Appendix A: Advisory Committee and Public Outreach

Final Report on Public Engagement North Avenue Corridor Study, Burlington, VT October 2014

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1) Summary of Public Involvement Activities

The Public Involvement Plan for the North Avenue Corridor Study was designed in the spirit of the Chittenden County Regional Planning Commission's (CCRPC) 2003 Public Participation Plan. The plan is predicated on an effective public involvement and public outreach campaign that involves transportation stakeholders and the broader public early in the process, checks in with them frequently, and then supports an outreach effort to present the final plan. The intent of the public involvement effort is to further foster a spirit of inclusiveness and ownership of the North Avenue Corridor Study.

Public involvement was integrated into all aspects of the work plan. Tasks included: Advisory Committee meetings, public meetings, visits to interest groups/stakeholders, a web voting tool created and managed by the City of Burlington, outreach and coordination with the City of Burlington and other study partners, and information management. Public comments and advertisements/media clips are attached to this document.

Advisory Committee

The Advisory Committee consisted of thirteen members representing a broad range of community organizations (see list of committee members). The group met six times between June 2013 and July 2014. The committee process culminated in the final meeting, on July 1, 2014, where members voted on their preferred concepts for the corridor. These concepts were then expanded to become the draft Corridor Study and Implementation Plan. Agendas and meeting notes are available in a separate document.

Public Meetings/Presentations

There were a total of three public meetings and a final presentation before the Burlington City Council in September of 2014. Meeting materials are available in a separate document.

The first public meeting was held on October 29, 2013 at the Hunt Middle School on North Avenue. The purpose of the meeting was to introduce the public to the corridor planning process and solicit initial input on transportation issues in the corridor. Participants worked in small groups to identify issues in four different corridor segments. In attendance were 52 members of the public, 3 City staff, 5 Advisory Committee members, 3 CCRPC staff, and 3 consultants present. Publicity included: CCRPC and City websites, Front Porch Forum, media advisory, calendar listings in the Burlington Free Press and Seven Days, blast emails (Advisory Committee, distribution list, public list, City Council, TEUC, and DPW Commission), City of Burlington's e-newsletter the BUZZ, article in the North Avenue News, and outreach by AARP to senior residents. Meeting materials were posted on a dedicated study website.

The second public meeting was held on February 20, 2014 at St. Mark's Church on North Avenue. The meeting featured a presentation of the draft corridor vision and goals and a set of issues and improvement ideas for the corridor. Participants worked in small groups to discuss improvements for four different corridor segments. In attendance were 27 members of the public, 3 City staff, 3 Advisory Committee members, 4 CCRPC staff, and 3 consultants. Publicity included: CCRPC and City websites, Department of Public Works Facebook and Twitter, Front Porch Forum, media advisory, calendar listings in the Burlington Free Press and Seven Days, blast emails (Advisory Committee, distribution list, public list, City Council, TEUC, and DPW Commission), posted flyers, City of Burlington's e-newsletter the BUZZ, paid advertisement in the North Avenue News, Local Motion Walk & Roll News, Campus Area Transportation Management Assn. (CATMA) newsletter, and outreach by AARP to senior residents. Meeting materials were posted on a dedicated study website.

The third and final public meeting was held on May 20, 2014 at St. Mark's Church. The meeting featured a presentation of intersection and cross section concepts for the corridor, followed by an open house format where participants could visit each table (representing a segment) to discuss and comment on their preferences. In attendance were 83 members of the public, 3 City staff, 6 Advisory Committee members, 2 CCRPC staff, and 3 consultants. Publicity included: CCRPC and City websites, Department of Public Works Facebook and Twitter, Front Porch Forum, media advisory, calendar listings in the Burlington Free Press and Seven Days, blast emails (Advisory Committee, distribution list, public list, City Council, TEUC, and DPW Commission), posted flyers, City of Burlington's e-newsletter the BUZZ, paid advertisement and two articles in the North Avenue News, Local Motion Walk & Roll News, Campus Area Transportation Management Association (CATMA) website and social media, and outreach by AARP to senior residents. Meeting materials were posted on a dedicated study website.

City staff made a presentation to the City Council on June 16, 2014. Final public presentations were made to the City Council's Transportation, Utilities, and Energy Committee (TEUC) in September and the Burlington City Council in October 2014. On October 6, 2014, the City Council approved a resolution supporting a series of short-term recommendations and a pilot three-lane configuration for North Avenue. Video of these meetings are available on demand at <u>www.cctv.org.</u>

Stakeholder/Interest Group Meetings

Outreach meetings were held with seniors at the Heineberg Club on February 5, 2014 and with the Flynn School PTO on April 3, 2014. Meeting notes are available in a separate document.

City of Burlington Web Voting Tool

The City of Burlington graciously created a web voting tool fashioned after a very successful tool created for PlanBTV. This tool, available at www.burlingtonvt.gov/public-input, allowed users to vote on preferred concepts for both cross-sections and intersections along the corridor. Final results of the voting are pending.

Information Management

Information management included a website with background and current information, Advisory Committee documents (agendas, meeting materials, presentations, meeting notes), public meeting documents (agendas, meeting materials, presentations, and meeting notes), advertisements, media clips, and a final report.

2) Advisory Committee & Staffing

North Avenue Corridor Study, Burlington

Advisory Committee:

Tom Ayres, Burlington City Council Terry Bailey, Burlington School District Amy Bell, VTrans Billy Bratcher, Ward 7 Kelli Brooks, Ward 4 Tad Cooke, Ward 3 Paul Decelles, Burlington City Council** Jim Holway, Ward 4 Nicole Losch, Burlington Department of Public Works Kirsten Merriman-Shapiro, Burlington Community & Economic Development Office (CEDO) Jon Moore, Chittenden County Transportation Authority (CCTA) Daniel Mulligan, Burlington Partnership for Healthy Communities Kelly Stoddard Poor, AARP Sandrine Thibault, Burlington Planning & Zoning Charlene Wallace, Local Motion

*Resigned February 20, 2014

**Resigned March 4, 2014

Advisory Committee Alternates

Samantha Barrett, Ward 4 RJ Lalumiere, Ward 7 Jason L'Ecuyer, Ward 7 David Lustgarten, Ward 4 Ken Peterson, Ward 4 Tony Redington, Ward 3 Mariah Sanderson, BPHC Fauna Shaw, Ward 3 Tom Treat, Ward 7

Project Manager: Eleni Churchill, Chittenden County Regional Planning Commission (CCRPC)

Study Staff: Sai Sarepalli, Chittenden County Regional Planning Commission (CCRPC)

Study Consultant Team:

Joe Barr, Parsons Brinckerhoff (Beginning January 1, 2014) Nick Schmidt, Parsons Brinckerhoff Steve Rolle, Parsons Brinckerhoff (through December 31, 2014) Diane Meyerhoff, Principal, Third Sector Associates

Final Report on Public Engagement North Avenue Corridor Study, Burlington, VT July 2014

Advisory Committee Meetings – Agendas and Notes

- Meeting #1: June 11, 2013
- Meeting #2: September 17, 2013
- Meeting #3: December 17, 2013
- Meeting #4: May 1, 2014
- Meeting #5: June 11, 2014
- Meeting #6: July 1, 2014



North Avenue Corridor Study Advisory Committee Meeting #1

Tuesday, June 11, 7:00 PM – 9:00 PM Miller Center (130 Gosse Court, Burlington)

AGENDA

- 1) Welcome & Introductions (Nicole Losch, City of Burlington; Eleni Churchill, CCRPC)
- 2) Project Overview (Steve Rolle, Parsons Brinckerhoff)
 - a) Study Purpose, Project Area, Project Scope, Schedule
- 3) Advisory Committee Overview (Nicole Losch)
 - a) Advisory Committee Role, Meeting Schedule
- 4) Corridor Overview: Virtual Tour & Discussion of Major Issues (Steve Rolle)
- 5) Next Steps (Steve Rolle, Eleni Churchill)
 - a) Next Advisory Committee Meeting: Review existing and future conditions; start to develop corridor vision and goals

Project Contacts:

Nicole Losch, Transportation Planner, Bicycle & Pedestrian Program Manager, Environmental Planner, City of Burlington DPW 865-5833, <u>NLosch@burlingtonvt.gov</u>

Eleni Churchill, Project Manager, CCRPC 846-4490 x11, <u>echurchill@ccrpcvt.org</u>

Steve Rolle, Senior Supervising Transportation Engineer & Planner, Parsons Brinckerhoff 617-960-4967, <u>Rolle@pbworld.com</u>



North Avenue Corridor Study Advisory Committee Meeting #1 Notes

DATE:Tuesday, June 11, 2013TIME:7:00 PMPLACE:Miller Center, 130 Gosse Court, Burlington

MEMBERS PRESENT:

Jon Moore, CCTA David Casey, BPHC Tad Cooke, Ward 3 NPA Jim Holway, Ward 4 NPA Nicole Losch, Burlington DPW Kirsten Merriman-Shapiro, CEDO Kelly Stoddard Poor, BLCP/AARP Sandrine Thibault, Burl. Planning Charlene Wallace, Local Motion

OTHERS PRESENT:

Eleni Churchill, CCRPC Ron McGarvey, NNE Resident Diane Meyerhoff, Third Sector Associates Tony Redington, Alternate Ward 3 NPA Steve Rolle, Parsons Brinckerhoff Sai Sarepalli, CCRPC

1) Welcome & Introductions

Nicole Losch of the City of Burlington and Eleni Churchill of CCRPC welcomed the group and introductions were made.

2) Advisory Committee Overview

Nicole explained that the study team tried to bring together a diverse group of perspectives for the Advisory Committee. She asked that members communicate regularly with their stakeholder groups. The role of the Advisory Committee is to represent a range of perspectives; review study materials and provide feedback; communicate with and provide updates to their organizations/constituents; and participate in developing the vision, goals, options, and recommendations for consideration by the City. Ultimately, the City Council will consider and approve the final recommendations of the Study.

June 2013	Project initiation (tonight)			
September 2013	Existing and future conditions; vision and Goals			
November 2013	Evaluation process; issues and options			
January 2014	Preliminary evaluation results			
March 2014	Recommendations			

Anticipated Advisory Committee Meeting Schedule

3) Project Overview

Steve Rolle of Parsons Brinckerhoff explained that the study will evaluate North Avenue from a "Complete Streets" perspective and develop recommendations for remaking the corridor to better accommodate all users.

A vision for Complete Streets in Burlington was established during workshops conducted in 2012, which is:

- Burlington streets will evolve into complete streets corridors that provide **safe**, **inviting**, **and convenient travel for all users of all ages and abilities** —including motorists, pedestrians, bicyclists, and public transportation riders.
- Within each neighborhood, the **need to move people through the corridor will be balanced with the need to provide access to homes, businesses, and local institutions** within the corridor. The most effective use of finite public space will be determined through interdisciplinary collaboration with a wide range of community members considering economic, environmental, and equity concerns.
- The corridor will develop into an attractive public space through creative streetscape, signage, and other site design features. The corridor will become more livable and desirable by promoting social interaction and public health. -Complete Streets Workshop Next Steps Memo, July 2012

Study Process

Each step of the process includes public outreach:

- **Collect Information**: Review plans and studies; Generate mapping; Compile traffic data; Collect bike/pedestrian info; Collect transit info; Inventory corridor
- Existing & Future Conditions: Assess from a Complete Streets perspective : Vehicular traffic, Pedestrians
- Bicycles, Transit riders: Current conditions and projected for year 2035
- Corridor Vision & Goals:
 - Vision: Concise statement that paints a picture of the desired future for the corridor.
 - Goals: Specific statements that define how to achieve the vision, and form the basis for evaluating options
- **Identify Options**: Identify issues and deficiencies; Reflect City policies and standards; Compile toolbox of options and best practices; Public workshop, Near- and Long-term options.
- **Evaluate Options**: Evaluation criteria derived from Study Goals; Quantitative and qualitative measures; Consider needs of all corridor users
- Implementation Plan: Recommendations; Priorities; Implementation timeframe; Next steps; Agency Responsibilities

Tony Redington, the Ward 3 NPA Alternate, asked if the study team could post presentations online prior to the meetings to allow committee members to follow along on their own devices. Eleni explained that the advisory committee would receive materials through email prior to the meetings. She stated her preference for the Committee to have an opportunity to comment on materials before they are posted for the public, but noted there would be a website and she would try to post presentations in advance.

Tony asked about the Existing Conditions and whether or not they reflect a recent decrease in traffic. Eleni responded that although traffic may have decreased in some areas, the City still expects some level of growth in the study area. We need to consider both historic trends and expected future development that impacts trip making. This will be discussed in more detail at the next meeting. Sandrine Thibault of Burlington Planning & Zoning mentioned that PlanBTV added the private realm to its complete streets perspective. Although the corridor study will mostly consider public right-of-way (ROW), one must keep in mind the character of what is beyond the ROW.

Kelly Stoddard Poor of the Burlington Livable Communities Project at AARP asked if we could include walking audits to better understand barriers to bicycle and pedestrian access. It's a great way to get people involved in the study. Sandrine offered her webmaster to help implement this online. Others expressed interest in a walking tour of the corridor. Since the corridor is long, Eleni asked that committee members provide specific areas in which to focus and we'll try to incorporate them into the first public meeting, or offer self-guided options in advance of the meeting.

Tony noted that the Burlington Walk/Bike Council (<u>http://www.burlingtonwalkbike.org/</u>) has a "Blueprint for Action" that outlines how to encourage people to switch from driving alone to public transit and biking. Demand management must be included in this discussion - increasing bus frequency will impact how people commute in this corridor.

Jim Holway, from the Ward 4 NPA, noted that some side streets along North Avenue are long; the bus serves North Avenue but it may be a long walk for those who live on the side streets.

4) Virtual Tour & Discussion of Major Issues

North Avenue can be divided into five segments for this study. Steve described each segment, its characteristics, and observations:

Segment 1: Plattsburgh Avenue to Shore Road

Physical Characteristics:

- 40 foot curb-to-curb width; 65 foot ROW (corridor-wide)
- One travel lane in each direction with on-street parking
- Sidewalks with landscape strip
- No designated bicycle accommodations
- Traffic signals at Plattsburg Avenue, Woodbury Road and Shore Road

Traffic: 10,800 AADT

Land Use: Single-family residential, multi-family, scattered retail, institutional Observations:

- Few opportunities to cross North Avenue (corridor-wide issue)
- Many school children walking to/from school
- ADA curb ramps are present but outdated (corridor-wide issue)
- Wide travel way unclear where on-street parking is allowed
- Frequent driveways (corridor-wide issue)
- Several offset intersections

It was mentioned that cars sometimes drive as if there are two lanes in each direction. Some residents are reluctant to park on street because of this.

Segment 2: Shore Road to VT 127

Physical Characteristics:

- 40-43 foot curb-to-curb width; Two travel lanes in each direction
- No center turn lane except at Shore Rd (northbound) and VT 127 (southbound)
- No on-street parking
- Sidewalks with landscape strip
- No designated bicycle accommodations
- Traffic signals at Ethan Allen Shopping Center, Ethan Allen Parkway, and VT 127

Traffic: 13,700 north of Ethan Allen Parkway; 19,100 south of Ethan Allen Parkway **Land Uses**: Mix of residential and retail

Observations:

- Left turns frequently block through lanes
- Travel lanes are relatively narrow
- Highest concentration of retail on corridor
- Ethan Allen intersection difficult to negotiate
- Ethan Allen Parkway VT 127 is the busiest segment of the corridor

New housing developments are focused in this area and may impact travel patterns.

Segment 3 - VT 127 to Institute Road

Physical Characteristics

- Typical 42 foot curb to curb width; One travel lane in each direction
- Northbound center and southbound right turn lanes at Institute
- On-street parking on both sides
- Sidewalks with intermittent landscape strip
- Northbound bicycle lane.
- Traffic signal at Institute Road

Traffic: 12,000 AADT

Land Use: Residential, institutional

Observations:

- Northbound bike lane is very wide in some locations
- No provision for southbound bicyclists
- Bike lane discontinuity at Institute Road

In this segment, there is a concern that people do not understand that a red arrow means do not proceed. Perhaps a "No Turn on Red" sign is needed at North Avenue/Ethan Allen Parkway. It was also noted that the Ethan Allen Parkway intersection is a natural connection for bikes accessing trails to the east, but is difficult for bicyclists to negotiate. South of the 127 intersection, bike lane trials were considered unsuccessful due to parking and road width, but different configurations should still be considered.

Segment 4 - Institute Road to Convent Square

Physical Characteristics

- Typical 35 foot curb to curb width; 65 foot ROW
- One travel lane in each direction
- No on-street parking
- Sidewalks with landscape strip
- Bicycle lanes both directions

Traffic: 12,000 AADT

Land Use: Primarily undeveloped or institutional; some single-family on east side of street Observations:

- Considerable open space and low intensity uses on west side of the roadway
- No on-street parking for residences on the east side of the street
- "Midblock" Crosswalk at Champlain Farms

Burlington College has a new Master Plan. Steve will procure a copy. This section is the first mid-block crossing on the corridor. It was mentioned that cars often park the bike lane in this section, and the official parking lane begins at an awkward point for bicyclists.

Segment 5 - Convent Square to North Street

Physical Characteristics

- Typical 33 foot curb to curb width; 65 foot ROW
- One travel lane in each direction
- On-street parking on southbound side only (south of Berry St)
- Sidewalks with landscape strip
- Northbound bicycle lane

Traffic: 12,000 AADT

Land Use: Densely developed single-family residential with some multi-family

Observations:

- Northbound bike lane is narrow
- Narrowest road width of any segment along the corridor
- More densely developed; different scale and feel than the rest of the corridor

In this section, it was noted the existing bike lane is narrow and difficult because of storm drains.

5) Next Steps

- Complete existing and future conditions analysis
- Develop draft vision statement and goals
- Prepare for first public meeting
- Next AC Meeting: September 2013

The meeting was adjourned at 8:50 PM.



North Avenue Corridor Study Advisory Committee Meeting #2

Tuesday, September 17, 2013, 6:30 PM – 8:30 PM Miller Center (130 Gosse Court, Burlington)

http://www.ccrpcvt.org/transportation/corridors/north-avenue-corridor-study/

AGENDA

- 1) Welcome & Introductions (Eleni Churchill, CCRPC)
- 2) Existing Conditions Along the Corridor (Steve Rolle, Parsons Brinckerhoff)
- 3) **Forecast Growth Assumptions** (Steve Rolle)
- 4) Preliminary Discussion of Corridor Vision & Goals (All)
- 5) Next Steps (Nicole Losch, DPW & Eleni Churchill)
 - a. Project Web Page Update
 - b. Public Meeting #1
 - c. Advisory Committee Meeting #3 (November)

Project Contacts:

Nicole Losch, Transportation Planner, Bicycle & Pedestrian Program Manager, Environmental Planner, City of Burlington DPW 865-5833, <u>NLosch@burlingtonvt.gov</u>

Eleni Churchill, Project Manager, CCRPC 846-4490 x11, echurchill@ccrpcvt.org

Steve Rolle, Senior Supervising Transportation Engineer & Planner, Parsons Brinckerhoff 617-960-4967, <u>Rolle@pbworld.com</u>



North Avenue Corridor Study Advisory Committee Meeting #2 Notes

DATE: Tuesday, September 17, 2013TIME: 6:30 PMPLACE: Miller Center, 130 Gosse Court, Burlington

Members/Alternates Present:

Terry Bailey, BSD Meredith Birkett, CCTA Kelli Brooks, Alternate Ward 4 NPA Jim Holway, Ward 4 NPA RJ Lalumiere, Alternate Ward 7 NPA Nicole Losch, Burlington DPW Kirsten Merriman-Shapiro, CEDO Daniel Mulligan, Alternate BPHC Sandrine Thibault, Burl. Planning Tony Redington, Alternate Ward 3 NPA Charlene Wallace, Local Motion **Others Present:** Eleni Churchill, CCRPC Brian Lee, UVM Diane Meyerhoff, Third Sector Associates Steve Rolle, Parsons Brinckerhoff Sai Sarepalli, CCRPC

1) Welcome & Introductions

Eleni Churchill of the CCRPC welcomed the group and introductions were made.

2) Existing Conditions Along the Corridor

Steve Rolle of Parsons Brinckerhoff presented the existing conditions. For purposes of this study, the corridor is divided into five segments. Steve reviewed each segment from the perspective of bicyclists, motorists, bus riders, and walkers. The presentation is available at: http://www.ccrpcvt.org/transportation/corridors/north-avenue-corridor-study/.

<u>Segment 1 - North Street to Washington Street/Berry Street (Old North End)</u> Physical Characteristics:

- Typical 33 foot curb to curb width; 66 foot ROW
- One travel lane in each direction
- On-street parking on southbound side only (south of Berry St)
- Sidewalks with landscape strip
- Northbound bicycle lane
- Numerous bus stops
- Highest everyday utilization of on-street parking in the corridor

Land Use: Densely developed single-family with some multi-family residential Traffic: 12,000 AADT

Observations:

- Existing bike lanes are very narrow and storm drains are hazards
- Bike lane southbound ends at Berry St. where on-street parking begins
- Length between pedestrian crossings is longer than desirable
- Narrowest road width of any segment along the corridor

Segment 2 – Washington Street/Berry Street to Institute Road

Physical Characteristics:

- Typical 35 foot curb to curb width; 66 foot ROW
- One travel lane in each direction, no on-street parking
- Sidewalks with landscape strip
- Bicycle lanes both directions

Traffic: 12,000 AADT

Land Use: Primarily undeveloped or institutional; some single-family on east side of street Observations:

- Considerable open space and low density uses along much of this segment
- No on-street parking for residences on the southern portion of this segment
- "Midblock" Crosswalk at Champlain Farms but no crossings to the north until Institute Rd.
- Bicycle lane on northbound approach to Institute Road is not visible any longer
- There are few right-of-way constraints in this segment
- Travel lanes are typically wide (13 feet) while bike lanes are slightly narrower than desirable
- Transit stops are closely spaced in the south
- Schools are major pedestrian generators (corridor wide)

Segment 3 - Institute Road to VT 127

Physical Characteristics:

- Typical 40-42 foot curb to curb width; One travel lane in each direction
- Northbound center left turn lane and southbound right turn lanes at Institute Rd.
- On-street parking on both sides
- Sidewalks with intermittent landscape strip
- Northbound bicycle lane designation, but no striping. Insufficient width for both bike lane and parking in some areas.
- Traffic signal at Institute Road

Traffic: 12,000 AADT

Land Use: Residential, institutional

Observations:

- Differentiation between northbound bike lane and parking lane is unclear
- No provision for southbound bicyclists
- Bike lane discontinuity at Institute Road
- Conflict with bicycles heading north at the 127 ramp; vehicles are accelerating on ramp.
- Southbound vehicles at VT 127 move to left-turn lanes to pass bicycles and then proceed straight through intersection
- Bicyclists do not heed "Bikes may use full lanes" and ride too close to the curb or parked cars
- Will the Champlain Parkway impact the 127 intersection?
- Turn lanes at Institute Rd. are necessary to accommodate turning volumes

Segment 4: VT 127 to Shore Road

Physical Characteristics:

- 40-43 foot curb-to-curb width; Two travel lanes in each direction (10 to 11 ft lanes)
- No exclusive turn lanes except at Shore Rd (northbound) and VT 127 (southbound)
- No on-street parking
- Sidewalks with landscape strip

- No designated bicycle accommodations
- Traffic signals at Ethan Allen Shopping Center, Ethan Allen Parkway, and VT 127

Traffic: 13,700 north of Ethan Allen Parkway; 19,100 south of Ethan Allen Parkway

Land Uses: Mix of residential and retail; more suburban in character

Observations:

- Left turns frequently block through lanes
- Travel lanes are relatively narrow
- Highest concentration of retail on corridor
- Ethan Allen intersection difficult to negotiate for pedestrians due to high speed of right turning traffic and long crossing distance.
- Entering the park from Ethan Allen is difficult (for cyclists or motorists) due to the high speed of opposing right turning traffic.
- Riding in the street is uncomfortable for all but the most experience cyclists.
- Few opportunities to cross North Avenue
- Ethan Allen Parkway VT 127 is the busiest segment of the corridor

Segment 5: Shore Road to Plattsburgh Avenue

Physical Characteristics:

- 40 foot curb-to-curb width; 66 foot ROW (corridor-wide)
- One travel lane in each direction with unmarked on-street parking
- Sidewalks with landscape strip
- No designated bicycle accommodations
- Traffic signals at Plattsburg Avenue, Woodbury Road and Shore Road

Traffic: 10,800 AADT

Land Use: Single-family residential, multi-family, scattered retail, institutional Observations:

- Few opportunities to cross North Avenue
- Many school children walking to/from school
- ADA curb ramps are present but outdated (corridor-wide issue)
- Wide travel way unclear where on-street parking is allowed
- On-street parking is lightly utilized except near St Marks during events at the church.
- Frequent driveways (corridor-wide issue)
- Several offset intersections
- Access management may improve flow

High Crash Locations (HCLs) in the Corridor:

Birch Court to Woodbury Road

Crashes: 39 PDO: 33 (85%) Crash Rate: 6.48 per MVM Actual/Critical Ratio: 1.23 Severity Index: \$21,677

Lakewood Pkwy. to Ethan Allen Pkwy.

Crashes: 76 PDO: 60 (79%) Crash Rate: 10.16 per MVM Actual/Critical Ratio: 2.00 Severity Index: \$41,204

Gosse Court/Woodlawn Road to Poirer Place

Crashes: 46 PDO: 42 (91%) Crash Rate: 6.18 per MVM Actual/Critical Ratio: 1.22 Severity Index: \$13,100

Strong St./Ward St. to Sherman Street

Crashes: 58 PDO: 4 (93%) Crash Rate: 9.51 per MVM Actual/Critical Ratio: 1.81 Severity Index: \$12,107

Steve summarized the current average daily traffic volumes along the corridor, AM and PM peak hour volumes, and discussed average daily traffic variations at certain locations (see presentation for more information).

3) Forecast Growth Assumptions

Steve discussed the 2035 growth projections for the corridor which will be used to estimated future traffic volumes (memo provided). Based on historic data (population/households/traffic) and projected population and employment growth in the corridor, a 5-15 percent increase in traffic is expected. Steve noted that the growth associated with potential expansion plans at Burlington College isn't known at this time, but that the highest levels of forecast growth (15%) correspond to the southern corridor segment near the college.

4) Preliminary Discussion of Corridor Vision & Goals

Eleni introduced the preliminary vision and goals for the corridor. She asked that the committee respond via email with comments and questions to her at <u>echurchill@ccrpcvt.org</u> by October 1st.

DRAFT Corridor Vision: North Avenue will provide for safe, inviting, and convenient travel for all users of all ages and abilities—including motorists, pedestrians, bicyclists, and public transportation riders. The need to move people through the corridor will be balanced with the need to provide access to homes, businesses, and local institutions. The corridor will develop into an attractive public space through creative streetscape, signage, and other site design features. The corridor will become more livable and desirable by promoting social interaction and public health.

DRAFT Corridor Goals- Common themes expressed in goals often include:

- Accommodating and balancing transportation needs of different user groups
- Improving safety for all users
- Enhancing specific travel modes and improving connectivity
- Increasing travel choices and managing demand
- Improving livability
- Linking land use and transportation
- Supporting community/economic development

Charlene Wallace of Local Motion asked if the themes could be reworded into goal statements. At this point prior to writing the goals, Eleni is looking for input on the themes and whether others should be added or removed from the list. She suggested that we will have an in-depth discussion on the vision and goal statements at our next advisory committee meeting. RJ Lumiere of Ward 7 asked about the link between land use and transportation. Eleni responded with an example: the number of curb cuts that provide access to the various land uses along the corridor can impact the safety and flow of all

modes of travel (access management is both a land use and transportation issue). Steve suggested also that the transportation infrastructure needs to reflect the context of what surrounds it.

Tony Redington of Ward 3 suggested that need equity among all users – walkers, bikers, and drivers. If our streets address equity, where everyone has separate and quality facilities, it reduces behavioral conflicts. His priorities are safety, equality of modes, interconnectivity, and continued efforts for a sustainable transportation system through TDM and transit. RJ would like to focus on a complete network for bicycling, especially for those who are not experienced cyclists.

5) Next Steps

- Finalize Level of Service (LOS) and more detailed investigation of crashes
- Refine draft vision statement and develop goals (mid October)
- Prepare for first public meeting (October 29th) and Next AC #3 meeting (November/December)
- Continue interactive website development

There was discussion of walking tours of the corridor, possibly with the help of AARP's audit tool.

The meeting was adjourned at 8:25 PM.

North Avenue Complete Streets Corridor Study

Advisory Committee Meeting #3

Tuesday, December 17, 6:30 PM - 8:00 PM

St. Mark's Church, 1251 North Avenue (@Shore Rd.)

Topics

- 1) Introductions
- 2) Project Status
 - a) Scope and schedule update
 - b) Dan Burden visit recap
- 3) Discussion on Vision and Goals
- 4) Initial Improvement Concepts
 - a) Near-term
 - b) Long-term
- 5) Next Steps
 - a) Public Meeting (January/February). Topics: Concept identification workshop.
 - b) AC Meeting (March). Topics: Refined Improvement concepts; begin identification of preferred concepts.

North Avenue Complete Streets Corridor Study

Advisory Committee Meeting #4

Thursday, May 1, 6:30 PM - 8:00 PM

St. Mark's Church, 1251 North Avenue (@Shore Rd.)

Topics

- 1) Introductions
- 2) Quick Briefing:
 - a) Project Background
 - b) Project Goals and Objectives
 - c) Outreach Summary
 - i) Prior AC Meetings
 - ii) Prior Public Meetings
 - iii) Summary of Feedback from February Workshop
- 3) Conceptual Alternatives
- 4) Evaluation Criteria
- 5) Scoring of Alternatives
- 6) Next Steps
 - a) Public workshop (May 20)
 - b) Selection of Short- and Long-Term Alternatives
 - c) Complete Corridor Plan

Project Website:

http://www.ccrpcvt.org/transportation/corridors/north-avenue-corridor-study/



North Avenue Complete Streets Corridor Study Advisory Committee Meeting #3 Notes

http://www.ccrpcvt.org/transportation/corridors/north-avenue-corridor-study/

DATE:	Tuesday, December 17, 2013
TIME:	6:30 - 8:30 PM
PLACE:	St. Mark's Church Family Center, 1251 North Avenue, Burlington

Members/Alternates Present:

Tad Cooke, Ward 3 NPA
Jon Moore, CCTA
Jim Holway, Ward 4 NPA
RJ Lalumiere, Alternate Ward 7 NPA
Nicole Losch, Burlington DPW
Kirsten Merriman-Shapiro, CEDO
Sandrine Thibault, Burl. Planning

Tony Redington, Alternate Ward 3 NPA Charlene Wallace, Local Motion **Others Present:** Eleni Churchill, CCRPC Paul Kervick, Ethan Allen Residence Diane Meyerhoff, Third Sector Associates Steve Rolle, Parsons Brinckerhoff Sai Sarepalli, CCRPC

1) Welcome & Introductions

Eleni Churchill of the CCRPC welcomed the group and introductions were made.

2) Project Status

Steve Rolle of Parsons Brinckerhoff provided an updated study schedule—see below.



3) Discussion of Vision & Goals

The committee reviewed the vision and goals statement (draft 12/17/13). The following revisions were agreed upon (strikeout is deleted text, <u>underlined</u> is added text):

VISION

North Avenue will continue to serve as the primary transportation corridor connecting Burlington's New North End with the rest of the City. As the North End's "Main Street," North Avenue will provide for **safe, inviting, and convenient travel for** *all* users of all ages and abilities — including motorists, pedestrians, bicyclists, and public transportation riders. The **need to move people through the corridor will be balanced with the need to provide access to homes, businesses, and local institutions.** The corridor will develop into an attractive public space through creative streetscape, signage, and other site design features. <u>The corridor will become more livable and desirable by promoting social interaction, public health, economic development, and environmentally sustainability initiatives.</u>

GOALS

GOAL 1) Remake the North Ave corridor into a "Complete Street" that accommodates the safe and efficient travel for all users of all abilities and provides transportation choices.

- Achieve a world class transportation corridor that offers quality of service and highest safety for those who walk, bicycle, and travel by motor vehicle or transit.
- Identify near-term improvements that can be implemented now to improve the safe and convenient accommodation of all corridor users.
- Develop a longer-term plan for fully remaking the corridor according to "Complete Streets" principals.

GOAL 2) Improve safety for all users. -of all abilities.

- Pedestrians improve condition of sidewalks and upgrade to meet current ADA standards; identify convenient/desirable crossing locations; and incorporate high visibility and driver awareness measures at crosswalks.
- Bicyclists provide dedicated space and bicycle treatments to form a continuous, high quality bicycle corridor that facilitates travel in and out of the New North End.
- Design facilities with all users in mind including children and seniors.
- Address high crash locations and congested locations.
- Improve access management and left turn accommodations on the corridor to reduce conflicts.
- Calm traffic and moderate travel speeds.

GOAL 3) Provide a range of convenient and efficient travel options and improve multimodal connections.

- Promote transportation options.
- Improve transit service in the corridor. (reduce headways; consolidate stops and add shelters)
 - o Reduce headways
 - o Add shelters
 - o Increase span of service during the day and weekend service
 - o Ensure efficient flow of buses along the corridor
 - Improve access (sidewalks, bike access) to transit shelters/stops
- Improve pedestrian and bicycle facilities.

- <u>Develop a safe, efficient and continuous bicycle network.</u>
- <u>Promote Transportation Demand Management (TDM) initiatives in the corridor.</u>

GOAL 4) Develop strategies that support vibrant and livable neighborhoods in the New North End; enhance the quality of life of residents and visitors; and support sustainable economic growth.

- Improve the visual character with streetscape treatments and other amenities <u>that promote</u> <u>and enhance the pedestrian environment and public realm.</u>
- Create attractive and inviting public spaces. , vibrant public spaces.
- Support economic development consistent with City planning objectives
- Enact supportive zoning/land use regulations <u>including those that address building location and</u> <u>urban design specific to the corridor</u>.
- Incorporate sustainable design practices.

4) Initial Improvement Concepts

Steve explained that there are key decisions that will define the corridor:

- Configuration of bicycle accommodations
- Intersection treatment at VT 127, Ethan Allen, Shore Road, and Plattsburg Avenue
- "Right sizing" of North Ave from the VT 127 to the Shore Road intersection
- On-street parking—there is an oversupply in most of the corridor, except at the southern end
- Pedestrian crossing plan

Steve spoke about these concepts in turn.

Long-Term Bike Accommodation Options

- Two-way cycle track May not be feasible south of Washington/Berry Street; driveways and cross streets are challenges
- One-way cycle tracks
- Bicycle Lanes standard or buffered

Intersection Treatment Options at VT 127

- Roundabout two lane roundabout needed (this need to be re-evaluated)
- Signalized Intersection with Improvements eliminate high speed, no stop turns; improve pedestrian and bike crossings; may need to add additional turning lanes

Intersection Options

- Shore Road: dedicated center left turn lane; realign Shore and Heineberg Roads. RJ Lalumiere suggested that if Shore Road is not realigned, the signal have split phasing to allow smoother bicycle travel.
- Ethan Allen Parkway and Plattsburg Avenue Intersections: mini-roundabout; minor realignment; pedestrian islands, relocate Ethan Allen Park entrance; eliminate high-speed free right turn.

VT 127 to Shore Road Segment Configuration

- Right-Sizing of the Corridor: One travel lane in each direction with center turn-lane/median; are additional lanes needed at Ethan Allen or VT 127?
- On-street Parking: Provide on one side only? Selective provision? Alternate sides?

Potential Gateways (Suggested at the Public Meeting#)

- North Street: Busy intersection, southern entrance to corridor

- Washington/Berry Street: Gateway to Old North End
- Institute Road: Burlington High School entrance
- Vermont 127: Transition from highway to urban street
- Ethan Allen Parkway: Busy hub, connections to recreational facilities
- Ethan Allen Shopping Center: Commercial hub
- Plattsburg Avenue: Northern entrance to corridor

Steve discussed *near-term options* for each of the corridor segments.

Washington Street to North Ave – Near Term

- Bicycles: Add sharrows, parallel route.
- Pedestrians: Additional crossings, improve visibility, convenience, safety of crossings, ADA ramps.
- Motorists: Check signal warrants at Washington.

VT 127 to Washington Street Near-term Options

- Bicycles: Widen bike lane/narrow travel lane; Add sharrows through Institute Road intersection; eliminate some parking on northern section/extend bike lanes.
- Pedestrians: Additional crossings in activity areas; improve visibility, convenience, safety of crossings; ADA ramps.
- Transit: Additional shelters; larger shelters at BHS, crosswalks paired with stops.

Shore Road to VT 127 Near-Term Options

- Bicycles: Remove a travel lane and add bike lanes *or* wide curb lanes; intersection treatments at VT 127, Ethan Allan Parkway; bike box or two-stage left turn at Shore Road. There was consensus that bike lanes are preferable to wide curb lanes for this segment.
- Pedestrians: Same as other segments; center median refuges; add pedestrian signal heads.
- Transit: Same as other segments.

Plattsburg Avenue to Shore Road Near-Term Options

- Bicycles: Eliminate parking on one side to provide bike lanes; add sharrows; intersection treatment at Plattsburgh Avenue.
- Pedestrians: Same as other segments; intersection treatments at Plattsburg Avenue similar to Ethan Allan Parkway; pedestrian on-demand signal at night.
- Transit: Same as other segments; extend route into neighborhoods.

5) Next Steps

- a) Finalize Vision & Goals
- b) Refine Improvement Concepts
- c) Public Meeting (January/February)
- d) Advisory Committee (March)

As Steve will be leaving his job at PB, he thanked everyone for their hard work and interest in the study.

The meeting was adjourned at 8:30 PM.

North Avenue Complete Streets Corridor Study

Advisory Committee Meeting #4

Thursday, May 1, 6:30 PM - 8:00 PM

St. Mark's Church, 1251 North Avenue (@Shore Rd.)

Topics

- 1) Introductions
- 2) Quick Briefing:
 - a) Project Background
 - b) Project Goals and Objectives
 - c) Outreach Summary
 - i) Prior AC Meetings
 - ii) Prior Public Meetings
 - iii) Summary of Feedback from February Workshop
- 3) Conceptual Alternatives
- 4) Evaluation Criteria
- 5) Scoring of Alternatives
- 6) Next Steps
 - a) Public workshop (May 20)
 - b) Selection of Short- and Long-Term Alternatives
 - c) Complete Corridor Plan

Project Website:

http://www.ccrpcvt.org/transportation/corridors/north-avenue-corridor-study/



North Avenue Complete Streets Corridor Study Advisory Committee Meeting #4 Notes

http://www.ccrpcvt.org/transportation/corridors/north-avenue-corridor-study/

DATE:Thursday, May 1, 2014TIME:6:30 - 8:30 PMPLACE:St. Mark's Church Family Center, 1251 North Avenue, Burlington

Members/Alternates Present:

Tom Ayres, W7 City Councilor Katelin Brewer-Colie, Local Motion Tad Cooke, Ward 3 NPA Jim Holway, Ward 4 NPA RJ Lalumiere, Alternate Ward 7 NPA Jason L'Ecuyer, Alternate Ward 7 NPA Nicole Losch, Burlington DPW Kirsten Merriman-Shapiro, CEDO Ken Peterson, Alternate Ward 4 NPA Tony Redington, Alternate Ward 3 NPA Sandrine Thibault, Burl. Planning Barry Trutor, Alternate, Ward 7 NPA

Others Present:

Eddie DeMott, VT Dept. of Health Liam Griffin, Resident Ward 7 Bob Herendeen, Resident Ward 4 William McGrath, Resident Ward 4 Rich Nadworny, Resident Ward 4

Staff/Consultants Present:

Joe Barr, Parsons Brinckerhoff Eleni Churchill, CCRPC Diane Meyerhoff, Third Sector Associates Nick Schmidt, Parsons Brinckerhoff Sai Sarepalli, CCRPC

1) Welcome & Introductions

Eleni Churchill of the CCRPC welcomed the group and introductions were made. She welcomed Tom Ayres, City Councilor from Ward 7, who replaces Paul Decelles.

