based trip reduction programs and an expanded network of park and ride facilities.			2025 MTP identifies TDM strategies through employer based trip reduction programs and an expanded network of park and ride facilities. TDM Pilot Project underway in partnership with CarShare Vermont, Local Motion, CCTA, CATMA	http://www.ccmpto.org/MTP/2025/MTP_final_apr2005.pdf
Other Projects									
7	CircAlt	IMP-01	Colchester	Severance Corners Improvements	Upgrades to US7/Blakely Road/Severance Road to consist of an additional westbound left turn lane, an additional northbound left turn lane and an additional southbound through lane.	The proposed improvements will mitigate current congestion conditions, improve safety in this location and will accommodate the Severance Corners Growth Center, which is a state designated Growth Center.	\$6,000,000	Evaluated in Severance Corners Transportation Improvement Plan, 2007. Design conducted by VHB.	http://www.ccmpto.us/library/studies/severance_corners/index.php?rept=1
8	CircAlt	IMP-02	Colchester	VT2A/US7/Creek Road/Bay Road Intersection Improvements	Improvements to VT2A/US7/Creek Road/Bay Road intersection including signalization, addition of turn lanes on north, south and east approaches and minor realignment.	This project will reduce traffic delays and will mitigate high crash levels at the three project intersections: US7/VT2A, VT2A/VT127 and US7/Bay Road.	\$3,000,000	Funding for this project is included in the TIP in FY13 and FY14.	Scoping report completed 1997. Digital copy not available
9	CircAlt	IMP-13-01	Williston	US2/Industrial Avenue Intersection Improvements	Improvements to the US2/Industrial Avenue intersection.	Improvements in this location will improve safety and reduce delays at this high volume intersection that accommodates a large number of trucks.	\$2,900,000	VTrans has completed design of improvements in this location. Project is in TIP for CON in FY14.	Digital copy not available.
10	CircAlt	IMP-22-03	Colchester	VT127 Intersections: Malletts Bay School Entrance	Provide left (west approach) and right (east approach) turn lanes on Blakely Road.	VT127 is the only east-west corridor in Colchester west of I-89. As such, it functions as a through road for commuter traffic and accesses numerous businesses and town and recreational facilities. This project will improve access to Malletts Bay School and reduce delays on VT127.	\$127,400		Scoping study completed in 2001. Digital copy not available.

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11	CircAlt SCP-02		Regional	Signal Updates and Optimization in Circ Study Area	Signal improvements in locations throughout the Circ study area.	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.			
12	CircAlt IMP-15		Williston	Trader Lane Construction	Construction of a new road in Williston between Marshall Avenue and US2 and connecting with Helena Drive.	Creation of a grid street system in the Taft Corners area will reduce congestion at the intersection of US2/VT2A and also VT2A/Marshall Avenue by providing travelers with an alternative route. It will also promote compact land use in this state designated growth center.	\$1,800,000	Evaluated in Williston Street Grid Evaluation, 2006.	http://www.ccmpto.us/library/studies/will_streetgrid_evaluation/
13	CircAlt IMP-16		Williston	Wright Avenue Construction	Construction of a new road in Williston connecting VT2A and Trader Lane	Creation of a grid street system in the Taft Corners area will reduce congestion at the intersection of US2/VT2A and also VT2A/Marshall Avenue by providing travelers with an alternative route. It will also promote compact land use in this state designated growth center.	\$2,100,000	Evaluated in Williston Street Grid Evaluation, 2006.	http://www.ccmpto.us/library/studies/will_streetgrid_evaluation/
14	CircAlt IMP-23		Essex Junction	Burlington Branch Rail Line	Upgrades to the rail line between Essex Junction and Burlington.	This upgrade will increase the weight that can be carried by rail cars on the Burlington Branch rail line thus increasing the potential to divert traffic from truck to rail. It also supports the States goal of creating a passenger rail connection between Burlington and Montreal.	\$3,000,000	Montreal and Commuter Rail Connection	
15	CircAlt IMP-22-01		Colchester	VT127 Intersections: Prim and West Lakeshore Drive	Intersection improvements.	VT127 is the only east-west corridor in Colchester west of I-89. As such, it functions as a through road for commuter traffic and accesses numerous businesses and town and recreational facilities.	\$333,200		Scoping study completed in 2001. Digital copy not available.
