

CHITTENDEN COUNTY REGIONAL PLANNING COMMISSION
TRANSPORTATION ADVISORY COMMITTEE
AGENDA

DATE: **Tuesday, April 4, 2017**
TIME: **9:00 a.m.**
PLACE: **CCRPC Office, 110 West Canal St. Winooski**

DELIBERATIVE AGENDA:

1. Action on Consent agenda – 9:00 – 9:05
See TIP amendment memo attached.
2. Minutes of March 8, 2017 – (Action Item) 9:05 - 9:10
See attached.
3. Public Comment Period (Information item) 9:10 - 9:15
Members of the public are invited to raise issues of interest or concern to the TAC on items not on the agenda.
4. Active Transportation Plan (Action Item) 9:15 – 9:35
A draft final ATP is available here: <http://www.ccrpcvt.org/our-work/our-plans/regional-bikeped-plan/>
Staff will present the major recommendations and seek a TAC recommendation to the Board to approve. See attached memo for more information.
5. Project Prioritization (Action Item) 9:35 – 9:50
See attached memo documenting this annual process and a staff recommendation.
6. Metropolitan Transportation Plan (MTP) Scenarios (Information Item) 9:50 – 10:05
Staff is considering several different future transportation scenarios to model as part of the MTP. See attached memo for more information.
7. UPWP Update (Information Item) 10:05 – 10:15
Next year's work program development is moving along and TAC action is anticipated in May. Staff will give a brief update.
8. Status of Projects and Subcommittee Reports (Information Item) 10:15 – 10:25
See bulleted list on the reverse for current CCRPC projects. TAC members are encouraged to ask staff for more information on the status of any of these on-going or recently completed projects.
9. CCRPC March Board Meeting Report (Information Item) 10:25 – 10:30
The Board met on March 22nd approving the functional class revisions, demographic forecasts and MRGP comments that the TAC had recommended. They also warned a public hearing on the FY18 UPWP.
10. Chairman's/Members' Items (Information Item) 10:30 – 10:35

Next Meeting: Tuesday, May 2, 2017

Project list:

- Title VI program participation and Public Participation Plan implementation
- Participation in the Vermont Highway Safety Alliance's working groups
- Participation in the State's Rail Council
- Coordination with United Way on the Neighbor Rides Program
- Exit 14 Signal Scoping and Systems Engineering Analysis (Burlington/South Burlington)
- Advanced Traffic Monitoring System through FHWA AID grant – Pilot Corridor design
- Allen Martin/VT 15 Intersection Scoping Study (Essex) – Final Report
- Countywide Functional Class Review and Update
- LPM services for Underhill sidewalk construction on VT 15
- LPM services for Shelburne sidewalk construction on US 7
- LPM services for South Burlington sidewalk construction on VT 116
- LPM services for Hinesburg – Village South Area Sidewalk on VT 116
- Regional Active Transportation Plan
- Burlington Winooski Avenue Circulation Study
- Bay Road Shelburne Bike Ped Corridor improvements study
- Coordination with GMT on ADA and Elders & Disabled advisory committees
- Metropolitan Transportation Plan (MTP) Update
- Winooski/Burlington Bridge Scoping
- Colchester Ave/Riverside Ave/Barrett St Intersection Scoping (Burlington)
- US 7 Southern Gateway Scoping (Shelburne)
- North Ave Pilot Study (Burlington)
- North Williston Road Scoping Study (Williston)
- Regional Transportation Model Update
- Railyard Enterprise Supplemental Scoping of Alternative 1B (Burlington)
- Transportation Hazard Mitigation Planning
- Winooski River Bicycle/Pedestrian Bridge
- Essex Path/Sidewalk Impact Policies
- So. Burlington Williston Road Area Transportation and Land Use Network Analysis
- So. Burlington VT116-Kimball-Tilley Land Use and Transportation Plan
- Williston Exit 12 Transportation Improvement District (TID) Pilot Project
- Mountain View Road Scoping Study, Williston
- Alternative Transportation Crossing Study for of I-89 Exit 14, South Burlington
- Regional Transportation Energy Planning
- Shelburne Phase 2 of Form Based Zoning to Improve Walkability
- Overhaul of South Burlington's Traffic Overlay District
- Jericho Riverside Future Street Network Study
- Winooski Downtown Parking Management Study
- Update to South Burlington's Transportation Impact Fee Ordinance
- ADA Evaluation of Pedestrian Facilities in Essex/Essex Junction
- Malletts Bay Stormwater Management Plan (Colchester)

CCRPC Transportation Advisory Committee

April 4, 2017

Agenda Item 1: Consent Item

FY2017 Transportation Improvement Program Amendments

Issues

Make the following changes to the FY17-2020 TIP:

Pearl Street Improvements, Essex Junction (Project HP111, Amendment FY17-09):