2) Briefing: Study Background, Goals/Objectives, Outreach Summary

Joe Barr of Parsons Brinckerhoff reviewed the study background (the presentation is available at: <u>http://bit.ly/north-ave</u>). The study is evaluating North Avenue from a Complete Streets perspective and developing recommendations for remaking the corridor to accommodate all users. Joe described the public process and provided a summary of the February public workshop. The feedback included a desire for consistency throughout the corridor, separated bicycle facilities, connectivity to existing paths, more crosswalks, and greater pedestrian visibility. Participants expressed concern about plowing and snow storage as well as protecting trees and the planting strip.

3) Conceptual Alternatives, Evaluation Criteria, and Scoring

The conceptual alternatives will be evaluated by looking at both cross sections and intersections. There are short-term (Option A) and medium/long-term improvement options (Options B-F). The evaluation criteria are based on study goals: accommodate safe and efficient travel for all users; improve safety for all users; balance transportation choices; and improve multimodal connectivity. Other goals include

consistent facilities throughout corridor and improvements that support a vibrant and livable community and sustainable economic growth. The alternatives were scored using a 1-5 point scale, with lower numbers indicating the most improved situation over the existing and higher numbers indicating a less improved situation.

4) Cross Sections: Alternatives and Evaluation

The design principles developed for cross sections include: rightsize corridor for all modes of travel; a consistent 25 mph speed limit, reinforced with traffic calming elements, consistent transportation facilities; parking, when present, on one side; and sidewalk/planting strip flexibility. Joe described each option and provided a summary of options.

Corridor-wide	Existing	Option A	Option B	Option C	Option D	Option E	Option F
Rightsized Corridor, 25 mph Speed Limit, 10.5' Vehicle Lanes, and	N/A	Bike Facilities in Existing Roadway Width	5' Min. Bike Lanes	Buffered Bike Lanes	Cycle Tracks	Raised Cycle Tracks	Raised Two-Way Cycle Track (SB Side)
Segment		Curb-to-Curb Width (ft)					
Plattsburg Ave to Shore Rd	40	Same	Same	43	43	29	29
Shore Rd to VT 127 Ramps	40	Same	41/50	45/54	45/54	31/40	31/40
VT 127 Ramps to Institute Rd	40	Same	Same	43	43	29	29
Institute Rd to Washington St	35	Same	Same	Same	Same	21	21
Washington St to North St	33	Same	40	43	43	29	29

Conceptual Alternatives: Typical Cross Sections

There was discussion a variety of bicycle facility options and the types of separation between vehicles and bicyclists/pedestrians as well as the need of on-street parking along the avenue. There was discussion about funding improvements and whether or not the federal government will contribute to improvements. Some committee members felt that there needs to be clarity about how much city taxpayers would need to contribute. Eleni Churchill of the CCRPC explained that federal funding could be used for certain projects in the corridor. Grant programs are available for bike and pedestrians improvements/projects through VTrans. Major improvements to the avenue will be probably done incrementally. We won't know the level of federal contribution any time soon.

Jason L'Ecuyer and Tony Redington are talking with DPW about a roundabout pilot project at 127 or at Institute Road.

5) Intersections: Alternatives and Evaluation

Joe discussed the intersection design principles which include compact intersections, pedestrian facilities on all approaches, continuous bicycle facilities through intersections, and supportive of "placemaking." Joe discussed options for each intersection: Plattsburg Avenue, Shore Road/Heineberg Road, Ethan Allen Shopping Center, Ethan Allen Parkway, Vermont 127 Ramps, Institute Road, and North Street.

6) Crosswalks

Joe described a series of additional crosswalks in the corridor.

7) Health Impact Assessment (HIA) for North Avenue Alternatives

Ed DeMott of the Vermont Department of Health explained that a Health Impact Assessment (HIA) is a flexible tool to look at how a project will impact the overall health of the community. The HIA for North Avenue alternatives was conducted by looking at existing data sets. It supports the transportation options that are the safest and encourage people to move more. The HIA includes a discussion of health equity – the concept that vulnerable populations (like the elderly, children, New Americans, people with disabilities) want to use this corridor safely to access basic needs. This is the first time the Health Department has drafted an HIA for a corridor study. Committee members will be provided a link to the Draft HIA and Ed welcomes comments and thoughts on the document.

8) Next Steps

The committee will meet after the public workshop to make recommendations to the City for moving forward with short, medium, and long term improvements. Nicole Losch of DPW reported that the online public input tool will be available soon.

Upcoming items:

- Complete the evaluation process (send comments to Eleni and Joe)
- Final public workshop (May 20, 7PM, St. Mark's Church)
- Final Committee meeting to select alternatives (June)
- Complete corridor plan (*Update:* Completion Date will be extended to September 30, 2014)
- Presentations to the City Council Transportation, Utilities and Energy Committee, followed by the City Council (*Update:* Summer 2014)

The meeting was adjourned at 8:40 PM.



North Avenue Corridor Study Advisory Committee Meeting #5

Wednesday, June 11, 2014, 6:30 – 8:30 PM Miller Center (130 Gosse Court, Burlington)

AGENDA

- 1) Welcome and Introductions
- 2) Concept Refinement & Evaluation
 - a) Public Meeting & Web Survey
 - b) General Cross-section Concepts Pros & Cons
 - c) Intersection Concepts
 - d) Evaluation Matrix Scores
- 3) Estimated Costs
- 4) Advisory Committee Recommendations for Corridor Implementation Plan
- 5) Next Steps

Project Website: <u>http://www.ccrpcvt.org/transportation/corridors/north-avenue-corridor-study/</u>



North Avenue Complete Streets Corridor Study Advisory Committee Meeting #5 Notes

http://www.ccrpcvt.org/transportation/corridors/north-avenue-corridor-study/

DATE:Wednesday, June 11, 2014TIME:6:30 - 9:00 PMPLACE:Miller Center, 130 Gosse Court, Burlington

Members/Alternates Present:

Tom Ayres, W7 City Councilor Tad Cooke, Ward 3 NPA Jim Holway, Ward 4 NPA RJ Lalumiere, Alternate Ward 7 NPA Jason L'Ecuyer, Alternate Ward 7 NPA Nicole Losch, Burlington DPW David Lustgarten, Alternate Ward 4 NPA Kirsten Merriman-Shapiro, CEDO Jon Moore, CCTA Dan Mulligan, BPHC Ken Peterson, Alternate Ward 4 NPA Tony Redington, Alternate Ward 3 NPA Sandrine Thibault, Burlington Planning Barry Trutor, Alternate, Ward 7 NPA Charlene Wallace, Local Motion **Others Present:** Emily Boedecker, Local Motion Ed DeMott, VT Dept. of Health Two members of the Public **Staff/Consultants Present:** Joe Barr, Parsons Brinckerhoff Eleni Churchill, CCRPC Diane Meyerhoff, Third Sector Associates Nick Schmidt, Parsons Brinckerhoff Sai Sarepalli, CCRPC

1) Welcome & Introductions

Eleni Churchill of the CCRPC welcomed the group and introductions were made.

2) Concept Refinement & Evaluation

Joe Barr of Parsons Brinckerhoff made a presentation (available at: <u>http://bit.ly/north-ave</u>).

2a) Public Meeting & Web Survey

The public meeting, held on May 20th, was attended by 85 people. Unfortunately, the voting for crosssections did not provide a clear preference. The online voting tool continues to be available at: <u>www.burlingtonvt.gov/public-input</u>.

2b) General Cross-Section Concepts Pros & Cons

Joe described the difference between short term improvements (1-3 years, minimal design required, public process as required for regulatory changes), medium term improvements (3-7 years, design required, public process included in the design process), and long term improvements (7 plus years, evaluation, scoping, and design needed, public process included throughout).

For cross-sections, Joe recommended a series of corridor-wide improvements (next page). Jim Holway of Ward 4 would like to see parking removed along the corridor.

Short term Corridor-Wide Improvements:

- Parking on one side, where present
- Bike facilities where feasible
- One to three additional bus shelters (depends on funding, site restrictions, and land availability)
- Three to five high-priority pedestrian crossings: Gosse Court, Green Acres Drive/Cayuga Court, Loaldo Drive, Saratoga Avenue, Killarney Drive/Village Green Drive, Lakewood Parkway, Poirier Place, Burlington College, Ward Street

Medium term Corridor-Wide Improvements:

- Remaining pedestrian crossings
- Additional bus shelters at high use stops
- 15-minute peak bus service and new Sunday service
- Gateway treatments: Plattsburg Avenue, VT 127 ramps, Washington Street, and North Street

Long term Corridor-Wide Improvements:

- Stormwater treatments
- Planting strip with landscaping, lighting, and utilities

Joe presented short, medium, and long term cross-section concepts for the corridor—see presentation at: <u>http://bit.ly/north-ave.</u>

Discussion:

The study team (City of Burlington, CCRPC, and the Consultants) presented the advantages and disadvantages of the two short term cross-sections (see slide 9). There was extensive discussion about the interaction between cyclists and buses with the two-way on-street cycle track concept and the safety issues presented when CCTA buses enter the cycle track to pick-up or drop-off passengers. Jon Moore of CCTA reported that CCTA's operations department and bus drivers expressed concerns about visibility issues and potential conflicts between busses and cyclists, especially the ones traveling northbound/counter-flow direction. Joe described a treatment (when space isn't an issue) where a refuge island is created for bus passengers away from the cycle track. Alternatively, the cycle track could be raised to sidewalk level at bus stops. This can be awkward with a two-lane cycle track configuration and it will also move this concept out of short-term consideration due to additional costs. Tony Redington of Ward 3 would like to identify a segment where a cycle track would operate well, perhaps between Shore Road and Plattsburg Avenue. Eleni is open to studying this idea, but it's likely not a short-term activity.

Sandrine Thibault of Planning & Zoning asked why the four lane configuration is retained in the short term concepts. Eleni responded that since a paving project is not planned for North Avenue, a pilot three lane configuration isn't as quick a process as it was for Colchester Avenue (one year). There is a cost associated with a pilot project and a need to provide concrete information and data to residents of the area prior to a pilot launch. This likely pushes a three lane road configuration to the medium term. There is some information available regarding level of service and delay; people must realize that there are tradeoffs to changing the lane pattern. Some committee members felt very strongly that a three lane configuration must occur in the short term.

Jim Holway feels the role of the committee is to provide a vision for the corridor. Cost, political will, and time can be considered once our vision is clear.

2c) Intersection Concepts

For intersections, Joe recommended a series of short-term corridor-wide improvements: ADA curb ramps and crosswalks on all approaches, audible pedestrian countdown timers with 5-second (push-button) leading pedestrian intervals, and bicycle facilities (where provided) maintained through intersections. RJ Lalumiere of Ward 7 would like a high priority to be given to bicycle facilities. He recommends improvement of the bike lane at Institute Road with a northbound bike lane through the intersection. Nicole Losch of DPW will check if the lanes align to allow this to happen. Joe reviewed in detail short, medium, and long-term intersection concepts (Slides 21 – 31).

2d) Evaluation Matrix and Scores

Joe reviewed the Vision and Goals of the study and the evaluation criteria used to score the concepts under consideration. Evaluation results where then presented and discussed (Slides 36 – 45). Committee members had a variety of questions on the scoring methodology and the actual scores of specific cross-section and intersection concepts – particularly as they pertain to roundabout concepts. It was pointed out that the Evaluation Matrix sent to the committee and posted on the web site has more detailed information on the scoring. Charlene suggested that the committee should vote in concept for something like a roundabout without specifying that it be one or two lanes. There is a fair amount that is unknown now that will be better known when a final design decision is needed.

3. High-Level Cross-Section Estimated Costs

Joe provided high-level estimates of costs for each concept.

4. Advisory Committee Recommendations for Corridor Implementation Plan

Eleni noted that the study will not conclude at the end of June as had been expected. There will likely be a visit to the City Council's Transportation, Energy, and Utilities Committee (TEUC) in July and a visit to City Council in August.

Committee members offered their thoughts on priorities:

- Dan Mulligan: Two-way cycle tracks along the corridor.
- RJ Lalumiere and Tom Ayres: Three-lane configuration should be a short term recommendation.
- Jim Holway: Would like to talk to more residents before final voting.
- Charlene Wallace: It's important to include protected bike facilities somewhere on the corridor to encourage new bike trips.

Since time was short, it was decided to hold an additional meeting in the next two weeks. The committee will vote on recommendations for implementation at that time.

The meeting was adjourned at 8:44 PM.



North Avenue Corridor Study Advisory Committee Meeting #6

Tuesday, July 1, 2014, 6:30 – 9:00 PM Miller Center (130 Gosse Court, Burlington)

AGENDA

- 1) Welcome and Introductions
- 2) Concept Revisions based on Advisory Committee feedback
- 3) Review of New Concept Scoring & Costs
- 4) Concept Discussion/Questions & Voting
- 5) Next Steps

Project Website: <u>http://www.ccrpcvt.org/transportation/corridors/north-avenue-corridor-study/</u>



North Avenue Complete Streets Corridor Study Advisory Committee Meeting #6 Notes

http://www.ccrpcvt.org/transportation/corridors/north-avenue-corridor-study/

DATE:Tuesday, July 1, 2014TIME:6:30 - 9:00 PMPLACE:Miller Center, 130 Gosse Court, Burlington

Members/Alternates Present:

Tom Ayres, W7 City Councilor Tad Cooke, Ward 3 NPA Jim Holway, Ward 4 NPA RJ Lalumiere, Alternate Ward 7 NPA Jason L'Ecuyer, Alternate Ward 7 NPA Nicole Losch, Burlington DPW David Lustgarten, Alternate Ward 4 NPA Jon Moore, CCTA Dan Mulligan, BPHC Tony Redington, Alternate Ward 3 NPA Kelly Stoddard Poor, AARP Sandrine Thibault, Burlington Planning Barry Trutor, Ward 7 NPA Charlene Wallace, Local Motion **Others Present:** Emily Boedecker, Local Motion Rep. Joanna Cole, Dist. 6-1 Joe Harig, Ward 7 Robert Herendeen, Ward 4 **Staff/Consultants Present:** Eleni Churchill, CCRPC Diane Meyerhoff, Third Sector Associates

1) Welcome & Introductions

Nicole Losch of Burlington DPW welcomed the group at 6:45PM and introductions were made. The presentation is available at: <u>http://www.ccrpcvt.org/transportation/corridors/north-avenue-corridor-study/</u>

2) Concept Revisions based on Advisory Committee Feedback

Nicole outlined the concept revisions based on feedback from the last Advisory Committee meeting. Revisions include a new long-term Concept F2 (on-street, 2-way cycle track on the southbound side of the corridor), a 3-lane configuration pilot project between Shore Road and VT 127 (planning in short-term, implementation in medium-term), and an "enhanced" buffered bike lane between Institute Road and Washington Street. Nicole reviewed Concept F2 and the pros and cons of two-way cycle tracks and raised versus on-street cycle tracks.

3) Review of New Concept Scoring & Costs

Eleni Churchill of the CCRPC described the concept scoring and presented a matrix of long-term cross-section evaluation results. This information was presented at the last meeting; the only change was to add Concept F2 to the matrix (approx. \$4.1 to \$4.4 million).

4) Concept Discussion/Questions and Voting

There was discussion on the process and next steps after the Advisory Committee's decision on preferred concepts. The Advisory Committee will make recommendations to the City Council's Transportation, Utilities, and Energy Committee (TEUC). The TEUC will make a recommendation to the full City Council; ultimately the City Council will decide which recommendations move forward.

4a) Short-Term Cross Section Recommendations

The Study Team (CCRPC, DPW, and Consultants) prefer Concept A1 for the short-term cross section. They believe this is the only concept that is viable and implementable in the short-term. The Committee discussed Concept A1; many felt that moving to a 3-lane configuration should happen in the short-term instead of the medium-term. Councilor Tom Ayres believes that we should be willing to fight for positive change. Discussion also included a lower speed limit, removal of parking, and enhanced bike lanes.

VOTE: The Committee	voted against support	ing Concept 1A	with two	voting yes	and eight	voting no:

Organization	Y/N	Organization	Y/N
AARP	Ν	Local Motion	Ν
BPHC	Ν	Planning & Zoning	Υ
CCTA	Ν	Ward 3	Ν
City Council	Ν	Ward 4	Ν
DPW	Y	Ward 7	Ν

RJ Lalumiere of Ward 7 suggested a **new short-term cross-section concept** and with input from the group, the concept was refined to be a **pilot project** with the following elements:

- Three-lane configuration between Shore Road and VT 127, with 10.5 foot travel lanes and 4.5 foot bike lanes
- 25 MPH throughout corridor
- All parking eliminated north of Washington Street
- Bike lanes, enhanced/buffered where space allows
- Protected bike lanes (with flex posts) from VT127 to Institute Road
- A very preliminary cost estimate is \$300,000-500,000 for the pilot.

Charlene offered to undertake an outreach effort to increase the comfort of residents with the new configuration. Eleni and Nicole welcomed outreach by individuals, but not on behalf of the Corridor Plan until the final configuration is determined by the city. Nicole has safety concerns with a possible 4.5 foot bike lane and both Eleni and Nicole expressed concerns with parking removal in some sections of the corridor. There was an extensive discussion about the pros and cons of the new cross-section concept. Barry Trutor of Ward 7 supports this option as long as it is the pilot that is reversible. Kelley Stoddard Poor of AARP would like to study parking elimination further. Charlene is concerned about the rush to finish this study; Eleni explained that the funding for this study is running out and that the study should be completed by the end of September. The committee members expressed some reservations about the new short-term cross-section concept.

VOTE: The Committee voted to support the **new pilot short-term cross-section concept as described above** with eight voting yes and two voting no:

Organization	Y/N	Organization	Y/N
AARP	Υ	Local Motion	Y
BPHC	Υ	Planning & Zoning	Ν
CCTA	Υ	Ward 3	Y
City Council	Υ	Ward 4	Y
DPW	Ν	Ward 7	Y

4b) Short-Term Improvement Recommendations for All Intersections

The Committee added "minimum" to the recommendation for 5-second leading pedestrian intervals (LPI). VOTE: The committee unanimously supported improvements for all intersections: ADAcompliant curb ramps and crosswalks on all approaches; audible pedestrian countdown timers with a minimum 5-second (push-button) LPI; and bicycle facilities (where provided) maintained through intersections:

Organization	Y/N	Organization	Y/N
AARP	Y	Local Motion	Υ
ВРНС	Y	Planning & Zoning	Y
ССТА	Y	Ward 3	Y
City Council	Y	Ward 4	Y
DPW	Υ	Ward 7	Y

4c) Long-Term Cross Section Recommendations

The committee was asked to consider six different long-term cross section concepts. These all require curbs to be moved:

- Concept B: 5' Minimum Bike Lanes
- Concept C: Buffered Bike Lanes
- Concept D: On-Street One-Way Cycle Tracks
- Concept E: Raised One-Way Cycle Tracks
- Concept F1: Raised Two-Way Cycle Track
- Concept F2: On-Street Two-Way Cycle Track

Jason L'Ecuyer of Ward 7 believes there is a psychological barrier to stopping and doing business on North Avenue and in the New North End. He'd like to see this change. Sandrine understands that protected bike lanes increase ridership and would like to see those on North Avenue, but acknowledges design details may be missing to help discern the best type of cycle track to recommend. RJ Lalumiere of Ward 7 is a cyclist who wants to ease travel to downtown and therefore supports a cycle track. He believes a one-way cycle track is safer than a two-way. As a cyclist, Tony Redington of Ward 3 wants to have the same freedom of movement as others who use the road and prefers a oneway cycle track on each side of the road. Charlene supports a one-way raised cycle track. Rep. Joanna Cole likes cycle tracks but doesn't think a raised track will have political support. David Lustgarten of Ward 4 would like to see consistent bicycle facilities throughout the City for everyone's safety. Nicole agrees a one-way protected facility is safer but is unsure of design details for a choice between raised or on-street.
The committee added a seventh concept, Concept G, to include a one-way cycle track to be either raised or on-street depending on future study. Eleni reminded the Committee that a Corridor Study is a visioning document and suggested a specific vision be identified to help guide future studies.

Organization	Concept	Organization	Concept	
AARP	D	Local Motion	G	
BPHC	D	Planning & Zoning	D	
ССТА	F2	Ward 3	G	
City Council	D	Ward 4	D	
DPW	D	Ward 7	E	

VOTE: The committee supported **long-term cross-section Concept D** with six votes in favor:

4d) Intersection Improvement Recommendations

Proposed short, medium and long-term intersection improvement concepts were discussed and the committee voted on each concept.

Plattsburg Avenue Intersection

Medium-Term

Concept 1: Eliminate high-speed right turn and add an exclusive pedestrian phase at south crosswalk VOTE: The committee unanimously supported Concept 1 for medium-term improvements at Plattsburg Avenue.

Long-Term

Concept 2: Eliminate the northbound right-turn lane.

Concept 3: Mini roundabout

VOTE: The committee supported **Concept 3 for long-term improvements** at Plattsburg Avenue with four votes in favor:

Organization	Concept	Organization	Concept	
AARP	3	Local Motion	3	
ВРНС	-	Planning & Zoning	2	
ССТА	-	Ward 3	3	
City Council	-	Ward 4	3	
DPW	2	Ward 7	2	

Shore Road/Heineberg Road Intersection

Short-Term

Concept 1: Increase pedestrian crossing times for seniors, add No Right Turn on Red, add split phasing. <u>VOTE: The committee unanimously supported</u> <u>Concept 1 for short-term improvements at Shore</u> <u>Road/Heineberg Road.</u>

Medium-Term (contingent on ROW donation)

Concept 2: Increase pedestrian crossing times for seniors, add No Right Turn on Red, realign Shore Rd. **VOTE:** The committee unanimously supported **Concept 2 for medium-term improvements** at Shore Road/Heineberg Road.

Ethan Allen Shopping Center Intersection

Short -Term

Concept 1: Increase pedestrian crossing times for seniors, add No Right Turn on Red. <u>VOTE: The committee unanimously supported</u> <u>Concept 1 for short improvements</u> at the Ethan Allen <u>Shopping Center.</u>

Long-Term

Concept 2: Increase pedestrian crossing times for seniors, add No Right Turn on Red, reconstruct Farrington's Mobile Home park private drive, reconstruct sidewalk and curb at Bamboo Hut. VOTE: The committee unanimously supported Concept 2 for long-term improvements at the Ethan Allen Shopping Center.

Ethan Allen Parkway Intersection

Medium-Term

Concept 1: Add Little Eagle Bay to signalized intersection; eliminate high-speed northbound right-turn; relocate vehicle park entrance.

VOTE: The committee unanimously supported **Concept 1 for medium-term improvements** at Ethan Allen Parkway.

Tony Redington suggested the addition of Concept 3 for the Long-Term recommendation: Advance a single-lane roundabout IF the future scoping study determines it is feasible. Eleni explained the traffic analysis was re-checked with a different software package for this intersection and results indicate that two lanes are needed for the northbound and southbound approaches. In addition, it was explained that future intersection scoping studies will always include and evaluate a range of alternatives, including a roundabout, even if the recommendation of the Advisory Committee is a signalized intersection.

Ethan Allen Parkway - Long-Term

Concept 2: Install a roundabout with dual southbound approach lanes and northbound right-turn lane with no flare on approaches, relocate vehicle park entrance.

VOTE: The committee unanimously supported **Concept 1 for long-term improvements** at Ethan Allen Parkway.

Vermont 127 Intersection

Short-Term

Concept 1: Remove high-speed northbound and westbound right-turn lanes. <u>VOTE: The committee unanimously supported</u> <u>Concept 1 for short-term improvements</u> at Vermont <u>127.</u> Long-Term

Concept 2: Remove high-speed northbound and westbound right-turn lanes, create dual southbound left-turn lanes

Concept 3: Roundabout with dual southbound approach lanes, a westbound right-turn bypass lane, and no flare on approaches

VOTE: The committee supported **Concept 3 for long-term improvements** at Vermont 127 with eight votes in favor and one vote against (City Councilor, Tom Ayers, voted for Concept 2).

Institute Road Intersection

Short-Term

Concept 1: no right turn on red, reduce intersection footprint, relocate northbound bus stop to far side, resolve bus driveway access

VOTE: The committee unanimously supported **Concept 1 for short-term improvements** at Institute Road.

Long-Term

Concept 2: install a roundabout with a southbound right-turn bypass and no flare on approaches, resolve bus driveway access.

VOTE: The committee supported **Concept 2 for long-term improvements** at Institute Road with seven votes in favor of Concept 2:

Organization	Concept	Organization	Concept
AARP	2	Local Motion	2
BPHC	2	Planning & Zoning	1
ССТА	-	Ward 3	2
City Council	2	Ward 4	2
DPW	1	Ward 7	2

Washington Street Intersection

Medium-Term Concept 1: Raised Intersection VOTE: The committee unanimously supported Concept 1 for medium-term improvements at Washington Street.

North Street Intersection

Medium-Term

Concept 1: Add No Right on Red, change parking lot entrance to right-in/right-out or curb cut removal, realign south crosswalk and add pedestrian refuge, realign north crosswalk to be adjacent to push button, protected/permitted southbound left turns.

VOTE: The committee unanimously supported **Concept 1 for medium-term improvements** at North <u>Street.</u>

4e) Priority Pedestrian Crossing Locations

The committee was asked to prioritize the top three to five locations for priority pedestrian crossings. The votes are tallied here from highest vote count to lowest:

Pedestrian Crossing Locations	Votes
Burlington College	7
Gosse Court	6
Killarney Drive / Village Green Drive	4
Green Acres Drive/ Cayuga Court	4
Ward Street	3
Saratoga Avenue	3
Poirier Place	2
Loaldo Drive	2
Lakewood Parkway	-

5. Next Steps

A draft Implementation Plan will be created and sent to Advisory Committee members via email for review. The Draft Corridor Plan will be presented to the TEUC in August, followed by a request to City Council for Plan acceptance in September. The final report will be available in September.

Eleni and Nicole thanked everyone for their participation and all their work.

The meeting was adjourned at 9:00 PM.

Note: These meeting notes were revised on July 29, 2014.

Final Report on Public Engagement North Avenue Corridor Study, Burlington, VT October 2014

4) Public Meetings (Media Advisory, Front Porch Forum, Flyer, Agenda, Notes) Stakeholder/Interest Group Meetings (Meeting Notes)

- Public Meeting #1: October 29, 2013
- Public Meeting #2: February 20, 2014
- Public Meeting #3: May 20, 2014
- Public Meeting #4: October 6, 2014 (Burlington City Council)
- Stakeholder Meeting: Flynn School PTO, April 3, 2014
- Stakeholder Meeting: Heineburg Club Seniors, February 5, 2014
- City Council's Transportation, Energy, and Utilities Committee (TEUC) Meetings: June 26, 2013; March 6, 2014; April 30, 2014; August 13, 2014; September 10, 2014



North Avenue Corridor Study Public Meeting #1, October 29, 2013, 7:00PM Hunt Middle School, 1364 North Avenue, Burlington

http://bit.ly/north-ave

AGENDA

7:00 Welcome & Overview of the Study (Nicole Losch, City of Burlington)

Overview of the Process and Purpose of the Meeting *(Eleni Churchill, CCRPC)*

7:05 Existing Conditions (Steve Rolle, Parsons Brinckerhoff)

7:25 Tables – Visit each station for 20 minutes

- Table 1: Nicole Losch, City of Burlington (Pink Group Start Here)
- **Table 2:** *Steve Rolle, Parsons Brinckerhoff* (Red Group Start Here)
- Table 3: Sandrine Thibault, City of Burlington (Green Group Start Here)
- Table 4: Eleni Churchill, CCRPC (Blue Group Start Here)
- 8:45 Discussion Major Corridor Issues
- 9:00 Thank You and Adjourn

Project Contacts:

Nicole Losch, City of Burlington DPW, 865-5833, <u>NLosch@burlingtonvt.gov</u> Eleni Churchill, Project Manager, CCRPC, 846-4490 x11, <u>echurchill@ccrpcvt.org</u> Steve Rolle, Parsons Brinckerhoff, 617-960-4967, <u>Rolle@pbworld.com</u>



North Avenue Corridor Study Public Meeting #1 Notes

DATE:Tuesday, October 29, 2013TIME:7:00 PMPLACE:Lyman Hunt Middle School Cafeteria, 1364 North Avenue, BurlingtonPRESENT:See Attached

1) Welcome & Overview of the Study

Nicole Losch of Burlington DPW and Eleni Churchill of the CCRPC welcomed the group and provided an overview of the Study and the public meeting.

2) Existing Conditions

Steve Rolle of Parsons Brinckerhoff presented the existing conditions. Steve briefly reviewed each segment from the perspective of bicyclists, motorists, bus riders, and walkers. The presentation is available at: http://www.ccrpcvt.org/transportation/corridors/north-avenue-corridor-study/.

3) Small Group Workshop

Participants were divided into four small groups to discuss corridor issues in detail. Each group reviewed a specific corridor segment, rotating to all four stations (i.e. – each group reviewed each corridor segment). Facilitators led groups through a series of questions; results (responses) are presented in Attachment 1.

4) Major Corridor Issues

Participants were asked: *"From a corridor-wide perspective, what do YOU think are the most important transportation issues along the North Avenue Corridor? Please list up to five."*

The raw data is presented in Attachment 2. The following table summarizes the number of times these topics were mentioned by respondents:

Торіс	Number of
	Responses
Improve bike accommodations	21
Reduce speeding	20
Improve Pedestrian accommodations	18
Amenities (esp. Lighting) and Scale	8
Improve Bus service	6
Improve Signal timing/detectors	6
Add Left-turn Lanes	6
Reduce congestion	3
Roundabouts	1

The meeting was adjourned at 8:45 PM.

Participants

Anderson	Hanna
Ayers	Tom
Bailey	Ryan
Bogdan	Karen
Bogdan	Dave
Brand	Matthew
Brown	Flip
Bucci	Jon
Buchanan	Kara
Buchanan	Gus
Curtis	Jace
Davis	Bob
Dugdak	Jack
Emanuelson	Karin

Gagnon	David
Garcia	Daniel
Gardener	Matt
Gardner	Matthew
Gragg	Monica
Hasselmann	Joseph
Hoye	Colin
Hu	Peng
Imbarrato	Domenic
Lemieux	Andrew
McGarvey	Ron
Miatke	Baxter
Milens	Muffie

Orlansky	Michael
Post	Sandy
Sayler	Tim
Schwartz	Aaron
Strand-	
Jordan	Megan
Spencer	Chapin
Su	Flora
Therrien	Alan
Truzansky	Tracy
Wan	Trani
Weigel	Brent
Western	Heidi
Wu	Roy

Advisory Committee Members: Kirsten Merriman-Shapiro, Kelly Stoddard-Poor, RJ Lalumiere, Jim Holway, Tony Redington

Rock Point School: 12 juniors and seniors attended with their teacher, Gus Buchanan.

Workshop Breakout Group Facilitators: Nicole Losch (City of Burlington); Steve Rolle (Parsons Brinckerhoff); Sandrine Thibault (City of Burlington); Eleni Churchill (CCRPC); Nick Schmidt (Parsons Brinckerhoff); Bryan Davis (CCRPC); Jason Charest (CCRPC); Kirsten Merriman-Shapiro (City of Burlington).

Other Consultants: Diane Meyerhoff (Third Sector Associates)

Attachment 1: Workshop Results – Corridor Segment Discussion (see separate file)

Attachment 2: Responses to the Question: From a corridor-wide perspective, what do YOU think are the most important transportation issues along the North Avenue Corridor? Please list up to five.

North Ave and VT 127 section (dangerous for bikes)

Lighting/aesthetics Bus shelters Speed Sidewalks Congestion

Slow down speeding traffic during day time No more trees More bike lane Traffic signal suitable time

Slow down the speed during day-time Reasonable signal time More bike lane

Slow down speeding traffic Make it easier to cross the street Add the bike lane

Better bike lanes Lighting Slow down speeding traffic More crosswalks Improve sidewalk conditions

Better bicycle accommodations Slowing down speed of traffic Better markings along corridor for transitions, bikes, etc. Make sure all traffic light detectors are working properly More green space

Speed (too fast) Crosswalks (too few) Signal timing Congestion Bike lanes not wide enough

Speed is an issue Green space too thin Bike signs unclear Early blinking yellow lights Some traffic lights need more phases

Major intersections less confusing Left turn lane

Bicycle lanes More crosswalks (very visible to motorists) Keep a neighborhood scale to it all

Bicycle accommodations Slow down traffic More accommodations for crossings

Northern part of North Ave corridor needs more crosswalks (especially across Plattsburg Ave) Speeding along northern section of North Ave – also different speeds in 2 directions north of Shore Road (30 mph in SB, 25 mph NB) Lack of bike lanes/too narrow

Speed issues Left turns are unusually difficult The on street parking either needs to be marked as such or replaced with bike lane and/or shoulder

Lane width in 5-lane area too small, speed too high for width – buses, trucks, city vehicles too big – <u>no shoulder</u> makes everyone take up too much space Lack of safe bike travel through shopping strip – Ethan Allen to Shore Too few safe crosswalks in this shopping district Left turns onto North Ave are difficult, dangerous, and frustratingly slow

Bike lanes! 2 lanes only (maybe 127 to Shore Rd turn lane between) Crossing @ bus stop Slowing traffic Look and feel of a village/community versus highway

Provide continuous dedicated bicycle accommodation Crosswalks for pedestrians Slow down speeding traffic Determine a way to extend CCTA service – even just a late bus and Sunday service Consider middle lane for turning

Dedicated bike lanes north and south – bike paths to connect to North Ave Bus pull ins/outs and bus shelters, well lit Fix the Plattsburg Ave intersection so you can cross Plattsburg Ave from the north side walk and then walk south down the east side of North Ave More frequent crosswalks in <u>all</u> directions

Cycle track – entire corridor Roundabouts at key intersections – North/BHS/Ethan Allen Shopping Center/Plattsburg roundabouts to be pathed Cycle track connections to schools More frequent transit scheduling (15 minute headways); late PM bus

Plattsburg Ave and North Ave – speed Crosswalks – Tracy Road odd; Packard Lofts area and south to narrow More room for bikes Better crosswalks Bus shelters/pull offs Better lighting

Slow down speeding traffic Better accommodation of bicycles More crosswalks Slow down speeding traffic Did I mention slowing down speeding traffic?

Speed and volume of traffic Lack of clearly marked and adequate width bike lanes Few places for pedestrians to cross At busy times, hard to turn left from Leddy Park to Kilarney Shore Rd to Ethan Allen Pkwy, sidewalks close to traffic

Speeding on North Ave from North St intersection continuing north Pedestrian and bike quagmire at 127 intersection Biking at Industrial intersection

The corridor where it is 4 lanes is a big problem. You can't make a left turn and cars speed through that section. It is hard to cross the road where the corridor has 4 lanes – not enough cross walks and cars speed through this section.

The 4 lanes part of the corridor gets congested during am and pm commute times and is a high accident area. Accessibility to the corridor through the 4 lane areas is difficult from the residential areas, especially during the am and pm peak times.

During winter months when snow banks are high poses a real safety issue, because vehicles trying to access the corridor, especially where it is 4 lanes, can't see traffic coming down the corridor to safely make L or R turn into the corridor!

Responses to: Anything else you'd like to share with the Advisory Committee and Study Team?

- Nope, enough information was gathered for the semester project in Brian Lee's class at UVM.
- Multi bike path adjacent to 127 needs a crossover
- The biggest issue for me personally is the connection between North Ave and the path along 127 where 127 connects with North Ave
- I was with the UVM CE133 class. I don't use this corridor frequently
- Check area complete streets: Route 15, Essex; Williston Road; Colchester Ave
- Bessery's Market fix the front so people can stop parking on the sidewalk
- Good format for public input!!
- Good format!
- This meeting was helpful as a member of the Committee to hear other people's comments. Thanks
- I feel that there is plenty of ROW for this project, however this turns it into a long term project
- I think the part of the corridor where it is 4 lanes should be changed to 2 lanes with a center turn lane. By Route 127, the L turn lane should stay so through traffic down the corridor to the South End can still flow. At the intersection of Ethan Allen Park heading north, make a short right turn only lane so traffic to Ethan Allen Parkway can continue to flow. At that intersection the current green arrow light doesn't work for traffic when the light to go straight is red and there is a car stopped in that right lane that isn't turning – they end up "holding" up traffic to Ethan Allen parkway.

Attachment 1: Public Meeting #1 Workshop Results Segment: Washington St/Berry to North St.

Bicyclists

Are there any particularly difficult street crossings for bicyclists on this segment (yes/no)? Is so, where and why?

Green: Lots of conflicting vehicle movements at gas station at North Street.

Pink Crossing North St NB and Washington St SB.

- Blue: Crossings not an issue. Narrow bike lane and cars parked in bike lane are problems.
- Red: SB left onto Washington St. NB at North Street (gas station conflicts).

How accommodating is this segment to both novice and experienced cyclists? List issues relative to each group.

Novice/Recreational/Children

Green: Uncomfortable, especially with parked cars.

- Pink: No SB bike lane after Berry St; kids on sidewalk. Bike lanes too narrow and street busy for kids.
- Blue: No SB bike lane. Difficult to turn left.
- Red: Non-continuous bike lane. Narrow northbound lane.

Experienced/Avid

Green:

Pink:

- Blue: No SB bike lane. Difficult to turn left.
- Red: Non-continuous bike lane. Narrow northbound lane.

What other issues affect cyclists on this segment?

Green: Drop of from sidewalk near RR tracks.

Pink: No SB lane after Berry. Conflicts with parked cars.

Blue:

Red: Connection to paths near RR. Need bike connections Battery Park to bike path, and North Ave to bike path.

Pedestrians

What is the consensus of your group (circle corresponding number)?

Crossing North Avenue is difficult due to the distance between marked crosswalks
 <<Strongly disagree
 Neutral
 Strongly agree>>>

	1	2	3	4	5
Green:	3				
Pink:	3				
Blue:	3				
Red:	4				
Average:	3.3				

• Crossing North Avenue is difficult due to the speed and/or amount of traffic.

<< <strongly disa<="" th=""><th>gree</th><th>Neutral</th><th></th><th colspan="3">Strongly agree>>></th></strongly>	gree	Neutral		Strongly agree>>>		
1	2	3	4	5		

Green: 3 Speeds lower in this segment due to density of development and two lanes.Pink: 4

Blue: 3

Red: 5 People drive fast.

Average: 3.8

• The condition of sidewalks and crosswalks is generally good

<< <strongly disa<="" th=""><th>gree</th><th>Neutral</th><th></th><th colspan="3">Strongly agree>>></th></strongly>	gree	Neutral		Strongly agree>>>		
1	2	3	4	5		

- Green: 2 Poor condition on this segment.
- Pink: 2 Not well marked (crosswalks?); sidewalks not in great shape.
- Blue: 3 Decent sidewalks. Ice and water splashing are problems.
- Red: 3 Not as good as further north. Decent green belt

Average: 2.5

• There are barriers to Universal Access (lack of ADA curb ramps, obstacles that block the sidewalk) along this segment.