16	CircAlt IMP-17		Williston	Video Detection Installation: Marshall/South Brownell, Marshall/Harvest Lane	Installation of video detection equipment on existing traffic signals at Marshall/South Brownell and Marshall/Harvest.	Installation of video detection equipment will improve the function and reliability of the traffic signals in these high volume locations and could improve roadway capacity without increasing the road footprint.	\$60,000	Upgrade existing signals	
17	CircAlt IMP-22-02		Colchester	VT127 Intersections: Laker Lane and Malletts Bay Avenue	Provide left (east approach) and right (west approach) turn lanes on Malletts Bay Avenue. Plan for future signal. Laker Lane accesses Colchester High School.	VT127 is the only east-west corridor in Colchester west of I-89. As such, it functions as a through road for commuter traffic and accesses numerous businesses and town and recreational facilities. Improvements in this location will improve access to Colchester High School and reduce delays on VT127.	\$186,200		Scoping study completed in 2001. Digital copy not available.
18	CircAlt IMP-22-04		Colchester	VT127 Intersections: West Lakeshore Drive and Malletts Bay Avenue	Add a right turn lane on east approach, eliminate left turn lane, add curbed island.	VT127 is the only east-west corridor in Colchester west of I-89. As such, it functions as a through road for commuter traffic and accesses numerous businesses and town and recreational facilities.	\$196,000		Scoping study completed in 2001. Digital copy not available.
19	CircAlt IMP-21		Essex	VT117/Sand Hill Road Improvements	Improvements and signalization of the VT117/Sand Hill Road intersection.	VT117 is a minor arterial highway and is heavily used by commuter traffic. Signalization of this intersection will reduce delay and will improve safety in this location.	\$1,170,000	Construction funds in the TIP for FY13.	Scoping study completed in 1996. Digital copy not available.
20	CircAlt IMP-10		Essex Junction	VT15, VT2A, VT117 Paving	Paving of state highways in 5-Corners Area, Essex Junction.	Heavy traffic volumes in the 5-Corners area, exacerbated by not constructing the Circ highway, stresses road pavement causing accelerated degradation. Degraded roads frequently have pot holes and have an impact on safety for vehicles, cyclists and pedestrians. Such roads also make an area less desirable for businesses and customers.		Paving last done in FY95, FY96 and FY97	
21	CircAlt IMP-04		Colchester	Exit 16 Park and Ride -- Lease of Existing Lot	Lease of an existing lot in the Exit 16 area for use as a park and ride.	Implementation of a park and ride lot at Exit 16 will promote carpooling and will potentially reduce vehicle volumes on US7 and Exit 16.		Potentially at Charlebois parking area.	http://www.ccmpto.us/library/studies/Parknride_InterceptFacility_FinalPlan_20110615.pdf
22	CircAlt SCP-18		Williston	Park and Ride Near Exit 12	Construction of a new Park and Ride facility in Williston near Exit 12.	Construction of a park and ride lot at Exit 12 will promote carpooling, will potentially reduce vehicle volumes on VT2A and US2, and will ease congestion at the Richmond Park and Ride Lot.		VTrans working with property owners to advance this project.	http://www.ccmpto.us/library/studies/Parknride_InterceptFacility_FinalPlan_20110615.pdf
23	CircAlt SCP-01		Colchester	VT127 Park and Ride Lot	Park and Ride lot on VT127 near the proposed I-289 intersection.	Project to promote carpooling and reduce vehicle volumes on the congested corridors of VT127 and North Avenue.	\$548,000	To include bus service. Estimated at 40 spaces per regional P&R Plan. Potentially at Old Sombreo Restaurant.	http://www.ccmpto.us/library/studies/Parknride_InterceptFacility_FinalPlan_20110615.pdf
24	CircAlt IMP-09		Essex	VT 15 / Sand Hill Rd Improvements	Traffic signal with pedestrian phase, protected pedestrian crossing of VT15, right turn lane on west approach, eliminates "Y" configuration on Sand Hill Road approach for improved safety.	Improvements to reduce delays on Sand Hill Road and improve safety for vehicles and pedestrians in this location.	\$1,600,000	Evaluated in VT Route 15/Sand Hill Road Scoping Study, 2008. Signal warrant is met. Scoping awaiting review from VTrans	http://www.ccmpto.us/library/scoping/VT15_Sand_hill/

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25	CircAlt	IMP-18	Williston	Traffic Signal Emergency Power Backup - Marshall Avenue Signals	Installation of emergency power back up systems.	Emergency power back up at intersections along busy corridors allows the intersections to maintain operation during power outages and allows emergency responders to concentrate on other problems that are caused by power interruptions. Maintaining signal operation in high volume locations is extremely important for traveler safety.	\$105,000		