- ▶ **Description of TIP Change:** Increase construction cost from \$1,820,000 to \$2,750,000. Add \$744,000 in federal funds in FY18. This is a CIRC Alternatives Phase II project and is not subject to CCRPC's fiscal constraint limit.
- ▶ **Reason for Change:** The following factors resulted in this cost increase:
 - The cost estimate for this project was developed in 2012. Costs increase by approximately 5 percent per year due to inflation
 - The initial cost estimate did not include construction engineering which includes a resident engineer required to be on the construction site to deal with day-to-day issues
 - The initial cost estimate included signal improvements at Post Office Square, and acknowledged that improvements may be needed at South Summit Street to allow the signals to be coordinated, but detailed costs were not included for the South Summit Street signal.
 - This estimate includes some nonparticipating items such as decorative lighting. These costs are not eligible for reimbursement according to VTrans amenities policy and won't ultimately be applied to the federal or state project cost

2017 Transportation Alternatives Program Awards

- ▶ **Description of TIP Change:** Add the projects below to the FY17 TIP. These projects were awarded Transportation Alternatives Program Awards.
 - **Picard Circle Stormwater Improvements, South Burlington** (Project OT029, Amendment FY17-10): Design and construction of stormwater infiltration and drainage infrastructure along Picard Circle -- \$52,000 PE in FY17
 - **Lamplite Acres Drainage Improvements, Williston** (Project OT030, Amendment FY17-11): Design and construct critical drainage areas at Lamplite Acres - \$300,000
 - **Crosswalk Improvements, Winooski** (Project BP099, Amendment FY17-12): Construct enhanced crosswalk treatments at five locations in Winooski - \$289,000
 - **Lee River Road Sidewalk, Jericho** (Project BP100, Amendment FY17-13): Design and construction of 1,000 feet of sidewalk and other pedestrian improvements on Lee River Road - \$60,000 PE in FY17.

I-89 U-Turn Widening, Milton (Project HP130, Amendment FY17-14):

- ▶ **Description of TIP Change:** Add \$54,000 in Federal funds for design and \$540,000 for construction in FY17 to:
 - Widen an existing U-turn at I-89 mile marker 100.9 to 50 feet and add 400-foot deceleration/acceleration lanes with 150 foot tapers.
 - Construct a new 50-foot-wide U-turn at I-89 mile marker 102.7 with 400-foot deceleration/acceleration lanes with 150 foot tapers.
- ▶ **Reason for Change:** These changes are being made to improve access in the vicinity of the newly reconstructed bridge over the Lamoille River.

Staff Recommendation: Recommend that the TAC approve the proposed TIP amendment.

For more information, contact: Christine Forde
cforde@ccrpcvt.org *or* 846-4490 ext. *13

1
2 CHITTENDEN COUNTY REGIONAL PLANNING COMMISSION
3 TRANSPORTATION ADVISORY COMMITTEE - MINUTES
4

5 DATE: Tuesday, February 7, 2017
6 TIME: 9:00 a.m.
7 PLACE: CCRPC Offices, 110 West Canal St. Winooski, VT
8

9 **Members Present**

10 Matt Langham, VTrans
11 Dean Bloch, Charlotte
12 Dennis Lutz, Essex
13 Dean Pierce, Shelburne
14 Barbara Elliot, Huntington
15 Chris Jolly, FHWA
16 Sandy Thibault, CATMA
17 Bruce Hoar, Williston
18 Nicole Losch, Burlington
19 Katelin Brewer-Colie, Local Motion
20 Peter Wernsdorfer, Winooski
21 Ryan Lambert, Winooski
22

Staff Present

Eleni Churchill, Transportation Program Manager
Christine Forde, Senior Transportation Planner
Charlie Baker, Executive Director
Melanie Needle, Senior Planner
Jason Charest, Senior Transportation Planning Engineer
Marshall Distel, Transportation Planner
Sai Sarepalli, Transportation Planning Engineer
Peter Keating, Senior Transportation Planner

23
24 Peter Keating called the meeting to order at 9:05AM.
25

26 **1. Consent Agenda**

27 N/A this month.
28

29 **2. Approval of Minutes**

30 Peter clarified the January meeting minutes that were questioned last month. They were accurate as first
31 presented. On separate motions the meeting minutes from both January and February were approved.
32

33 **3. Public Comments**

34 There were none.
35

36 **4. Active Transportation Plan**

37 Peter reported that this item will not be considered for action at this meeting as we'd received some
38 significant new comments in the past week. Peter will email the link to the Plan to the TAC members
39 after this meeting and request that any further comments be submitted by the end of next week.
40

41 **5. Roadway Functional Class**

42 Marshal Distel and Jason Charest presented their reassessment of the Region's road classification that has
43 been on-going over the past year. They began with an overview on the topic and Federal Highway's
44 quantitative guidelines that help determine classes. They then addressed why classification is important
45 and the process behind the assessment, which included:

- 46 • CCRPC staff initiating a comprehensive review of the County's roadways
- 47 • Starting with Class 2 roads
- 48 • Identifying new traffic generators, land use characteristics, AADT volumes
- 49 • Avoiding assigning parallel routes
- 50 • Preventing roadways from changing functional class at a boundary
- 51 • Considering Highway Functional Classification Concepts, Criteria and Procedures
- 52 • Working with VTrans
- 53 • Coordinating functional class changes with bordering RPCs
- 54 • Soliciting feedback from municipalities

1 Jason then went to the interactive on-line map and summarized the changes: 62 Route changes
2 incorporating 105 segment changes. He also focused on some specific change recommendations. Next
3 steps include: TAC Approval, Board Approval, CCRPC submits official request to VTrans, and VTrans
4 submits official request to FHWA for final approval. Following short discussion DENNIS LUTZ MADE
5 A MOTION, SECONDED BY PETER WERNSDORFER: THE TAC ACCEPTS THE PROPOSED
6 FUNCTIONAL CLASS CHANGES INCORPORATING BURLINGTON'S RECOMMENDATIONS
7 AND ADVISES THE CCRPC BOARD TO REQUEST THAT VTRANS CONSIDER THESE
8 CHANGES AS PRESENTED FOR SUBMITTAL TO FHWA. THE MOTION PASSED
9 UNANIMOUSLY.