<< <strongly disagree<="" th=""><th></th><th colspan="3">Neutral</th><th colspan="3">Strongly agree>>></th><th>>>></th></strongly>			Neutral			Strongly agree>>>			>>>	
	1		2		3		4		5	
Green:	3									
Pink:	4	Narrow.	 Hedges and braches block. 							
Blue:	2									
Red:	4									
Average:	3.3									

• Walking along this segment is generally a pleasant experience.

<< <strongly disa<="" th=""><th>agree</th><th>Neutral</th><th></th><th>Strongly agree>>></th></strongly>	agree	Neutral		Strongly agree>>>
1	2	3	4	5

Green:3Lots of peds use this segment to access other areas.Pink:2.5Blue:3Not bad, but no micro-parks in the segment.Red:3Average:2.9

What other issues affect pedestrians on this segment?

Green: Good street trees. Drivers don't yield at unsignalized crosswalks.

- Pink: Future impacts of new building at Berry St. Biking kids on sidewalks. Accessing parked cars.
- Blue: Benches needed.
- Red: Greenbelt provides drainage and buffer from traffic. Parked cars also provide buffer, but with other impacts. Need more lighting.

Transit

What is the consensus of your group (circle corresponding number)?

•	The location and placement <<< Strongly disagree		and placement of bus stop ly disagree	of bus stops and shelters is good or Neutral		n this segment Strongly agree>>>	
		1	2	3	4	5	
	Green:	3	Shelters very beneficia	I. Additional	SB stop seems	unnecessary.	
	Pink:	2	More shelters than els	ewhere on co	orridor.		
	Blue:	2	No pullouts for stops n	lear onstreet	parking.		
	Red:	2	Need NB shelter. Light	ting needed a	at shelters.		
	Average	: 4					
•	Bus stop	s are	easy to access from eithe	er side of the	corridor		
	<<<\$	trong	ly disagree	Neutral		Strongly agree>>>	
		1	2	3	4	5	

	-	2 3 4 3
Green:	2	Need crosswalks
Pink:	3	
Blue:	2	No crosswalks near shelter stops.
Red:	2	Need crosswalks at every stop.

Average: 2.3

Bus operating frequencies (30 minutes weekdays) and schedules are adequate.

<< <strongly disagree<="" th=""><th>Neutrai</th><th></th><th colspan="3">Strongly agree>>></th></strongly>		Neutrai		Strongly agree>>>		
1	2	3	4	5		

Green: 3

- Pink: 2 15 minutes preferred by students. Fewer stops to speed up route times.
- Blue: Longer service into evenings.
- Red:1Need larger buses during PM.15 minute peak service.Sunday service needed.Average:2

What other issues affect bus riders on this segment?

Green:

- Pink: Waiting on weekends (need 30 minute service).
- Blue: Sunday service needed.

Red:

Motorists

What is the consensus of your group (circle corresponding number)?

•	Congestio	on is r	ot an issue on this se	egment of the corr	idor.		
	<< <st< th=""><th>rongly</th><th>disagree</th><th>Neutral</th><th>S</th><th>trongly agree>>></th><th></th></st<>	rongly	disagree	Neutral	S	trongly agree>>>	
		1	2	3	4	5	
	Green:	5					
	Pink:	2	Area near North St of day.	impact by turning	buses, gas stati	on traffic. Deper	nds on time
	Blue:	5					
	Red:	5					
	Average:	4.3					
•	On-street <<< St	t park rongly	ing is important alon disagree	g this segment of t Neutral	he corridor S	trongly agree>>>	
		1	2	3	4	5	

- Green: 3 Good for residents; bad for bikes. Narrows road in winter. Wider green space would be nicer.
- Pink: 3 Needed because of homes but barrier to complete streets.
- Blue: 4 Problem for bikes; needed for residents.
- Red: 4 Highly used. Driveways back onto busy street.

Average: 3.5

Are there any intersections/locations that are especially difficult to negotiate as a motorist on this segment (yes/no)? If yes, describe.

Green: North Street. Crossing from Washington to Berry (both directions).

Pink: North St. Future at Berry St?

Blue: Washington St crosswalk visibility. Doors opening from parked cars.

Red: SB left onto Washington because of heavy opposing traffic.

What other issues affect motorists on this segment?

Green: Bicyclists weaving in and out of parked cars (SB). Bicyclists taking lane slow traffic (traffic calming).

Pink: Fire Dept operations. Turning left from side streets onto southbound North Ave is difficult.

Blue: Left turn for North St and gas station problematic. Visual change at Berry.

Red:

Other Corridor Issues

Safety

What is the consensus of your group (circle corresponding number)?

<< <s< th=""><th colspan="2"><<<strongly disagree<="" th=""><th colspan="2">Neutral</th><th colspan="2">Strongly agree>>></th></strongly></th></s<>	<< <strongly disagree<="" th=""><th colspan="2">Neutral</th><th colspan="2">Strongly agree>>></th></strongly>		Neutral		Strongly agree>>>	
	1	2	3	4	5	
Green:	1					
Pink:	2	Less than elsewhere.				
Blue:	1					
Red:	5					
Average	: 2.3					

• Left turns are difficult to make along this segment.

<< <strongly disagree<="" th=""><th>/ disagree</th><th colspan="2">Neutral</th><th colspan="2">Strongly agree>>></th></strongly>		/ disagree	Neutral		Strongly agree>>>	
	1	2	3	4	5	
Green:	3	SB left onto Washing	gton is difficult b	ecause of stead	ly opposing traffi	c.
Pink:	3					
Blue:	2	Difficult to turn left	into Condo oppo	osite high schoo	I.	
Red:		Institute and Washir	ngton.			
Average.	: 2.7					

Gateways

Are there any locations on this segment that should be considered as Gateways? Gateways are locations where special design treatments could be considered to indicate neighborhood transitions, important crossroads, or changes in context (especially to drivers).

Green: Near Yankee Medical and at Washington Street.

Pink:

- Blue: Berry St could be a gateway.
- Red: North St. Washington/Berry.

Segment: VT 127 to Washington/Berry

Bicyclists

Are there any particularly difficult street crossings for bicyclists on this segment (yes/no)? Is so, where and why?

Green: VT 127 intersection. Road narrows at Institute. SB bike lane (between through and right turn lane) at Institute is difficult to negotiate. Blind spot climbing hill SB.

Pink VT 127 intersection (NB especially).

Blue: NB at VT 127 (even with ped call).

Red: VT 127 (cars travel fast around turns). Institute.

How accommodating is this segment to both novice and experienced cyclists? List issues relative to each group.

Novice/Recreational/Children

Green: Not accommodating.

Pink: Not accommodating for amateur cyclists.

Blue: Poor for young cyclists. Fair for intermediate cyclists.

Red: Very poor.

Experienced/Avid

Green: More manageable for experienced cyclists.

Pink: Okay for assertive cyclists.

Blue:

Red: Fair.

What other issues affect cyclists on this segment?

Green: Wrong way bike riding.

- Pink: No connection to bike trails to the west at VT 127. Bikes ride on sidewalk near Institute. Sidewalks are in poor condition.
- Blue: No connection to bike trails to the west at VT 127. This segment is dark. Poor sidewalk condition at Institute. Bike lanes aren't plowed. Left turns (SB) at Washington.
- Red: No bike trail connections at VT 127.

Pedestrians

<- <st< th=""><th>North . rongly</th><th>Avenue is difficult di disagree</th><th>ue to the distance Neutral</th><th>between mai</th><th><pre>rked crosswalks Strongly agree>></pre></th></st<>	North . rongly	Avenue is difficult di disagree	ue to the distance Neutral	between mai	<pre>rked crosswalks Strongly agree>></pre>
	1	2	3	4	5
Green:					
Pink:	3	Crossings not as im	portant along mud	ch of corridor	(less developed)
Blue:					
Red:	3				
Average:	3				
Crossing << <st< td=""><td>North . rongly</td><td>Avenue is difficult d disagree</td><td>ue to the speed ar Neutral</td><td>nd/or amount</td><td>of traffic. Strongly agree>></td></st<>	North . rongly	Avenue is difficult d disagree	ue to the speed ar Neutral	nd/or amount	of traffic. Strongly agree>>
-	1	2	3	4	5
Green:					
Pink:	4				
Blue:					
Red:	3				
Average:	3.5				
The cond	ition o	f sidewalks and cros	swalks is generally	y good	
<< <st< td=""><td>rongly</td><td>disagree</td><td>Neutral</td><td></td><td>Strongly agree>></td></st<>	rongly	disagree	Neutral		Strongly agree>>
	1	2	3	4	5
Green:					
Pink:	3				
Blue:					
Red:	4	Good except at City	Bluffs condos (ac	ross from higi	n school).
	2 5			-	

• There are barriers to Universal Access (lack of ADA curb ramps, obstacles that block the sidewalk) along this segment.

<<>St	<pre><strongly disagree<="" pre=""></strongly></pre>		Neutral	S	Strongly agree>>>		
	1	2	3	4	5		
Green:		Driveway crossings south of VT 127.	dip down (rather t	than flush with	sidewalk), espe	cially SB	
Pink:							
Blue:							
Red:	3	Driveway at cemete	ery.				
Average:	3						
Walking	along t	his segment is gene	rally a pleasant ex	perience.			
<< <st< td=""><td>rongly</td><td>disagree</td><td>Neutral</td><td>S</td><td>trongly agree>>></td><td></td></st<>	rongly	disagree	Neutral	S	trongly agree>>>		
	1	2	3	4	5		

Green:3Except next to sloped ledge on west side of street between VT 127 and Institute.Pink:3Blue:7Red:3Average:3

What other issues affect pedestrians on this segment?

- Green: Kids crossing street from Bus Shelter at Institute (not at intersection). More peds on west side of street.
- Pink: Rock outcropping/ledge on west of road makes uncomfortable ped environment. Drainage/splashing.
- Blue: Difficult to cross high-speed turns at VT-127. Missing segment near high school. Crosswalk at Champlain Farms has poor visibility.

Red:

Transit

What is the consensus of your group (circle corresponding number)?

The location and placement of bus stops and shelters is good on this segment • <<<Strongly disagree Neutral Strongly agree>>> 1 3 5 2 4 Green: Pink: Students jaywalk at Institute. Blue: Red: 4 Average: 4

Bus stops are easy to access from either side of the corridor
 <<Strongly disagree
 Neutral
 Strongly agree>>>
 1
 2
 3
 4
 5

	-	2	5	4	5
Green:					
Pink:					
Blue:					
Red:					
Average.	: N/A				

Bus operating frequencies (30 minutes weekdays) and schedules are adequate.
 <<Strongly disagree
 Neutral
 Strongly agree>>>

1	2	3	4	5

Green:

- Pink: 2 Students have to wait quite awhile. More frequent service needed on Saturday afternoon.
- Blue: Later buses needed.
- Red: Hourly is too long.

Average: 2

What other issues affect bus riders on this segment?

- Green: Offset shelter NB at Institute encourages jaywalking.
- Pink: Shelters too small at Institute. Need an Express service.
- Blue: Sunday service. Lighting at shelters (solar?).
- Red: Missed connections at downtown hub.

Motorists

<<<\$	strongly d	isagree	Neutral		Strongly agree>>>
	1	2	3	4	5
Green:					
Pink:					
Blue:	I	nstitute congested	l during AM (schoo	l start).	
Red:	5				
Averane	. 5				

On-stre	et par	king is important alon	g this segment of t	he corridor		
<<<	< <strongly disagree<="" th=""><th>Neutral</th><th colspan="2">Strongly agree>>></th><th>•</th></strongly>		Neutral	Strongly agree>>>		•
	1	2	3	4	5	
Green: Pink:						
Blue:	2	Parking in front of E services and events	Bessery's Market is at St. Marks.	s important; Ne	ed to accommo	date
Red:		Need some, but les	s than today.			
Average	e: 2					

Are there any intersections/locations that are especially difficult to negotiate as a motorist on this segment (yes/no)? If yes, describe.

Green: EB left and NB left at Institute doesn't get enough green signal time.

Pink: Institute.

Blue:

•

Red: Institute NB left. SB lefts at Champlain Farms and Washington Street.

What other issues affect motorists on this segment?

Green:

Pink:

Blue:

Red:

Other Corridor Issues

Safety

Speeding	g is a j	problem along this se	gment			
<<<\$	trongl	y disagree	Neutral		Strongly agree>>>	
	1	2	3	4	5	
Green:						
Pink:	4					
Blue:	3	Speed rounding co	rner approaching h	igh school.		
Red:	4					
Average	: 4.7					

• Left turns are difficult to make along this segment.

<< <st< th=""><th colspan="2"><<<strongly disagree<="" th=""><th colspan="2">Neutral</th><th colspan="2">Strongly agree>>></th></strongly></th></st<>	<< <strongly disagree<="" th=""><th colspan="2">Neutral</th><th colspan="2">Strongly agree>>></th></strongly>		Neutral		Strongly agree>>>	
	1	2	3	4	5	
Green:						
Pink:	3					
Blue:		Difficult to turn left	into Condo oppo	site high scho	ol.	
Red:		Institute and Washi	ngton.			
Average:	3					

Gateways

Are there any locations on this segment that should be considered as Gateways? Gateways are locations where special design treatments could be considered to indicate neighborhood transitions, important crossroads, or changes in context (especially to drivers).

Green:

Pink:

- Blue: VT 127. SB at Berry/Washington
- Red: VT 127. Institute Rd.

Segment: Shore Rd to VT 127

Bicyclists

Are there any particularly difficult street crossings for bicyclists on this segment (yes/no)? Is so, where and why?

- Green: VT 127, Ethan Allen, Leddy Park, Shore Rd, Lakewood, Saratoga, Killarney. Lack of signals, crosswalks, vehicle conflicts.
- Pink Ethan Allen Pkwy due to volume of traffic; Wait for signalized crossings isn't too bad.
- Blue: Crossing VT 127 northbound; this is least accommodating segment on corridor; no room/no shoulder/no bike lanes; Northbound green right turn at Ethan Allen conflicts with bicyclists.
- Red: Difficult the entire segment; left turns especially difficult; Traveling north or south through VT 127 is difficult; bikes exiting shopping center are in conflict with right turning cars.

How accommodating is this segment to both novice and experienced cyclists? List issues relative to each group.

Novice/Recreational/Children

- Green: Poor, pretty bad. Storm drains are an issue.
- Pink: Not at all. No place for bikes and traffic travels too fast.
- Blue: Entrance at Ethan Allen Park is difficult.
- Red: Will be on sidewalks; crossing side-streets is also difficult/dangerous due to conflict with right turning cars.

Experienced/Avid

Green:

Pink: Don't feel comfortable on road.

Blue:

Red: Bad even for experienced cyclists; drivers don't pay attention.

What other issues affect cyclists on this segment?

- Green: No bike lanes; speed and volume of traffic; don't feel safe riding in travel lane.
- Pink: Lack of bike lanes, especially between Leddy Park and Ethan Allen Park.

Blue:

Red: Bingo sign by Elks sign makes it impossible for motorists to see cyclists.

Pedestrians

What is the consensus of your group (circle corresponding number)?

- Crossing North Avenue is difficult due to the distance between marked crosswalks
 <<Strongly disagree
 Neutral
 Strongly agree>>>
 - 12345Green:5Pink:4Blue:5Red:4.5Average:4.6 (strongly agree)
- Crossing North Avenue is difficult due to the speed and/or amount of traffic.

<< <st< th=""><th>rongly disagree</th><th></th><th>Neutral</th><th></th><th colspan="3">Strongly agree>>></th></st<>	rongly disagree		Neutral		Strongly agree>>>		
	1	2	3	4	5		
Green:	5						
Pink:	4						
Blue:	5						
Red:	5						
Average:	4.5						

• The condition of sidewalks and crosswalks is generally good

	<< <strongly disagree<="" th=""><th>/ disagree</th><th>Neutral</th><th></th><th>Strongly agree>>></th><th></th></strongly>		/ disagree	Neutral		Strongly agree>>>	
		1	2	3	4	5	
	Green:	4					
	Pink:	4	Some issues at VT 127.				
	Blue:						
	Red:	3					
Average: 3.7		3.7					

• There are barriers to Universal Access (lack of ADA curb ramps, obstacles that block the sidewalk) along this segment.

<< <st< th=""><th colspan="2"><<<strongly disagree<="" th=""><th colspan="2">Neutral</th><th colspan="2">Strongly agree>>></th></strongly></th></st<>	<< <strongly disagree<="" th=""><th colspan="2">Neutral</th><th colspan="2">Strongly agree>>></th></strongly>		Neutral		Strongly agree>>>	
	1	2	3	4	5	
Green:	3	Not enough user exp	perience in group	o to comment.		
Pink:	3.5	Shopping center intersection on east side (north/south direction).				
Blue:						
Red:	3	Distances may make	travel difficult.			
Average:	3.2					

• Walking along this segment is generally a pleasant experience.

<< <st< th=""><th>rongly disagree</th><th>Ne</th><th colspan="2">Neutral St</th><th colspan="2">rongly agree>>></th></st<>	rongly disagree	Ne	Neutral St		rongly agree>>>	
	1	2	3	4	5	
Green:	2					
Pink:	3.5					
Blue:						
Red:	3					
Average:	2.8					

What other issues affect pedestrians on this segment?

- Green: Driveways and sidewalks; Crossing east leg of VT 127; Not enough crosswalks; More of a green strip desirable; snow accumulation.
- Pink: Green belts.
- Blue: Crosswalks are too long (streets too wide); signals are too long (long cycle lengths); New housing development will increase kids crossing street to get to bus; Summer farmers market crossing from bus stop is impossible.
- Red: Water in front of DMV.

Transit

•	The locat	ion ar	nd placement of bus	stops and shelters	is good on this	segment	
	<< <st< td=""><td>rongly</td><td>v disagree</td><td>Neutral</td><td>S</td><td>trongly agree>>></td><td></td></st<>	rongly	v disagree	Neutral	S	trongly agree>>>	
		1	2	3	4	5	
	Green:	4.5	Not many bus ride	rs in group.			
	Pink:						
	Blue:						
	Red:	3.5	One more shelter r southbound now.	needed northbound	d (north of Hanı	naford). Mostly provi	ded
	Average:	4					
•	Bus stops	are e	easy to access from e	either side of the co	orridor		
	<< <st< td=""><td>rongly</td><td>v disagree</td><td>Neutral</td><td>S</td><td>trongly agree>>></td><td></td></st<>	rongly	v disagree	Neutral	S	trongly agree>>>	
		1	2	3	4	5	
	Green: 2.5 Many stops lack		Many stops lack cr	osswalks.			
	PINK:						
	Blue:						
	Red:	2	No crosswalks.				
	Average:	2.5					

• Bus operating frequencies (30 minutes weekdays) and schedules are adequate.

<<<Strongly disagree Neutral Strongly agree>>> 1 2 3 4 5 Green: 3 Pink: Blue: Red: Hourly is too long. 15 minute peak and more Sunday service desirable. 2.5 Average: 2.8

What other issues affect bus riders on this segment?

Green: Buses don't serve side streets; pothole in front of shelter; no wifi at stops (stop amenities).

Pink: Long walks.

Blue:

Red:

Motorists

What is the consensus of your group (circle corresponding number)?

ion is r	not an issue on this s	egment of the corr	ridor.	
trongly	/ disagree	Neutral		Strongly agree>>>
1	2	3	4	5
2				
2	Leddy Park Rd inte	rsection.		
2	Ethan Allen interse	ction = stop +60; n	norning + even	ing = peak times.
3				
: 2.3				
	1 2 2 2 3 : 2.3	 trongly disagree 1 2 2 Leddy Park Rd interse 3 Ethan Allen interse 3 : 2.3 	trongly disagree Neutral 1 2 3 2 2 Leddy Park Rd intersection. 2 Ethan Allen intersection = stop +60; r 3 : 2.3	trongly disagree Neutral 1 2 3 4 2 2 Leddy Park Rd intersection. 2 2 Ethan Allen intersection = stop +60; morning + even 3 : 2.3

• On-street parking is important along this segment of the corridor

<< <s< th=""><th colspan="2"><<<strongly disagree<="" th=""><th>Neutral</th><th></th><th>Strongly agree>></th><th>></th></strongly></th></s<>	<< <strongly disagree<="" th=""><th>Neutral</th><th></th><th>Strongly agree>></th><th>></th></strongly>		Neutral		Strongly agree>>	>
	1	2	3	4	5	
Green:	1	Lacks on-street par	king today, and is	not needed.		
Pink:	2	Shopping center provides plenty of off-street parking.				
Blue:	1	So much parking el	sewhere and off-s	treet already.		
Red:	2	Not needed – enou	gh provided off-st	treet.		
Average	: 1.5					

Are there any intersections/locations that are especially difficult to negotiate as a motorist on this segment (yes/no)? If yes, describe.

Green: Any left turn that does not have a green arrow (protected left); Shore Road (all modes).

Pink: Left turns blocking through traffic (northbound) at shopping center.

Blue: Shore Rd; Ethan Allen

Red:

What other issues affect motorists on this segment?

Green: Speeding; narrow lane widths.

Pink: Wider outside lanes.

Blue: Only one northbound exit from shopping center; use Rite-Aid parking lot to get across.

Red:

Other Corridor Issues

Safety

What is the consensus of your group (circle corresponding number)?

speeding << <s< th=""><th>g is a prop trongly disa</th><th>agree</th><th>Neutral</th><th>:</th><th colspan="2">Strongly agree>>></th></s<>	g is a prop trongly disa	agree	Neutral	:	Strongly agree>>>	
	1	2	3	4	5	
Green:	4					
Pink:	5					
Blue:	5					
Red:	5					
Average	: 4.8					

• Left turns are difficult to make along this segment.

<< <st< th=""><th>rongly</th><th>disagree</th><th>Neutral</th><th></th><th>Strongly agree>>></th><th></th></st<>	rongly	disagree	Neutral		Strongly agree>>>	
	1	2	3	4	5	
Green:	4					
Pink:	4	Difficult anywhere the	here isn't a signal			
Blue:	5	Protected left at Sho well on this segment	opping Center is g t.	reat. A cente	r left turn lane would w	vork
Red:	4	Difficult even with the Northbound at Shor minute and cut other	raffic lights. Ethai e Road also probl er motorists off.	n Allen southt ematic – peop	oound is especially difficient of the second s	cult.
Average:	4.3					

Gateways

Are there any locations on this segment that should be considered as Gateways? Gateways are locations where special design treatments could be considered to indicate neighborhood transitions, important crossroads, or changes in context (especially to drivers).

Green:

Pink: VT 127 intersection is a transition point; Bike route from Leddy Park to Ethan Allen.

Blue: VT 127; Shore Road (right lane only for through movements is confusing).

Red:

Segment: Plattsburgh to Shore Road

Bicyclists

Are there any particularly difficult street crossings for bicyclists on this segment (yes/no)? Is so, where and why?

Green: Crossing Shore Rd is difficult and Plattsburgh Ave is generally dangerous.

- Pink No.
- Blue: Plattsburg intersection is a major problem, especially north-south.
- Red: Plattsburgh Ave (all approaches).

How accommodating is this segment to both novice and experienced cyclists? List issues relative to each group.

Novice/Recreational/Children

Green: Better than other segments, but still only experienced cyclists ride on the road.

- Pink: Depends on traffic and time of day. Biking on sidewalk is an option.
- Blue: Not accommodating.
- Red: Not accommodating ride on sidewalks.

Experienced/Avid

- Green: Better than other segments, but still only experienced cyclists ride on the road.
- Pink: Depends on traffic and time of day. Biking on sidewalk is an option.
- Blue: Experienced cyclists can use due to width of travel lanes (cars rarely use on-street parking).
- Red: Experienced cyclists can ride comfortably in the road due to wide lanes (including parking lane).

What other issues affect cyclists on this segment?

- Green: Left turns at intersections. Motor vehicle speeds.
- Pink: Plattsburgh Avenue intersection is dangerous for bikes and pedestrians.
- Blue: No designated bike lanes; Left turns are difficult; no pavement markings designating parking lane.
- Red: Left turns at Shore Road & Heineburg Rd. Split phases at Shore & Heineburg Rd.

Pedestrians

What is the consensus of your group (circle corresponding number)?

	Crossing <<< St	north rongly	Avenue is difficult d disagree	due to the distance between marked crosswalks Neutral Strongly agree>		
		1	2	3	4	5
	Green:	4	An issue for the en locations.	tire corridor. Schoo	ol children a	re crossing at unmarked
	Pink:	4				
	Blue:	5				
	Red:	5				
	Average:	4.5				
	-					
•	Crossing	North	Avenue is difficult d	ue to the speed an	d/or amount	t of traffic.
	<< <st< td=""><td>rongly</td><td>disagree</td><td>Neutral</td><td></td><td>Strongly agree>>></td></st<>	rongly	disagree	Neutral		Strongly agree>>>
		1	2	3	4	5
	Green:	5				
	Pink	5	primarily speed. T	raffic varies conside	rably during	the day.
	1 IIIK.	5	P - 7 - P			
	Blue:	5	Speed is primary is	sue; traffic volumes	s only heavy	during peaks.
	Blue: Red:	5 5 5	Speed is primary is Speed.	sue; traffic volumes	s only heavy	during peaks.
	Blue: Red: <i>Average:</i>	5 5 5 5	Speed is primary is Speed.	sue; traffic volumes	s only heavy	during peaks.
	Blue: Red: <i>Average:</i>	5 5 5	Speed is primary is Speed.	sue; traffic volumes	s only heavy	during peaks.
•	Blue: Red: <i>Average:</i> The cond	5 5 5 5 ition c	Speed is primary is Speed. of sidewalks and cros	sue; traffic volumes sswalks is generally	s only heavy	during peaks.
•	Blue: Red: Average: The cond	5 5 5 ition c	Speed is primary is Speed. of sidewalks and cros disagree	sue; traffic volumes sswalks is generally Neutral	s only heavy	during peaks. Strongly agree>>>
•	Blue: Red: Average: The cond <<< St	5 5 5 ition c rongly 1	Speed is primary is Speed. of sidewalks and crost disagree 2	sue; traffic volumes sswalks is generally Neutral 3	good 4	during peaks. Strongly agree>>> 5
•	Blue: Red: Average: The cond <<< St	5 5 5 ition c rongly 1 3	Speed is primary is Speed. of sidewalks and cros disagree 2	sue; traffic volumes sswalks is generally Neutral 3	good 4	during peaks. Strongly agree>>> 5
•	Blue: Red: Average: The cond << <st Green: Pink:</st 	5 5 5 ition c rongly 1 3 5	Speed is primary is Speed. of sidewalks and cros disagree 2	sue; traffic volumes sswalks is generally Neutral 3	good 4	during peaks. Strongly agree>>> 5
•	Blue: Red: Average: The cond <<< St Green: Pink: Blue:	5 5 5 ition c rongly 1 3 5 2	Speed is primary is Speed. of sidewalks and cros disagree 2	sue; traffic volumes sswalks is generally Neutral 3	good 4	during peaks. Strongly agree>>> 5

Average: 3.8

• There are barriers to Universal Access (lack of ADA curb ramps, obstacles that block the sidewalk) along this segment.

<< <st< th=""><th>rongly disagree</th><th></th><th>Neutral</th><th></th><th colspan="3">Strongly agree>>></th></st<>	rongly disagree		Neutral		Strongly agree>>>		
	1	2	3	4	5		
Green:	3						
Pink:	1						
Blue:	2						
Red:	3						
Average:	2.3						

• Walking along this segment is generally a pleasant experience.

<< <strongly disagree<="" th=""><th>/ disagree</th><th colspan="2">Neutral</th><th colspan="2">Strongly agree>>></th></strongly>		/ disagree	Neutral		Strongly agree>>>			
	1	2	3	4	5			
Green:	3							
Pink:	5							
Blue:	4	Less traffic and hou	Less traffic and houses are set further back on this segment.					
Red:	4	Sidewalks are separated from traffic and neighborhood is attractive.						
Average:	4							

What other issues affect pedestrians on this segment?

Green: Crossing Shore Rd is difficult. Right turn on red from Shore Rd & left turns from North Ave.

- Pink: Plattsburgh Ave is a difficult crossing for pedestrians. Crossing North Ave is an issue due to vehicle speeds.
- Blue: Two lanes of traffic are less impactful to peds than four; need better (ped scale) lighting; This segment is very dark.
- Red: Crossing is difficult at night because signals go into flashing yellow mode early. No sidewalks on side streets.

Transit

•	The location and placement of b			us stops and shelters is good on Neutral		this segment Strongly agree>>>	
		1	2	3	4	5	
	Green:	4					
	Pink:	5					
Blue: 5 More shelters needed (instead of just					stops).		
	Red:	5	Need more shelter	s. Some stops coul	ld be eliminat	ted.	
	Average.	: 4.8					

- Bus stops are easy to access from either side of the corridor • <<< Strongly disagree Neutral Strongly agree>>> 2 3 5 1 4 Green: 4 Pink: 3 Difficult to cross North Ave. Blue: 5 (from side streets) Red: 2 Depends on direction of travel. Crossing North Ave can be difficult. Average: 3.5
- Bus operating frequencies (30 minutes weekdays) and schedules are adequate.
 <<<Strongly disagree
 Neutral
 Strongly agree>>>

	1	2	3	4	5			
Green:	3							
Pink:	4							
Blue:	2	Need extended service	Need extended service hours and more weekend service					
Red:	1	Need more frequent evening service.						
Average:	2.5							

What other issues affect bus riders on this segment?

Green: Need a bus stop at Miller Center.

- Pink: Need services that extend off of North Ave into the neighborhoods.
- Blue: Strong support for extended Sunday service.
- Red: Frequent Sunday service would allow for recreational trips. Need 15 minute headways for weekday peaks.

Motorists

<<< Strongly disagree		y disagree	Neutral		Strongly agree>>>		
	1	2	3	4	5		
Green:	5						
Pink:	3	Pavement marking are poor	s where road trans	itions from fou	ur to two lanes (Sho	ore Ro	
Blue:	4	Congestion only du	uring AM peak (sch	ool related).			
Red:	5	Southbound left tu	irns at Heineberg a	re an issue.			
Average.	: 4.3		a nemeberg a				

On-stree	et park	ting is important alon	g this segment of t	he corridor:		
<< <s< th=""><th colspan="2"><<<strongly disagree<="" th=""><th colspan="2">Neutral</th><th colspan="2">Strongly agree>>></th></strongly></th></s<>	<< <strongly disagree<="" th=""><th colspan="2">Neutral</th><th colspan="2">Strongly agree>>></th></strongly>		Neutral		Strongly agree>>>	
	1	2	3	4	5	
Green:	1					
Pink:	1	Need to accommodate St. Marks church.				
Blue:	2	Parking in front of Bessery's Market is important; Need to accommodate services and events at St. Marks.				
Red:	2	Parking is importan	t for St. Mark's.			
Average	: 1.5					

Are there any intersections/locations that are especially difficult to negotiate as a motorist on this segment (yes/no)? If yes, describe.

Green: Plattsburgh Ave due to intersection geometry.

- Pink: Plattsburg Ave and Shore Rd intersections are skewed and create problems for motorists, pedestrians and bicyclists.
- Blue: Shore Rd; Ethan Allen
- Red: Intersections at Plattsburgh Ave, Shore Rd/Heineberg, Tracy Dr left turns.

What other issues affect motorists on this segment?

Green: Speeding; narrow lane widths.

- Pink: Loop detection is missing (or not working) on many side streets.
- Blue: Left turns out of Tracy Drive are very difficult due to proximity to Plattsburgh Dr
- Red: Left turns onto Heineberg are difficult.

Other Corridor Issues

Safety

< <strongly disagree<="" th=""><th>ly disagree</th><th>Neutral</th><th></th><th colspan="3">Strongly agree>>></th></strongly>		ly disagree	Neutral		Strongly agree>>>		
	1	2	3	4	5		
Green:	5	Speeding a probler	n between Hunt Sc	hool Driveway	and Plattsburgh		
ink:	4						
ue:	3						
ed:							
verage	: 4						

• Left turns are difficult to make along this segment.

<< <sti< th=""><th>rongly disagree</th><th>Ne</th><th>eutral</th><th>Strong</th><th colspan="3">Strongly agree>>></th></sti<>	rongly disagree	Ne	eutral	Strong	Strongly agree>>>		
	1	2	3	4	5		
Green:	2						
Pink:	3						
Blue:	4						
Red:							
Average:	3						

Gateways

Are there any locations on this segment that should be considered as Gateways? Gateways are locations where special design treatments could be considered to indicate neighborhood transitions, important crossroads, or changes in context (especially to drivers).

Green:

Pink:

Blue:

Red:

North Avenue Corridor Study - Public Meeting #1 Evaluation Form October 29, 2013 - 7:00-9:00 PM - Hunt Middle School, 1364 North Avenue

Number of respondents: 13

1. How did you hear about the Meeting? (check all that apply)

a) Email from Friend/Colleague2b) Email from Sponsors1c) Email from Other2d) City's BUZZ3e) City/CCRPC Website2f) Front Porch Forum4g) Burlington Free Press1

<u> </u>	
h) Seven Days	1
i) North Avenue News	2
j) Neighborhood Plan. Assembly	2
k) Flyer	0
I) Other (please describe)	
UVM Class (3); City Council; AARP	

2. Please rate the following aspects of the meeting:

Aspect	Fantastic	Very Good	Good	ОК	Poor	Terrible
Welcome	6	4	2			
Presentation	4	5	3			
Small Group Work	4	4	5			
Physical facilities for this event	2	7	4			
Amount of time allowed for input	4	6	3			
Overall value of this event to you	4	6	3			

Comments:

- Cookies and cider = good!
- Need more time in small groups
- Great format it worked well for input
- Well organized! Thank you!
- Very informational, however all members of the group were from the same area of the corridor so input for other sections was limited
- Good process good questions
- The facilitators were well-informed and led the public meeting effectively. The format of rotating from 1 table to another was useful in focusing on 4 different segments of the North Ave. corridor, but also proved somewhat repetitive, so attention drifted away towards the end of the meeting.

3. Anything else you'd like to share with us?

- Nice format great opportunity for input
- Did a good job handling a large crowd
- Overall, this was a useful meeting the opportunity to participate in decisions that my affect the future planning is greatly appreciated. Thanks!


North Avenue Corridor Study Public Workshop #2, February 20, 2014, 7:00PM St. Mark's Church Family Center, 1251 North Avenue, Burlington

http://bit.ly/north-ave

AGENDA

7:00 Welcome (Nicole Losch, City of Burlington)

7:05 Presentation (Joe Barr, Parsons Brinckerhoff)

- Status of Corridor Study
- Draft Corridor Vision & Goals
- Overall Issues and Improvement Options for North Ave
- Description of Breakout Group Activity

7:20 Breakout Groups – Visit each station for 20 minutes

- **Table 1:** *Nicole Losch, City of Burlington* (Pink Group Start Here)
- Table 2: Joe Barr, Parsons Brinckerhoff (Red Group Start Here)
- Table 3: Peter Keating, CCRPC (Green Group Start Here)
- **Table 4:** *Eleni Churchill, CCRPC* (Blue Group Start Here)

8:45 Report Back by Facilitators, Wrap up, Next Steps

9:00 Adjourn

Project Contacts:

Nicole Losch, City of Burlington DPW, 865-5833, <u>NLosch@burlingtonvt.gov</u> Eleni Churchill, Project Manager, CCRPC, 846-4490 x11, <u>echurchill@ccrpcvt.org</u> Joe Barr, Parsons Brinckerhoff, 617-960-4862, <u>barrje@pbworld.com</u>



North Avenue Corridor Study Public Workshop #2 Notes

DATE:Thursday, February 20, 2014TIME:7:00 PMPLACE:St. Mark's Church Family Center, 1215 North Avenue, BurlingtonPRESENT:See Attached

1) Welcome & Overview of the Study

Nicole Losch of Burlington DPW welcomed the group and provided an overview of the Study.

2) Study Presentation

Joe Barr of Parsons Brinckerhoff made a presentation including the status of the study, draft vision & goals, and overall issue and improvement options for the corridor. The presentation is available at: http://www.ccrpcvt.org/corridors/NorthAve/20140220 NorthAvePublicForum2Presentation Final.pdf

Question: Why doesn't the study include North Street to Battery Street? A: (Nicole Losch): This segment will be part of a future study that includes North Champlain and Park Streets. We needed to limit the scope of the study to make it manageable.

Question: The vision statement includes "economic development." How is that defined in the context of the study? A: (Nicole Losch): We want the transportation system to support existing economic activity as well as expected future growth. The Planning Department assisted us with growth projections. The twenty-year growth projections vary between 5-15 percent along the corridor.

Question: How to you factor in the Beltline as a mover of people in this area? A: (Eleni Churchill of the CCRPC): We have accounted for it through traffic counts and turning movement studies.

Question: Is your report about employment and traffic online? A: (Eleni): The "Existing & Future Conditions" report will be posted soon.

3) Breakout Groups

Participants were divided into four small groups to discuss corridor issues in detail. Each group reviewed a specific corridor segment, rotating to all four stations (i.e. – each group reviewed each corridor segment).

TABLE 1: Nicole Losch/Christine Forde - Washington Street to North Street

Option	Timeframe	Description
А	Short-Term (Less than 3 years,	Two 12.5' travel lanes
	working within existing curb line)	Sharrows on both sides
		One 8' southbound parking lane
В	Mid-Term (Less than 7 years)	Two 11' travel lanes
		Two 5' bike lanes
		One 8' southbound parking lane
C	Long-Term (More than 10 years)	Two 11' travel lanes
		Two 5' bike lanes with 2' buffers
		One 8' southbound parking lane
D	Long-Term (More than 10 years)	Two 11' travel lanes
		Two 5' cycle tracks with 2' mountable curbs
		One 8' southbound parking lane
E	Long-Term (More than 10 years)	Two 11' travel lanes
		One 8' southbound parking lane
		Landscaped strip with raised cycle track and sidewalk

Improvements for Discussion

<u>Corridor</u>

Need to keep parking but conflicts with bikes "A" not better than existing (existing has problems with debris) Consistency across all corridors is desirable – a standard design More bikes will Option "E"

Is it feasible to shrink green strips?

Should include Depot Street

Need bike lanes - no one will ride in lane with cars

Short-term – narrow lanes for bike lanes

Separation in "E" too wide - need separation for bikes - a physical barrier

"B" may not increase number of riders

Concerned with losing trees in green belt

If bus stop at Ward needs a crosswalk

North Street may be a good place for a mini roundabout

Bike box may not be necessary at North Street

Study should consider zoning changes and the impact of increased density

Evaluate on-street parking usage

Drainage of bike lane important

Consider cycle track

Buffered lanes to prevent car doors conflicting with bikes and to prevent cars from parking in bike lane

Cyclists use VT137 path or waterfront path

Cycle track not safe because of driveways

For option "A" don't eliminate lane – needs separate lane Option "C" is better for snow removal; Option "D" – no plowing, would need to be plowed Bike box is not really necessary at North Street

Intersections

Flashing beacons at all intersections because traffic doesn't stop for pedestrians and lots of beacons sets a tone for the road when pedestrians are present Crosswalk at Ward Street needed Raised or colored crosswalks to make them more visible Parking at curb ramps

TABLE 2: Joe Barr/Nick Schmidt - VT 127 to Washington Street

		Description		
Option	Timeframe	Institute Rd to Washington St.	VT 127 to Institute Rd.	
А	Short-Term (Less than 3	Two 12' travel lanes	Two 11' travel lanes	
	years, working within	Two 5.5' bike lanes	Two 5' bike lanes	
	existing curb line)		One 8' southbound or	
			northbound parking lane	
В	Mid-Term (Less than 7	Same as Option A	Same as Option A	
	years)			
C*	Long-Term (More than 10	Two 11' travel lanes	Two 11' travel lanes	
	years)	Two 5' bike lanes with 1.5'	Two 5' bike lanes with 2'	
		buffers	buffers	
			One 8' southbound or	
			northbound parking lane	
D	Long-Term (More than 10	Two 11' travel lanes	Two 11' travel lanes	
	years)	Two 5' cycle tracks with 2'	Two 5' cycle tracks with 2'	
		mountable curbs	mountable curbs	
			One 8' southbound or	
			northbound parking lane	
E	Long-Term (More than 10	Two 11' travel lanes	Two 11' travel lanes	
	years)	Landscaped strip with raised	One 8' southbound or	
		cycle track and sidewalk	northbound parking lane	
			Landscaped strip with raised	
			cycle track and sidewalk	

Improvements for Discussion

*Note: Option C for Institute Rd to Washington St also works within the existing curb line.