10 11 **6. Municipal Road General Permit Comments**

12 Charlie referred members to the draft comment memo in the meeting packet and asked for members'
13 approval and or revisions or additions to what was offered. Charlie went through each comment topic one
14 by one asking for agreement or changes. The discussion on Class 4 roads generated interest with a
15 number of difficulties cited by what the State's proposing. The annual fee also seemed high and should
16 reflect some lowering over time as towns made progress. Dennis Lutz noted that some terms in the draft
17 permit seemed to be used interchangeably and more precise definitions need to be offered. He specifically
18 noted the terms gully, swale and ditch needed definition. Following further discussion BRUCE HOAR
19 MADE A MOTION, SECONDED BY DENNIS LUTZ, TO APPROVE THE COMMENT MEMO AND
20 TO SEND TO THE BOARD FOR THEIR APPROVAL. THE MOTION PASSED UNANIMOUSLY.

21 22 **7. Town Highway Bridge Pre-Candidate List Priorities**

23 Christine began by describing how VTrans Capital program categorizes projects – Front of the Book,
24 Development & Evaluation, Candidate. The bridges we're looking to prioritize come before any of these
25 and are used to move projects into the Capital Program at a future date. VTrans is looking for our
26 region's top 10 priorities for this list. Christine pulled up a map on the screen revealing the locations of
27 the 10 we are planning to send to VTrans. She noted that many of these are from last year's priority list
28 although one or two have moved up to the Candidate category. She also went over the table that scored
29 prioritization and explained how the criteria work. Matt Langham noted that on average VTrans
30 completes 10 bridge projects per year. Following discussion, DEAN PIERCE MADE A MOTION,
31 SECONDED BY DEAN BLOCH, TO APPROVE THE LIST OF BRIDGE PRIORITIES. THE
32 MOTION PASSED UNANIMOUSLY.

33 34 **8. VTrans Funding Priorities**

35 Matt went through a PowerPoint to explain where VTrans proposes to spend funds in the coming year. He
36 began by comparing this year's Governor recommended budget to the one that passed last year, overall
37 showing a 0.4% increase. He next displayed a chart of the past 6 years total budget amounts for
38 comparison and then provided details for the two largest funding sources: federal and state. The emphasis
39 areas for the new budget are:

- 40 • Safety
- 41 • Preservation and Maintenance
- 42 • Grow Vermont's Economy
- 43 • Energy Efficient Transportation Choices
- 44 • Protecting Vulnerable Populations
- 45 • Making Vermont Affordable
- 46 • Asset Management and Performance
- 47 • Clean Water Initiative

48 For each category, Matt offered budget program examples. The Clean Water Initiative is a new program
49 and Matt provided further detail including:

- 50 • Two-year program FY2018 – FY2019

- 1 • \$13.5M over two years
- 2 • \$1.1M additional Transportation Alternatives (TA) funding redirected to Municipal stormwater
- 3 grants annually
- 4 – Entire \$2.2M TA Program now dedicated to clean water
- 5 • Additional funds redirected to Municipal Mitigation Assistance
- 6 – \$5.2M in FHWA formula funds over FY2018 and FY2019
- 7 – \$400,000 redirected from Town Highway Class 2 Roadway Program

8 There was further discussion about how to get the Clean Water program funds out to communities and a
9 desire to consider a separate meeting to discuss this.

10 11 **9. MTP Fiscal Constraint**

12 Peter noted last month's MTP related item concerning the MTP project list and next efforts to relate an
13 estimated level of funding for those projects. He described the methodology from the last MTP and our
14 intent to use it again. This is a two-step process:

- 15 1. Determine the historical level of federal funds coming to the state and estimate/project a future
16 trend.
- 17 2. Calculate the historic share Chittenden County has received of the overall state pot. Last time we
18 used 17.1%. Project future funding on a determined share.

19 Step one has been done and there is basically a flat line of level funding anticipated into the future. For
20 the second item, we're still working on it. Depending on what historic period we look at, we've received
21 anywhere from a low of 13% of the state share to a high of nearly 20%. We will be discussing options
22 with VTrans and will return in April with a decision on how this applies to the project list.

23 24 **10. Population Forecast Update**

25 Melanie continued her presentation started last month on this topic. This time it included revisions and
26 extensions out to 2050 performed by RSG. Beginning with the 10-year extension out to 2050 she showed
27 slides charting total County population, municipal totals and municipal share of the County total. She next
28 described the details on both the household and employment forecast methods and trends and the details
29 by municipality going out to 2050. The next steps in this process are:

30 Receiving a revised consultant forecast this afternoon that will take into consideration:

- 31 Winooski-account for recent growth
- 32 Burlington- pipeline development
- 33 Rural towns-flat or declining population
- 34 Essex-modification to employment

35 Board considering forecast for approval March 15th

36 Staff will assign job numbers to the Transportation Model's Transportation Analysis zones following
37 Board approval.