Cyclists swerve to avoid potholes

"Dooring" a concern with bike lanes next to parking

Plowing issues for cycle track

"D" safer for cyclists than "C"

Cycle tracks may remove trees

Pedestrian crossings at bike lanes needed at bus stops

All options assume same traffic levels Cars get stuck on ice behind northbound bus stop at Institute Road

"C, D, E" different than Table 1 (narrower street)
Whichever option is chosen, make consistent with other segments
Option "D" - less impacts to landscape, but maintains separation
Option "E" may have pedestrians walk in bike lane
Bike/pedestrian conflicts a dangerous recipe
Some hesitation about curbs being a tripping/falling hazard
Agree that short-term options are pursued quickly
Concern at rock outcropping – make space for greenbelt
Question of bicycle traffic at roundabouts
VT 127 right lane merge for cyclists is scary – used to have normal right turns 10 years ago
VT 127 – like the pedestrian island in dual-turn lane option

Left turn issues from cycle tracks with driver visibility

Don't assume any option can't be done

Clearly list what needs to happen for each option

Think of accommodating future travel modes with these improvements (trolley, light rail, EVs)

Additional property for VT 127 roundabout may come from portions already used for transportation (i.e. ramps)

Bike connection through Ethan Allen Park circuitous for commuting

Why aren't there more bus riders? Question of access, headways, or better buses?

Think about bus/bike conflicts for cycle track options

Gateway treatments at VT 127 to slow traffic

Parking may not be needed at portions where there are no housing/other issues Think about signage, especially speed limit signs

Think about bike buffer for "A" and "B" south of Institute Road. No need for 12 foot lanes How to account for snow removal for the options – "C" seems to be best option from this perspective

Much to upgrade because of cycle track

With VT 127 roundabout, no gaps in traffic for drivers turning from side streets onto North Ave. Consider bus loop operations at Institute Road. They can block Institute Road intersection traffic.

TABLE 3: Peter Keating/Sai Sarepalli - Shore Road to VT 127

mprover				
Option	Timeframe	Description		
Α	Short-Term (Less than 3 years,	Two 10' travel lanes		
	working within existing curb	One 10' center turn lane		
	line)	Two 5' bike lanes		
В	Mid-Term (Less than 7 years)	Two 11' travel lanes; One 11' center turn lane/raised		
		median; Two 5' bike lanes		
С	Long-Term (More than 10 years)	Two 11' travel lanes; One 11' center turn lane/raised		
		median; Two 5' bike lanes with 2' buffers		

Improvements for Discussion

D	Long-Term (More than 10 years)	Two 11' travel lanes
		One 11' center turn lane/raised median
		Two 5' cycle tracks with 2' mountable curbs
E	Long-Term (More than 10 years)	Two 11' travel lanes
		One 11' center turn lane/raised median
		Landscaped strip with raised cycle track and sidewalk

Right of way

Bring back trolleys (reserve option)

Neighborhood shuttle to move aged population

Continuous cycle track along corridor

Increase in aged population in this neighborhood

Options for aged population's mobility

Short-term option preferred with low speed.

Accommodate buses without impacting through traffic and bikes

Wide lanes, bus pullouts

Favor option "C"

Increase bus service frequency

Improve signage northbound at Ethan Allen intersection

Bike box northbound at Ethan Allen intersection

Relocate park entrance – option "B"

Sidewalk lower than road elevation – safety hazard in winter 10 foot option in "B" with buffer strip Favor option "B" with buffer strip Potential crosswalk at Village Green

TABLE 4: Eleni Churchill/Kirsten Merriman-Shapiro – Plattsburg Avenue to Shore Road

Option	Timeframe	Description		
А	Short-Term (Less than 3 years,	Two 11' travel lanes		
	working within existing curb	Two 5' bike lanes		
	line)	One 8' southbound or northbound parking lane		
В	Mid-Term (Less than 7 years)	Same as Option A		
С	Long-Term (More than 10 years)	Two 11' travel lanes		
		Two 5' bike lanes with 2' buffers		
		One 8' southbound or northbound parking lane		
D	Long-Term (More than 10 years)	Two 11' travel lanes		
		Two 5' cycle tracks with 2' mountable curbs		
		One 8' southbound or northbound parking lane		
E	Long-Term (More than 10 years)	Two 11' travel lanes		
		One 8' southbound or northbound parking lane		
		Landscaped strip with raised cycle track and sidewalk		

Improvements for Discussion

Option "A" is better than what we have now with a minimal investment Like bike lane between sidewalk and parking lane Concerned about raised curb for street maintenance Existing conditions are superior to any options because wide spaces with cars and eventually need to turn; I had to pick like option "E"; focus on other areas of corridor first Do not like "E" – concerned about separation between pedestrians and bikes More trees is more inviting – like a real neighborhood!! Lighting for all modes to improve safety Plattsburgh Ave. Intersections North Ave. intersection with Tracey has light/prohibit lefts People need to take left at Tracey Skeptical of roundabouts Do not understand roundabouts (reference Winooski and Taft Corners)

Intersections

How will people get in and out of Merola's? Bulb-out OK – more time for pedestrians Pedestrian lead signals Pedestrian exclusive signals No right on red when pedestrian crossing Staniford Road/North Ave. is bad – it needs attention with focus on pedestrians – consider rapid flashing beacons where appropriate Concerns about adjacent land uses Lots of improper use of left turn lanes at Heineberg and Shore Roads

<u>Road</u>

Options "D" and "E" are preferable but must be maintained, especially plowing "E" best for bikes "C" no good for bikes due to car doors Love short-term – best to do now

Intersections

Pedestrian crossing at Staniford Like bulb-out to slow traffic down at Plattsburgh Vehicle access (esp. left) at Merola's Maybe Merola's access from Tracey Drive – then roundabout Shore/Heineberg – right-size road – worked well on Colchester Ave.

<u>Road</u>

Like car parking on one side especially with more mid-block crossings Like option "D" Like option "C" or "D" better with separation and clarity for bikes Like "A" or "B" – do not need to do "C, D, E" Choices need to consider costs "C, D, E" expands amount of asphalt – more heat and increased stormwater Whole bike in different color "A" and "B" do not meet complete streets – won't increase more casual bicyclists Sigh distance for cyclists at intersections with parking lane Use granite curbs for maintenance by plows

Intersections

Need pedestrian crossing at Staniford More time for pedestrian crossing at Heineberg Crosswalks at Plattsburgh now! Like bulb-out at Plattsburgh to slow traffic Roundabout at Plattsburgh then Tracy drive can turn right or left Like modern roundabout for Plattsburg (2) Like gateway at Plattsburgh Gateway closer to 127 not at Plattsburgh Like long/medium term for Shore Road

Road

Images do not show curb cuts – this is important Car doors opening into bikes plus curb cuts Don't do anything until can get to options "C, D, or E" – not safe and creates attractive nuisance

4) Report Back by Facilitators, Wrap Up, & Next Steps

Each group summarized its findings. Joe, Nicole, and Eleni thanked everyone for attending. Next steps include:

- Post the Existing & Future Conditions Report online
- Start to develop proposals for short and long term
- Spring workshop will be scheduled in late April

The meeting was adjourned at 8:58PM.

Participants

Ayers	Tom
Becot	Florence
Bogdan	Karen
Bogdan	Dave
Branch	Nick
Branch	Pat
Bristow-	
Johnson	Robert
Buchanan	Kara
Buchanan	Gus

Carter-Lovejoy	Lorraine
DeMott	Ed
Duncan	Bob
Fandrich	Karl
Foss	John
Gomez	Guillermo
Grey	Jamie
Lefebvre	Theresa
Leopold	Mark
Ode	Carol

Parsons	Tim
Pibus	Lynda
Purcell	Nora
Reutter	Alex
Seleen	Chuck
Sullivan	Pat
Terhune	Lea
Trutor	Barry
Weigel	Brent
Winter	Kate

Advisory Committee Members: Kirsten Merriman-Shapiro, Jim Holway, Tony Redington, Charlene Wallace

Workshop Breakout Group Facilitators: Joe Barr (Parsons Brinckerhoff); Eleni Churchill (CCRPC); Christine Forde (CCRPC); Peter Keating (CCRPC); Nicole Losch (City of Burlington); Sai Sarepalli (CCRPC); Nick Schmidt (Parsons Brinckerhoff); Kirsten Merriman-Shapiro (City of Burlington).

Other Consultants: Diane Meyerhoff (Third Sector Associates)

Written Comments Received

From: Laura Schutz Sent: Tuesday, February 18, 2014 5:53 PM Subject: North Ave

Thanks for the posting about the North Ave meeting this Thursday. I will not be able to attend (have already made other plans), but wanted to mention that I think the intersection of Plattsburg Ave and North Ave is in desperate need of attention to improve pedestrian safety!!!

Besides that issue, I will mention that I do support the idea of moving to a single lane of traffic in both directions with a median turn lane - I feel this line has worked well on Williston Rd. (with the exception of how it widens to 2 lanes by the airport & shrinks back down - it would be better to add just a rt turn only lane instead of briefly having 2 lanes that merge again). It's strange & a bit confusing to have the road go from 1 lane by the HS to 2 lanes from 189 to St. Mark's then back to 1 lane. The wide lanes north of St. Mark's make for some confusion as does the northbound left lane becoming a turn only lane at St. Marks's. Thanks for your work here!

Laura Schutz, 30 Valade St.

From: Michael McGarghan Sent: Tuesday, February 18, 2014 7:47 PM Subject: comments on the plan

I cannot attend the public meeting this Thursday due to conflicting schedules. I wanted to include my concerns that bicycles are kept out of the traffic lanes in the North Avenue. While there might be some who feel they might want to give the right of way over to a bicycle on this corridor, there must be careful consideration that it never come at the expense of taking away a lane of car traffic, or the safety of pedestrian that will be caught off guard from fast moving bikes that don't obey traffic rules that licensed motor vehicles on the road must do. That is what the community bike path is for, and they can and should use the sidewalks and designated bike paths or walk their bikes if they have no other choice. They are not entitled to the use of the North Avenue traffic lanes until they put a license plate and register that bike and obey every stop sign, intersection and other rule of the road. Slow moving bikes up the hill by BHS will be a dealt with how?

Thank you for listening to my concerns. Mike McGarghan, 111 Birch Court

From: Kel Rossiter Sent: Wednesday, February 19, 2014 8:10 AM Subject: North Ave Meeting

Hello,

I am unable to attend the upcoming Feb 20th meeting, but I am interested in staying abreast of project plans/developments. Speaking generally, for purposes of my own public input, I am very much in favor of making that corridor more bike-friendly.

Thanks, Kel Rossiter, 83a N. Champlain Street

From: Andrew Mack Date: 02/19/2014 12:01 PM (GMT-05:00) Subject: North Avenue re-imagined

Given how well the three-lane approach has worked in the several places it has been installed in the city, I think having a trial period with these markings would be productive. Even if it slows traffic some, it would probably encourage more use of the belt-line.

Andrew Mack Burlington Choral Society Taiko Aikokai New England (BTG) Run for Jump

From: Lea Terhune Sent: Friday, February 21, 2014 12:14 AM

I attended the public workshop at St, Mark's tonight. Related documents on website were easy to access and read. Thanks. Central location, space set up beautifully, everything about the logistics of the meeting was great. The facilitators were wonderful, the format was fun and interesting. The brownies were delicious! Good turnout, too!

The problems I see are

- we are planning for yesterday, not 2035 and beyond,
- senior mobility options are not included, and
- there are some practicalities that are being ignored.

We should have constructed complete streets as you show in the plans years ago. By the time 2035 rolls around, we will have spent our transportation dollars to catch up to where we should be now. To design for 2035, we need to plan reduce cars in the city and dependency on cars for the short trips on the Avenue. It is not practical to imagine that many more people will walk and bike. It's not safe to bike until there are separated, protected bike lanes. They are in the long-term plan, but is that practical? If you build it, will they come? My neighbors say no. Most people can't or won't walk or bike in cold or inclement weather, and a large percentage of seniors can't or won't walk more than a mile, or bike, even in the best weather. Parents won't let their kids bike there. So long term bike lanes aren't practical for most people we want to move around, and short-term they aren't safe. Share the road with reduced speed limits costs nothing and it is safer.

Roundabouts to make intersections safer for biking and walking are a nice idea, but bike lanes aren't safe as long as the bikers have to navigate among parked cars and curb cuts. If we create bike lanes as designed in the short-term plan, the city would be knowingly creating hazard zones. Encouraging people to use bike lanes that are not safe is unconscionable. People aren't stupid; most will not use them. Most don't use them now. And, we don't use buses, either. Roundabouts make intersections safer for seniors. Well ok, but wouldn't it be simpler to reduce speed limits and lengthen crosswalk time? Roundabouts are safer for cars. Yes. Roundabouts are more attractive than signalized intersections. YES!

The most practical planning investment for 2035 is a street design that includes step on and off solar light rail. That would get a plan into the pipeline that takes us into the future. Shuttles run routes into the neighborhoods connecting schools, senior housing and residential areas to the rail stops on the Avenue. Bike lanes flank the center rail line, and cars are on the outside. (photo attached) Buses/shuttles fan out from the avenue. I think it was at a transportation conference in Portland that they demonstrated state of the art light rail, cars made in Barre VT! We could buy local.

For bike commuters (my husband is one), connect the existing bike paths and create a safe, separated express bike lane on the beltline. If it is prohibited, enlist the assistance of our VTrans, our legislators and our congressional delegation to get a waiver. Speed limit on that road needs to be reduced anyway. It is ridiculous to speed from North Ave to Park Street just to maybe get somewhere a few seconds faster. For recreational cyclists and walkers, improve/widen the existing bike paths.

Frequently when table reps reported out, I heard them say "we heard many of the same things..." But you want to listen for what wasn't the same. If you wanted a lot of the same, why bother to get us together at all? In every group I heard points that the scribes did not relate, because they weren't the same! Repeatedly I heard facilitator say we couldn't do something when of course we could. One woman said, "we shouldn't dismiss an idea because we can't do it now, only to find out 20 years from now that many other cities did it because they challenged the can'ts." Example in VT is single payer. They said it couldn't be done, but we got a waiver.

Why continually play catch-up? Look for the next thing, and plan for that. To make intersections safer for all users <u>now</u>, reduce speed limits and lengthen crosswalk time. Simple, and it doesn't cost a dime. For bikers, continue to share the road with reduced speed limits, instead of building bike lanes that aren't safe because of parked cars and curb cuts. Put an express bike lane on the beltline -- oh, there's already a separated path there! Make it useful, accessible, figure our why people can't use it.

Thanks for inviting more comments. Those are mine. Lea Terhune, 22 Appletree Point Lane

From: Jean Markey Duncan Sent: Wednesday, February 19, 2014 8:30 AM Subject: North Ave.

I was wondering if you could clarify something for me. When I read, "North Avenue Re-Imagined", I actually thought we were going to be reimagining the street in its entirety. I thought we might be considering a complete regrading of the streets, to lower the roadway so that the street is not higher than the sidewalk and so that puddles at the curb do not threaten walkers and bikers with total saturation when the streets are wet, as they do now. I imagined strategically placed islands along the avenue to breakup the runway affect. These islands would be beautifully planted and act as an oasis for people crossing the street. Turning lanes would be located near islands. I imagined streetscape improvements like eliminating the ugly fencing along the avenue between Little Eagle Bay and Lakewood estates and replacing it with sound barrier walls that could be planted with trumpet creeper or other attractive foliage. I had hoped that we might establish some limits on rooftop antennae that is threatening to make the street look like an industrial corridor. (i.e., new structure recently erected on top of Ethan Allen shopping center building.) Maybe a low but densely planted circle by the Alliance Church to move traffic down North Ave. or onto the beltway? How about some art? A given, of course, would be bike lanes and all accommodations for alternative means of transportation and all the smart street design elements that would make sense. Goal would be to beautify the roadway and surrounding area, improve the environment with plantings and rain gardens and make it safe for everyone day and night while keeping traffic moving slowly but steadily.

Now I am beginning to think that the reimagining might be limited to painting new lines on the existing street?

I am e-mailing because I am out-of-state now with my father who was in an auto accident and therefore I won't be able to be at the meeting. Thanks in advance for your reply. Jean

Comments from the Meeting Evaluations

- I appreciate the work taken to develop these options please maintain focus on physical separations to protect bike lane.
- Need a 20 year assumed area development (density impact) changes (residential/commercial, etc.) to make this activity to be useful.
- I love the idea of not having four lanes and having a left turn lane instead. I best liked options A, B, or C. The other options aren't necessary.
- Don't tell us something can't be done. Tell us why it can't be done today and what needs to change.
- Does the bus company have an active participant in the process positioned at the highest level? If not, please.
- All examples of street options should indicate total new curb-to-curb dimension to more easily understand loss of greenbelt width.
- While my group was composed of bicycling advocates, I'm hoping other modes were disproportionately rep. in the remaining groups. No way to know but the point I suppose is to be sure the vision stays comprehensive and equitable.
- I'm concerned about traffic congestion when construction is being done.
- Gateway treatment @ 127 (to slow traffic)
- For Table 3: short-term preferable to midterm because mid-term=wider car lanes near onstreet, biking-speeding-injuries!
- Important to highlight the different ways in which residents can provide input after the meeting. Overall it was a valuable meeting. It is important for short term measures to be implemented as steps in the right direction, but not forgetting the vision of the corridor in the long term.
- It seems that a huge improvement to bikers' experience and safety would be to fill the <u>many potholes</u> that are close to the curve.
- Bring back the trolley.
- Standardize a single (professional) concept for all corridors. Then, show how it would apply to all corridors (with modifications), then lay opinions can make a difference.
- Allow bike access from 127 bikeway to North Avenue at the North Ave and "Beltline" 127 access.
- Do you have a best chance option why?
- Do you have costs, etc.?
- 10 foot lanes and bike lanes in pavement separators
- Excited at having any sort of bike lane we can't judge which option is best without cost data!
- Is the advisory committee comprised of folks from all relevant sectors?

North Avenue Corridor Study - Public Workshop #2 Evaluation RESULTS February 20, 2014 - 7:00-9:00 PM – St. Mark's Church, 1251 North Avenue

22 Evaluations Received as of February 23, 2014

1. How did you hear about the Meeting? (check all that apply)

a) Email from Friend/Colleague	5
b) Email from Sponsors	4
c) Email from Other	0
d) City's BUZZ	2
e) City/CCRPC Website	3
f) Front Porch Forum	7
g) Burlington Free Press	1
h) Seven Days	0

i) North Avenue News	3
j) Neighborhood Plan. Assembly	3
k) Flyer	1
l) Walk 'N Roll News	2
m) Other (please describe)	
Professional relationships,	
On Steering Committee (2)	

2. Please rate the following aspects of the meeting:

Aspect	Fantastic	Very Good	Good	ОК	Poor	Terrible
Welcome	4	13	5	0	0	0
Presentation	3	13	4	1	0	0
Small Group Work	4	9	6	2	1	0
Physical facilities for this event	5	10	5	1	0	0
Amount of time allowed for input	5	7	6	3	0	0
Overall value of this event to you	9	7	2	3	0	0

Comments:

- Very educational. I hope some of the ideas are used.
- I appreciate the work taken to develop these options please maintain focus on physical separations to protect bike lane.
- Felt like 1st small group stop was entire spent understanding visuals, didn't get to give feedback, other three stops were spend commenting.
- It was a valuable event to hear about the options for the corridor. Small work sessions should have had more presentation from staff. Comments easily went off topic.
- Things got loud during small group work. Wish the group work was longer.
- This was OK! Staff/facilitators were very open and curious.
- Need a 20 year assumed area development (density impact) changes (residential/commercial, etc.) to make this activity to be useful.
- I love the idea of not having four lanes and having a left turn lane instead. I best liked options A, B, or C. The other options aren't necessary.
- Thank you!
- A little loud, but ended up okay.
- Don't tell us something can't be done. Tell us why it can't be done today and what needs to change.
- Would have preferred to see info about options before small group work to have more time to process.
- Route options discussion redundant from group to group. Option A, B, etc. should have been consistent from group to group.
- Does the bus company have an active participant in the process positioned at the highest level? If not, please.
- All examples of street options should indicate total new curb-to-curb dimension to more easily understand loss of greenbelt width.
- While my group was composed of bicycling advocates, I'm hoping other modes were disproportionately rep. in the remaining groups. No way to know but the point I suppose is to be sure the vision stays comprehensive and equitable.
- Poor acoustics.
- Thank You!

North Avenue Corridor Study - Public Workshop #2 Evaluation RESULTS February 20, 2014 - 7:00-9:00 PM – St. Mark's Church, 1251 North Avenue Page 2 of 2

3. Anything else you'd like to share with us?

- I'm concerned about traffic congestion when construction is being done.
- Gateway treatment @ 127 (to slow traffic)
- For Table 3: short-term preferable to midterm because mid-term=wider car lanes near onstreet, biking-speeding-injuries!
- Good handouts!
- Important to highlight the different ways in which residents can provide input after the meeting. Overall it was a valuable meeting. It is important for short term measures to be implemented as steps in the right direction, but not forgetting the vision of the corridor in the long term.
- It seems that a huge improvement to bikers' experience and safety would be to fill the <u>many potholes</u> that are close to the curve.
- Bring back the trolley.
- Standardize a single (professional) concept for all corridors. Then, show how it would apply to all corridors (with modifications), then lay opinions can make a difference.
- Allow bike access from 127 bikeway to North Avenue at the North Ave and "Beltline" 127 access.
- Do you have a best chance option why?
- Do you have costs, etc.?
- 10 foot lanes and bike lanes in pavement separators
- Excited at having any sort of bike lane we can't judge which option is best without cost data!
- Mrs. Eleni Churchill is awesome!
- Is the advisory committee comprised of folks from all relevant sectors? Great, great workshop, Thanks!
- Overall good! Steering needs more process time!!

North Ave Corridor Study

Flynn School PTO meeting April 3, 2014 Notes by Nicole Losch

Attendees: 10

Northernmost section + Plattsburg Ave intersection:

- Would like northbound bike markings for cyclists where right-turn-lane begins
- Northeast corner of Plattsburg / North Aves is very challenging sidewalk ends & no crossing across North Ave
- Southeast corner is too wide and cars are too fast turning
- Can have exclusive ped phase and No Right Turn on Red?
- Proposed new crosswalks seem like good locations
- On-street parking in that section is not really needed, only used by 1 car
- Could have sign at Bessery's for parking behind building?

Shore Rd to Rt 127:

- Like the two-way-left-turn-lane concept
- Section seems to have the worst sidewalks of the entire corridor

General comments:

- Many concerns for winter maintenance of cycletrack concepts, but buffered bike lanes were appealing
- For implementation, focus on safety improvements first
- Could have bus pull-outs?

North Avenue Corridor Study Public Forum

Come tell us what YOU think!

Tell us about the issues and share your ideas of how to improve travel for all users on North Avenue

(between North Street and Plattsburg Avenue)

Heineberg Senior Community Center February 5, 10:15 AM



North Avenue Corridor Study, Burlington, VT

Notes from Heineburg Club Forum (Seniors)

February 5, 2014

Pedestrian Access:

- Crosswalks do not meet the needs of visually disabled
- Short walking time at Heineberg and in many other locations
- *Poor conditions of sidewalks, difficult to walk or use scooters. Very difficult in winter conditions
- Traffic volume is high and makes people feel unsafe
- Can't get from here to Hannaford's because the sidewalks are unsafe
- No clear designation on West Side of North Ave for pedestrians high volume of motorists and driveways.
- HS area poor sidewalk conditions
- Bank, difficult area because of standing water
- *Driveways* challenging b/c there is lots of traffic coming into the Street, feels unsafe
- Goss Court- light needed, challenging intersection. Interference with turns, need to look in many directions

Crosswalks:

- Why can't stop in all four directions because it is unknown whether its safe to walk because motorists are making right and left turns. Motorists can wait. I don't mind waiting for people to cross safely.
- Shore Road- Not enough time to walk.
- Walking up North Ave., wait for traffic. Need more cross walks not necessarily more lights.
- No RIGHT ON RED.
- Better visibility of pedestrian crosswalks. MORE CROSSINGS needed throughout corridor.
- Crossing signals need to meet the needs of disabled

Aesthetics- Experience of North Ave

- A little scary with 2 lanes of traffic.
- Speed limits change frequently, its confusing
- Need more trees
- Speed limit signage is poor.
- Cyclists need a bike lane. It is hazardous for bicyclists and they ride on sidewalks, which then make sidewalks dangerous. Separate cyclists + pedestrians
- How many lanes on Avenue? Too many changes makes for confusion.

- Problem with drives come up to bicyclists where there is drainage. Makes it scary to pass bicyclists. Concern from motorists.
- Interaction coming off the beltway. Are large trucks able to go through.
- Have heard talk about roundabouts. Would rather those than what we have now. Need to have improved access to crosswalks in this configuration.

Transit

- Doesn't come very often. The bus only goes down north Ave and does NOT go onto the side streets. Some people cannot walk that far from their house.
- Bus schedules have been reliant.
- <u>Challenge</u> to go down Tilley Drive (medical services). Took all day to get there (3 transfers).
- Need direct routes to busy locations especially for medical appointments on Tilley Drive.

Motorists

- Intersection at Heineberg. Do a dance to get out, not a clear direction to turn.
- Tracy Drive intersection, cannot turn left, both stores dump traffic into this section. Unsafe.
- Franklin Square, gas stations
- Goss Court concerns
- Neighborhood streets are where the speeding happens. Speed as they approach stop signs.

On Street Parking

- Combination, of concerns with safety and its unknown whether it is allowed and isn't allowed.
- No place on Corridine (?). Need on street parking (except for St. Mark's Church).
- Village Green, lights are not long enough/ meet needs for visually impaired.
- Street close to beltway, difficult to get out.

Bike

- *We need bike lane, separated from road. Need safe bike bath. Well marked bike lane down the corridor.
- This conflicts with parking on street. Can't have on street parking
- No place to park bikes. We need them!

Presenters: Eleni Churchill (CCRPC) and Nicole Losch (City of Burlington) Notes prepared by Kelly Stoddard Poor of AARP



CITY OF BURLINGTON, VERMONT

CITY COUNCIL TRANSPORTATION, ENERGY & UTILITIES COMMITTEE

c/o Department of Public Works 645 Pine Street, Suite A Post Office Box 849 Burlington, VT 05402-0849 802.863.9094 VOX 802.863.0466 FAX 802.863.0450 TTY www.burlingtonvt.gov

Councilor Maxwell Tracy, Chair, WARD 4 Councilor, Tom Ayres, WARD 2 Councilor William "Chip" Mason, WARD 5 Inquiries: Guillermo Gomez 802.540.0557 DIRECT ggomez@burlingtonvt.gov

DRAFT: Transportation, Energy and Utilities Committee of the City Council

Wednesday, June 26, 2013 at 5:00 - 7:30 PM

DPW Front Conference Room –MINUTES–

Members present: Chair, Maxwell Tracy Tom Ayres

Others present: Guillermo Gomez, DPW Nicole Losch, DPW Meredith Birkett, CCTA Tony Redington

Chair Maxwell called the meeting to order at 5:04 pm.

1. Agenda

Chair Tracy moved to accept agenda, excluding item 6, Flynn Avenue due to absence from Councilor Mason, proponent of the agenda item. Ayres second. All in favor.

2. Public Forum

Tony Redington: Former state employee and member of the Bicycle & Pedestrian Council. Highlighted concern about how our transportation needs are beyond our funding capacity. Suggested City Council to recognize that something has to be done with the backlog in transportation and infrastructure needs. This is not only a local issue, but a state and national issue. The City is currently faced with a "non-growth" situation in terms of population and that this will have an impact in terms of sustainability and transportation. Praised work done by the City Council and the selection of the new DPW Director.

3. Minutes of 5/22/2013

Tracy motioned to adopt minutes. Ayers second to approve with a correction in item 6: Replace Dodds Court with Gosse Court.

Item 4: CCTA Route & Schedule Planning, Meredith Birkett

Birkett: Presentation about key facts from CCTA and how the routes are scheduled and planned. CCTA is the only regional transit authority. It currently operates 14 local routes, 5 commuter routes and 2 shopping shuttles. CCTA has an annual ridership of 2.7 million with a fleet of 70 vehicles. CCTA has identified a range of services to be implemented as additional funding becomes available, such as new commuter routes, intermodal connections, service upgrades, etc.

Ayers: Why are sometimes stops removed from a particular route?

Birkett: This is typically done to make a route more competitive

Ayers: Could projected service to/from Malletts Bay pass through the New North End?

Birkett: The route will most likely use Route 127.

Birkett: Funding is a mix of passenger revenue, grants and local matches by communities served. CCTA has identified issues with long term funding in their Transit Development Plan. New routes are typically funded by grants such as the CMAQ grant. The challenge with this funding source is that funds are limited and the grant is extremely competitive.

Avers: Do cities/towns along a route chip in for transit service?

Birkett: A request for a local match is typically done on a case by case basis. Communities that advocate for a route usually provide a local match.

Spencer: Burlington pays approximately 65% of the local matches received by CCTA, so Burlington is not usually asked to provide a local match when new routes are being planned.

Birkett: Reallocation of existing resources sometimes makes up for shortfalls.

Tracy: Is Sunday service being considered?

Birkett: CCTA is looking into costs right now. New funding is extremely competitive.

Tracy: For the real time information being planned by CCTA, will there be on-site screens on bus stops for people who don't own smartphones?

Birkett: Busier stops and transfer stops will have display screens.

Spencer: It will also be possible to call over the phone and get information with the bus stop ID. The Council is encouraged to "make noise" to bring these issues to the CCTA Board.

Item 5: North Avenue Corridor Study, Nicole Losch

Losch: The first advisory committee meeting took place approximately two weeks ago. CCTA was also involved in this meeting. NPA representatives also attended the meeting. NPA representatives were asked to update residents at NPA meetings. Next on the schedule for the study is to compile the corridor's existing conditions, which is currently under way. The first public meeting is expected to

happen sometime in September, to fully understand the existing conditions. There is also discussion of having a corridor tour. There will also be a project website, which will be hosted through the CCRPC. The City website will also have a link to the project website. All the presentations and meeting minutes will be posted in the project's website.

Tracy: How is the study funded?

Losch: The study is funded through the Regional Planning Commission's Annual Work Program. The City provides a 20% match.

Ayers: When will the final report be ready?

Losch: The report should be finished around May, 2014. There are four public meetings scheduled for the study, not including the advisory committee meetings.

Ayres: Are advisory committee meetings open to the public?

Losch: Yes, they are.

Tracy: When would it be appropriate to check in again for progress on the study?

Losch: When we are closer to the Public Meetings.

Tracy: Who are the consultants?

Losch: Parsons Brinckerhoff and Third Sector Associates.

Item 6: Councilor's Updates:

Dewey Park:

Losch: Before Counts have been completed. The Pilot Project will start some time in July.

Safe Routes to School:

Ayers: Updates on North Avenue Project

Gomez: The Safe Routes to School project consists of pedestrian signal improvements on three intersections along North Avenue (Plattsburgh Avenue, Heineberg Road, Ethan Allen Shopping Center). The project also includes bumping out the southeast corner of the North Avenue – Plattsburgh Avenue intersection to reduce the crossing distance. This project is 100% State funded and will be built during the 2013 construction season.

Booth Street

Tracy: There are still speed issues along Booth Street after the installation of traffic calming. Is there anything additional that could be done?

Losch: What was put in place is the highest level of traffic calming. Chicanes are an option. We don't really have them in Burlington. Residents have to go through the traffic calming process again to request a revamp of the traffic calming. Multiple meetings are needed to complete the process.

Next TEUC Meeting:

The TEUC will tentatively be on break for July (will check with Councilor Mason). Next TEUC meeting will be Tuesday, August 20th at 5:00 PM at DPW.

Item 11: Adjourn

Ayres moves to adjourn. Tracy second. All in favor. Adjourned at 6:04 pm.



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Transportation, Energy and Utilities Committee

DRAFT MEETING MINUTES:

Thursday, March 6th- 2014 at 4:45 PM

DPW – Front Conference Room 645 Pine Street – Burlington, VT

Members present:	Chair, Maxwell Tracy	(TEUC)
	Tom Ayres	(TEUC)
	Chip Mason	(TEUC)

Others present: Norm Baldwin, DPW Guillermo Gomez, DPW Nicole Losch, DPW Chapin Spencer, DPW

Chair Tracy called the meeting to order at 4:55 pm.

1. Agenda

Chair Tracy moved to approve the agenda with the addition of one item at the end: An update on CCTA negotiation. All in favor.

- 2. Public Forum
- 3. Minutes of 1/21/14

Councilor Ayres moved to approve minutes from 1/21/14. All in favor.

4. Spring Street Closure

Losch: Information about the closure was included in the memo attached to the meeting agenda. There was a neighborhood request for Traffic Calming in 2012. Residents were concerned about vehicles speeding and the awkward sight lines at this location. We have been

working together for this closure with Parks and Recreation because of the location, right next to Dewey Park. After discussing the options with residents, there was interest in testing a street closure. DPW did a pilot project, which included data collection, and later analyzed and discussed the results and observations. General results were satisfactory. Only one person complained about the closure. We held a negative poll, which closed last week. The results were in favor of moving forward with the permanent street closure. We plan to implement the closure in two phases. First, we will do the closing with a temporary measure. We are doing this because Parks & Rec is interested in expanding the park. Phase 2 of the closure will be managed by Parks & Rec. Today we are asking the TEUC's approval and advancement of this to the City Council.

Tracy: The results are consistent with what I heard from the neighbors.

Losch: We got feedback from residents, which proved useful in improving the design.

Tracy: What is the temporary measure to be used for the closure?

Losch: We are going through the options. We do not want Jersey barriers. Planter boxes are an option. We are also in conversations with Burlington City Arts to see if the school could participate in this. Parks might also be able to contribute small trees.

Mason: Is there ever a presentation at an NPA level for traffic calming?

Losch: Not usually. The meetings usually include the residents that are directly affected. If there is a major impact, we will hold a larger meeting. The first meeting for this project attracted a lot of supporters.

Tracy: Yes, a good mix of people showed up.

Losch: The neighborhood has been very active throughout the project.

Councilor Mason moved to approve the closure and bring this to the City Council. All in favor.

5. Colchester/Pearl/Prospect Intersection – Nicole Losch, DPW

Losch: We are in the midst of a scoping study for the Colchester/Pearl/Prospect intersection. This study was initiated after the Colchester Avenue Corridor was completed. As part of this project, a short term alternative was conceived, which consisted of changes in signalization and lane configuration at the intersection. The Steering Committee for this study met after the data collection was completed, and based on the feedback received, the committee voted to make the changes at the intersection permanent. The pilot project had already gone through the Public Works Commission, which approved all the regulatory changes.

We are finishing the scoping study. The Steering Committee will meet in the upcoming weeks to vote for the preferred alternative. We will be coming back to this Committee and the Council with this preferred alternative. If the preferred alternative involves a realignment of the intersection, we will work with the Regional Planning Commission to move this project to construction.

Mason: How would the realignment work?

Losch: We would encroach into one of the properties and the UVM Green would be expanded. More details about this will be available at the end of this study.

Tracy: Is UVM on board with this?

Losch: Yes. They are among the stakeholders in the Steering Committee. They want to see a carefully done, well thought design.

6. North Avenue Corridor Study – Nicole Losch, DPW

Losch: We recently held the second Public Meeting for this corridor study. We had a good turnout for this past meeting. Approximately 35 residents attended. The meeting allowed members of the community to go through all the different options envisioned for each of the segments that make up the corridor. The next meeting is scheduled for April, to get feedback from the residents on the different alternatives.

Ayres: I was there for part of the meeting. I had the chance to listen to the presenters in one of the tables set up during the meeting.

Losch: It has been challenging to get the word out for this project. We are currently developing an online tool so we can hopefully reach out to more people and capture their feedback.

Ayres: I was pleased with the attendance for this meeting.

Losch: There are a couple of locations where roundabouts could potentially work and are being considered.

Ayres: I hear a lot about the intersection of Plattsburgh Avenue

Tracy: Are there any cycletracks being considered?

Ayres: I think there is a lot of support for cycletracks

Losch: Many of the options presented include the implementation of cycletracks.

Ayres: Part of the success in the perception of cycletracks I think comes from bike advocates, which have been engaged in the neighborhood.

Losch: We held a special meeting at the Heineberg Center. There was general support for the alternatives that were presented. The responses received show openness to new ideas.

Spencer: We are planning to reach out to the two new councilors.

Ayres: I would like to take part of this.

7. Bicycle & Pedestrian Action Plan – Nicole Losch, DPW

Losch: We received a grant to scope for bicycle and pedestrian improvements. The intent of this grant is to help develop an implementation plan. This study will help identify priorities and allow us to go through a public process. Through this study, we will come up with specific alternatives that can be advanced in the future. The process involves issuing an RFP. There are local and national companies that are interested in doing this study. We have been in conversations with the Regional Planning Commission about expanding the study to include performance measures. If we revisit our status every year and track progress, we might see things move faster.

Tracy: Everyone seems to be in favor of this.

Losch: Funding is always one of the biggest hurdles to move projects forward. Lisa Aultman-Hall recently gave a very interesting presentation about the different obstacles that communities face to move projects forward. It was a very interesting presentation. She mentioned funding, topography and climate among the different factors that difficult the advancement of projects in our area. Larger projects will have to be funded externally, through grants or PPPs (Public-Private-Partnerships). All these different issues will be discussed through this study.

Spencer: Once we have a clear idea of what our needs and priorities are we can have the discussion about how to fund these projects. We have planned a lot, but when it comes to constructing, we have to prioritize so we can move forward.

Tracy: What is the status of the North Winooski Corridor Study?

Losch: The Regional Planning Commission's Technical Advisory Committee is currently reviewing the application. It has been recommended to be funded, but there are still a few steps before the final decision on the application is made.

8. Adoption of the Town Road and Bridge Standards – Nicole Losch, DPW

VTrans is encouraging municipalities throughout the State to adopt the Town Road and Bridge Standards. The standards are a brief document and every year we must send a certification. We recommend the City to adopt these standards. The main advantage of adopting these standards is that in case of emergencies, the local share that the City must provide is reduced. We will get the TEUC members a copy of the standards for review.

Mason: How urgent is this issue?

Losch: It is not very urgent at this time.

Mason: Is there a downside to adopting these standards?

Losch: None that we can identify at this time.

Councilor Mason moves to discuss this in the next TEUC meeting. All in favor.