38 39 **11. Status of Projects and Subcommittee Reports**

40 Peter referred members to the project list on the back of the agenda.

41 42 **12. CCRPC February Board Meeting Report.**

43 Peter mentioned the Board approved major TIP amendments that the TAC has considered last month.

44 45 **13. Chairman's/Members' Items**

46 No items came up.

47
48 The meeting adjourned at 10:55 a.m.

49
50 Respectfully submitted, Peter Keating



CCRPC Transportation Advisory Committee

04/04/2017

Agenda Item 4: Action Item

Active Transportation Plan: Action Item

Background:

CCRPC began an update to the Bike Ped plan in the summer of 2015 and held extensive public outreach through workshops and the project's on-line map comment tool through that fall and winter. Preliminary network and infrastructure recommendations were presented to the TAC and Board last spring and fall, based largely on GIS analysis that considered:

- Public comment, safety, level of stress,
- Trip origins and destinations, and
- Previous plans/studies.

A project feasibility layer was added later and combined with priorities to produce a recommended network map identifying both.

Staff provided extensive comments on priority recommendations and feasibility determinations last September which led to some revisions and another round of comment/review solicitation. We conducted this through Front Porch Forum and local Bike/Ped committees from October to December. More recently TAC comments were received and further revisions made.

At the April TAC meeting, staff will present the plan with a focus on its recommendations.

Staff

Recommendation:

Staff recommends that the TAC recommend approval of the Active Transportation Plan to the CCRPC Board.

Staff contact:

Peter Keating, pkeating@ccrpcvt.org 861-0124

Attachments:

The ATP and priority map can be found at <http://www.ccrpcvt.org/our-work/our-plans/regional-bikeped-plan/>



CCRPC Transportation Advisory Committee

April 4, 2017

Agenda Item 5: Action Item

2019 Transportation Project Prioritization

Issues: Each year the Vermont Legislature requires that projects in the Transportation Capital Program be prioritized. Specifically, they directed VTTrans to develop a numerical grading system to assign a priority ranking to all paving, roadway, safety and traffic operations, state bridge, interstate bridge, and town highway bridge projects. The rating system was to consist of two separate, additive components as follows:

1. One component shall be an asset management-based factor which is objective and quantifiable and shall consider, without limitation, the following:
 - the existing safety conditions in the project area and the impact of the project on improving safety conditions;
 - the average, seasonal, peak, and nonpeak volume of traffic in the project area, including the proportion of traffic volume relative to total volume in the region, and the impact of the project on congestion and mobility conditions in the region;
 - the availability, accessibility, and usability of alternative routes;
 - the impact of the project on future maintenance and reconstruction costs.
2. The second component of the priority rating system was to consider the following factors:
 - the functional importance of the highway or bridge as a link in the local, regional, or state economy; and
 - the functional importance of the highway or bridge in the social and cultural life of the surrounding communities.

A prioritization methodology was developed as a collaborative effort between VTTrans and the regional planning commissions (RPCs). VTTrans provides technical input on projects to determine the first part of the project score and the RPCs provide input on the second part of the score.

VTTrans Methodology Overview

Prioritization methodologies were developed for each program category listed in the Transportation Capital Program. The methodologies are summarized below.

Paving

- Pavement Condition Index – 20 points (more points are given for higher levels of pavement deterioration)
- Benefit/Cost – 60 points (output comes from a Pavement Management System software which considers the type of pavement treatment, traffic volumes and percentage of trucks)
- Regional Priority – 20 points

Bridge

- Bridge Condition – 30 points (considers the condition of components of the bridge such as the deck, superstructure and substructure)
- Remaining Life – 10 points (considers the rate at which the bridge is deteriorating)
- Functionality – 5 points (adequacy of the alignment and the width)
- Load Capacity and Use – 15 points (considers if there is a weight restriction and the traffic volumes)
- Waterway Adequacy and Scour Susceptibility – 10 points (characteristics of the waterway the bridge crosses, if applicable)
- Project Momentum – 5 points (considers right-of-way and permit issues)
- Benefit Cost Factor – 10 points (considers the benefit to the traveling public of keeping the bridge open)
- Regional Priority – 15 points

Roadway

- Highway System – 40 points (looks at highway sufficiency rating and network designation)
- Cost per vehicle mile – 20 points
- Project Momentum – 20 points (considers right-of-way and permitting issues)
- Designated Downtown project – 10 bonus points
- Regional Priority – 20 points

Traffic Operations

- Intersection Capacity – 40 points (based on level of service)
- Accident Rate – 20 points
- Cost per Intersection Volume – 20 points
- Project Momentum – 10 points (considers right-of-way and permitting issues)
- Regional Input – 20 points

CCRPC Priority Methodology

CCRPC developed a methodology for regional priority scores in 2005. The methodology uses planning factors MPOs are required to consider in their planning process, as stated in ISTEA and reiterated in subsequent legislation. The planning factors are: Economic Vitality; Safety and Security; Accessibility, Mobility and Connectivity; Environment, Energy and Quality of Life; Preservation of Existing System; and, Efficient System Management.

The methodology uses a project scoring sheet that identifies project characteristics that result in a score of High, Medium-High, Medium, Low or No Impact for each of the six scoring criteria. Each project receives one score for each planning factor. The score is determined by finding the highest scoring project characteristic that applies to each project. Necessary information for scoring projects is derived from existing studies and data collected/processed by CCRPC, VTrans, consultants or towns. Only one score is applied to the project for each planning factor even though multiple characteristics may apply to the project.

In addition to the six scoring categories, projects receive points if the project is in the current TIP according to the following schedule:

- 10 points for construction funds in the TIP
- 8 points for right-of-way in the TIP
- 6 points for engineering in the TIP

Projects receive only one score for the TIP Status item corresponding to the highest scoring project phase even if there are multiple phases listed in the TIP for the project.

The list of projects to be scored comes from the annual Transportation Capital Program and is supplied by VTrans. The list includes all projects in the Capital Program except rail projects, aviation projects, interstate projects, bridge maintenance projects, projects funded with federal safety funds, bike/ped and Transportation Alternatives awards and projects expected to be under construction in the near future

Preliminary project scoring sheets were sent to TAC members having projects in their towns for review and comment.

Attached are the preliminary project scores for the Regional Priority factor.

The attached table lists projects in rank order by program category, from high score to low score. Ties between projects are broken in the following way: higher functional classes are placed before lower functional classes. Functional class order is: Interstate, Principal Arterial, Minor Arterial, Major Collector. If ties still remain higher traffic volumes are placed before lower traffic volumes.

Staff Recommendation: Approve the 2019 Regional Project Scores, with changes if any, and forward to CCRPC Commission

For more information contact: Christine Forde
cforde@ccrpcvt.org or 846-4490 ext. *13

Attachments:

- CCRPC Prioritized Project Lists – 2019
- CCRPC Project Scoring Sheet

**2019 CCRPC Prioritized Project List
Roadway Projects**

Rank	CCRPC Score	Economic Vitality	Safety and Security	Accessibility, Mobility and Connectivity	Environment, Energy and Quality of Life	Preservation of Existing System	Efficient System Management	TIP Status	Planning Designation	Functional Class	High Crash
Roadway											
1	65	High	High	High	High	Medium	High	CON-1,2	State Village	Principal Arterial	Yes
2	63	High	High	Medium-High	Medium-High	High	High	CON-3,4	Enterprise	Principal Arterial	Yes
3	60	High	High	Medium-High	High	Medium-High	High	PE-1,2	Metro	Major Collector	Yes
4	58	High	High	High	Medium-High	Medium	Medium-High	CON-3,4	State Growth Center	Interstate/Principal Arterial	Yes
5	54	Medium-High	High	Medium-High	High	Medium-High	Medium-High	PE-1,2	CCRPC Village	Minor Arterial	Yes
6	53	High	Medium-High	Medium-High	Medium-High	Medium	Medium-High	CON-1,2	Enterprise	Minor Arterial	No
7	51	High	Medium	High	Medium-High	Low	Medium-High	CON-3,4	Enterprise/ Metro	Principal Arterial	No
8	51	Medium-High	High	Medium-High	Medium-High	Medium-High	Medium-High	PE-1,2	CCRPC Village	Minor Arterial	Yes
9	44	Medium-High	Medium-High	Medium-High	Medium-High	Medium-High	Medium-High	Circ Alt	Rural	Major Collector	No
10	40	Medium-High	Medium-High	Medium-High	Medium-High	Medium	Medium	Circ Alt	Suburban/Rural	Major Collector	No
11	39	High	Medium	Medium-High	Medium-High	Low	Medium-High	-	Enterprise/ Metro	Minor Arterial	No
Traffic Operations & Safety											
1	59	High	High	Medium-High	Medium-High	Medium	High	CON-1,2	Enterprise/ Metro	Principal Arterial	Yes
2	59	High	High	High	High	Medium	Medium	CON-3,4	State Growth Center	Principal Arterial	Yes
3	54	Medium-High	High	Medium-High	Medium-High	Medium-High	High	PE-1,2	Suburban	Minor Arterial	Yes
4	54	Medium-High	High	Medium-High	Medium-High	Medium-High	Medium-High	CON-3,4	Center	Minor Arterial	Yes
*	52	High	High	High	High	Medium	Medium-High	-	State Village	Principal Arterial	Yes
5	50	High	Medium-High	Medium-High	Medium	Medium	Medium-High	CON-3,4	Suburban	Principal Arterial	No
6	47	High	Medium-High	Medium-High	Medium	Medium	Medium-High	PE-1,2	Rural	Principal Arterial	No
7	47	High	Medium	High	High	Medium	Medium-High	-	State Growth Center	Principal Arterial	No
8	44	Medium-High	Medium	Medium-High	Medium-High	Medium	Medium-High	PE-1,2	CCRPC Village	Minor Arterial	No

* US7/Harbor Road/Falls Road has recently completed scoping and CCRPC seeks to have this project added to the Capital Program. The project has been scored, but not ranked because it is not currently part of the transportation program.