Spencer: We have also been reviewing a document from NACTO (National Association of City Transportation Officials). The document is "NACTO, A Street Design Guide). We are working to adapt these guidelines. We will come to this committee in the future to discuss this topic.

9. CCTA Negotiations

Spencer: Pending on negotiations on Saturday, the Union could call for labor action on Monday. Our hope is to reach an agreement on Saturday. We are trying to balance the need for full time work. We are proposing a few part time positions and review how we split the shifts. Our goal is to set up a schedule for full time workers to have fixed schedules. I am in a unique position for these negotiations because I am a supporter of labor, but I also understand the business side of CCTA.

Ayres: Can you explain about how CCTA plans to deal with the "time hole" between the two peak periods of each day?

Spencer: There is currently a 5.5 hour "time hole" between the two peak periods. Part timers are being proposed for the peaks. There has been growth service in CCTA, but this growth in concentrated in the morning and peak hours of the day. Under the current model, drivers have to fight over voluntary extra work.

Tracy: Are other municipalities facing similar challenges?

Spencer: I don't know the specifics about what other cities are doing. Larger transit systems have more flexibility, but CCTA is a relatively small system.

Mason: Can workers go on strike or is there a requirement to give notice?

Spencer: No notice is required. Drivers could go on strike with or without the blessing of the Union. If any agreement is reached, the condition will be of not going on strike. The biggest impact of the strike would be on the neighborhood special.

10. Councilors' Updates

Tracy: I will create a summary of our work per request of Council President Shannon.

Spencer: I have a proposal. We need to have a conversation about looking at our asset bases and how they are funded. We are doing OK with roads but we need to explore our sidewalk funding. We have a limited pot of funds. I am interested in meeting with this group so we can present and discuss the different options.

Tracy: I agree. I hear a lot of complaints about the state of our sidewalks.

Spencer: I would like to propose a joint TEUC – Public Works Commission Meeting for the end of March.

The meeting is proposed for March 27th from 4:45 to 5:45 PM

Tracy: Is the administration on board?

Spencer: Bob Rusten has been very receptive and I have also had preliminary conversations with the Mayor.

Tracy: I think there would be great support for this initiative

11. Adjourn

Tracy moves to adjourn. All in favor. Meeting adjourned at5:49 PM.



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Transportation, Energy and Utilities Committee

DRAFT MEETING MINUTES:

Wednesday, April 30th- 2014 at 4:45 PM

DPW – Front Conference Room 645 Pine Street – Burlington, VT

- Members present: Chair, Maxwell Tracy (TEUC) Tom Ayres (TEUC)
- Others present: Pat Buteau, DPW Guillermo Gomez, DPW Nicole Losch, DPW Chapin Spencer, DPW

Chair Tracy called the meeting to order at 4:51 pm.

1. Agenda

Chair Tracy moved to approve the agenda. All in favor.

2. Public Forum

3. Minutes of 3/6/14

Councilor Ayres moved to approve minutes from 3/6/14. All in favor.

4. Traffic Fund Discussion – Pat Buteau, Chapin Spencer - DPW

Spencer: Traffic fund is currently strained. We are looking for opportunities to find efficiencies and increase revenues.

Buteau: There are four areas that we are trying to change

1. Eliminate Operating Deficit

- 2. Capital Investment (Assessment)
- 3. Stabilize Traffic Fund
- 4. Secure cash to purchase technology upgrades

We are considering different measures to achieve these objectives:

- Easy fixes, such as garage automation.
- Turning garages into 24/7 facilities
- Provide extra security
- Potential increases and extended hours for meter enforcement in downtown
- Demand sensitive pricing
- Increase monthly leases

Multiple options are on the table. We wanted to bring this issue to the TEUC to get some input before going in front of the full commission.

Tracy: Are all these measures expected to be rolled out at the same time?

Buteau: No. Different measures must follow different processes. For example we are looking at the 2 free hours of parking. The charter says that 2 hours of free parking must be provided, but it doesn't specify where. The Marketplace garage is the busiest facility in Downtown; however, some 70% of the users are non-paying users (users under 2 hours). One option is eliminating the 2 free hours in the Marketplace Garage, but providing those 2 free hours at other locations.

Ayres: Could you talk about the extended meter enforcement time and the timeline for rollout?

Buteau: Some of the current parking meters that we have are 3-hr meters, plus some that are 10-hr meters. Current enforcement is between 8 am and 6 pm.

Ayres: If we change enforcement hours, I am concerned about the consequences on art events. I know the Flynn can sometimes have events that go over the 3-hr mark.

Buteau: With the implementation of new technologies, such as smart meters, we want to get rid of the time restriction

Ayres: Is it true that there are apps that will give notifications to users?

Buteau: We are currently looking at different types of technologies. There are apps with multiple features in the market. Apps can inform users when their meter time is about to expire. There are technologies that read license plates, so if someone has put money in their meter and still have time left, they can park elsewhere and still make use of this time.

Spencer: We are planning to talk to the Mayor to see which of these technologies we should roll out and how. We have a study underway that will provide recommendations, but in the meantime, we consider that we should take interim measures to address the all these issues. We would love the TEUC's input. We plan to talk to the Mayor and then to the Public Works Commission. We want to know if you consider all these measures something defensible.

Tracy: I think all of what you are presenting here is defensible. I support what you are proposing and I will be happy to attend the commission meeting.

Spencer: After our meeting with the Mayor, we will come to the TEUC with a formal proposal

Ayres: If I have no conflict, I will also be happy to attend the Public Works Commission meeting. I will also be happy to convey my support to the Mayor.

Buteau: Hoyle Tanner & Associates was selected recently to conduct a Parking Assessment Study.

Ayres: Regarding the installation of smart meters, what is the timeline for this city-wide?

Buteau: Each of the smart meters costs between \$6.900 and \$7,900. Each meter is supposed to be for approximately 10 parking spaces, which is related to how much people are typically willing to walk to the meter. We are looking to use technologies that do not require pay and display. Mostly likely, payment will be tied to license plates. And we are also trying to figure out some of the enforcement issues. Our initial plan would be for approximately 280 in the downtown core. We are looking also for other technologies, such as in-car meters. We have also other improvements coming, such as improved wayfinding.

5. DPW Fiscal Year 15 Budget Discussion – Chapin Spencer

Tracy: We requested to include this item in the agenda to start getting an idea of what the priorities for Public Works will be for the upcoming fiscal year. We don't want to talk about the numbers yet.

Spencer: We are getting ready to start rolling out a full blown budget for the new fiscal year. This time, we are happy to announce that water and waste water are not seeking a rate increase for next year. As you may already know, we are down one engineer in our staff, so we are in the process of hiring someone to replace Erin Demers. We do have multiple projects along the way. There will be some investment this fiscal year in new equipment. There will be no major changes in the budget for FY 15. We should be going to the full City Council in the upcoming weeks for the budget sessions. Preparation of the budget is well underway.

6. Sidewalk Funding – Nicole Losch, DPW

Spencer: We presented this topic to the Public Works Commission. This topic is line with one of the objectives of the City of providing operational excellence.

Losch: In order to sustainably maintain our current system, we want to reach a 35 year life cycle for sidewalks and a 75 year life cycle for curb. There are current identified issues with our network, but we are not investing enough keep up with the maintenance needs. Our goal is to improve the quality of our concrete infrastructure, by providing a safe and walkable network, and invest in curb repair and construction to prevent greenbelt scouring and compaction. The deterioration of curbs also has an impact in the water quality. We want to document the current state of our system and secure funding to implement our goals.

Our current sidewalk system consists of approximately 127 miles of sidewalk. 42% are deficient, with a Sidewalk Condition Index (SCI) of 51.3. Our yearly budget for sidewalks is approximately \$600,000. Since 2008-2009 we started prioritizing our work, but even with this, at the current rate of investment, sidewalks are on a 126 year life cycle. In the future, we want to add approximately 4.5 miles of new sidewalks to meet the City policy and secure adequate funding to bring the life cycle to 35 years.

Ayers: What are some of the deficiencies in the sidewalks?

Losch: Exposed aggregate, spalling, horizontal displacement, vertical displacement, obstructions, cracking, and drainage problems. Most of the repairs are done by our right-of-way crews.

We don't have as much information about our curb system. We don't know how many miles of curb we have, but we would like to have approximately 132 miles of curb. Currently there is no dedicated funding source for curb repair or construction. We dedicate yearly approximately 10% of our sidewalk budget on curbs but that is not nearly enough. There are multiple funding strategies that we have been researching, such as property tax variations, material options and district based modeling (see presentation). We brought this subject to the last Public Works Commission. They provided some input regarding the funding options we should consider or reject. We are planning to return to the Public Works Commission next month for a funding recommendation. After this, we will come back to the TEUC and then the full City Council, before going to the general public.

Tracy: Is the plan to bring this to the next Town Meeting Day?

Spencer: I am supportive of a dedicated funding source. We are still waiting to hear from the Public Works Commission. They asked to take a closer look at the funding alternatives.

Tracy: I am glad this conversation is happening. This has been one of my top goals, based on the feedback I received from residents. I think if this is put on the ballot, it would be supported.

Ayres: I think this would get a positive reaction at the New North End as well.

Spencer: What do you think is the next step we should take?

Ayres: What was the reaction from the Public Works Commission?

Losch: We would also like to present the option of reducing or cutting other services together with a few other alternatives and gauge the reaction to see how we should proceed after.

Tracy: We will need to know the timeline for this and clarity on who needs to approve what.

Spencer: If it is a tax increase, it will have to be approved by the City Council.

Losch: We can't really advocate for any of the options. We can research, present and inform people, and then the decision makers will eventually have the final word.

Ayres: I think multiple groups should be involved in this effort, such as the local NPAs, the Crossing Guard Program, AARP, etc.

Tracy: I will check with the Mayor to see how this fits with the City's priorities.

Spencer: Is this something that we should pursue for the November election?

Tracy: I think that November is a good time, since the winter will allow time for preparation.

Ayres: Given all that there is under discussion currently, it might be better to give it some more time.

Spencer: Can you bring this to your respective caucuses?

Tracy: We will bring up the subject.

Ayres: Please send the material related to this presentation.

7. North Avenue Corridor Study Update – Nicole Losch, DPW

Losch: We have an upcoming Public Meeting. I will now provide a brief review of the study.

The corridor study is evaluating North Avenue from a Complete Streets perspective and is developing recommendations for remaking the corridor to accommodate all users. There are numerous stakeholders that are part of the Advisory Committee for this study (City Council, the School District, City of Burlington, CCRPC, CCTA, AARP, NPA Reps from Wards 3, 4 and 7, Local Motion, Livable Communities).

The corridor was divided into five distinct corridor segments for the purpose of the study. Each segment has its own characteristics and issues. The existing conditions and improvement options were documented and presented at a Public Workshop that took place on February 20, 2014. A wide range of options were presented to attendees and short-term, mid-term and long-term solutions were developed throughout the corridor.

The next step is to analyze the specific transportation improvements options and how they address identified issues to meet the corridor vision and goals. The next Public Workshop will be held on Tuesday, May 20th at 7:00 PM at St. Mark's Church Family Center.

Ayres: What has been the response from the other Councilors?

Losch: I have met with councilors Hartnett and Wright. I haven't heard from Bianka.

Ayres: Any input?

Losch: Councilor Wright encouraged us to reach out more to the New North End residents because there are still a lot of people that we haven't heard from.

Ayres: How many of the proposed concepts can be initially implemented as pilot projects?

Losch: We are looking into this, but it is a challenge. As we realign travel lanes, traffic will depend on what treatments we have at the intersections.

Ayres: I have a feeling this will be contentious. On one side you will have the bike advocates and on the other you have the drivers. If there are any concepts that can be initially installed as pilots, this could probably help easing some concerns. We are also interested in economic development.

Losch: There is a strong link between land use and transportation. We are definitely interested the opportunity that this study provides to promote economic development.

Ayres: I am committed to this process. Multimodal safety was one of my priorities during my campaign. Are there any concerns about the length of trips along the corridor?

Losch: This is something we are looking into. With changes on the road, there will likely be some kind of impact. It is a matter of determining what the impact will be and if it is acceptable.

8. Councilors' Updates

The next TEUC meeting will take place on Wednesday, May 28th at 4:45 PM at the Front Conference Room at Burlington Public Works.

9. Adjourn

Tracy moves to adjourn. All in favor. Meeting adjourned at 6:31 PM.


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Transportation, Energy and Utilities Committee of the City Council

Wednesday, August 13th, 2014 at 4:45 PM

Burlington Police Department – Community Room

1 North Avenue – Burlington, VT

-AGENDA-

- 1. Agenda
 - a. DISCUSSION
 - b. ACTION
- 2. Public Forum
- 3. Minutes of 5/28/2014
 - a. DISCUSSION
 - b. ACTION
- 4. Garage Assessment Pat Buteau, DPW
- 5. Consolidated Collection Tom Moreau, CSWD
- North Avenue Corridor Study Update Nicole Losch, DPW
 (This agenda item will be informational only. The formal presentation of the study will be on the September TEUC meeting, scheduled for September 10)
- 7. Councilors' Updates
- 8. Adjourn

Regular City Council Meeting (Monday, June 16, 2014)

Generated by Amy Bovee on Thursday, August 21, 2014

Members present

Tom Ayres, Norm Blais, Sharon Bushor, Dave Hartnett, Jane Knodell, Bianka Legrand, Chip Mason, Karen Paul (phone), Rachel Siegel, Max Tracy, Kurt Wright, Joan Shannon

Absent

Selene Colburn, Vince Brennan

Meeting called to order at 7:10 PM

1. Agenda

Action: 1.01 Approve/Amend the Agenda

Also present: Mayor, Scott, Lori, Rich, Eileen, Richard,

Move to Amend to remove from the consent agenda 5.22 Communication from Mayor Miro Weinberger re: City of Burlington Diversity and Equity Strategic Plan and place it on the June 23rd City Council Deliberative Agenda per Mayor's Office; Items 5.28 and 5.29 Special Event Outdoor Entertainment Permits, note date changes per Clerk's Office; Remove Item 5.32 Communication from Jeff Nick, Church Street Marketplace Commission from Consent Agenda as duplicative per Clerk's Office; Amend Action on Item 5.38 Communication from Jeff Nick, Church Street Marketplace Commission re: Requesting Ordinance Prohibiting Smoking on the CSM District from 9:00 a.m. to 9:00 p.m. and place on June 23rd City Council Deliberative Agenda.

Councilor Siegel requested they divide the consent agenda to address item 5.16. Action (Consent), Resolution: Authorization to Execute Airport Joint Use Agreement (AJUA) with United States of America for Use of Burlington International Airport (Board of Finance) separately. She stated she would like to address this separately but does not need to discuss it. City Attorney Blackwood stated that would be the proper procedure.

Motion by Max Tracy, second by Sharon Bushor.

Final Resolution: Motion Passes

Aye: Tom Ayres, Norm Blais, Sharon Bushor, Dave Hartnett, Jane Knodell, Bianka Legrand, Chip Mason, Karen Paul, Rachel Siegel, Max Tracy, Joan Shannon

2. Public Hearing

Action, Public Hearing, Resolution: 2.01 Resolution: Allocation Method and Standards for Common Area Fee Formula and Establishment of Common Area Fees for The Church Street Marketplace for Fiscal Year 2015 (Board of Finance)

City Council President Shannon opened the public hearing at 7:15pm.

No one came forward to speak.

City Council President Shannon closed the public hearing at 7:15pm.

Councilor Bushor stated this is a two part process. They received the methodology and proposal in May and held public hearings. They received no comments regarding the proposed formula. This is the final act to set the fees for the coming fiscal year.

Adopt the resolution

Motion by Councilor Bushor, second by Councilor Ayres Final Resolution: Motion passes Aye: Tom Ayres, Norm Blais, Sharon Bushor, Dave Hartnett, Jane Knodell, Bianka Legrand, Chip Mason, Karen Paul, Rachel Siegel, Max Tracy, Joan Shannon

3. Indoor Entertainment Permit Application (2014-2015)

http://www.boarddocs.com/vt/burlingtonvt/Board.nsf/Public

City Council President Shannon thanked the administration for their work in creating the support documents. She thanked channel 17 for televising the work sessions.

Action: 6.05 Resolution Annual Appropriation & Budget for Regional Programs for FY 2015 (Board of Finance)

Councilor Ayres stated he will be recusing himself from this vote because of his position as executive director of First Night Burlington.

waive the reading and adopt the resolution

Motion by Jane Knodell, second by Sharon Bushor. Final Resolution: Motion Passes Aye: Norm Blais, Sharon Bushor, Dave Hartnett, Jane Knodell, Bianka Legrand, Chip Mason, Karen Paul, Rachel Siegel, Max Tracy, Kurt Wright, Joan Shannon Recuse: Tom Ayres

Action: 6.08 Resolution Creation of Information Technology Department (Board of Finance)

Councilor Bushor stated she is pleased as a resident and City Councilor to see the formation of an IT Department. It is long overdue and she is glad the administration has made this a priority. When she read the resolution, she had some suggestions. The resolution states that the Department Head will be appointment annually by the Mayor. She believes this makes sense for the first year, but she believes it might be worth rethinking this in the future to make it a longer appointment. Her rationale is that this is someone who will have technical expertise. Making this a revolving door position with each Mayor may not serve IT or the City well. She also believes that they should include a help desk function as part of the responsibilities of the Department.

waive the reading and adopt the resolution

Motion by Jane Knodell, second by Sharon Bushor.

Final Resolution: Motion Passes

Aye: Tom Ayres, Norm Blais, Sharon Bushor, Dave Hartnett, Jane Knodell, Bianka Legrand, Chip Mason, Karen Paul, Rachel Siegel, Max Tracy, Kurt Wright, Joan Shannon

7. Presentation

7.01 Presentation: Nicole Losch, DPW, re: Intersection Scoping Study for Colchester St/Pearl St/Prospect St (oral)

Nicole Losch, DPW, stated they have initiated this study as a result of their 2011 Colchester Avenue Corridor Plan. The Council accepted the plan which recommended improvements to that corridor. Among those was a recommendation to conduct a scoping study for the Colchester/Pearl/Prospect intersection to address its offset alignment and improve mobility and safety for all users. They initiated the study through the Chittenden County Regional Planning Commission and they hired Resource Systems Group. They convened a steering committee including City Councilors, Ward 1 NPA, UVM, CATMA, DPW, the RPC, CCTA, and Local Motion. The Committee identified the purpose and need of the project. The purpose is to identify a preferred alternative that enhances safety for all modes of transportation. The need for the project is to address peak period traffic congestion to improve the safety of the intersection and alleviate inadequate accommodations for cyclists and pedestrians.

David Saladino, Resource Systems Group, stated this study was driven by the propensity for crashes. It was the 25th worst location in the State for the number of crashes. The offset approach causes issues for drivers, pedestrians and cyclists. It has a high volume of pedestrian traffic during peak hours. When this project started, there was not an advanced pedestrian phase for east west crossing. There was recurring congestion during evening peak times. Through the process they considered several alternatives. They used a pilot project that they tested and worked well. They also tested three longer term alternatives. The project had public input and they requested that they make any small easy changes quickly to see some immediate improvements. DPW made those changes happen. The primary change was that they removed parking on the downhill side of Pearl Street to make wider shoulders for cyclists. They prohibited left turns onto North Prospect. They removed parking spaces in front of the University Health Center to process northbound traffic. They also installed no turn on red LED signs on two of the corners to allow pedestrians to cross the street when they have a walk signal. They made those changes and observed the effects throughout the year. The Public Works Commission voted to permanently eliminate the parking spaces and to prohibit left turn

movement from Pearl to North Prospect. The Committee then looked at the larger scoping study and built on the alternatives. The first two would align the North South approaches. They would shift the South Prospect approach to align it with North Prospect. This would be a land swap with the University of Vermont on both sides of the street. They also hope to create a pedestrian plaza on the southeast corner. They also hope to add a bike box to allow cyclists to get in front of the stopped vehicles. There is a possibility to do that at other intersections and the City will continue to look at that. The second alternative is the same except there is a left turn lane on the north approach. It would be eleven feet wider and would process traffic better. The downside is it creates a longer pedestrian crossing distance and would cost more. The third alternative was a roundabout. It would be a 100 foot radius which is less than the standard. The volumes lend themselves to a roundabout, but the physical constraint of the building did not lend itself to a roundabout. They studied the wait time that would take place during peak hours. Right now they have 119 seconds of delay. Alternatives one and two would cause half the delay. The roundabout alternative was not good. Alternative 1 has all positive improvements. Alternative 2 has some very good improvements, but there are also some negative or neutral aspects. Both would cost about the same amount. There will be some changes in the number of parking spaces.

Ms. Losch stated their next step is to identify their preferred alternative. The steering committee met and endorsed Alternative 1. They took this recommendation to the Transportation, Energy and Utilities Committee who were also supportive. They plan to return to the Council with a resolution at the next meeting. They will recommend Preferred Alternative 1. They will identify funding, design, and implement the alternative. Their implementation of pilot projects gained some national recognition with the study through the National Association of City Transportation Officials. It was recognized as being an innovative way of testing long term projects.

Councilor Bushor stated this was a model process. They had a steering committee representing all of the stakeholders. They had some heated debates and they made decisions. She applauded Ward 1 residents who came up with a pilot program that did not cost money and made that intersection safer.

Councilor Knodell inquired if the preferred alternative is what is there now. Ms. Losch stated it will shift the intersection to the west. It will expand the UVM Green, will retain a right turn lane from South Prospect Street onto Colchester Ave., and will have a shared through or left turn lane from South Prospect to North Prospect or Pearl Street. Mr. Saladino stated three approaches will stay as they are, but the Northbound approach will shift. Councilor Knodell inquired if they have tracked the safety data. Ms. Losch stated they have, although it has only been in place for six months. This is a short window to get a lot of safety data. They have not heard of any crashes since it was implemented. Councilor Knodell inquired if they have an estimate of the cost of the project. Mr. Saladino stated there is a chance that it could be partially locally funded. Because it is a high crash area they may be able to access highway safety funds through the State. There will probably be a variety of funding sources.

City Council President Shannon inquired if they will have the funding sources identified when they come to the Council for approval. Ms. Losch stated they have not identified the funding source. They will not indicate where the funding would come from. City Council President Shannon inquired what they would be seeking approval for. Ms. Losch stated they would be asking for approval for the preferred alternative and they would then seek funding. They will have more of an ability to find funding if they have their plans in place. Councilor Bushor stated the improvements have made a world of difference and people are wondering why they need to do more. This could be safer for pedestrians and bicyclists, which is why they are proposing this alternative. She believes it is safer for pedestrians. Cyclists are still at risk. They are trying to make it safer for all modes of transportation.

8. Commission & Board Appointments

Councilor Wright requested a brief recess. City Council President Shannon recessed the meeting for five minutes.

Communication: 8.01 Communication - Boards and Commissions Nominating Committee re: City Council 2014 Commission & Board Appointment Worksheet

Councilor Siegel moved to nominate a slate of candidates for items 8.02 through 8.07 and 8.11 through 8.14.

Councilor Siegel thanked all Board and Commission applicants. They have transformed their process over the past few years. Three years ago the appointments were made via a slate that was created in a closed meeting. Within those meetings there were cultures of trading candidates between parties. She was uncomfortable with that process. They created a pilot process last year where they held work sessions to interview all candidates with all of the Councilors. It allowed only two minutes per candidate and was an awkward format. That pilot opened up the process so that it was more transparent, but it was not efficient. They revised the plan and created the pilot that they used this year. There was a nominating committee of



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Transportation, Energy and Utilities Committee

DRAFT MEETING MINUTES:

Wednesday, August 13th - 2014 at 4:45 PM

Burlington Police Department – Community Room 1 North Avenue – Burlington, VT

Members present:	Chair, Maxwell Tracy	(TEUC)
	Tom Ayres	(TEUC)
	Chip Mason	(TEUC)

Others present: Pat Buteau, DPW Guillermo Gomez, DPW Liam Griffin Phil Hammerslough RJ Lalumiere Nicole Losch, DPW Bill McGrath Tom Moreau, CSWD Jon Olin, Hoyle Tanner & Associates Tony Redington Paul Sisson Chapin Spencer, DPW Charlene Wallace, Local Motion

Chair Tracy called the meeting to order at 4:53 pm.

1. Agenda

Chair Tracy moved to approve the agenda. All in favor.

- 2. Public Forum
- 3. Minutes of 7/1/14

Councilor Ayres moved to approve minutes from 5/28/14. All in favor.

4. Downtown Parking Initiative – Pat Buteau (DPW) & John Olin (Hoyle Tanner & Associates)

See supporting documents for this meeting for the Executive Summary of the Garage Assessment Report

Buteau: I want to introduce you to Jon Olin, who is with Hoyle Tanner, representing the consultant hired to do the garage assessment for the City. He will introduce some of the key findings from the study.

Olin: Thanks. I am with Hoyle Tanner & Associates. We recently completed the garage assessment for the City. Our approach to this project was to assess and understand the needs for repairs on the garages and classify and price all these needs. We classified the repair list depending on the urgency of the work needed into the following categories:

- Immediate repairs
- Short term repairs (1-2 years)
- Mid-term repairs (2-5 years)
- Long-term repairs (10 years)

We also helped identify an annual maintenance plan.

In the College Street Garage we found poor lighting and structural deficiencies. Repairs are mostly at the floor level.

The Lakeview Garage, being the newest, has significantly less needs, mostly preventive work.

Buteau: We are looking to finance the repairs. We will shuffle around some of the repairs. We will need to borrow money in two stages. We will borrow once to get us through the next five years (immediate, short and mid-term repairs), and then once again for the long term repairs identified. We will be pledging part of the increased revenue from the parking rate increase for repayment.

Tracy: Will the increase bring enough revenue?

Buteau: This increased revenue will be good for the short term and the debt service.

Tracy: What is the timeline?

Olin: Preliminary engineering for the immediate repairs should start as soon as possible, with construction starting in the next construction season.

Buteau: Construction will depend on how long the engineering takes.

Olin: Replacements are repairs for each garage.

Buteau: We will be replacing components.

Mason: How did we get to where we are right now?

Buteau: It's a combination of factors. On one hand we have deferred maintenance from lack of funds. On the other hand, we have an inherited garage that the City got from the private sector.

Mason: Do garages support themselves with the parking fees collected?

Buteau: They will after the rate changes.

Tracy: Jon, from your experience doing work in other places, how do we compare? Are there things being done elsewhere that we could be doing?

Olin: In things like the Electronic Vehicle charging stations, Burlington is definitely leading.

Tracy: We want to improve the customer experience, but we also need to look at more things.

Olin: Garages are inherently expensive structures. They have to sustain unique uses and environmental factors. This is why planning for maintenance is really important. It might seem expensive at the beginning, but we will save in the long run if we invest in the maintenance of our garages.

Spencer: As next steps, the CAO and CEDO are looking to see if there is any interest in redeveloping any of the existing parking garage structures, before making any major investments. The information from this Garage Assessment will be included in the Parking Study.

5. Consolidated Collection – Tom Moreau, CSWD

See supporting documents for this meeting for the Consolidated Collection Info Sheet and Timeline

Moreau: CSWD has the mission of dealing with waste in an economic and efficient way. One of the things we are looking at right now is consolidating the collection of waste in the County. There are currently five trucks from five different companies that collect waste in my street. This situation replicates all over Chittenden County. I pay approximately \$34 a month and get the trash collected every two weeks.

CSWD is looking into consolidating collection in order to reduce cost to residents and businesses, reduce the environmental impact of excessive truck traffic and increase the level of recycling.

Currently, ten private haulers provide trash collection services in Chittenden County. The City of Burlington used to provide trash collection services, but this service went private in the 1950s. In Burlington, there are currently six companies offering the service. Countywide, approximately 90% of the waste is collected by the top 3 haulers. Our current mode of waste collection is used in less than 15% of the municipalities in the country. Other municipalities typically provide collection service directly or contract a private hauler to provide the service.

Estimated cost savings from consolidating collection are about \$4.4 million in savings in overall collection costs over the current system (Countywide). Consolidating commercial collection would add \$1.6 million to the savings. These savings do not include those related to reduced emissions, noise and road maintenance. CSWD is currently recommending that only households in structures with less than five units be included in a consolidated collection system. Cost savings reflecting this are currently in the works.

Some of the concerns people have about having a consolidated collection system include:

- Customers will have no choice of who provides the service
- Smaller haulers might be negatively affected, unable to compete with larger haulers.
- Some haulers believe they will lose customers to Drop-Off Centers.
- Haulers may lose the ability to grow for the term of the contract
- Some people believe that government should not interfere with the operations of private enterprises.

CSWD developed a list of questions that come from haulers, staff, board members and municipal governing boards to get a better picture of how the implementation of a consolidated collection system would look like. (See supporting documents for the list of questions and answers).

There will need to be a public process in order to move this forward (see supporting documents).

Spencer: I am the representative for the City of Burlington. I voted in favor of continuing the exploration of Consolidated Collection.

Moreau: If CSWD goes forward with this, each town will decide whether to send this item to vote. Towns can also group together.

Ayres: From an economic stand point, is this model more efficient?

Moreau: On a regional level the answer is not clear. There are pros and cons. There will be efficiencies from consolidating, but the tradeoff is less choices.

Mason: How do you bid this out?

Moreau: You bid out specific routes. CSWD would structure the routes, and then routes would be advertised for bid.

Sisson: Has this been vetted by attorneys?

Moreau: Yes. Municipalities have the right to regulate trash collection. It has to be proved that we are doing a verifiable public good. It is a privilege, not a right for haulers to provide this service to municipalities.

Sisson: Would it be charged in the property tax or separately?

Moreau: It could be charged through the property tax.

Griffin: When I moved to Burlington I found it mind-blowing how fragmented the trash collection service is.

Moreau: The biggest impact this model has is in the collection of recyclables.

Griffin: Where I used to live, trash collection was charged in the property taxes.

Lalumiere: I am also frustrated. There is no organics collection. Everything is done on different days, and I find the service expensive.

6. North Avenue Corridor Study – Nicole Losch, DPW

Nicole Losch from DPW presented with an overview of the Corridor Study. See supporting documents for this meeting for a PDF of the presentation.

Ayers: If a pilot doesn't work, what is the cost of the removal?

Losch: Depends on many factors. Grinding and repainting markings can be done under \$30,000. North Avenue will be repaved in a few years. If the timing is correct, the repaving of the street could take care of this.

Wallace: There is a great graphic that I have seen in other presentations, which shows the relationship between speed limit and traffic safety. The lower speed limit is a concern for some residents, so I think it would be useful if you could include this slide in the final presentation to help illustrate the safety impacts of reducing the speed limit. Also, an estimate of the increased travel time with the lower speed limit would be useful. I also want to point out how much a protected bike lanes attract many more users. There is a chart from studies done in Portland

that shows that there are lots of potential bike riders who don't use unprotected bike lanes because of concerns about their safety.

Hammerslough: People with visual disabilities take longer to cross a street. Estimates show that the people with visual disabilities will double in the next few decades. I would like improvements to be extended to all crossings. I have noticed that in Colchester Avenue there is no parking on either side. I don't think it would be such a hardship if parking was removed along North Avenue.

Sisson: I think one simple and cheap improvement that we can do is eliminating parking on the west side of North Avenue. The cross sections shown in the presentation don't show utility poles. I know it is expensive, but burying utilities would free up space. Additionally, ten foot setbacks should not be allowed in residential areas. I think there is a risk of increased traffic, especially in the morning if we implement the changes discussed. The public input process is flawed. All the meetings were held at the same time. If people were not able to attend the meetings, how could they give their input? I think there are some refinements that can be made on the corridor (crosswalks, lower speed limit), but I disagree with the elimination of one travel lane. We are lucky to have two great biking facilities (the Bike Path by the lake and the Route 127 bike path).

Griffin: I ride between the New North End and downtown. We have two bike paths, but they are not the most convenient way to travel between the New North End and downtown. I want to thank the committee for the work they have done. The slide that showed the accidents was very useful. I would like to know what effect the conversion would have on the number of accidents. I support the conversion, both as a driver and a biker.

Lalumiere: A high crash rate is reason enough to do this study and evaluate the implementation of some of these changes to the corridor. Whenever my wife rides, she goes way out of her way, avoiding the corridor just to feel safe while riding. One question that I have is if we implement a pilot for a year, would that be enough time to see a noticeable impact in the crash rate? Something else that I want to point out is the economic benefit of complete streets. Studies have shown that more inviting streets bring an economic benefit to adjacent businesses.

Redington: Regarding the reduction of number of lanes, from four to three, AARP has done studies where these lane reductions have taken place. These studies have shown that after two years, there is a reduction in the crash rate, and an increase in use of other modes of transportation (increase in bicycle ridership). All we are saying is "try before you buy". You can allow some changes as a pilot project, and if there is no acceptance for the pilot, we will find out. Also, a demo of a mini roundabout should be built soon. The community needs to see an example of a real roundabout before the one planned for Shelburne Road is built (scheduled for 2017). The changes that the city will experience if we implement these changes will be tremendous. Think of what our city would be like if projects like the bike path and the beltline never would have happened.

McGrath: I don't understand why the focus is here, when there are other parts of the city that have more serious issues. Shouldn't we deal with current serious issues before we do all this? All of the improvements in the study sound great, but if we don't deal with what we currently have, how can we embark in all these new projects? I don't have the answer, but I have questions. Where is the money for all this coming from? I think we should go slowly.

Lalumiere: I echo what you are saying, but I think North Avenue does have issues that we need to deal with. It is troublesome that I can't ride with my family to downtown in the most direct way.

Sisson: There are tractor-trailers coming out of Ethan Allen Shopping Center bringing supplies to Hannaford that already have difficulty maneuvering under existing conditions.

Ayres: Regarding throughput with the 4 to 3 lane conversion, would it be possible to get data from similar cases in the region?

Losch: We might be able to find other studies.

Sisson: Who determines if the pilot is or isn't successful?

Losch: The Public Works Commission would have some input, depending on the components of the pilot.

Tracy: The TEUC will be making a recommendation for the full City Council in September.

Wallace: It would be useful for the September meeting if you have answers to questions as to why we are doing each improvement.

Griffin: A slide with the potential costs of short-term, mid-term and long-term improvements would also be useful.

7. Councilors' Updates

8. Adjourn

Tracy moves to adjourn. All in favor. Meeting adjourned at 6:40 PM.



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Transportation, Energy and Utilities Committee of the City Council

Wednesday, September 10th, 2014 at 6:00 PM

Burlington Police Department – Community Room

1 North Avenue – Burlington, VT

-AGENDA-

- 1. Agenda
 - a. DISCUSSION
 - b. ACTION
- 2. Public Forum
- 3. Minutes of 8/13/2014
 - a. DISCUSSION
 - b. ACTION
- 4. Adoption of the NACTO Urban Streets Design Guide Nicole Losch, DPW
- 5. Formal Presentation North Avenue Corridor Study Nicole Losch, DPW TEUC to vote on the North Avenue Corridor Implementation Plan.
- 6. Councilors' Updates
- 7. Adjourn



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Transportation, Energy and Utilities Committee

DRAFT MEETING MINUTES:

Wednesday, September 10th - 2014 at 6:00 PM

Burlington Police Department – Community Room 1 North Avenue – Burlington, VT

Members present:	Chair, Maxwell Tracy	(TEUC)
	Tom Ayres	(TEUC)
	Chip Mason	(TEUC)

Others present: See attached sign-in sheet

Chair Tracy called the meeting to order at 6:05 pm.

1. Agenda

Chair Tracy moved to approve the agenda with a change in the order of the items: the Public Forum will occur after the presentation of the North Avenue Corridor Study.

All in favor

2. Minutes of 8/13/14

All in favor to approve minutes from 8/13/14

3. Adoption of NACTO Street Design Guide – Nicole Losch

Losch: Given the agenda we have to North Avenue, we haven't prepared a lot of information about this guide right now. We have provided the link to the NACTO Street Design Guide for you to digest this guide and take action about this issue in the next meeting. We have been using these guides in some of our projects. FHWA recently endorsed these guides, recognizing that they give more flexibility in design. Mason: I propose delaying action on this item to the next TEUC meeting.

All in favor.

4. North Avenue Corridor Study - Nicole Losch, DPW, DPW; Eleni Churchill, CCRPC; Jason Charest, CCRPC

Nicole Losch from DPW, Eleni Churchill and Jason Charest from CCRPC gave a presentation of the North Avenue Corridor Study and of the Implementation Plan. See meeting materials for both the presentation and the Implementation Plan.

5. Public Forum

Residents gave their opinions on the Corridor Study and the Implementation Plan. See attached list of members of the public who provided comments.

Deliberation

TEUC members deliberated before taking action regarding the Implementation Plan for the North Avenue Corridor Study:

Ayres: I have amendments, and I have some questions about some of the minutia. Just so we have them on the public record.

Tracy: What I would like to do is to move the recommendations as a whole. As we do in the regular City Council, if Councilors have amendments they can make them

Mason: I move the adoption of the implementation plan from the advisory study for consideration to the full City Council on September 22

Ayres: I second that but I would like to have the floor back have some amendments for when you deem it appropriate.

Tracy: You can have the floor now

Ayres: If I may, I will ask two relatively simple questions: In the short term crosswalk additions. What sort of signifiers will there be present to call attention to the fact that there will be a crosswalk? How will I, as a driver, know when there will be a crosswalk?

Losch: Each location is different. The basic enhancement will be the crosswalk and warning signing at the crossing to let the drivers know there is a crosswalk. Additional enhancements can be either with paint or extending the curb into the street to make pedestrians more visible and shorten the crossing distance. One more option is the Rectangular Rapid Flashing Beacons

(RRFB), like the ones on Pine Street. We will look at each location in particular. We look at traffic speeds, number of pedestrians, street lighting, the number of lanes pedestrians will need to cross. Depending on the information at each location we will develop a plan to make sure the crossing is visible and safe to cross.

Ayres: The second question that I have relates to something that has been discussed a lot. It's related to the 127 slip lane, I wish we could pilot this. What is the approx. cost of the elimination plan, and if proven not feasible, how simple would it be to backtrack?

Losch: It is difficult to give an estimate for the reconstruction. We gave a quick estimate is \$70,000 for everything from removing the concrete island to making the signal adjustments. That is a very rough estimate but we don't have a lot of data. We wanted to have a placeholder. The biggest component in terms of construction would be to remove the concrete island, which is not complicated, in the grand scheme of things. Based on recent projects, my guess would be \$10-25K, removal would be a bit less, but reinstalling it would be a similar cost.

Ayres: I don't have any further questions.

Mason: Paul Sisson had asked this question previously. Assuming we adopt the pilot, who determines if the pilot project is a success or failure and modifications? Who makes the decisions?

Losch: It is an iterative process. Typically for large projects like this, it is necessary to get feedback from as many people as possible including residents and City Council. Public Works takes all this feedback into consideration for the decision. However, there are so many components to what can be considered success or a failure. From our experience, public input is equally important when we review. What I expect is that we will present all the metrics in community meetings, to this committee, to the full Council, if they are interested, and determine the level of comfort where the project stands.

Mason: To ask it differently, in the case of the pilot project of 4 lanes to 3 lanes for example, would it be possible for the Council to reserve that authority to make the decision?

Losch: Yes

Mason: I'm not suggesting it would be that way, but if there were desire to do that, it would be a possibility.

Spencer: Yes.

Tracy: In terms of the bike lane piece. The lanes in the short term are buffered lanes. Correct?

Losch: Correct. There is one section from Institute Road to 127 that was recommended to be a pilot protected bike lane.