2019 CCRPC Prioritized Project List
Paving, State Bridge and Town Highway Bridge

Rank	CCRPC Score	Economic Vitality	Safety and Security	Accessibility, Mobility and Connectivity	Environment, Energy and Quality of Life	Preservation of Existing System	Efficient System Management	TIP Status	Planning Designation	Functional Class	High Crash
Paving											
1	30	Medium-High	Low	Medium-High	Low	Medium	Medium	-	Village-Rural	Minor Arterial	No
2	30	Medium-High	Low	Medium	Low	Medium-High	Medium	-	Rural	Minor Arterial	No
3	26	Medium	Low	Medium	Low	Medium	Medium	-	Rural	Major Collector	Yes
State Bridge											
1	52	High	High	Medium-High	Medium-High	Medium	Medium-High	PE-1,2	Metro	Interstate/ Principal Arterial	Yes
Town Highway Bridge											
1	39	Medium	Medium-High	High	Medium-High	Medium-High	Low	-	Rural	Town Road	No
2	36	Medium	Medium-High	Medium-High	Medium	Medium-High	Medium	-	CCRPC Village	Major Collector	No
3	30	Medium	Medium	Medium-High	Low	Medium	Medium	-	Rural	Major Collector	No
4	28	Medium-High	Medium	Medium-High	Low	Low	Low	-	Rural	Minor Arterial	No
5	26	Medium	Medium	Medium	Low	Medium	Low	-	Rural	Town Road	No

CCRPC Project Prioritization Scoring Criteria

		Planning Factors	
		Economic Vitality <i>Support the economic vitality especially by enabling global competitiveness, productivity, and efficiency</i>	Safety and Security <i>Increase the safety and security of the transportation system for motorized and nonmotorized users</i>
Project Characteristics	High Impact (10 points)	<input type="checkbox"/> Project provides new or improved access, including transit and pedestrian/bike access, to or within a Vermont designated Growth Center, Downtown, New Town Center or Village Center or a CCRPC designated Enterprise Planning Area <input type="checkbox"/> Project on an interstate or principal arterial that improves access for freight <input type="checkbox"/> Project improves airport access <input type="checkbox"/> Project improves access, including transit and pedestrian/bike access, to tourism facility <input type="checkbox"/> Project that improves access to the rail network	<input type="checkbox"/> Safety improvement in a VTrans identified High Crash Location – intersection or section of roadway <input type="checkbox"/> Bridge improvement for a bridge with critical safety deficiencies (sufficiency rating up to 25) <input type="checkbox"/> Dedicated pedestrian/bike facility making intermodal linkages or regional connections in a location with a documented existing safety problem
	Medium-High Impact (7 points)	<input type="checkbox"/> Project provides new or improved access, including transit and pedestrian/bike access, to or within a CCRPC designated Center, Metro or Village Planning area, or a municipal designated growth area <input type="checkbox"/> Project on a minor arterial or major collector that improves access for freight <input type="checkbox"/> Project addresses environmental issues that could impact economic development (stormwater, flood resiliency) <input type="checkbox"/> New/expanded Park and Ride Lot	<input type="checkbox"/> Bridge improvement for a bridge with serious safety issues (sufficiency rating of 25.1 to 50) <input type="checkbox"/> New median barriers, guardrails or shoulders <input type="checkbox"/> Intersection/roadway safety improvement in a location with a documented safety problem <input type="checkbox"/> Rail grade crossing improvement or warning signs <input type="checkbox"/> Dedicated pedestrian/bike facility with a documented safety problem on a Principal or Minor Arterial roadway
	Medium Impact (5 points)	<input type="checkbox"/> Project that provides new or improved access, including transit and pedestrian/bike access, to or within a future activity area identified in a municipal plan or study <input type="checkbox"/> Bus station/stop amenities and shelters <input type="checkbox"/> Project maintains or improves an access facility important to rural community including town highway bridges <input type="checkbox"/> Repave interstate or principal arterial	<input type="checkbox"/> Bridge safety improvement for a bridge with a sufficiency rating from 50.1–70 <input type="checkbox"/> Repave interstate or principal arterial <input type="checkbox"/> Dedicated pedestrian/bike facility in a location with a documented safety problem on a Major Collector roadway <input type="checkbox"/> Safety related transportation project identified in a study/report
	Low Impact (3 points)	<input type="checkbox"/> Other transportation improvement that supports economic development <input type="checkbox"/> Repave a minor arterial or major collector	<input type="checkbox"/> Repave a minor arterial or major collector <input type="checkbox"/> Dedicated pedestrian/bike facility in a location with a documented safety problem on a local road <input type="checkbox"/> Other safety related improvement identified in a study/report
	No Impact (0 Points)	<input type="checkbox"/> No discernible benefit	<input type="checkbox"/> No discernible benefits