Tracy: I just want to make sure people understand the difference between buffered and protected. Buffered means space in between traffic and people, but no physical barrier. A point of reference is South Union. Protected lanes have a physical barrier between cars and bikes.

Tracy: In terms of parking, south of Washington Street, that remains in the current draft.

Losch: That is correct.

Mason: Before we go to amendments, to talk about Local Motion's proposal, there is an expense to remove the island. Local Motion developed a proposal leaving the island. What would be the expense of putting a bike signal and leaving the island? Is that a nominal expense?

Losch: We just saw this proposal very recently and I don't know with the signal infrastructure that is out there, how feasible this alternative is. Signal hardware is relatively expensive, so even if this is a bike signal, it wouldn't be a lot less expensive than having a regular traffic signal. The other consideration with this concept is that it is proposing an enhanced crossing across the slip lanes and providing a point of control across the actual approach, it doesn't give improvements to any other modes, whereas the other concept provides more thorough consideration to the other modes.

Tracy: Do any of the councilors have amendments that they want to bring forward at this time?

Ayres: I have three amendments. My proposal is to move the 4 to 3 plan, currently in the midterm and move it to the short term.

Losch: The implementation plan under consideration now is the advisory committee's recommendation, which has the pilot in the short term.

Ayres: In this case, I will withdraw my amendment.

Losch: The differences between the two recommendations are in slide 37.

Ayres: I need some clarification. Does moving to on-street parking north of Institute Road require an amendment?

Losch: Yes

Ayres: The amendment I propose is that counter to the advisory committee's recommendation, the plan we move forward to the City Council calls for a continuation for on-street parking north of Institute Road.

Mason: I will second. Is that on both sides or on one side of North Avenue?

Ayres: Both sides

Losch: If we retain parking on both sides, we won't be able to accommodate any bike lanes in any sections north of Institute Road. If we retain parking on one side, we can accommodate bike lanes in each direction

Ayres: the short term recommendations were to eliminate all parking on both sides north of Washington Street. Correct?

Losch: The advisory committee's recommendation

Ayres: What I am suggesting is that we continue to allow parking. Essentially retain the existing conditions as opposed to eliminate parking on both sides of the Avenue.

Mason: There is some confusion. With what Councilor Ayres has proposed, would that allow for bike lane on one side of North Avenue?

Losch: No. Parking is currently allowed on both sides of North Avenue, north of Institute Road.

Ayres: What is the study group's recommendation?

Losch: Retain parking on one side of North Avenue, north of Institute Road.

Ayres: That is my amendment.

Mason: May I ask the position of the Director of Public Works?

Spencer: DPW was part of the study team. Our recommendation was to go with parking on one side of the road north of Institute Road.

Mason: To be clear, this would allow continuous bike lanes?

Spencer: Yes. With parking on one side of the road, we would be able to accommodate bike lanes on both sides.

Churchill: the Advisory committee meeting's alternative is eliminating parking on both sides. If you want to retain parking on one side of Institute Road, yes we can have bike lanes on both sides of North Avenue, but not protected or buffered.

Mason: Can you restate the amendment?

Losch: Continue on-street parking on one side of North Avenue North of Institute Road.

Mason: Is this all the way to Plattsburgh Avenue or to 127?

Ayres: Only until 127

Mason: My concern is the high school. To have no bike lane seems to me a little bit silly. To be clear what Nicole said is one lane of parking from Institute Road to VT-127.

Losch: That is an option

Mason: What I am hearing is until 127.

Ayres: When you say we are proposing, do you mean the study group or the advisory committee.

Ayres: I would eliminate advisory recommendation that all parking north of Washington be eliminated. Instead, amend report parking on one side between Institute and 127 and between Shore road and Plattsburgh Ave.

Public: Are you taking comments on that?

Tracy: We can't. That is not the protocol for Robert's Rules.

Mason: There will be an opportunity before the Council, but there is a motion on the floor.

Tracy: Do you second that?

Mason: I don't second that.

Tracy: Motion fails.

Mason: I would propose an amendment to allow parking on one side of North Avenue only between Institute Road and 127.

Ayres: I will second that.

Tracy: Do you want to speak on that?

Ayres: Given that I drive through this stretch almost every day I would say this is almost a nonissue. When I drive by, I hardly see any vehicles there.

Tracy: One thing that I am hearing is that it is important to restrict parking, not only for the short term but also for the future to do a protected bike lane. If this parking is hardly used, I think it's a waste to change the game at this stage. Having study group recommendations and advisory committee recommendations has created a lot of confusion.

Mason: I don't drive this segment daily, so I withdraw my amendment.

Ayres: Does this bring us back to the advisory committee's recommendation of eliminating parking on both sides of North Avenue north of Washington Street?

Mason: The only place of North Ave north of Washington, there is currently a prohibition to Institute Road, it is allowed between Institute and 127, not allowed between 127 and Shore Road and then allowed between Shore Road and Plattsburgh Ave on both sides of the street?

Losch: Yes

Mason: Thanks for the clarification

Ayres: Henceforth, based on the advisory committee's recommendations there will be no parking north of Shore Road to Plattsburgh on either side of the street?

Losch: And also between Institute Road and 127

Mason: Anecdotally, Saint Mark's sees a lot of parking during mass on Saturday afternoon

Ayres: This is beyond anecdotally, and continues to be the case.

Spencer: Just want to underscore that parking changes need to go through the DPW Commission.

Mason: Does this mean that if Council were to approve the plan, parking changes would still need to go through the Commission?

Spencer: Correct

Losch: Many of the recommendations in here are really to authorize the City to pursue implementation.

Mason: What would the commission do to come up with a determination? How do they evaluate parking removal?

Losch: There is a public forum process, they advise that we contact affected adjacent property owners and they will take this into consideration to make the decision.

Mason: But no further studies?

Losch: They may ask for parking counts or additional information, but until we take it to the commission, we won't know.

Tracy: We are back on the floor with open discussion on the original motion

Ayres: I have one more amendment. It has to do with a consistent 25 MPH speed limit. I would like to amend the plan to maintain the 30 mph speed limit, in those stretches of the corridor where it exists. I would like to speak to that if I get a second.

Mason: I second.

Ayres: From the beginning of this process I was involved in this project, initially as a concerned citizen observing the workshops. In April of this year I was appointed to take the place of former Councilor Paul Decelles in the advisory committee. Over the course of the deliberations of the committee, I have said consistently that the 4 to 3 reconfiguration is the linchpin of this entire effort. Because of that, the calming effect of the new configuration, the speed is going to be tamped down.

This 5 mph speed reduction has been a point of significant contention for neighbors in the New North End. I have received a number of calls on both sides of this issue. I think that if we can move the 4 to 3 lane study, I think a natural result of this will be traffic calming.

Tracy: I do not support this recommendation. I was in the Public Works Commission when we went to the 25 mph limit in residential areas. We were presented with a lot of good data from traffic studies from around the country that proved that even that small 5 mph reduction can create substantial advantages in terms of safety. The fatality rate, the injury rate all go down. I think if we can increase safety, we should. I think we should be bringing the limit down to 25 mph, so I will be voting against the amendment.

Losch: I just want to add that the design speed is a big consideration. There is always a concern that if you set a speed limit that is too low for the street design, you could be creating a hazardous situation based on the fact that cars will continue to drive at a higher rate of speed.

Ayres: I want to add another comment. This whole question of speed is as much a question of enforcement as it is of regulation. I want to echo the comments of Megan Burns who stated earlier, we need to ask our officials at BPD to help us enforcing the limit. I hear a lot about speed issues, and I am talking about excessive speed. Not by a few miles. If we don't do enforce the speed limit, there won't be much difference.

Tracy: The motion passes with Councilors Ayres and Mason voting in favor, Councilor Tracy voting against. Any additional comments?

Spencer: I wanted to let the councilors know that councilor Wright, who couldn't stay, suggested that under the pilot project there was discussion about metrics for the success of the pilot. He was suggesting that your committee might benefit from fleshing out what those metrics would be so the community would know from the start what the measurements would

make the pilot successful or unsuccessful. He wanted me to pass this information during your deliberation to you to see whether you would want to delve into that as part of your motion or not.

Mason: I am not an expert and I believe none of us are, so it can't fathom to what those metrics are. To me it all comes back to determine whether this is an administrative decision or a Council decision. My inclination is that the decision to make the pilot a permanent change should be a decision of the Council and not a decision of the Director of Public Works, whoever he or she may be at the time. I don't know what my colleagues think.

Ayres: Would it be to the satisfaction of the TEUC to insert language that states that there will be metrics (some of the metrics included in the relevant slide of the presentation)? We could include language in the study that suggests what the metrics might be.

Mason: Assuming we list the measures, there is the question about how much weight to give to each of the metrics.

Tracy: The information collected will be presented to the TEUC and the Council after the pilot?

Losch: Our intent is also to present the information on the pilot project at the beginning, to see what information people think they need to see so this data can be collected before and after the pilot.

Tracy: That is satisfactory to me. I want to thank everyone involved in this process. We got comments from people across the City, and that speaks to the importance of this corridor to the City.

The implementation plan, as amended, passed unanimously.



City Council Agenda Item

Agenda Item Details

Meeting	Oct 06, 2014 - City Council Meeting - Monday, October 6, 2014 - 7:00 p.m.
Category	5. Deliberative Agenda
Subject	5.02 Resolution: North Avenue Corridor Plan (Transportation, Energy, Utilities Committee)
Туре	Action, Resolution
Recommended	waive the reading and adopt the resolution

Action

Note proposed updated amendments per Councilor Wright; note proposed amendment per Councilor Ayres Note Consolidated Proposed North Ave Corridor Amendments per Brian Lowe, Mayor's Office

CC-NorthAveCorridor memo_final.pdf (1,753 KB) North Ave corridor amendment.docx (12 KB)

DPW - North Avenue Corridor Plan; Create North Avenue Task Force.docx (24 KB)

Amendment per Councilor Ayres North Avenue Corridor.docx (15 KB)

Amendment per Councilor Wright North Avenue Corridor.docx (15 KB)

Consolidated Possible North Ave Corridor Amendments.pdf (294 KB)

Motion & Voting

waive the reading and adopt the resolution as amended.

Motion by Max Tracy, second by Tom Ayres.

Final Resolution: Motion Passes

Aye: Tom Ayres, Norm Blais, Vince Brennan, Sharon Bushor, Selene Colburn, Dave Hartnett, Jane Knodell, Bianka Legrand, Chip Mason, Karen Paul, Rachel Siegel, Max Tracy, Kurt Wright, Joan Shannon

Amend line 69-73 to read as follows:

"A pilot project to include no parking at least on one side of North Avenue between Institute Road and the VT 127 ramps and between Shore Road and Plattsburg Avenue, buffered bike lanes between Washington Street and Institute Road, bike lanes between Institute Road and the VT 127 ramps, a 3-lane cross section with bike lanes between the VT 127 ramps and Shore Road, bike lanes between Shore Road and Plattsburg Avenue, and, as needed, replace drain grates with bike-friendly grates;"

Motion by Tom Ayres, second by Kurt Wright.

Final Resolution: Motion Passes

Aye: Tom Ayres, Norm Blais, Dave Hartnett, Bianka Legrand, Chip Mason, Karen Paul, Kurt Wright, Joan Shannon

Nay: Vince Brennan, Sharon Bushor, Selene Colburn, Jane Knodell, Rachel Siegel, Max Tracy

Amend Starting in the current Line 47, adding new Resolved clause: "BE IT FURTHER RESOLVED that metrics and community input will begin to be collected at the onset of the pilot project, to be fully reviewed and presented with staff recommendations 4 months into the pilot and again at the conclusion of the 4 - 3 lane pilot study. By its nature as a pilot study, if public input from the New North End does not support its continuation, the City will restore the 4 - 3 lane pilot area to its current configuration; and"

Motion by Kurt Wright, second by Dave Hartnett.

Final Resolution: Motion Passes

Aye: Tom Ayres, Norm Blais, Sharon Bushor, Dave Hartnett, Bianka Legrand, Chip Mason, Karen Paul, Kurt Wright, Joan Shannon

Nay: Vince Brennan, Selene Colburn, Jane Knodell, Rachel Siegel, Max Tracy

Add Resolved Clause "Where width and parking allow add buffering and protection for bike lanes on both sides of North Ave."

Motion by Max Tracy, second by Selene Colburn.

Final Resolution: Motion Passes

Aye: Tom Ayres, Norm Blais, Vince Brennan, Sharon Bushor, Selene Colburn, Dave Hartnett, Jane Knodell, Bianka Legrand, Chip Mason, Karen Paul, Rachel Siegel, Max Tracy, Kurt Wright, Joan Shannon

would add the words "and one representative from each Ward (3, 4, 7) recommended by the project area Councilors and appointed by the Mayor" following the phrase Burlington School District

Motion by Dave Hartnett, second by Dave Hartnett.

Final Resolution: Motion Passes

Aye: Tom Ayres, Norm Blais, Vince Brennan, Sharon Bushor, Selene Colburn, Dave Hartnett, Jane Knodell, Bianka Legrand, Chip Mason, Karen Paul, Rachel Siegel, Max Tracy, Kurt Wright, Joan Shannon

Members of the public may speak when recognized by the Chair, during the Public Forum (time certain: 7:30 p.m.) or during a Public Hearing. This agenda is available in alternative formats upon request. Persons with disabilities, who require assistance or special arrangements to participate in programs and activities of the Clerk/Treasurer's Office, are encouraged to contact us at 865-7000 (voice) or 865-7142 (TTY) at least 72 hours in advance so that proper arrangements can be made. This meeting will air live on the night of the meeting on Burlington Telecom, Channel 317. This meeting will also air on Channel 17 two days after the meeting starting at 8:00 p.m., repeating at 1 a.m., 7 a.m. and 1 p.m. the following day. For information on access, call Scott Schrader, Assistant CAO for Administration and Management (865-7140) or Lori Olberg, Licensing, Voting and Records Coordinator (865-7136) (TTY 865-7142)

Final Report on Public Engagement North Avenue Corridor Study, Burlington, VT October 2014

5) Public Comments



a Volunteer Advisory Group to the City of Burlington's Dept of Public Works

www.burlingtonwalkbike.org listserv: <u>burlingtonwalkbike@googlegroups.com</u>

September 18, 2014

To: Members of Burlington City Council

Dear Distinguished Councilors:

The Burlington Walk-Bike Council (BWBC) strongly endorses the recommendations of the North Avenue Corridor Advisory Committee for improvements on North Avenue. The North Avenue Corridor is a critical component of Burlington's transportation infrastructure, and is currently not well designed for any mode of transportation, whether travelling by car, bike, walking, or bus.

Adoption of the recommended changes will result in important short-term improvements for all modes, and a substantially improved corridor in the long term. These changes will help improve safety for all transportation modes, and will help reduce pollution and greenhouse gas emissions by enabling more people to walk, bike, or bus instead of drive. In addition, these same changes will promote a greater sense of neighborhood in the New North End and increase economic activity along the corridor by slowing down traffic and making it more pleasant for both walking and biking.

The BWBC particularly would like to see that critical improvements are made in the short term, as called for in the recommendations. The proposed pilot project is both relatively inexpensive and reversible, while providing important improvements for drivers, bikers, pedestrians, and public transportation. The important changes to be made in the short term include the following:

4 to 3-lane Conversion

The BWBC strongly supports the conversion of the section between Rt. 127 and Shore Rd. from 4 lanes to 3 lanes. This is critical to allow the addition of bike lanes to this section of the road and continuous bike lanes along North Ave. Without this conversion, bicycles will continue to be forced to either share the lane with cars or ride on the sidewalk, substantially limiting the number of people willing to bike in this section (and on North Ave. in general) and also reducing safety for bikes, pedestrians, and cars alike. A three-lane configuration is fully adequate for the amount of car traffic in this area, and will reduce driver confusion as well as add a traffic calming element to discourage speeding. This configuration is working well on Colchester Ave. and on the portion of Williston Rd. for which it was adopted recently. The BWBC strongly recommends implementing this change within the next 12-18 months.

Removal of On-Street Parking

The BWBC strongly supports the removal of on-street parking on both sides of the road between Institute Rd. and Rt. 127, and between Shore Rd. and Plattsburgh Ave. Retaining parking on one side of the road, as proposed by the North Ave. Study Team, would not allow for the use of buffered bike lanes. In addition, bicycle traffic would be forced to ride next to any parked cars, introducing the risk of injury or death from "dooring." Since relatively few cars park on these sections of road, many bicyclists will also be tempted to weave in and out of the parking zone as they proceed, to increase distance from the traffic lane. This weaving makes bicyclist behavior less predictable, increasing driver stress and reducing safety for all. That said, the BWBC would support a compromise measure enabling parking in the bike lane Sunday mornings on a specified portion of the section between Shore Rd. and Plattsburgh Ave. to accommodate church-goers.

Buffered bike lanes

The BWBC strongly supports the addition of buffered bike lanes on both sides of North Ave. between Washington St. and Plattsburgh Ave. This is an easy way to significantly improve conditions for both bicyclists and drivers in the short term, while we make plans for true protected cycle track in the future.

Protected bike lanes pilot

The BWBC strongly supports the proposed pilot project adding protected bike lanes on the section between Institute Ave. and Rt. 127. This will improve safety for both bicyclists and drivers, and will reinforce the existing speed limit on this section of the road.

Crosswalk and intersection improvements

The BWBC strongly supports the many crosswalk and intersection improvements proposed for throughout the North Ave. corridor. These will greatly improve conditions for pedestrians by providing safe crossings and calming traffic. It is also important to ensure that bike lanes are continued through all intersections to ensure the safe passage of bicycles.

Rt. 127 interchange

The currently proposed plan for the intersection with Rt. 127 needs to be revised to include bike lanes. The BWBC also supports the removal of both existing slip lanes to reduce traffic speed and to allow for both pedestrians and bicyclists to cross safely. The BWBC would, however, support a compromise measure (like that proposed by Local Motion) to maintain a slip lane for traffic exiting 127 turning northbound, as long as there is room for bike lanes and signals to stop traffic in the presence of bikes and pedestrians.

Speed limit reduction from 30 to 25

The BWBC supports the reduction of the speed limit on North Ave. from 30 to 25, which would increase safety for all modes of transportation. The reduction of the speed limit is, however, less important than the actual infrastructure improvements that will reduce speed on the corridor.

Medium and long-term improvements

The BWBC also strongly supports the medium and long-term plans for North Ave., in particular including the addition of protected cycle track along the entire length of the corridor and roundabouts at key intersections. These changes will truly allow for significant increases in safety for all modes of transportation, and will thus also promote significant increases in use of the corridor by bicyclists and pedestrians.

Thank you very much for your consideration of these issues, and we look forward to a greatly improved transportation infrastructure along North Avenue in the near future.

Yours truly,

Burlington Walk Bike Council

The Burlington Walk/Bike Steering Committee:

Erik Brown Brotz, Chair erik@burlingtontelecom.net Jim Holway jholway2012@gmail.com Phil Hammerslough phil.hammerslough@gmail.com Stu Lindsay Stulindsay@comcast.net Steve Norman stevenorman@fastmail.fm Tony Redington tonyrvt99@gmail.com Charlene Wallace, Local Motion charlene@localmotion.org

cc: Mayor Miro Weinberger Chapin Spencer, Public Works Director DPW Commissioners % Chair Nathan Lavery Peter Owens, Director of CEDO

From: Jason at Local Motion

Sent: Tuesday, September 30, 2014 11:23 AM

Subject: Your voice needed: Oct 6 is final vote on North Ave. transformation for safe walking & biking



I am emailing you as a Burlington supporter of Local Motion who wants to see our city become a truly great place for people-powered transportation. Next week -- on Monday, October 6 -- we have the opportunity to take a huge step forward for walking and biking in Burlington, and we need your help. Read on for details, and <u>click here to RSVP</u>.

Over the last year or so, Local Motion has been intensively involved in a project to <u>chart a</u> <u>new future for North Avenue</u>, Burlington's longest street and the backbone of the New North End. With strong leadership from New North End residents, a consensus has emerged around a series of commonsense changes that will make North Avenue safe and accessible for everyone, whether you are walking, biking, taking the bus, or driving.

On Monday, October 6 at 6 PM, the Burlington City Council will decide whether to approve these important changes to North Avenue. They need to hear from you! <u>Click here to join the movement to make North Avenue safe for everyone</u>. There is a small but vocal minority of residents who do not want any change on North Avenue at all. The City Council needs to know that support for change is broad and deep.

Will you commit to speaking out at Monday's City Council meeting for a walkable, bikeable, liveable future for North Avenue and for our city as a whole? <u>Click here to let us know that we can count on you to be there on Monday</u>. See below for FAQs, talking points, and resources.

Together, we will make North Avenue -- and Burlington as a whole -- the kind of place where everyone feels safe walking or biking anywhere.

Onward!

Jason Van Driesche, Director of Advocacy and Education

New to the North Avenue project? Need more info? Here are answers to some FAQs.

I don't live in the New North End. Why should I care?

Great question! There are two reasons why the vote on North Avenue matters for the city as a whole.

First, many of Burlington's most important institutions and destinations are in the New North End, including the high school and one of our two middle schools, three of our four regional-scale parks, and more. So <u>chances are you or your kids travel to or through the New North End regularly</u>, and making North Avenue safer for walking, biking, and driving would give you more options and some peace of mind.

Second, North Avenue is the first major corridor that has undergone an in-depth study of this kind since Mayor Weinberger came into office. This means that <u>the City's decision about North Avenue</u> <u>will send a strong signal about how serious this administration is about improving conditions for</u> <u>walking and biking city-wide</u>. So if you want Winooski Avenue or Pearl Street or Shelburne Street or anyplace else in Burlington to get a real makeover in the near future, you need to speak out for the same on North Avenue.

I don't know enough about what the recommended changes are. Where can I learn more? Here is a very brief overview of the proposed near-term improvements (which means in the next one to three years) as recommended by the Transportation, Energy, and Utilities Committee (TEUC) of the City Council, with a summary of the benefits of each improvement:

- 4-TO-3 LANE CONVERSION: With a center turn lane, commuter traffic will flow more smoothly and crashes will be fewer, with the new center turn lane from 127 to Shore Road allowing people who need to make a turn to get out of the travel lane
- SAFER INTERSECTIONS: Crash risk will decline at intersections as turning lanes are redesigned to discourage high-speed right turns (particularly at Ethan Allen Parkway and Plattsburgh Avenue)
- IMPROVED CROSSWALKS: People will feel more comfortable crossing North Avenue with exclusive pedestrian phases, blinking lights at new mid-block crosswalks, and many other upgrades
- CONTINUOUS BIKE LANES: People riding in the new bike lanes along almost the entire length of North Avenue (Washington Street to Plattsburgh Avenue) will have fewer conflicts with motorists, resulting in lower blood pressure and improved safety all around
- A BUFFER FOR PEDESTRIANS: People walking to the store or to school will breathe easier as cars are seven or eight feet away from the curb instead of just two -- and as bikes ride in the bike lane instead of on the sidewalk
- MORE SPACE FOR BUSES: Buses will integrate more smoothly into traffic with consistent 10.5 foot lanes plus a buffer on either side, which give them a little more room to maneuver than the current 10 foot lanes in the four-lane section

<u>Click here for the full text of the minutes from the final Advisory Committee meeting</u> (where these recommendations were finalized for consideration by the TEUC).

How can I get involved in making other Burlington streets better for walking and biking?

First, join Local Motion if you aren't a member already! You can join at <u>http://www.localmotion.org/give/members.</u> Our members fuel our work to make Burlington -- and Vermont as a whole -- a great place to get around under your own power.

Second, sign up to be an advocate for a walkable and bikeable Burlington! While Local Motion is the hub for making Burlington a great place to walk and bike, you are the spokes -- and the wheel, and the rest of the bike. Reply to this email to get periodic alerts on opportunities to make a difference for a walkable, bikeable city.

Third, get out on the streets and make yourself heard! There's a fantastic new group called <u>Bikeable</u> <u>Burlington Now</u> that is organizing rides and other events to highlight the demand for a more bikeable city. Join in the conversation, and stand up with them for better biking!

ISSUE NO. 2068 SEPTEMBER 9, 2014

ONE West Neighborhood Forum

North Avenue Corridor Study & TEUC Meeting Sep. 10 TOM AYRES – CITY COUNCIL MEMBER, WARD 7, BURLINGTON

North Avenue Corridor Study & TEUC Meeting Sep. 10

TOM AYRES, <u>TAYRES@BURLINGTONVT.GOV</u>, CITY COUNCIL MEMBER, WARD 7, BURLINGTON

Event: Sep 10, 2014

I want to be sure that all of my New North End friends and neighbors know about an important meeting that will be taking place this Wednesday evening, September 10, at 6 pm at the Burlington Police Department's Community Room at 1 North Avenue.

The City Council's Transportation, Energy, and Utilities Committee (TEUC) will meet and the implementation plan for the North Avenue Corridor Study will be the primary item on the agenda. I serve on the TEUC along with Councilors Max Tracy (Ward 2) and Chip Mason (Ward 6). We will be reviewing the implementation plan that is to be put forward by the Burlington Department of Public Works and the Chittenden County Regional Planning Commission (CCRPC). The TEUC will also be considering the recommendations of the North Avenue Corridor Study Advisory Committee, which vary somewhat from the draft DPW/CCRPC plan. (FYI, I also served on the Advisory Committee as the city's liaison representing the City Council.) The TEUC's task on Wednesday night will be to reconcile the recommendations cited above, then move the final implementation plan forward to the City Council for its action on Monday, September 22.

There will be a public forum at the TEUC meeting this Wednesday. I encourage all residents of the New and Old North Ends to attend and share your vision of the future of North Avenue. I am optimistic that we will have a short-, medium-, and long-term plan at the end of this process that will be acceptable to the vast majority of our citizens. It will be a plan that represents both some compromises and the best collaborative thinking of motor vehicle, bicycle, and pedestrian advocates alike. Please join me at the TEUC meeting on Wednesday night and the City Council meeting on September 22 as together we work to make a safer, more accessible and environmentally responsible North Avenue a reality in the years ahead.

News from Neighboring FPFs

Shared postings from Downtown FPF NORTH AVE CORRIDOR STUDY MEETING TOMORROW! BY MAXWELL TRACY Shared postings from Lakewood FPF FONA (FRIENDS OF NORTH AVENUE) & THE CORRIDOR STUDY BY JIM HOLWAY

ONE West Neighborhood Forum

ISSUE NO. 2064SEPTEMBER 4, 2014 North Avenue Corridor Study

JASON L'ECUYER, NPA STEERING COMMITTEE MEMBER, WARD 7, BURLINGTON

As you may or may not know, I have been representing Ward 4/7 on the North Avenue Corridor Study. I must say, I have learned a lot.

This committee met for a period of ~15 months and had multiple public forums for all voices to be heard.

Here is my take on the whole thing as I have seen lots of opposition to what the committee came up with. I believe North Avenue can be safer, can have room for bicyclists and be more friendly to pedestrians. I hear from folks that don't want their commute extended, they think the BAU corridor is fine as is. I hear the people on the committee are pro bike and anti motorist.

I don't believe they are competing factors. The committee approved a plan to make North Ave better, not worse. So what's the give? Did we decide that motorists have to endure gridlock traffic so bicyclists can have their way? The study concluded that traffic would flow well. It would also reduce the confusion of the current set up. Changing to three lanes (middle lane being the turning lane) would simplify navigating the road and make room for cycle tracks. Again, what's the give? Answer, up to 37 seconds of increased travel time during peak hours. What do we get in return? My opinion (I am not a cyclist), we get a more vibrant, economically viable North Avenue. The recommendations will encourage people to bike to the shopping center for a bagel or a slice of pie with the family. People will be more comfortable walking on North Ave. We will have more of a sense of community. To me, it's a win all around.

All I'm trying to say is that the recommendations that came out of the committee were by people trying to do right for the residents of our community. There was no intent to lessen what exists, only to enhance it and I fear with the way people are viewing this issue, we are missing out on a huge opportunity to enhance where we live.

Regards, Jason L'Ecuyer

ONE West Neighborhood Forum

North Ave. Corridor Plan - NPA Representatives Report SARA GIANNONI – NPA STEERING COMMITTEE MEMBER, WARD 3, BURLINGTON North Ave. Corridor Plan - NPA Representatives Report

SARA GIANNONI, NPA STEERING COMMITTEE MEMBER, WARD 3, BURLINGTON

From Tony Redington, who is on the NPA Steering Committee:

Interested in a street corridor featuring a road diet in the short term and cycle track (protected bike lanes) from end-to-end along with roundabouts in the long term?

Want a "world class street" with the highest level of safety and service for bicycling, walking or traveling by car and transit? Then tune in and watch the half hour CCTV program featuring four Neighborhood Planning Assembly representatives from Wards 3, 4 and 7 on the North Avenue Corridor Study Advisory Committee presentation recorded Wednesday July 30.

The presenters: Jim Holway, Jason L'ecuyer, RJ Lalumiere and Tony Redington. The North Avenue draft plan at the end of a 15-month process will be available sometime in August followed by at least two City Council hearings as part of the approval process this fall. The program CCTV website:

http://www.cctv.org/watch-tv/programs/north-avenue-corridor-study

You can find study documents and materials posted at the Chittenden Country Regional Planning Commission website: CCRPCVT.org

From: TONY Redington <<u>tonyrvt99@gmail.com<mailto:tonyrvt99@gmail.com</u>>> Date: Thu, Jul 31, 2014 at 4:34 PM Subject: Four NPAsters on the North Avenue Corridor Study Present on CCTV July 30 To: Burlington Walk/Bike Council <<u>burlingtonwalkbike@googlegroups.com<mailto:burlingtonwalkbike@googlegroups.com</u>>>, ONEABN Old North End Arts & Business Network <<u>oldnorthend@gmail.com<mailto:oldnorthend@gmail.com</u>>>

Hi:Interested in a street corridor featuring a road diet demonstration in the short term and cycle track from endto-end along with roundabouts (pathed for cyclists) in the long term? Want a "world class street" with the highest level of safety and service for bicycling, walking or traveling by car and transit? Then tune in and watch the half hour CCTV program featuring four Neighborhood Planning Assembly representatives on the North Avenue Corridor Study Advisory Committee presentation recorded Wednesday July 30: The presenters: Jim Holway, Jason L' ecuyer, RJ Lalumiere and myself. The draft plan at the end of a 15-month process will be available sometime in August followed by at least two City Council hearings as part of the approval process to be completed sometime in the fall. <u>http://www.cctv.org/watch-tv/programs/north-avenue-corridor-study</u>

From: Chapin Spencer [mailto:cspencer@burlingtonvt.gov]
Sent: Friday, July 18, 2014 2:28 PM
To: Diane Meyerhoff; Nicole Losch
Cc: Kurt Wright
Subject: North Avenue Public Input

Diane and Nicole: After talking with long-time NNE resident Gary Dion (once in person and once on the phone), I wanted to pass along his input to be considered as part of the North Avenue Corridor Study. Please include these in the corridor study's public comment section.

Gary: I'm including your comments here that are in the North Avenue Corridor Study project area (North Street north to Plattsburg Avenue). I'm working on the other comments outside of the Corridor Study process and will follow up separately with you on these others.

Comments from Gary Dion: [My updates in brackets]

• Re-stripe North Avenue more frequently — or with a more durable material. With the various lane changes and dedicated turn lanes, the markings get worn quickly and then drivers aren't sure where to go.

- Install an overhead "Left Turn Only" sign NB on North Avenue at the intersection with Shore Road so NB traffic knows there is a center turn lane. [I've passed this on to Traffic and they are planning to add an earlier on-road left turn only marking down ask there is concern with adding signs (that can act like sails) on the span wire.]
- Install a sign "dead end" on North Avenue after Plattsburgh Avenue.
- Install a sign at Plattsburg Avenue directing traffic to Colchester on to Plattsburg Avenue. [Passing along to Traffic. I understand that they are making this sign and will install it soon.]
- Increase speed enforcement on North Avenue and/or install radar speed signs.
- Repair sunken catch basins on North Avenue. [Some done. More needed.]
- Repair utility patch on North Avenue in front of Thayer School. [We are checking into this.]

Thanks all. Best, Chapin

Chapin Spencer, Director Department of Public Works 645 Pine Street, Burlington, VT 05401 802-863-9094 www.burlingtonvt.gov/DPW

From: TONY Redington
Sent: Wednesday, July 16, 2014 11:24 AM
To: Eleni Churchill
Cc: <u>BarrJE@pbworld.com</u>; Nicole Losch
Subject: Comments on Historic Traffic and Future Projections on North Avenue Corridor Study

Hi Eleni: Please consider the following information regarding existing conditions analysis and future projections in regard to vehicle traffic along the North Avenue Corridor.

This message presents the traffic numbers from Vermont Agency of Transportation reports updated to 2013 for North Avenue segments, the Beltline and the connector for 2005, 2013 and an early 1990s year when most numbers peaked on Vermont urban streets--numbers that can be placed against actual growth projected by the Study Team draft report.

Historic data shows virtually universal decline in traffic from about 1990 through 2013--about a quarter century--and absolute decline on all segments 2005 to 2013. The single segment showing an increase--Washington St.-127--increased 1,100 from 1993 through 2013.

Meanwhile the draft Existing and Future Corridor Conditions Report projects a reversal of a traffic decline history over the next 20 years in spite of estimating zero population or employment increases with the following traffic growth estimates:

5% growth Plattsburgh Ave

5% growth on North Ave between Plattsburgh and Shore Rd 10% growth on North Ave between Shore Rd and VT 127 15% growth on North Ave between VT 127 and North St 5% growth on VT 127

No rationale is provided for this historical change of the curve from negative to positive vehicle traffic on North Avenue. The Vermont Agency of Transportation guidance for growth factors for project purposes (contained in the "Red Book") indicates a five year urban traffic decline of 1% and 20 year decline of 5%. The VAOT factors reflect historic traffic trends.

Here are the historical numbers:

VT127Connector-Manhattan Dr	2005	2009	2013		
D001 1	5,600 14	l,700 14,	200	-600 05/13	1990 18,100
VT127—Connector-Plattsburgh D475	8,500	8,100	8,000	-500 05/13	1993 9.100
VT127—Connector Ramp 1-No. Ave D476	9,900	7,700	7,700E	-2,200 05/13	1994 9,800
NORTH AVE—Sherman-North	13,100E	10400E	10,900E	-2,200 05/13	
NORTH AVE—North-Wash.	11,400E	11,100E	E 11,100E	-300 05/13	
NORTH AVE—Wash.—127 D045	11,800	11,700	11,600	-200 05/13	1993 10,500
NORTHAVE—127-Ethan Allen Pkwy	20,400	E 15,500)E 18,300E	-2,100 05/13	
NORTH AVE—E.A.PShopping Ctr.	14,300E	13,300E	E 13,400E	-900 05/13	
NORTH AVE—Shopping CtrShore D151	14,900	13,700	13,400	-1,500 05/13	1993 13,800
NORTH AVE-Shore-Plattsburgh D148	11,700	10,800	10,800E	-900 05/13	1993 11,100
PLATTSBURGH—No. Ave-Barley Rd D289	7,700	6,600	7,000	-700 05/13	1987 8,400

E--Estimated by AOT; other numbers are sample or 100% from automatic traffic recorder counts. Thank you for your consideration.

From: TONY Redington Date: July 2, 2014 at 9:20:01 AM EDT Subject: North Avenue Advisory Committee Meeting July 1 Hi: Another "declaration." Tony

The North Avenue Corridor Study Advisory Committee on Tuesday July 1 declared its own independence endorsing a corridor design insuring the opportunity to reach the stated adopted vision goal "achieve a world class transportation corridor with quality service and highest safety for those who walk, bicycle and travel by motor vehicle or transit."

In a series of votes the Advisory Committed set the final shape of the plan calls for a short term pilot of a "road diet" from Shore Rd./Heineberg Rd. intersection to VT 127 reducing four lanes to three lanes with the center lane for turns. The other major short term betterment within three years, in part taking advantage of roadway freed up by the road diet, marks bike lanes on each side existing roadway from the north end of the corridor at Plattsburgh Ave. to Washington St. near Burlington College, a distance of about two-and-a-half miles. The short term "pilot" approach to afford the North Avenue community to "try it before you buy it" also removes little used parking along the Washington St.-Plattsburgh Ave. segments. Part and parcel of the bike lanes marking involves installation along at least on corridor segment of "cycle track", a protected bike lane, accomplished through a series flexible bollards. The bollards would be removable during the snow season.

The Advisory Committee also approved two ground breaking recommendations for the long term, the first ever in City studies: protected cycle track from end-to-end of the 2.8 mile corridor with roundabouts installed at key intersections which promises increased safety and service for all modes. The cycle track long term will be one-way built either on the roadway level or the sidewalk level as decided in the future. In addition the roundabouts re-enforce the speed management as the Committee committed to a 25 mph level during the "pilot" period.

The decrease called for by the Committee, a decease from the 30 mph speed limit in the central part of the corridor, accords with the City speed limit policy of 25 mph with part of this North Avenue corridor currently one of less than of a handful of exceptions to that policy today.

Roundabouts recommendations included the intersections of Plattsburgh Avenue, Ethan Allen Parkway, VT 127 and Burlington High School (Institute Road). The votes for Plattsburgh Ave. and Ethan Allen Parkway were by narrower margins. The discussion of roundabouts included emphasis that each intersection be carefully evaluated as part of scoping studies that will take some years hence, that traffic trends may well allow single lane roundabouts (the safest treatment, particularly for those who bike and walk), and that further study employ firms with proven experience in roundabout evaluation and design (not available for corridor study). Burlington's (and Chittenden County's) first busy street roundabout on Shelburne Street at Locust St./South Willard St., a single lane design, involves traffic numbers above that of the two high traffic North Avenue intersections today at VT 127 and Ethan Allen Parkway.

The next steps in the Corridor plan involves write-up of the draft plan reflecting the Advisory Committee decisions followed by review by the City Council committee on Transportation, Energy and Utilities chaired by Councilor Maxwell Tracey, then the City Council. Further, separately public involvement continues at each stage of the plan implementation.

The "North Avenue declaration" comes a few weeks after the Burlington Walk Bike Council "Burlington Declaration" calling for investments in quality walking bicycling infrastructure-particularly cycle track and roundabouts-and supporting considering of these measures in the North Avenue corridor study. Local Motion also undertook initiatives to support inclusion of quality walk and bike "infra" in the North Avenue plan.

While improved transit was not specifically addressed a consensus has existing in the planning process for improved frequency and hours of service for Chittenden County Transportation Authority (CCTA) routes serving North Avenue, better connectivity to other routes in the City, and at least examining the feasibility of light rail extending from Flynn School south to the Marketplace and beyond (trolley service after about four decades from downtown reaching Ethan Allen Park ended in 1929).

Wednesday, June 25, 2014 5:47 PM

Message from: miriam black

The Council and the Administration seem bent on converting the streets into a glorified bicycle path. At times one would think that nobody rides in cars or on buses. Let me introduce myself as someone who has never ridden a bicycle. Getting from the New North End by bike is already available via the Bike Path. Should additional roadways be needed consideration should be given to licensing bicyclers, ticketing those who do not follow traffic signs, lights, do not signal for turns, ride several abreast in heavy traffic, etc. Without bus service into neighborhoods, most Burlingtonians are forced to drive autos...current conversation appears to point to mandating bike travel rather than cars, an obviously ridiculous state. Let's try to be practical!

From: Meredith Birkett <<u>mbirkett@cctaride.org</u>> Sent: Thursday, June 19, 2014 4:44 PM Subject: North Avenue Follow-Up

Hi Eleni, Jason, and Charlene,

Given all the discussion that has taken place, Jon and I thought it would be helpful to send a follow-up note to clarify CCTA's position regarding Local Motion's proposed 2-way cycle track (I believe it was referred to as C+).