* Improved access is defined as increase in capacity or reduced delay

		Planning Factors	
		Accessibility, Mobility and Connectivity <i>Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight</i>	Environment, Energy and Quality of Life <i>Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns</i>
Project Characteristics	High Impact (10 points)	<input type="checkbox"/> Bicycle /pedestrian facility making intermodal linkages or regional connections to or within a Vermont designated Growth Center, Downtown, New Town Center or Village Center <input type="checkbox"/> Project that facilitates movement of goods or improves intermodal connectivity to or within a Vermont designated Growth Center, Downtown, New Town Center or Village Center <input type="checkbox"/> Project that benefits areas where 10% or more of the households are below the poverty level <input type="checkbox"/> Bridge or other project that maintains connectivity or reduces flood vulnerability in a location with no alternative route for residents or businesses or a detour of 25 miles or more	<input type="checkbox"/> Pedestrian/bike facility making intermodal linkages or regional connections resulting in the potential for reducing VMT <input type="checkbox"/> Clean fuel buses/vehicles and alternative fuel infrastructure <input type="checkbox"/> VMT reduction program including transportation demand management and park and ride lots <input type="checkbox"/> Transportation project that encourages compact land use or transit oriented development <input type="checkbox"/> Transportation project that reduces stormwater runoff or improves water quality or other stream ecological conditions for impaired waterways
	Medium-High Impact (7 points)	<input type="checkbox"/> Bicycle/pedestrian facility making intermodal linkages or regional connections to or within a CCRPC designated Center, Metro, Enterprise or Village Planning area or municipal designated growth area <input type="checkbox"/> Project that facilitates movement of goods or intermodal connectivity to or within a CCRPC designated Center, Metro, Enterprise or Village Planning area or municipal designated growth area <input type="checkbox"/> Project maintains or improve connectivity on interstate or principal arterial <input type="checkbox"/> Bridge or other project that maintains connectivity or reduces flood vulnerability in a location with limited alternative routes for residents or businesses (detour 10 – 24.9 miles)	<input type="checkbox"/> Transportation project that reduces delay at an existing high volume intersection or group of intersections within a Vermont designated Growth Center, Downtown, New Town Center, Village Center, CCRPC designated Center, Metro, Enterprise or Village Planning area or municipal designated growth area <input type="checkbox"/> Traffic calming/streetscape project within a Vermont designated Growth Center, Downtown, New Town Center, Village Center, CCRPC designated Center, Metro, Enterprise or Village Planning area or municipal designated growth area <input type="checkbox"/> Projects that remove traffic from a neighborhood within a Vermont designated Growth Center, Downtown, New Town Center, Village Center, CCRPC designated Center, Metro, Enterprise or Village Planning area or municipal designated growth area <input type="checkbox"/> Pedestrian/bike facility making local connections resulting in the potential for reduced VMT <input type="checkbox"/> Transportation project that reduces stormwater runoff or improves water quality or other stream ecological conditions for non-impaired waterways
	Medium Impact (5 points)	<input type="checkbox"/> Bicycle/pedestrian facility making intermodal linkages or regional connections to or within a locally important activity center <input type="checkbox"/> Project that facilitates freight movement or intermodal connectivity to or within a locally important activity center <input type="checkbox"/> Project maintains or improves connectivity on minor arterial or major collector <input type="checkbox"/> Project that maintains connectivity and mobility for a rural community including town highway bridges with a detour of 5 – 9.9 miles	<input type="checkbox"/> Transportation project that reduces delay at an existing high volume intersection or group of intersections <input type="checkbox"/> Necessary bridge or roadway improvements within a Vermont designated Growth Center, Downtown, New Town Center, Village Center, CCRPC designated Center, Metro, Enterprise or Village Planning area or municipal designated growth area <input type="checkbox"/> Necessary bridge or roadway improvements on interstate or principal arterial
	Low Impact (3 points)	<input type="checkbox"/> Project that maintain or improve connectivity on minor arterials or major collectors <input type="checkbox"/> Bridge project with a detour less than 5 miles	<input type="checkbox"/> Necessary bridge or roadway improvements on minor arterial or major collector <input type="checkbox"/> Other project that has a positive effect on the environment, energy use or quality of life in the region <input type="checkbox"/> Other bridge improvements
	No Impact (0 Points)	<input type="checkbox"/> No discernible benefits	<input type="checkbox"/> No discernible benefits