After speaking with Jason on June 11, Jon and I met with our Operations staff to discuss the C+ proposal, and they raised some operational safety concerns.

- 1. To provide safe and accessible service for CCTA passengers, buses must be able to pull up to the curb. It would not be safe to board or de-board passengers in the cycle track due to potential conflicts with cyclists. This would be especially unsafe for passengers using mobility devices.
- 2. Due to the configuration of concept C+ with the two-way cycle track located directly adjacent to the travel lane, there would be many instances when CCTA buses would travel and stop in the cycle track in order to pull to the curb.
- 3. CCTA is also concerned with limited driver visibility to the rear and side of the bus when pulling out of the two-way cycle track and back into the southbound travel lane. A two-lane bike lane is more challenging than a single lane bike lane due to the angle of the bus mirrors.
- 4. Since CCTA has bus stops roughly every 800 feet on the west side of North Avenue, and would require a minimum opening of 100' to allow buses to stop parallel to the curb, there would need to be significant gaps in the cycle track to allow for CCTA operations.

While CCTA is fully supportive of Complete Street improvements along North Avenue we are concerned that concept C+ would limit CCTA's ability to maintain safe, accessible and efficient transit service along the North Avenue Corridor.

As an alternate to concept C+, CCTA believes concept F would offer a safer operating situation. Concept F would provide similar bicycle and pedestrian upgrades along North Avenue while also providing a greenbelt between the southbound travel lane and a two-way cycle track. The green belt would provide a safe boarding and alighting location for passengers assuming the installation of ADA accessible landing pads.

CCTA would be comfortable advocating for concept F if the following components were included at all bus stop locations:

1. ADA landing pads in the greenbelt

Signalized crosswalks across North Avenue

- 2. Curb cuts at the landing pads on the North Avenue and cycle track sides Crosswalk markings from the landing pad across the cycle track to the sidewalk
- 4. A curb cut on the sidewalk side of the cycle track.

Please let us know if you have any questions.

Thank you, Meredith Meredith Birkett | Director of Service Development CCTA | 15 Industrial Parkway | Burlington, VT 05401 Tel | 802-540-2453 Fax | 802-864-5564 <u>www.cctaride.org</u> *****
Message from: Lisette Baxter

About North Avenue, some thoughts. 1. I am against a round-about or a "circulator" as they call it in Winooski. It doesn't work when there's a pedestrian crossing, actually it is more dangerous. 2. On a long corridor like North Avenue a speed limit of 30 miles works well. Instead of punishing those of us who follow the speed limit by lowering it to 25 miles, make sure the speed limit is enforced. Twenty five works well in neighborhoods but not on long connecting road like North Avenue or Shelburne Road and others. 3. Bicycle lane: how about removing the green belt along the sidewalk on the West side -since on the East side we have electrical poles- and using this extra space for the bicycle lane. We have a beautiful bicycle path but on the other hand I can understand the need to have a lane on North Avenue (actually every street should). To remove the green belt is probably not the most popular solution but we have to work with what we have - and hopefully within budget. By removing the green belt - and keeping the sidewalk elevated - that would give the extra lanes needed for the bicycles. Lisette Baxter Lakewood Estates Burlington, VT

From: Moe Hevey Sent: Thursday, June 12, 2014 10:28 AM Subject: NORT AVE. CROSSWALK PROPASAL.

Putting Crosswalks (lights or otherwise) at every street corner on North Ave. is NUTS !!

I live on Birch Ct. and I am having problems getting onto the Avenue with my car on occasion, slowing traffic will cause gridlock.

There are 4 Lights from shopping ctr. now for crossing the ave., longer light times for people and bikes to cross would be a good idea.

Roundabouts I never liked, safety problems with bikes using them. Thanks. Moe Hevey *****

From: Chapin Spencer Sent: Monday, June 09, 2014 9:52 PM To: Bill Bratcher Subject: Re: Speeding

Thanks Billy for passing this along.

I'm sharing your comments with Nicole Losch who is our point person on the North Avenue Corridor Study. If you have a moment, I'd encourage you to share your thoughts through the online input tool for the study: http://www.burlingtonvt.gov/public-input

Some of your ideas may be appropriate as short-term recommendations for the study — things we want to get done in the next year or two. We can look at similar treatments as were installed along Pine Street. Those 6 sets of rapid flashing beacons, curb ramps and new sidewalk segments cost \$139,000 — half paid for from a state grant. Having the North Avenue Corridor Study call out a number of practical short term improvements will help us secure funding for them.

Best, Chapin, Chapin Spencer, Director, Department of Public Works

On 6/9/14 8:49 AM, "Bill Bratcher" wrote:

Good morning, Boy it's heating up here on the avenue. This morning I'm bringing my child to Burlington High School doing the speed limit. A very impatient motorist is behind me beeping his horn because I'm not going fast enough. He sees an opening veers into the right lane then back into our left lane, nearly causing an accident. Now he inches his way to the belt lines entrance and he's stuck in traffic as it's somewhat backed up. I put put around him on my way to BHS, for some reason I get the middle finger because my RPMs don't live up to his North Avenue raceway expectations and the "new norm " out here. How many times have my wife and me had horns beeped at us also for slowing down to turn into our own driveway, you can't count that high. This city street is way out of control brother. You say something may not be done on the Avenue for a while, that's really not acceptable. Chaplin, I'm really not one to complain about anything, but speeding and impatience is insane up here. I don't know why there is 25 mph postings here near Hunt Middle School where I am, it's a complete joke! We both know it will most likely take a child or bicycle rider getting hit to act on this in a timely manner. I love what you did on Pine Street. But, why Pine Street and not the avenue? With Thayer house up here and all the other expansion in this part of town, there's more traffic than ever. I really wish I had the time to attend the corridor study meetings. Having a front porch I witness much more than the average resident on the avenue. But, many feel the way I do. You should come here on a Friday afternoon, sit down after work and have a cold one with me. You will be blown away at how fast people zip by in this school zone. In the meantime, I'm sitting here putting the final touch on a great but sad tune called " The North Avenue Blues" . " Mr. Policeman, want your quota met in one day, tuck your black and white here in my driveway" ! " Im gonna call up the Department of public works, see what I can get done, city clerks gonna hear how dangerous my roads become" ! Yours in safety, Billy B. ****

From: Paul Sisson Sent: Tuesday, June 10, 2014 3:17 PM Subject: North Avenue Corridor

I want to express the basic question of many citizens that I have been in contact with, which is - why? If it is not broken, don't fix it. And North Avenue as a whole is not broken - it needs some attention, but not on the scale that is being discussed. If the CCRPC wants to help in the improvement of traffic in the City, please look more closely at the southerly and easterly approaches to the City - i.e. Rt. 7 and Rt. 2. Gridlock is fast approaching in these access points, and clearly more attention should be paid to significant problems that exist already than to those that might (or might not) become problems in the next 30 years.

Finally, the City of Burlington cannot afford this kind of project without significant (say 95%) funding from others, be it the State of the Fed. The BT fiasco has gotten the City to the edge of financial ruin, and existing infrastructure maintenance should be the focus of the City's construction budget.

I also question the CCRPC's public involvement process, which consisted of a consultant talking to six affected parties (per online consultant agreement), and also had three or four meetings, all held in the evening. Let's consider a resident who works evenings, or a single parent that has kids home from day care, or merely the hard-working Average Joe or Jane that just doesn't feel like going back out once he or she gets home from work. Instead what you get for a turnout is mostly the same people at each meeting, people that don't represent the views of the majority of the residents. It would seem to me in the age of the computer, that an organization like the CCRPC would have developed other means to obtain public input.

Finally, a comment about the North Avenue Corridor Group at the CCRPC - I feel we in Wards 4 and 7 are underrepresented on that committee. It would seem prudent for the CCRPC to include as many residents in the affected area, but that is clearly not the case. Why should non-residents have more say than residents? Just because they work for CCRPC, DPW or any other entity should not give them more influence than residents - we drive the roads every day - we know what it is like - and we don't need experts telling us stuff we already know, or worse, doing things to our roadways that most of us don't want done. From: David Lansky Sent: Saturday, May 24, 2014 4:41 AM Subject: North Ave Corridor, mid & long term options From: 181 Austin Dr

I'm stunned that none of the options (for segment 5) include a physically separated two-way bike lane. Options D and E have bike lanes that are physically separated from car and pedestrian lanes; I think that is a good idea. Yet, I don't think we need 14' or 10' dedicated to two-way bike traffic. I think a two-way narrow bike lane that is separated from car traffic should be considered; consolidating the bike traffic into a pair of lanes makes it easier to have separate signal systems for cars, bikes, and pedestrians.

From: Azur Moulaert Sent: Friday, May 23, 2014 10:09 PM Subject: Limited scope From: 36 Westminster

I think that the transportation focus on this proposal is missing a broader conversation about other aspects of the quality of life of our community. I have spoken to several people in our neighborhood and they have a similar view, why are we talking about roads alone?

At the NPA (and the slide show that was posted and used earlier this week) meeting the ppt presentation & handouts were professionally done, a good job at presenting transportation alternatives, yet -again- solely focused on whether we put a roundabout here or there, a lane here or there etc.

I encourage the Corridor group to think outside its mandate and integrate other aspects of community development. I predict that you will have more community input. Dovetail what Rich Nadworny is doing.

Granted, one process doesn't exclude the other but I think you are missing opportunity "to connect the dots" by devoting all of this collective IQ to focus on such a small (yes, important) piece of our community needs.

Without the larger picture, I don't see the value of voting for one option or another on a map. Leah Terhune and Tony Redington have pointed out interesting articles/ideas on this thread http://goo.gl/yRZffT this kind of information is precisely what should be shared to better frame the issues (yes issues plural) that affect our community. Respectfully.

From: Daniel G. Cohen To: Councilor Ayres Subject: North Avenue study Date: Sun, 25 May 2014 12:30:12 -0400 Mr. Ayres:

I am not sure why you think there are problems with North Avenue, as you claim in your column in the North Ave. News.

I was born here 63 years ago. Burlington used to be nice. Now, what has been done to the streets, is a sad joke.

What, specifically, do you think is wrong with North Avenue? There is nothing wrong. Traffic moves fine, bicycles move fine, pedestrians move fine. And, you are talking about making changes, like installing round-abouts and all that crap? Please leave North Avenue, and everything associated with it, alone. Burlington's former DPW Director Steve Goodkind and all the politicians here have ruined this city already. For example, this is the Queen City of Speed Bumps. Very sad. Not necessary. The old Brookes Avenue here was fine for the past 100 years, and then curb jut-outs ruined it. Irt's dangerous. School Street was a sweet street. Now, it's one-way due to speed bumps that prohibit two-way traffic. Were you born here? Leave things as they are please. -- Daniel G. Cohen, Burlington, VT. *****

From: Joyce Walsleben Sent: Saturday, May 24, 2014 4:21 PM Subject: North Ave Discussion

I attended your presentation last Tuesday and wish to add the following comments. I should tell you I am a fairly new transplant from Manhattan where I watched the streets undergo similar changes. God, what confusion!

I should also mention that I am not a bike rider, well, except for the time I was impaled on the back of a woman's bike after she was forced to stop short for a left turning car and I was attempting to cross First Ave traffic, curbs and bike lanes. Pedestrian safety? I don't think so.

I did note some other issues which I hope will alert you as you plan:

- 1) In NYC there was no space for delivery trucks, so they parked and blocked the bike lane if they fit, or the traffic lanes if not. They included Fed Ex, Mail trucks, garbage collections, etc. Blocking the bike lanes forced the bikes to the traffic lanes. On North Ave, we have garbage pick up, recycling, parkers, mail and UPS, etc. Where will they go?
- 2) Even with the bike lane, some riders were faster than others and refused to be penned in, preferring the traffic lanes. Of note, I see that bikers tend not to care which direction they should go...they go either way, necessitating a walker who crosses their lane to look both ways..hence my missing the stoppage of the bike mentioned above. There is nothing as frightening as a shrill bike whistle in your ear! An instantaneous stop midstep if necessary is all that saves you from the ER.
- 3) There was a very useful center lane for emergency vehicles which worked because one could move to one of the neighboring lanes on a 3 lane one way street. How would that work in your plans?
- 4) Snow removal was another surprise! No snow plows initially fit the bike lane. Where does the plowed snow reside? Even with the backhoe system in NYC, it had to sit somewhere. Store owners were forced to shovel it into the bike lane. In your handouts I noted a Montreal exhibit with some snow on the lanes. What would have happened last winter with all our ice? Any curbing or other bollards would only complicate things.
- 5) And the roundabout at Plattsburg Ave, is a planned disaster. Have you seen the traffic patterns there at school dismissal? NO traffic moves. It's second only to Marathon Day. That roundabout would shut down North Ave AND Plattsburg Ave in both directions.

Which brings me to my next point: **What about those of us who are locked in above Plattsburg Ave?** We have one way in and maybe two ways out. Why is the roadway at Rivers Edge locked and unavailable? Who helps us in an emergency? Why can't some of the imaginary money help us?

If you are truly interested in improving North Ave, what about enforcing some neighborhood rules of no cars, trailers or boats on the front lawn which seems to be the norm?

I do appreciate the time you have spent and realize this is far from over, so perhaps a little more thought and less eagerness? Thanks. Joyce Walsleben *****

From: Steph Holdridge Sent: Friday, May 23, 2014 11:32 AM Subject: turning lanes

1195 North Ave Apt 3: There are many people now living in the 5 apt buildings here. We have to turn left into the parking lot. People traveling north in the center lane are not expecting this and often just change to the other lane just in time to miss hitting us waiting to turn left. I think it would be much better to have 3 lanes for all of North Ave with the center always being the turn lane. South Burlington did this on Williston Road East of Rte 116 and it works really well. People know what to expect and the road is consistent which is one of your goals. It is confusing when the number of lanes is constantly changing. Thanks. Enjoyed your presentation.

From: Nicole Losch Sent: Thursday, May 22, 2014 12:07 PM To: 'Francis Taginski' Subject: RE: North Ave. Project

Thanks for writing – I'm happy to clarify.

This study is not engineering, but conceptual planning. We initiated this nearly a year before Chapin started with the department, and we're trying to evaluate how we might implement complete streets – which is a city policy as adopted by City Council in the 2011 Transportation Plan.

Things are definitely not a "done deal," and we hope that anyone who couldn't attend the meeting or didn't feel comfortable staying will still comment at their leisure online – we just launched our online input tool yesterday: <u>www.burlingtonvt.gov/public-input</u>. If you're able to help us share this link with anyone who may be interested, we would appreciate that!

This input is helping us identify what concepts are preferred (and disliked), but is not meant to indicate that the process ends when this study ends. Rather, this is just the first step of many. Knowing the preferred concepts helps us focus future projects and present those in more detail and design to the community before implementation. Only very small improvements are likely to move forward without much additional design e.g. new crosswalks, signal timing changes, etc.

Many of details you're looking for (actual costs, full traffic analysis) will come along as we slowly try to implement the recommendations within the study. The information we have collected is available in the Existing <u>& Future Conditions Report</u>.

We didn't present cost estimates at the public meeting, but a full evaluation matrix will be included in the actual Corridor Study; it was just too cumbersome to include that in our public meeting – it took a full 2 hours just to introduce the concepts and let people comment on them. The matrix will include very preliminary cost estimates, traffic impacts, complete streets features, etc.

Public input is continuing as we wrap up the actual Corridor Study – we have the online tool and we'll have presentations at several meetings with local decisionmakers over the next month (public comment is always welcome at these meetings):

- June Public Works Commission
- June Transportation, Energy and Utilities Committee of the City Council
- July City Council (who will adopt the final plan)

I hope this clarifies a bit, and I hope that you'll still head to our online tool to provide some comments!

Thanks. Nicole Losch, PTP Transportation Planner / Pedestrian and Bicycle Program Manager 645 Pine Street Suite A, Burlington VT 05401

From: Francis Taginski Sent: Thursday, May 22, 2014 9:25 AM To: Nicole Losch Subject: North Ave. Project

I was unable to attend the public meeting on the project due to work but did hear from some folks that did attend. Sounds like a done deal no matter what anyone says. The meeting was packed with probike organizations many of whom were not NorthEnd or Burlington residents. The vote for the favorite proposal at the end of the meeting took place after the real residents left feeling this was a bike pep rally. None of my previous comments or informational requests were even noted during the meeting. NO information was provided on financing, intersection ratings, accident counts, economic impacts, or engineering road evaluations for speed reduction before the project is fast tracked though the Council. Why can't we have a vote of just NorthEnd residents before you move further? My other concern is that lane markings will made on North Ave. just to serve the special interest biking group and Spenser's agenda before any one knows what happened. This project is NOT planning process that I have ever seen. Let's take a step back and really do some engineered planning.

Thanks for listening, Francis "Tag" Taginski *****

May 20, 2014 Amy Stewart, Village Green (via phone message)

I'd like to see a fully marked bicycle lane throughout the whole corridor. There should be bicycle access to the Winooski Valley Park District Land/Ethan Allen Homestead from the Connector. There is a wide median there that could accommodate a bike path. Lastly, the bike path should be plowed for bike commuters; the sidewalks are too narrow when there is snow on the ground.

Issue No. 1217 - May 11, 2014

Latest Ideas for North Avenue Lea Terhune • NPA Steering Committee Member, Ward 4, Burlington

Keep up with the latest ideas for North Avenue here: <u>http://northavenue05408.blogspot.com/</u>

There are several opportunities to participate. ~Cyclists especially need to participate in the May 14 NORTH AVENUE BIKE ADVOCATES MEETUP, ~And all options will be discussed at PUBLIC FORUM, MAY 20, 6:30-8:30 pm

ST. MARKS CHURCH FAMILY CENTER. Details here: <u>http://northavenue05408.blogspot.com/</u>, ~Options are discussed monthly at the North End Neighborhood Planning Assembly <u>http://wards4and7npa.blogspot.com/</u> on

the fourth Wednesday of each month (May 28, June 25, July 23, Aug 27). Burlington College will be making a presentation of their ideas at NPA on May 28, Miller Center, 6:45 pm.

Although the official Corridor Study Advisory Committee is finishing its work soon, a volunteer Task Force known as "The Corridori" will be tracking subsequent events and reporting at every NPA meeting. For example, the North Avenue Corridor Plan will be presented to City Council for comment and approval sometime this summer. Then we will need to advocate for action! We hear that our plan is expensive, but it is MUCH cheaper per linear foot than the fancy upgrades planned for a much shorter section of Pine Street.

Will North Avenue be a 4 lane speedway to get cars downtown and to the waterfront fast, or will it be an attractive tree-lined avenue at the center of our community, safe for people of all ages to use, offering all modes of transportation options?

From: RJ Lalumiere Sent: Sunday, May 11, 2014 11:38 PM Subject: Further Comments on North Ave Corridor Study

Of the options as presented at the May advisory committee meeting I strongly prefer "D" for the segments and roundabouts for the intersections.

"E" & "F" are acceptable but less desirable options. "F" in particular creates several problems for cyclists including increasing the required number of street crossings and unusual road position leading to motorist inattention and confusion. It should only be implemented if a particular area presents insurmountable space constraints.

"B" & "C" are not acceptable long term options; they severely limit the upper bound on bike modal share by perpetuating the failed paradigms of the past that do not accommodate the safety and comfort concerns of the majority of the population with regards to cycling. I am strongly opposed to both. As short term alternatives to the "A" option they may be acceptable, but I do not believe that is one of the current suggestions...

Green lane markings for areas where bicycle facilities have right of way are strongly desired, but should be implemented via colored asphalt rather than paint for durability and maintenance reasons.

On street parking should not be considered for any segments but North St to Berry St. Even for that segment the need for on street parking should be formally evaluated. There are very few through fares from the NNE to points south, but there is plenty of residential, lot and side street parking. Most of the existing on street parking is barely utilized as it is thanks to these factors. Parking bans further show the practicality of this position (i.e., even without city garages the NNE easily clears the streets). Disadvantaging walkers and cyclists to maintain tax payer subsidized vehicle storage should no longer be perpetuated especially since viable alternatives exist.

Removing the on street parking frees up the necessary space to put proper verges between the main traffic lanes, the cycle tracks and sidewalks. This will enhance safety (perceived and actual), improve walker and cyclist comfort, improve aesthetics and provide space for snow storage. It also frees up the space to make the cycle tracks a proper width. Cycle tracks need to have at least 7 feet of usable width.

This allows passing, side by side riding & passable lanes when narrowed by winter weather. The importance of facilities that allow for side by side riding cannot be overstated as it greatly increases the pleasantness and sociability of the activity leading to higher rates of cycling. It also allows for stronger riders to pace weaker riders (specifically the young and elderly) to help provide guidance at intersections.

Removing on street parking would also allow for a short term buffered bike lane option to be implemented within the existing curb-to-curb width while waiting on long term reconstruction that includes cycle track.

I'm concerned that the roundabout options as presented are overly complicated & confusing and that these non-standard designs may not even be necessary to support the traffic volumes present in this corridor (presumably the reason for their suggested designs) and may be less safe than the standard designs. I would request that a firm specializing in roundabout designs be consulted on all proposed installations.

Cycle tracks and roundabouts should be melded seamlessly with no need for cyclists to merge on to the main travel lanes unless they want to.

See attached example design from the Dutch C.R.O.W. "Design Manual For Bicycle Traffic".

Crosswalks should be added to maintain the City's desired maximum distance between crosswalks. RRFB's should be implemented at unsignalized, non-roundabout crosswalks to improve motorist yield compliance.

Ideally utilities would be buried to enhance aesthetics and resiliency. If they are not then at a minimum the highway scale lighting should be replaced with pedestrian scale lighting.

The speed limit for the corridor should be made 25 MPH consistently, in line with the general speed limit in Burlington. This speed should be reinforced by both legal enforcement and design considerations.

Shore Rd and Heineburg Rd realignment is highly desirable. Regardless of whether this is done or not split phasing the signal should be done immediately. This intersection is currently highly unsafe and stressful regardless of mode.

While out of scope for this study it would be nice to have an eye on the fact that reducing the number of lanes on the Rt. 127 connector road would allow for construction of a 2 way cycle track to connect North Ave to the 127 Bike Path. Given the dearth of intersections/driveways along this connector road a two way cycle track would have little downside in this application (especially considering that all the possible connections for bicycles are on the North side) and would be much easier to execute. This would be a huge win as currently there is no good way to get to/from North Ave directly to this path. This configuration would also mesh better with a single lane roundabout at the intersections and reduce the amount of weaving that occurs presently.

Sincerely, RJ Lalumiere, Ward 7 Alternate *****

From: Nicole Losch Sent: Wednesday, May 07, 2014 3:16 PM Subject: FW: North Ave.Project

Hello Francis,

Thanks for taking the time to write. I wanted to let you know that none of our conceptual alternatives are a done deal. These are all concepts, with a focus on treatments that will create a Complete Street. We have to consider all the modes that New North Enders may choose to access this corridor, and this process is helping us and the community to work through the various ways we could make that happen. The cross-sections feature variations for vehicle lanes (including bike facilities), but other streetscape considerations are universal to all of the scenarios -- street trees, transit enhancements, etc.

While we're nearing the end of the Corridor Study, the process for improving North Avenue is really just beginning. The bigger proposals in this Corridor Plan will need further scoping and design, so there will be many

opportunities to continue to provide input. As you probably remember from your former planning career, engaging the public is always a challenge! We're trying some new ways to reach everyone we possibly can, with an online input tool coming online within the next 2 weeks. If you have other ideas for how we could have reached you during this process or how we can reach you and others in future projects, I would love to hear your ideas!

Thanks again, and I hope to see you at the next public workshop on May 20 at 7 pm at St. Mark's Church on North Avenue.

Nicole Losch, PTP, Transportation Planner / Pedestrian and Bicycle Program Manager

From: Francis Taginsk Sent: Tuesday, May 06, 2014 9:16 PM Subject: North Ave.Project From: 177 saratoga Ave., Burlington

As a resident and former professional regional Planner I find the project alternatives presented as a closed process. Is this a done deal and you are merely fulfilling the public comment requirement to justify proceeding? Is this a repeat of the Pearl Street mess? The alternative are single purpose for bike traffic. There is no provision for bus traffic that does not allow vehicular traffic to proceed during a bus stop. NO concept of what will happen in the winter. The New Northend will be gridlocked. Ever seen rush hour? If you can stand the heat place the proposals in public places or at Ethan Allen Shopping center for all to see and not just those that have social media. What provision have you made for Colchester commuters? The Beltline intersections cannot handle existing traffic. Don't punish the New Northend.

From: <u>burlingtonwalkbike@googlegroups.com</u> On Behalf Of Jim Holway Sent: Sunday, May 04, 2014 9:21 PM To: patrickkearney; Burlington Walk/Bike Council Subject: [BWBC] Re: North Avenue Corridor Study

Patrick - Thank you for your comments. It makes very good sense. I will be sure your thoughts are part of our process in the North Avenue Corridor Study.

I recently joined the steering committee for the Burlington Walk / Bike council. Right now we are working with Burlington City, Locomotion and others to have a designation of a World class Gold city with transportation - especially focused on short-term, mid-term and long-term pedestrian and bicycling. Working with businesses to encourage walking and bicycling.

I'll pass your thoughts on at our next meeting. - Jim Holway

On Sun, May 4, 2014 at 6:59 PM, patrickkearney wrote: Hi Jim

I had intended to attend the meeting on May 1st but had a scheduling conflict.

My points are as follows: My understanding is that the restriction of having bicycles on the beltline is self imposed and could be reversed if several people pushed the issue.

You cannot have a good bike path along the curb of North Avenue as long as the catch basins are at the curb. North Avenue being flat is a opportunity to move the catch basins behind the curb as it done in some locations. It is not a cheap solution but it has been done on flat streets. the hill sections is more difficult. I would appreciate it if you could forward my comments to the regional planning group Thanks. Patrick

From: Eli Lesser-Goldsmith
Date: Tuesday, May 6, 2014 10:58 PM
To: Chapin Spencer <<u>cspencer@burlingtonvt.gov</u>>
Cc: Joel Fleming <<u>ifleming@burlingtonvt.gov</u>>
Subject: Re: Packard Lofts Parking

Understood. I bet you could save the trees. but who knows.

I would really love to see a wider, more usable bike lane running down north ave. Even if it was on ONE side only, but wider, I think a LOT more people would use the lane for commuting, enjoyment, etc.. right now it's just too narrow. Eli

On Tue, May 6, 2014 at 10:18 PM, Chapin Spencer <<u>cspencer@burlingtonvt.gov</u>> wrote: Thanks Eli.

The reason we're proposing to notch in the parking is so we can preserve the bike lane all the way to intersection with Berry Street and Washington Street. So we're on the same page there.

I don't know if the trees could be moved, but we can check.

We think this is a balanced proposal and it sounds like you think it seems sensible as well.

Best, ~ Chapin Chapin Spencer, Director, Department of Public Works, 645 Pine Street, Burlington, VT 05401

From: Eli Lesser-Goldsmith Date: Tuesday, May 6, 2014 7:11 PM To: Joel Fleming Subject: Packard Lofts Parking

Thanks for letter in the mail about the Packard Lofts and the proposed parking change.

For the record, I'm one of the only people in that area that have supported Packard Lofts, from the beginning. Now that's it built, I think its great. Great for the neighborhood, and great for Burlington.

Here is my feedback on the parking plan:

- can the trees be moved in, closer to the building?
- what happens to the bike lane that runs down North Ave? North ave REALLY needs a bike lane.. and a wider one at that.

Overall, I support this plan, because the cafe really needs parking on North Ave.

Thanks for your work on this! Eli *****

From: Chapin Spencer [mailto:cspencer@burlingtonvt.gov] Sent: Sunday, May 04, 2014 10:21 PM To: R. Alex Reutter Cc: Nicole Losch; Eleni Churchill Subject: Re: N. Ave corridor study

Hello Alex, Thanks for writing and sharing your input. DPW staffer Nicole Losch and CCRPC staffer Eleni Churchill are the point people for the North Avenue Corridor Study so I'm forwarding your input to them. You make some good points. There will be an online comment tool up soon and I'd welcome you and your neighbors to continue to offer input as this project moves forward. Thanks again!

Best, Chapin Chapin Spencer, Director, Department of Public Works, 645 Pine Street, Burlington, VT 05401

From: "R. Alex Reutter" Date: Sunday, May 4, 2014 5:26 PM To: Chapin Spencer Subject: N. Ave corridor study

Hi Chapin, I was at the Ward 4/7 NPA mtg last week and brought home one of the packets the information on the North Ave corridor study (unfortunately the contact info for the folks who presented the study wasn't included, which I why I'm e-mailing you). I think it's fantastic that the NNE is getting a serious look, but had a concern about the proposed roundabout design (attached). The two southbound lanes going into the roundabout and then coming out of the roundabout are highly undesirable; there would be enough confusion among the elderly population with a single-lane roundabout. Likewise, the dedicated right turn lane for people coming off 127 seems undesirable from a design aesthetic. If these extra lanes are part of the design in order to push cars through the intersection, then I think I would rather have a signalized intersection. (It's also entirely possible that I simply misunderstand the design, and would be happy to be educated about it.)

Cheers, Alex ****

From: Liam Griffin Sent: Friday, May 02, 2014 12:59 PM Subject: Re: North Ave Corridor Study - Feedback

Wanted to shoot another thank you note for all the info that was presented last night.

On a somewhat related note, I wanted to send along this link:

http://labs.strava.com/heatmap/#14/-73.24750/44.50391/gray/bike

While the data used to create this "heat map" is limited, and also skewed towards the more competitive cyclist that actually tracks rides with Strava (instead of casual commuters) it does show some interesting visuals on the varying use of different routes. Interesting to look at comparative use of different routes, and the lack of defined east/west routes.

I found this via an article about how Portland actually purchased all the data from Strava for their city to use it for future planning purposes.

http://bikeportland.org/2014/05/01/odot-embarks-on-big-data-project-with-purchase-of-strava-dataset-105375 From: Diane Meyerhoff Sent: Friday, April 25, 2014 1:37 PM To: 'Liam Griffin'; 'echurchill@ccrpcvt.org' Subject: RE: North Ave Corridor Study - Feedback

Hi Liam! Thanks for your comments. I've forwarded your note to Joe Barr, who has taken over for Steve Rolle at PB and is responsible for the technical aspects of the study.

I hope we'll see you at the public meeting on May 20th (7PM, St. Mark's Church). Best, Diane

From: Liam Griffin Sent: Friday, April 25, 2014 1:27 PM Subject: North Ave Corridor Study - Feedback

First, thank you for all the great work so far. I've been following progress online and got to hear some public reaction at the ward 4/7 NPA meeting this past week. It is nice to see all the thought and work that is going into finding a solution for a section of town that is currently a nightmare for all road users.

My one major concern is that there seems to be a gap in the options provided. There are currently multiple scenarios for each segment of the corridor, with different lane options and timelines. There are also suggestions for updates to intersections. The missing link in the proposal right now are options that show how the different lane configurations will work at the actual intersections. To me, that is the MOST important part of this whole study and planning process, since Burlington does such a terrible job of providing bike lanes that are actually designed to work through an intersection. In fact, I don't think I can name a single intersection in Burlington that has a bike lane running through it on both sides. Lanes almost always disappear when they're most needed, at the intersection where a cyclist is the most vulnerable.

I brought this up a the NPA, and will be attending future meetings about the corridor planning, but wanted to bring this to somebody's attention ASAP since all the work that has been done so far will be rendered useless if the planning for lanes does not carry through with redesigned intersections.

This video has some great ideas for intersection configurations: <u>http://vimeo.com/86721046</u>

Thanks for reading. Best. LG *****

From: Chapin Spencer Sent: Thursday, April 24, 2014 5:25 PM To: Nicole Losch; diane@thirdsectorassociates.com Subject: Re: NAN draft(s) for North Ave Corridor

Thanks you two. Nothing of note from the Ward 4/7 NPA last night as it relates to the project. RJ and the other gentleman did a very good and factual job. Many positive comments. Two comments of concern about a 4 to 3 lane conversion -- one wanted a demonstration trial first.

Help Plan for North End

<u>Lea Terhune</u> • NPA Steering Committee Member, Ward 4, Burlington Event: Apr 23, 2014 Residents in the North End of Burlington meet monthly at the Miller Center on 4th Wednesday, planning how to improve our neighborhoods and providing input to city departments about quality of life in our neighborhoods, city/school budgets, park activities, and streets/sidewalk/bikepath issues. It's also a good time to talk informally with elected and appointed officials who represent the North End on Council, School Commission, and other boards, commissions, task forces and advisory panels. In addition, there is an Open Mic for speak-out at every assembly meeting.

This month, on April 23 at 6:45 pm, representatives to the North Avenue Corridor Study -- Barry Trutor and RJ LaLumiere -- will gather more input about how we want The Avenue designed when improvements are done. Local imagineer Rich Nadworny will share results from a workshop he designed to re-imagine the North End and he will gather more of our ideas. Chapin Spencer, DPW, will wrap up the evening with a discussion about North End paving needs, bike path reconstruction, sewer and waste water system performance, and anything else residents want to bring up.

NPA Agenda at North End NPA website: <u>http://wards4and7npa.blogspot.com/</u> Details about North Ave Corridor Study: <u>http://northavenue05408.blogspot.com/</u>

Lea Terhune Ward 4 NPA *****

From: Ken Peterson
Sent: Sunday, April 06, 2014 11:09 PM
To: TONY Redington
Subject: Re: New! North Ave Task Force Website, a New Blog there; Advisory Committee Meets May 1

Tony, the more I look and study these smaller roundabouts, the more I kinda like them for a safer method of the walkers getting across the street. Bikers also will be better off but they also have to obey the same laws as the motorists and from what I have seen and noticed over the years that a very large number of them have complete disregard for the laws.... but to get them off the street on their own pathway would be great along now, one of my questions might be if and when this all comes about, and since we won't with the walkers. have parking meters along the way, will the sidewalk plows work with the street plows on opening up all routes. meaning no snowbanks between the different paths. Another thing I am concerned about is the bus pickups. if the small piece of land between the bike lanes and the street will it be wide enough for the waiting area without losing part of the bike lane just trying to vision this whole deal coming together and since I am a newbie and having to move at a faster scale now to catch up well there are a few things. From the High School to Plattsburgh Ave, i have driven it so many times each day and there is never more then two to four most of the time there is only one. I would hope that that whole stretch of that area cars in that area. would be treated the same with the same width (bike lanes 5 feet for example all the way... sidewalk lane all the way the same. car lanes say 11 feet all the way the same. I am only using those numbers for illistration. two car lanes and one center turn lane (total of three lanes) but I do feel that a seven foot bike lane is way larger then needed. we need to put some of that width back to the car lanes. Just some thought, Thanks again for all your work and getting some of us turned around at least a bit . Ken Peterson ****

On Sat, Apr 5, 2014 at 9:34 AM, TONY Redington wrote:

Hi: The new website of the North Avenue Task Force--citizens involved in the current North Avenue corridor study--new post, "What do homeowners want most?--A Place with Safe Bikable Routes to Work and Shop" deals with information from the recently released National Association of Realtors Survey.

The North Ave Task Force website, <u>http://northavenue05408.blogspot.com</u> ,

contains keys to the North Ave study documents, comments and blogs on current and upcoming meetings and relevant items--an easier way to keep up and share without receiving lots of emails clogging up the inbox!

ADVISORY COMMITTEE, ST. MARKS CHURCH FAMILY CENTER, THURSDAY, N MAY 1 6:30-8:30 P.M. Key meeting will move close to final vision, goals, and closer to final options. Committee meetings are open to anyone to attend.

Finally, if you have any questions regarding issues, roundabouts, cycle track, etc., do not hesitate to contact me and will try to respond or connect you to somone in the know. Tony *****

From: Jim HolwaySent: Thursday, March 27, 2014 4:38 AMSubject: Help get the word out and offer your own suggestions

Hello - "Leadership is not a title, it is an action" - Public Allies CEO Paul Schmitz

Thus I am asking for community leadership. I think of your connection in the New North End

Please read, spread the questions and invite people's responses. Can I ask you to contact at least two people and/or groups who may want to be informed, involved or might volunteer in getting this off the ground?

In advance, thank you, Jim Holway (Use the email jim@05408.org)

Post begins here: Neighbors, friends and community leaders of all shapes, sizes, colors, ages and backgrounds -

I am not the first to talk about this and hopefully not the last. In fact that is the point of this appeal for your thoughts.

Before tossing this message aside because it has length, please read through because your thoughts may have long range impact in our community.

There are many facets of our North End that make us, in many ways, our own village. as well as being a great part of Burlington.

Did you know the "new" North End has some 10,000 great neighbors, friends and leaders in all parts of Burlington who live in the 05408 zip code? We also have over 200 businesses and community groups.

Neither did I before I began creating a Business Directory. - which now needs the businesses in our 05408 zip code area to help me complete and verify the data I do have. Hint.. Hint.. Business owners

We all know the obvious ones however the bulk of those businesses are home-based and/or internet based. Many of our own friends and neighbors would love to have our business. Plus the business to business relationship.

What about an affordable family restaurant? We have 2 new Pizza places opening with in months of each other. Is that an woops!

So here are the questions I would love your thoughts on:

I'll ask several, but just take a moment to comment on one or two of most interest.

(Q1) If you own one of these 200+ businesses or know of a person who does, what are some ways our community and our other businesses can work with you?

(Q2) I searched hard to get the database I have created for the business directory. Yet what I have is incomplete information. Consider how hard it is to get your info known by somebody who is not putting much time in? Start by getting me your complete info - There is no cost to you. There is no current plan to sell advertising such as telephone directories do. Why not help get your own info out?

(Q3) If you are a resident, what businesses do you think are missing along the avenue and in our neighborhoods? How do the businesses here serve you well and what is missing?

(Q4) If you are a business or organization in the New North End, what sort of collaborative advocacy might solve challenges that are hard to overcome as a single person, group or business?

(Q5) If you are a resident, what information do you find lacking because you do not know where to go and do not want to or have the means to go to city hall?

(Q6) Whatever entity you represent (selve or group) do you have information on events, specials, or needs that can not wait a month for the North Avenue news or won't reach enough people through the NPA, Church, Senior Center or other community center?

(Q7) What are the best parts of the New North End that we should share with visitors?

Here is why your thoughts are very important to our community now:

Several visioning projects are underway. A North Avenue Corridor Study, A Workshop this coming weekend targeted at hearing from the quieter and/or less active community engaged people. People who's ideas are gold, but not frequently heard from. We are digesting and really having an opportunity to rethink many things as a result of Redistricting. Ranging from NPAs, to political parties. From a revamped model of representation to a new campaigning dynamic.

Of course there are many offshoots to those large changes that are afoot. There are more opinions on how to embrace and seize the opportunities than there are people expressing those opinions.

My request of you is to help pool all thoughts and explore an overarching set of possibilities that are credited to no one but a credit to us all.

I will start the ball rolling with a goal for forming a way for all the ideas to begin to gel together rather than miss the synergies that may not come about for a decade or more. I ask what sort of group might we envision to give the ideas legs and to turn the best of them into action and a body to see them through.

A group such I will describe below can:

- * Pull these great ideas and efforts together,
- * Can centeralize and standardize communication where it best fits
- * Can advocate stronger,
- * Monitor progress,
- * Can be a clearing house for information to and from the city government, Community groups and Businesses
- * Keep the community better informed,
- * Capitalize on synergies and effective collaborative efforts
- * Keep a more responsive relationship with the city
- * And work with large service providers such as Burlington telecom.