		Planning Factors	
		Preservation of Existing System <i>Emphasize the preservation of the existing transportation system</i>	Efficient System Management <i>To encourage and promote the safe and efficient management and operation of integrated, intermodal transportation systems to serve the mobility needs of people and freight and foster economic growth and development.</i>
Project Characteristics	High Impact (10 points)	<input type="checkbox"/> Reconstruction, resurfacing or intersection improvement for a project with a documented critical need <input type="checkbox"/> Bridge structural improvement for a bridge documented to be in danger of being closed or weight restricted (sufficiency rating of less than 25) <input type="checkbox"/> Reconstruction or resurfacing of an existing pedestrian/bike facility making intermodal linkages or regional connections with a documented signification need	<input type="checkbox"/> TDM strategies, programs and incentives including new or expanded park and ride lot that would reduce VMT <input type="checkbox"/> Traffic signal interconnect or other ITS improvement to reduce congestion <input type="checkbox"/> Improvement that reduces congestion to roadway, corridors or intersection with significant congestion (V/C over 1.5) <input type="checkbox"/> Pedestrian/bike facility making intermodal linkages or regional connections resulting in the potential to reduce congestions
	Medium-High Impact (7 points)	<input type="checkbox"/> Reconstruction, resurfacing or intersection improvement for a project with a documented significant need <input type="checkbox"/> Bridge structural improvement for a bridge with documented significant structural deficiencies (sufficiency rating of 25 – 50) <input type="checkbox"/> Reconstruction or resurfacing of an existing pedestrian/bike facility with a documented significant need <input type="checkbox"/> Necessary improvement to an existing park and ride lot	<input type="checkbox"/> Improvements that reduces congestion to roadway, corridor or intersection (V/C over 1) <input type="checkbox"/> New interchange on limited access highway, in a location with significant congestion, to relieve congestion <input type="checkbox"/> New signals or roundabout where warranted <input type="checkbox"/> New connections between existing streets to facilitate the use of alternative routes and reduce congestion <input type="checkbox"/> Necessary improvements to operate existing bridges and roadways on interstate or principal arterial
	Medium Impact (5 points)	<input type="checkbox"/> Reconstruction, resurfacing or intersection improvement for a project with a documented moderate need <input type="checkbox"/> Bridge structural improvement for a bridge with documented moderate structural deficiencies (sufficiency rating of 50.1-70) <input type="checkbox"/> Reconstruction or resurfacing of an existing pedestrian/bike facility	<input type="checkbox"/> Improvement that reduces congestion to roadway, corridor or intersection (V/C less than 1) <input type="checkbox"/> Median treatment or access management <input type="checkbox"/> Bicycle/pedestrian facility making locally important connections resulting in the potential for reducing congestion <input type="checkbox"/> Improvements that reduce travel time <input type="checkbox"/> Necessary improvements to operate existing bridges and roadways on minor arterial or major collector
	Low Impact (3 points)	<input type="checkbox"/> Other improvement to the existing transportation system <input type="checkbox"/> Transportation improvement that has an indirect benefit to the existing transportation system	<input type="checkbox"/> Necessary improvements to operate town highway bridges on minor collectors and local roads <input type="checkbox"/> Other improvements that benefit the transportation system.
	No Impact (0 Points)	<input type="checkbox"/> No discernible benefits	<input type="checkbox"/> No discernible benefits



CCRPC Transportation Advisory Committee

04/04/2017

Agenda Item 6: Information Item

Metropolitan Transportation Plan (MTP) Scenarios

Issues: As part of the MTP development, and especially as we look long term, we will be relying on our transportation model to evaluate different transportation futures and measure their impacts. Our first scenario, or base case, will be run first and will look at what happens as the region grows in future years with only our current transportation system and the additional projects identified in our 4-year TIP. The other three scenarios will include the base case, but will be built on very different and distinct strategies so that any differences can be better evaluated in helping to determine the MTP scenario. It is likely that the MTP scenario will incorporate elements from all the scenarios. The scenarios and their elements are identified in the table below.

Scenarios Evaluated for Years 2015, 2030, & 2050				
Base Build	Technology Intensive	Transportation Demand Management/ Energy Conservation	Capacity Expansion	Hybrid/MTP Scenario
Existing transportation system plus all TIP projects	Base Build, plus... Autonomous and connected vehicle deployment; Intelligent Transportation Systems implementation; MaaS (Mobility as a Service) expansion – car sharing, ride-hailing (Uber, Lyft), bikeshare, flexible transit; communications infrastructure to make these possible	Base Build, plus... Significant fleet conversion to EVs; Mode shifts from SOV to expanded alternatives (transit, walk, bike, rideshare); Telework/work-at-home expansion; Vehicles per household decline; Increase policy of 80% future growth in the areas planned for growth to 90%	Base Build, plus... New local connector roads (from official maps); Other potential priority congestion relief projects as revealed by model analysis; expansion of 89 and interchanges will be considered for this scenario	Base Build; Plus... Projects and Strategies TBD

All scenarios will be evaluated to ensure that they are consistent with our projected long term fiscal constraints. Each scenario is also proposed to use the same level of growth in population, housing, and employment out to 2050. In the MTP Scenario, we will look closely at the model results from the three scenarios and build a long range MTP project and strategy list that will likely pick aspects from each. This “hybrid” scenario will also be tested, and modified to become the proposed MTP long term recommendations in the fall. The MTP scenario will also loop back with the energy planning work to determine the impact this scenario has on advancing the State’s goal of 90% renewable energy by 2050.

Issues for TAC Consideration and Feedback

We are somewhat limited in the number of scenarios we can test and are looking for TAC guidance. Have we selected the right ones? What might be another and what elements would it include? Are there other components we should include in any of the scenarios we’ve proposed? Each transportation scenario is using the same land use (numbers of jobs and homes in the same places, given the recently approved 2050 Demographic Forecast, except the TDM/Energy scenario which includes a denser land use pattern.

Evaluation Criteria

In the last MTP we used the following measures to evaluate the scenarios:

1. Future congestion – volume to capacity ratios
2. Daily total vehicle miles of travel (internal/external)
3. Daily transit trips
4. PM peak hour vehicle hours of delay
5. Cost

Others to be considered:

6. Energy usage/greenhouse gas emissions
7. Other?

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