So, over a number of months I have spoken with local leaders, CEDO and been working with a handful of people to lay the groundwork to an initiative that could be a hybrid Business association / Community Resource and Advocacy / Chamber of tourism and Commerce.

Sounds like a lot, but really the needs in each area are too small to stand alone. Given the size and makeup of our community, we would need to be small scale on all counts.

From the initial wide range of possibilities will come conversations and frankly volunteers that will drive a refined and more aptly responsive group to facilitate what our residential and business community wants and needs.

Ok. Long enough message.. Let's check ego's and titles at the digital doorway and kick around some ideas and see what we can do together for our community.

- Thank you, Jim Holway

From: Bill SorrellSent: Wednesday, February 19, 2014 11:16 AMSubject: Re: JOIN US! North Avenue Workshop #2, 2/20, 7PM, St. Mark's

More bike friendly is important and those pedestrian crossings with the flashing lights along Pine Street will save lives. The biggest problems are the stressful left hand turns with the relatively high speeds south of the shopping center across two lanes and into two lanes when oncoming traffic in the far lanes might be changing lanes. Too frequently not fun...or safe *****

From: Nicole Losch [mailto:NLosch@burlingtonvt.gov] Sent: Wednesday, February 19, 2014 9:32 AM Subject: RE: North Ave. Hi Jean,

This study is definitely not limited to just looking at new painted lines on the roadway. That may indeed be one recommendation, especially for some immediate or short-term fixes, but this planning study is an opportunity to identify big projects as well. We are focusing on projects and improvements to the streetscape and within the street's right-of-way, but any recommendations outside of that realm will try to be captured to share with other city departments who might be able to consider those changes (e.g. height limitations).

All of the ideas you expressed would be welcome, and although you can't attend the meeting we will include your email and your comments with those we do receive at the meeting. Also, there will be another public meeting coming up, likely in April. At that meeting we'll try to prioritize and get into more specifics on some of the projects / recommendations that are identified at this week's meeting. Please stay tuned for that meeting as well.

Thanks for writing! Nicole Losch, Transportation Planner / Pedestrian and Bicycle Program Manager / Environmental Planner

From: Jean Markey Duncan Sent: Wednesday, February 19, 2014 8:30 AM To: diane@thirdsectorassociates.com Subject: North Ave. I was wondering if you could clarify something for me. When I read, "North Avenue Re-Imagined", I actually thought we were going to be reimagining the street in its entirety. I thought we might be considering a complete regrading of the streets, to lower the roadway so that the street is not higher than the sidewalk and so that puddles at the curb do not threaten walkers and bikers with total saturation when the streets are wet, as they do now. I imagined strategically placed islands along the avenue to breakup the runway affect. These islands would be beautifully planted and act as an oasis for people crossing the street. Turning lanes would be located near islands. I imagined streetscape improvements like eliminating the ugly fencing along the avenue between Little Eagle Bay and Lakewood estates and replacing it with sound barrier walls that could be planted with trumpet creeper or other attractive foliage. I had hoped that we might establish some limits on rooftop antennae that is threatening to make the street look like an industrial corridor. (i.e., new structure recently erected on top of Ethan Allen shopping center building.) Maybe a low but densely planted circle by the Alliance Church to move traffic down North Ave. or onto the beltway? How about some art? A given, of course, would be bike lanes and all accommodations for alternative means of transportation and all the smart street design elements that would make sense. Goal would be to beautify the roadway and surrounding area, improve the environment with plantings and rain gardens and make it safe for everyone day and night while keeping traffic moving slowly but steadily.

Now I am beginning to think that the reimagining might be limited to painting new lines on the existing street?

I am e-mailing because I am out-of-state now with my father who was in an auto accident and therefore I won't be able to be at the meeting.

Thanks in advance for your reply. Jean *****

From: Diane Meyerhoff
Sent: Monday, February 17, 2014 9:56 AM
To: 'Tracy Truzansky'
Subject: JOIN US! North Avenue Workshop #2, 2/20, 7PM, St. Mark's

Sorry you can't make it! We'll definitely post all the info on the website (<u>http://bit.ly/north-ave</u>). Thanks for your interest! Diane

From: Tracy Truzansky **Sent:** Monday, February 17, 2014 9:52 AM **Subject:** Re: JOIN US! North Avenue Workshop #2, 2/20, 7PM, St. Mark's

Hi Diane, I am interested in this process, but I cannot come that evening. Please include me in the email of the results of the meeting. I am particularly interested in having the safety issues at the intersection of North Ave and Plattsburgh Ave and the lack of crosswalks addressed. Tracy

From: Eleni Churchill Sent: Tuesday, January 28, 2014 2:54 PM To: Paula Henry Subject: Pedestrian crosswalk safety

Hello Paula, Thank you for your comment on pedestrian safety concerns at the North Ave/Shore Rd intersection. Improving pedestrian safety is one of the goals of the North Ave Corridor Study. The study team will assess the pedestrian crossing issues at this location and develop strategies to improve pedestrian travel through the intersection. Thanks again, Eleni, Eleni Churchill, CCRPC -----Original Message-----From: Paula Henry Sent: Sunday, January 26, 2014 6:01 PM Subject: Pedestrial crosswalk safety

As a resident of the Crescent Woods community, I am concerned about the safety of pedestrians crossing Shore Rd at North Ave. The left turn lane onto Shore Rd does not allow sufficient visibility to people crossing, and on more than one occasion, I have nearly hit a pedestrian, although I have a green light. In the dark, it is very bad.

-----Original Message-----From: RJ Lalumiere Sent: Tuesday, January 07, 2014 10:25 PM Subject: North Ave Corridor Recommendations

Hi All, sorry to be so long in getting these out to you, pesky holidays and procrastination and all...

Attached please find my vision for the typical corridor section (hopefully by the end of this process the typical corridor cross-section will be more homogeneous than today) and my recommendation (very roughly drawn but hopefully illustrating my idea) for reworking the Institute road intersection in the short term to fix the broken link in the bicycle facilities by lane shifting/sharing.

Given the single track nature of many cycles ideally any curbing in the cycle track will be angled/mountable to help prevent loss of control due to lips, e.g., <u>http://www.aviewfromthecyclepath.com/2008/12/danger-of-parallel-kerbs.html</u>

Of course don't hesitate to contact me with any questions about these recommendations.

= Short Term =

* Narrow main travel lanes between North St and 127 to 10'; widen bike lanes accordingly. Where there is varying curb to curb width maintain constant main travel lane width and give the excess to the bike lane area. * Green stripe bike lanes.

* Realign lanes by Institute Rd to allow for continuous bike lanes. Make south bound bike lane share right turn lane to make the space available for north bound bike lane north of the intersection. Shift north bound main travel lane and left turn lane west and start left turn lane later to allow for north bound bike lane south of the intersection.

(Illustrations attached.)

- * Re-stripe bike lanes between Institute Rd and 127 which are signed but paint is nearly obliterated.
- * Fill all potholes in the bike lanes (north bound between North St and Institute Rd comes to mind)
- * Paint all drain grates and manhole covers in bike lanes with orange reflective high-friction paint
- * Re-do sidewalks by City Bluffs condos (across from BHS); many feet wide gaps in the current sidewalk.
- * Fix other deteriorated/failed sidewalk sections.
- * Dedicate signal phases at Heineburg/Shore to allow for safe lefts.

* Adjust signal phases at Ethan Allen Parkway to allow for safe lefts into park. Light up the "No Turn on Red" when EAP has the green?

- * Allow pedestrian buttons to call reds at night. (Currently do not function at all at night...)
- * Paint "put bike here" marking over inductive loops. (i.e., MUTCD figure 9C-7 and sign R10-22)
- * Add more crosswalks in most needed locations (Gosse Ct., etc.)
- * Clear bike lanes after snow/ice storms...
- ? Paint (super-)sharrows on 4 lane sections and Berry to North St SB?

? What to do about 127 intersection left turn lane re: cyclists? Too many cars try to scoot by even when taking the lane...

- = Medium Term =
- * Add RRFBs or HAWKs at unsignalized crosswalks
- * Roundabouts at 127 [potentially with a medianed off extra right turn lane northbound?] and Institute Rd
- * Cycle track between 127 and Institute Rd; remove on street parking
- * Align/extend west side sidewalk near Institute Rd.

* Level sidewalks between Institute Rd and 127. They slope at some driveways and are hazardous for pedestrians/cyclists in icy conditions.

? Replace 4 lane section outside lanes with cycle track or standard road diet?

? Dedicated left turn phase north bound at Hannaford's plaza?

? What to do about St. Mark's on street parking?

= Long Term =

! See diagrams !

* Cycle track the length of the corridor. May need to remove road verge south of Berry to accommodate southbound travel. Wayfinding signage and bike parking leading folks down Depot St to College St shuttle may be helpful for novice cyclists at the end of the corridor?

* Roundabouts with outside cycle tracks and sidewalks at all busy intersections.

* Replace all existing inductive loops with diagonal quadrupole configuration loops for better detection of bicycles. reference:

http://ncactive.org/sites/default/files/Background%20Paper%20on%20Bicycle%20Detection.pdf

* Buried utilities

* Attractive pedestrian scale lighting (ex. similar to the neighborhood lighting already found in the James Ave area) ? Blast ledge near Institute Rd to allow access to full RoW?

Comments from Tony Redington - DRAFT 12/31/2013

Breakdown Of 25 Respondents To Invitation To Comment On North Avenue Traffic Related Service Concerns. **Total respondents: 25**

Number of Concerns Expressed: One 11; Two 7; Three or more 7

Total concerns: 66 with seven "dual" placed in two "concerns" categories with the second category identified by comment within parentheses (....)

Response categories

Response categories by numbers of "concerns" with dual concerns counted; percentage of concerns expressed as a percentage of total respondents, 25.

1. Bicycling	24	96%
2. Bikepath	9	36%
3. Roundabouts	8	32%
4. Specific locations	6	24%
5. Bus	5	20%
6. General	5	20%
7. Shore/Heineberg Intersection 4		16%
8. Road diet/right-sizing	4	16%
9. Waking mode	4	16%
10. T 127	2	8%

Responders who specifically identified themselves in regard to modal use and percentage of all responders (25): Bus commuters 3 12% Bicyclist 9 36% Bicycle commuter 3 12% No car available 2 (one household two commuters neither with a car) 8%

Specific Issues: Note: some comments are placed in additional category(ies) are identified by (......) parentheses. One commenter, for example, raised a general issue of pedestrian and bicycle crashes at the Shore Rd. signal—basic comment placed under Shore Road-Heineberg Intersections as well as under Bicycling and Walking

1. <u>Specific location concerns (6)</u>:

a. Plattsburgh Ave Intersection: disaster for walkers

b. Dodds Court, a street with lots of teens, children, pets—used by cars to avoid Shore Rd signal, changing to one way probably not possible, suggests speed humps (traffic calming)

c. City priorities for street paving in North End do not address streets with greatest needs first

d. Flynn School-open/close congested (marathon too), expand study to include

e. Right-turn only at Tracy to solve problem near Plattsburgh Ave

f. Stanifield Rd. crossing—several accidents and even more near misses, new development will cause even more dangerous condition

- 2. <u>Road Diet/Right sizing (4):</u>
- a. 127 to Shore Road
- b. road diet with center turn lane, Leonard Street
- c. 2-lane at shopping center: now high speed and tailgating, solves everything from Plattsburg Ave to BHS, also provides space for bicycle lane—then do not allow bikes on sidewalks, no roadway parking
- d. difficult to make left turn and also a problem near new Thayer School apartments
- 2. Roundabouts (8):

<u>For</u>

- a. Yes, BHS and VT 127, plenty of land
- b. "like the idea"
- c. Against roundabout but noted sufficient land at BHS <u>Against</u>
- d. against, Winooski [will use "traffic circulator" term for Winooski circle] lots of accidents
- e. absolutely not the solution
- f. no roundabouts, Winooski made some mistakes, not safer than signals
- g. not a fan, space only available at BHS
- h. like in principle, do not like Winooski traffic circulator, walker safety, confusing to drivers and walkers
- i. Nobody wants any type of roundabout on North Ave, no good comments on roundabouts anywhere
- 3. <u>Bicycling (commuting, safety, etc.) (24):</u>
 - a. as bicyclist almost run over by bus with "bike may take lane" signs in sight, we need actual bike lanes, since incident bike on sidewalks\ bikes need to abide by laws, lights front/back at night
 - b. bikes need to abide by laws, lights front/back at night
 - c. dedicated bike lanes from St. Mark's to 127
 - d. southbound, problem navigating RT lane at BHS
 - e. car parking on bike lanes at Packard Lofts
 - f. at take the lane area for bicyclists, cars do not want to travel at 10 mph in spite of signs

- g. northbound at 127 intersection southbound left turners context "scary"
- h. traffic speeding up at Starr Farm Road and beyond with bus stops further on
- i. want buses/cars "polite" to me
- j. like new signs "may use full lane"
- k. manhole in front of BHS at dip "hazardous"
- I. put stop signs at crosswalks for bicyclists on sidewalks who do not stop
- m. no bikes on Beltline or between 127 and Plattsburg Ave
- n. ride sidewalks in summer
- o. North Ave a road for cars and trucks, not a bikepath
- p. Have to use sidewalk where splashing and conflicts with walkers occur
- q. Variation in space for bicyclists along North Ave
- r. Bicyclists angry a cars but mostly bikes not obeying stop signs-give out tickets
- s. (with road diet in area of shopping center) bikes on lanes from BHS north and bikes and walkers share to the south [on sidewalks]
- t. Did bus and bike somewhat before moving to Shore Rd—Shore Road to BHS too dangerous, do like Colchester Ave and add bike lanes each side
- u. Ethan Allen Parkway, add lane or path at Park—faster than riding on sidewalk
- v. (Shore Rd intersection not safe for bicyclists, saw two accidents and more near misses with cars turning south from Shore Rd not looking for pedestrians/bicyclist who have the walk light [example of right turn on red problem])
- w. North Ave at Shore Rd used as 4-lane, "nightmare" for cyclist. Frequent commuter/pleasure cyclist
- x. (bike lanes—keep vehicles, pedestrians and parking separate)
- 4. <u>Bikepath (10):</u>
- a. clear for commuters in winter
- b. bikes do not obey stop signs on path at cross streets, not safe, what to do?
- c. Need transitions from path to local streets particularly for families
- d. Bikepath primarily for recreation, pain for commuters: hill, high wind, poor plowing
- e. Dedicated bike lanes 127 to Shore Road
- f. Decrease from four lanes to three provides space for bike lanes
- g. Taking lane/using turn lanes legal but dangerous
- h. Commute to South End daily but hit twice by right turners (property damage only)
- i. (have seen two bicycles hit and even more near misses at Shore Rd. signal—cars turning south to not see walkers/bikes which have the light [right-turn-on-red example]
- j. Like bikepath, never use it because of fear of dogs which are frequently loose from people who do not obey leash law

6. <u>VT 127 (2):</u>

- a. Lights VT 127 so it feels safe at night to drive
- b. Shutting down ramp on VT 127 an improvement—most cars no exceed 30 mph limit
 - 7. General comments:
 - a. Complete streets
 - b. 25 mph too low but the law, older folks rive slow, all the stop lights
 - c. minute or two to enter North Ave from side streets even on non-peak hours
 - d. a commitment to reduce car use means one needs to make it easier and safer to use alternatives
 - e. keep vehicles/parking/bicycles/walking separate
 - 8. Walking mode (4):
 - a. teach kids to use crosswalks

- b. (lack of safety at Shore Road traffic signal—cars turning south from Shore Rd when walkers have the walk light—not safe for pedestrians)
- c. between VT 127 and Ethan Allen Parkway no crossing which is not convenient and some cross between, lots of families
- d. (Plattsburgh Ave intersection a disaster for walkers)
- 9. Bus/transit (4):
- a. improve connection at Cherry to FAHC for NE commuters
- b. lack of weekend buses/later service (after last bus at 7:15 p.m.) on Saturday
- c. buses rolling "roadblocks", too many stops, buses rowed, too much time taken to accommodate disabled
- d. (did commute by bus somewhat before moving to Shore Rd)
- e. though UVM supports, tend not to use bus, poor connection at Cherry St, took child in past and experienced profanity on bus
- 10. Shore Rd-Heineberg Rd intersection (4):
- a. Jog between Hieneberg Rd and Shore Rd results in confusion when vehicles moving from/to those streets
- b. Northbound cars run red light at Shore Rd.
- c. Crossing guard open/close of school, but CP Smith closing time no crossing guard—intersection not safe for pedestrians, have seen two bikes hit and even more near misses as cars turn south without looking for anyone crossing even though the light is "walk" [right turn on red example]
- d. (Dodds Court, a street with lots of teens, children, pets-used by cars to avoid Shore Rd signal

-----Original Message-----From: Eleni Churchill Sent: Friday, December 06, 2013 4:12 PM To: Justine Sears Subject: North Avenue Corridor study

Hi Justine, Thank you for your comments on the North Ave pedestrian issues. The North Ave Corridor Study will develop strategies to address a variety of issues including pedestrian crossings along this corridor. We are planning to have two more public meetings/workshops (in addition to the final presentation) and I will encourage you to attend as we will be soon in the strategy development phase of the project. Pedestrian signs such as the ones on Pine Street (and in other communities in Chittenden County) will be considered among other strategies to improve pedestrian travel in the corridor.

Thanks again for your interest and I hope to see you at the next North Ave public meeting. Eleni Churchill, CCRPC

From: Justine Sears Sent: Tuesday, December 03, 2013 7:56 PM Subject: North Avenue Corridor study

Hi Eleni, I live in the Old North End just off of North Ave (Ward St.). I was unable to make the public meeting on Oct. 29th and just wanted to weigh in- it's really dangerous to try and cross North Ave on foot! I don't mean to write and complain, I just wanted to suggest that the study consider improved pedestrian infrastructure. I've tried out the new crosswalks on Pine St. that have new signs and the option to blink and they are awesome! Crossing there now feels much safer than it did just with the painted lines. I hear that they put in similar devices in South Burlington. Not sure if there will be any more public meetings, but I'll try make it next time. Best, Justine Sears

From: Eleni Churchill Sent: Wednesday, October 23, 2013 9:02 AM To: 'Ann Cerrato' Subject: RE: North Ave AARP

Hello Ann,

Thank you for your interest in the North Avenue Corridor Study and your comment on bus frequency and availability in the corridor. I am sorry you will not be able to attend the meeting on the 29th but we will add your e-mail to our distribution list so that you will be receiving updates on this study as it moves forward. Notes as well as the presentation from the meeting will be posted on the project's web site at http://bit.ly/north-ave after the meeting. Thanks again, Eleni

From: Ann Cerrato Sent: Tuesday, October 22, 2013 12:22 PM Subject: North Ave AARP

Hi, I recv the E-mail about making North Avenue better for everyone. I cannot attend the meeting, I have another one that night. I really would like to be updated on the outcome of the meeting please!!!

One thing I would like to see is that the North Avenue buses run every fifteen minutes like the Williston Buses do also run later past 8:00pm. I think the population on North Ave has grown and continues to grow.

Thanks for holding this meeting. I hope to hear back about the outcome of the meeting. Ann *****

From: Jarlath ONeil-Dunne Sent: Tuesday, October 22, 2013 8:20 PM Subject: Re: North Ave Study

Thanks Diane. One area of chief concern for me is making a left turn from North Ave onto Ethan Allen Parkway (while headed south on North Ave). Having a green arrow turn signal would make it much safer. Glad the project is moving forward. Thank you for soliciting input. Jarlath

On Oct 22, 2013, at 8:16 PM, "Diane Meyerhoff" wrote:

Hi Jarlath! You've successfully submitted your feedback – and feel free to expand it! We appreciate your taking time out to contact us. I'll add you to the mailing list for future meetings. Diane

From: Jarlath ONeil-Dunne Sent: Tuesday, October 22, 2013 5:22 PM Subject: North Ave Study

Hi Diane, I am a resident of the New North End, but am unable to make the North Avenue Corridor Study on the 29th. Is it possible to submit feedback in some other way? I find the current design to be unsafe for vehicular, bicycle, and pedestrian traffic. It would be great if the new design followed some of the successful redesigns, such as the one on Colchester Ave, in which the lanes were reduced from 1 to 2 and a turning lane and bicycle lane were added. Best, Jarlath

Jarlath O'Neil-Dunne. University of Vermont | Spatial Analysis Laboratory

From: Eleni Churchill Sent: Monday, October 21, 2013 5:33 PM To: 'Pat & Nick Branch' Subject: RE: North Ave. Study Public Meeting

Thank you for your input. I hope that you can make it to the meeting on the 29th. Eleni

From: Pat & Nick Branch
Sent: Monday, October 21, 2013 5:30 PM
Subject: Re: North Ave. Study Public Meeting
Ok, Our feed back, if we don't make the meeting, is that bike lanes be drawn on North ave. There is plenty of room to do so. Thanks, Nick Branch

From: Eleni Churchill Sent: Monday, October 21, 2013 5:27 PM To: <u>'Pat & Nick Branch'</u> Subject: RE: North Ave. Study Public Meeting Hello Nick,

We don't have any recommendations yet - we are still in the evaluation phase of the study (all modes of transportation and land use). We will be developing preliminary recommendations after the first public meeting scheduled for October 29th and share them during the second public meeting in December (or early January).

Please let me know if you have any further questions or comments. Thanks, Eleni

From: Pat & Nick Branch Sent: Sunday, October 20, 2013 8:09 AM Subject: North Ave. Study Public Meeting

Hi Are there written preliminary recommendations we can look at beforehand? Thanks, Nick Branch, 7 Bore stone Lane

October 17, 2013 Hi Mary!

Thanks for your input on the North Avenue Study. I'll be sure to add your name to the email list for future meetings. Diane

-----Original Message-----From: Mary Sent: Wednesday, October 16, 2013 7:52 PM Subject: Plattsburgh ave

Hi, I can not go to the evening mtgs but wanted to give a little input to traffic on Plattsburgh Ave. I have been living at 100 Plattsburgh Ave going on 23 yrs, The biggest issue is very fast speeding, like 60 mph, even faster with motorcycles.

Cars are always passing people who are going the posted speed limit. I do not know how you fix the problem but it is an issue especially when trying to get out of my driveway. I hope some people have some good ideas to help with this problem. Thank you, Mary Cornell, 100 Plattsburgh Ave.

From: R. Alex Reutter Sent: Saturday, October 05, 2013 10:01 PM Subject: North Avenue corridor study

Hi Nicole, Sarah and I are interested in this, but can't make the Oct 29 public meeting. We would love to see the corridor remade as a complete street with roundabouts at the major intersections (especially 127 and Ethan Allen Parkway). Cheers, Alex

-----Original Message-----From: Rolle, Stephen S. Sent: Monday, October 07, 2013 10:19 AM To: 'phuzzie' Subject: RE: North Ave - More On Existing Conditions

RJ - Thanks for the additional observations. Steve

-----Original Message-----From: phuzzie Sent: Wednesday, October 02, 2013 11:55 PM Subject: North Ave - More On Existing Conditions

I was recently Downtown in the evening for a meeting on a day I was doing walking/busing and as the #7 bus only runs once an hour in the evening and I didn't feel like waiting 45 minutes for the next one I ended up walking most of the length of the corridor and took some more notes on existing conditions along the way. Sorry if any is redundant to what has been previously discussed.

* Cars swerve into bike lane apparently without looking to pass left turning vehicles. [Segment 2]

* Vegetative overgrowth on sidewalks (~480-530-ish North Ave area East side). This is actually a fairly common problem in Burlington, I think Code Enforcement generally only enforces this "on request"?

* North ave/Route 127 ped head takes a long time to signal once requested... (Maybe Ethan Allen Parkway also but it didn't seem as long; however light was pretty stale already...)

* North ave/Saratoga ave crosswalk is awkward (curve in)

* Lakewood Pkwy east side crosswalk seems unfriendly. Long unprotected crossing. One way status not clearly marked.

* Many curb cuts lack tactile strips. [Segment 4]

* 19:18 well into dusk and some street lamps still not on, but some are.

Potentially broken or misconfigured? I'm not sure how they are activated [timer? light sensor?] Was between Rite Aid and Hannaford's.

* Some driveways seem really wide? Ex. People's United Bank, Bamboo Hut

Hope that helps! See you at the upcoming meetings. RJ Lalumiere ****

Comments Collected by Jim Holway

I want to pass on the many emails I have gotten. Please read and consider these valuable input in the dialog.

From: Jim HolwaySent: Friday, November 01, 2013 12:36 PMSubject: Re: Citizen feedback on North Ave. Corridor Study

1. From Laura Schutz - Saw your FPF posting about your CCRPC North Avenue Corridor Study Advisory Committee and just wanted to share my concerns about the Plattsburg Ave / North Ave intersection. (A couple years ago someone running for town council specifically mentioned this on his website & thus won my vote even though he wasn't elected).

As a pedestrian, the intersection is a disaster! The sidewalk is on the North side of Plattsburg Ave; however it doesn't link via crosswalks to either of the sidewalks on North Ave.!!! The only crosswalk across Plattsburg Ave. is at the Sunset Dr. intersection and there is no sidewalk on the south side of Plattsburg Ave to North Ave. So when pedestrians approach North Ave. on Plattsburg avenue, they are forced to jay-walk across Plattsburg Ave. prior to the intersection (my preferred method), cross Plattsburg Ave or North Ave at the intersection without crosswalks, or walk north on North Ave. in the road with your back to oncoming traffic (not recommended) until the crosswalk near Flynn School. This intersection would be my top priority in this area (and as a runner I'm familiar with the North Ave section from North St. to Plattsburg Ave.).

Thanks for listening / reading!

2. Hi Jim, First, thanks for working on this and taking the trouble to coordinate here.

I wanted to make that meeting but could not. Glad to hear there is another. In the mean while, I would like to say that I am prepared to advocate for a road diet on North ave. let me know how I can help. I was on the Bike Council from 2000-2009, and have been involved (with my students at Champlain College) in the production of bike maps and the Bike Safe campaigns. I do feel very strongly that the 4-lane areas need to be reduced, as Colchester Ave was done quite successfully. (I used to live over there.)

So, keep me in the loop, and again thanks. David Lustgarten, 142 Killarney

3. I couldn't make it to the meeting last night and hope to get to next one, but just wanted to chime in. Thanks for inviting comment.

In principle, I like roundabouts and believe they calm traffic, reduce stop-and-go fuel consumption, and keep traffic moving more efficiently through complicated intersections. My concern with this one, in our neighborhood, is pedestrian crossings. Unfortunately, that foils the intention and advantage of a roundabout, as we have seen in Winooski, where it is still an improvement, I believe, but not ideal for several reasons, the main one being that it is confusing to drivers and pedestrians alike!

I look forward to finding a good solution for both drivers, walkers, cyclers, longboarders, and all forms of traffic coming and going thru that intersection. My 2 cents.

Sally, Sally Ballin, Independent Associate, USANA Health Sciences

4. Jim - Thanks for your FPF posting.

I was nearly run over by a Burlington bus while biking on North ave in a "Bikes may use full lane" lane. In fact, I was right under that sign. I had to crash my bike onto the sidewalk in order to not get hit. I think those signs are pointless, and we need actual bike lanes.

Since that happened I've been biking on the sidewalk, which is not safe for pedestrians.

Also, the right hand turn lane into BHS is very dangerous for cyclists. I try to bike into downtown as much as possible, but the lack of safety on North Ave for bikers definitely deters me.

Thanks, Tim Nitz, 37 Woodlawn Road

5. Jim, In general I favor round-abouts because they keep the traffic moving and serve as a calming mechanism, even during high-traffic times. The intersection of North Ave with the belt-line (Rte 127) at the North Ave Alliance Church would be a good one to start with. There is plenty of open space there, much of which is owned by either the City of Burlington or the state. The very few cars at most times getting onto North Ave from the Alliance Church or from the belt-line turning left onto North Ave bring the high-trafficked main corridor to a halt, often for just one car.

The Burlington High School intersection is another candidate. Again plenty of land owned mostly by the city. A round-about here would accommodate the higher volume of traffic going into and out of BHS and North Beach during peak periods and yet still permit movement of cars continuing north or south on North Ave.

I would say these two intersections might be the first to work on as both the Ethan Allen Pkwy and Plattsburgh Ave intersections have configuration and land constraints that will take more time to design and if necessary acquire additional property outside of the current public right-of-way.

Go for it!! Ben Ben Bosher, Group Benefits Broker, Benefit Design & Strategies, LLC

6. Hi. Thx for doing this. It scares me to think all this trouble is happening and cutting off at Plattsburg ave. Unless you extend it north to at least the Flynn school it will be an exercise in futility! Traffic gets backed up at the intersection because of poor traffic management at the school in the morning and at closure in the afternoon. It probably lasts an hour. The other nightmare time is during the marathon in May!! We, at the end of north ave have no other entry point because of one way streets out but none in. Very uncomfortable and unsafe for any emergency. Joyce Walsleben

7. Fran Joseph

to jim

Hi, I would like to see the lights put back on Route 27 so that night driving once again feels safe. I wish that the bike path was accessible for winter bicycle commuting into downtown. And I wish that we could become more encouraging to restaurants and/or cafes so that we had some neighborhood hangouts that had character and good food. Thanks.

8. Carol Hinson

Jim, I have lived in the New North End for 40 years and really hope we don't have round a bouts. The one in Winooski is a mess, lots if accidents and worse when it snows. Thanks,

9. Kathy Curley. Round about's are absolutely not the solution. Teach the pedestrians to use the existing cross walks instead. Don't spend time, or tax payers money to fix something that isn't broken.

10. I just want to point out that there are stop signs for the bikers to stop at intersections with cross streets. BUT bikers don't usually stop because motorists will stop instead and motion bikers to cross or let them cross. Which is all good but I for one will always stop because I worry that a biker will not stop and cross in front of me. My husband does not stop because he says THEY have a stop sign and should abide by the signs. So my complaint is what are we as motorists supposed to do? Somehow if bikers are to stop according to the stop signs then the drivers need to keep driving. The signs are there but nobody follows them. One of these days something will happen. Is there a better sign that can be used to straighten it out? Thank you, Jean Parker

p.s. I do ride the bike path and observe the stop signs

11. Jim—Thanks so much for your FPF post and your leadership on this issue.

As both a vehicular commuter on North Avenue and a road bike rider, I feel strongly that the stretch of North Avenue between 127 and St. Marks should be changed from a four lane to a two or three lane road. As things are, the four lanes are barely wide enough for four passenger cars to pass each other. Since trucks and buses regularly use the stretch, driving to work can feel like an obstacle course. If a bicycle is added to the mix, there simply isn't enough room. The signs saying something to the effect of "Hey guys, we're dispensing with the usual rules for a few blocks and now it's okay for the bikes to take up a whole lane!" Iull bikers into unsafe behavior and are an invitation for road rage to break out. I'm not a traffic planner, but something like what was done with Williston Road from Hinesburg Road to Kennedy Drive would make sense—vehicular traffic should be reduced to two lanes (one in each direction), with dedicated bike lanes on both sides, accomodation for bus stops and creation of appropriate turning lanes. It may make commuting on North Avenue a little slower—but it will be safer, and hopefully some of the traffic will shift over to the Beltline.

A further safety suggestion: Impose and enforce a rule that any vehicle traveling on the city streets at night must have appropriate front and rear lighting. Bicycles are invisible at night unless they have good lights. As a bicycle rider, I strongly support "complete streets" efforts to make the roads accommodating for bikes—but the flip side of that coin is that bicycles should adhere to basic travel rules, starting with the need to be lit up at night. - Paul H. Ode, Jr.

12. Jim - Many thanks for your informative message on FPF. A growing problem on North Avenue is between Ethan Allen Park and Shore Road. Trying to get into the proper lane going north to make a left onto Shore Road is a problem. And I think it is only going to become more of a problem having all those new apartments on Thayer School property occupied. So, that is my thought. Thanks for listening. Karen Martin, Fern Street

13. Hi Jim. I was disappointed to not be able to go to the public forum the other night, it is about time that some thought was put into this street. One concern that I have and many visitors have had is that north ave is not wide enough to support 4 lanes. Often guests of ours will say their drive was fine until they got to north ave and they have to wince when cars are just inches from them. I believe the 3 lane with the "suicide strip" in the middle for turning would be a good solution. This would give room for bikes as well. This has worked well in other parts, (Colchester ave, route 2) which I would suppose get more traffic than North ave. I also live on leonard street and often turning left out of leonard can be difficult. A turning lane would definitely help. A second benefit to this would be to slow down the traffic on North ave and it might get people to use 127 more. I like the idea of roundabouts. Being from boston, the roundabout is a great thing. Take care, David Pope

14. (A) North Avenue specific - any mode of travel and any part of the North Ave.

My partner and I live at 32 Forest Street with our son, who is 2. We do not own a car. I bike to work at Fletcher Allen (leave at 6 am, return at 8 pm, 3 days a week including every other weekend). When it is too snowy to bike, I take the bus. The bus does not run early enough on Saturdays or late enough on Saturdays, and the bus does not run at all of Sundays, so on the snowy weekends when I work, I either take a cab or walk the five miles. A cab ride is \$15-20 one way. My partner works at Champlain Elementary School and buses--takes the 710 and then the 340 home.

(B) Your street(s) - Getting to and from your home to any other point in northern Burlington 32 Forest Street (C) The bike path. - Intersections with the bike path and streets. Are there safety concerns or improvement ideas?

(D) Bus routes and times. If your a rider or if you travel in any other mode AND have interactions with the buses, what are your thoughts? The 1115 bus out North Avenue is really really crowded on Thursdays and it is usually a small bus.

I wish there was a later bus than the 715 pm from Cherry to New North End on Saturdays, and an earlier bus on

Saturday mornings. I wish there were more Sunday options. Many people at Northgate and the New North End work at the hospital, including weekends, and would be helped/more likely to bus if the routes accommodated hospital schedules.

What are your safety concerns? My main safety concerns:

-Biking: the intersection with 127 (near the church) is scary on a bike heading north, because of the cars turning left onto 127 from the southbound lane

-Busing: I really really wish there was a curb cut and crosswalk across North Avenue at the intersection of North Avenue & Northgate Road/Forest Street.

-Speed: Drivers really pick up speed at the end of North Avenue after Starr Farm Road, which is dangerous because it is a residential neighborhood with three or four major bus stops.

What ideas do you want to be passed on through the Advisory board / Public Works / Parks & Rec / other? The safety ideas and route requests above.

What information would you like to have available for you and travelers (neighbors and/or visitors)? I am biking and busing because I cannot afford a car--please be aware of bikers & the buses. On my bike, I follow all of the road rules, as if I were in a car, but I am much more vulnerable. When you yell at me as I bike by, it is startling and unnecessary. When you drive near a bus, please be polite and realize that the bus is going slowly and stopping frequently because it is carrying passengers--passengers who are not taking up road space with another car, so please be patient. Thank you!, Corry Mallon

15. Hello, Thank you for offering an outlet for us to write in our concerns about north avenue. I am a cyclist and I use north ave to get home almost every day after class. I really appreciate recently seeing the signs saying "bikes may use full lane".

That being said, I have several problems with the quality of the shoulder. In front of Yankee medical there are still several potholes that need attention. In addition the dip in the road in front of Burlington High School has a manhole cover that is relatively hazardous and is surrounded by sand.

In addition to road quality issues I find that crossing 127 (the belt line) exit onto north avenue going north is really dangerous and think that there should be some sort of infrastructure or signage to help cyclists cross over the exit lane onto the shoulder of north avenue. - Craig Morrill

16. Hi Jim, I think North Ave is perfect just the way it is. What is really important is that we put stop signs on the sidewalks for the bicycles. They don't know to stop at intersections and entrances/exits from shopping centers and developments. We need to continue to educate bicyclists that they must abide by the same rules of the road as cars but they can still use the sidewalk assuming they are going to obey the same rules of the road. Just because we are riding on a sidewalk does not permit us to go thru red lights.

Please do not allow any rotary's or round abouts. I think Winooski made some mistakes. I don't think they are any safer than traditional red/green light/ with traditional Walk/Don't Walk electric lights.

I drive North Ave daily and ride my bike on the Avenue and the sidewalks frequently in the warmer months. Thank God for the sidewalks. The Avenue is very dangerous for bicyclists just like Williston Road and Shelburne road and Dorset Street.

It is a road for cars and trucks not a bike path. We don't allow bikes on the beltline nor should we promote bikes on the Avenue especially between the Beltline and Plattsburgh Avenue. Thanks for listening to me. John Halvey 27 Tracy Dr, Burlington 17. Dear Jim, Thanks for the opportunity to give you my thoughts regarding traffic flow and patterns in the NNE.

First I am not a fan of traffic circles and that comes from my experience in New York as the state's assistant Commissioner of Transportation. One thing that is critical about an effective traffic circle or round-about is that to be really effective they have to be large enough to allow safe and efficient entry and exit ramps and space and generally that space does not exist along North Avenue, with the possible exception of the high school. Some of the existing "circles" in the city are a traffic joke, with motorists just having too little space and driving right through and over circle dividers.

A simple partial solution to the traffic situation at Plattsburgh and North Ave is to make Tracy Drive a right turn only.

I think that traffic flows on North Avenue are not bad, although with the new development just north of the shopping center some thought should be given to how to solve the problem of left turners going into that development

I do not know who is making the decisions regarding street paving, but someone is screwing up. A great example of this is that Shore Road recently received a serious repaving, yet it was in fairly decent shape, while Staniford Rd which has very heavy traffic and is about to get a lot more, has been neglected and patched for years. Perhaps the person in charge of road maintenance should occasionally pay a visit up to the North End and take a look at their priorities.

I hope these thought are useful. Keith Tarr-Whelan, 131 Edinborough Drive

18. Hello Jim - Responses below in red

Hello Neighbors -

Recently I wrote about the North Avenue Corridor Study. As one of the representatives I want to give an update and ask for your contributions. No I am not talking money. I'm talking about taking a few moments to write about your experiences and thoughts related to walking, biking, bus and car travel in northern Burlington. Bike Path from the Boathouse / Battery Park to the Winooski River. Roads and Bike path on North Avenue.. Route 127 and any streets in our neighborhood(s).

(1) A quick update about our "field trip" to Montpelier. A few of us went to Montpelier VT to observe two Rounda-bouts. Our objective was to pick times where the round-a-bouts would be most "stress-tested" or busy. To get a full report on our findings please attend our next NPA meeting at the end of Gosse Court - Miller Center - Wed. Nov. 20 - 7pm to 9pm

The brief summary is that we observed a very easy flow of mixed-mode travelers (Autos, buses, school kids, adults and bikers). The two round-a-bouts were observed for a period between small traffic to school day ending to end of business day. We also observed a very different flow as we traveled through nearby roads that were managed by traffic signals. Delays, unsafe pedestrian crossings and lengthy lines made clear the need for serious discussion about solving problem areas along the North Avenue Corridor. 4 intersections immediately come to mind - (1) High School & N. Ave. (2) 127 & N. Ave. (3) Ethan Allen Parkway & N. Ave. (4) Plattsburg and N. Ave.

I invite you to add more and/or comment on these. jp} rotaries are a common item in Massachusetts with it's predominance of very old and odd intersections. They work well and are efficient. For some reason here, they tend to freak people out. the one in Winooski seems to work well and the population has become comfortable with it. It did take a while. There's not a good understanding initially of the right0-of-way. If you're in the rotary, keep moving! AYou've got the right of way. If you are entering, wait and find the first safe opening. pretty simple. And...

(2) The North Ave. Corridor Study is about quarter of the way through a year long process of studying North Avenue traffic of all modes (walk/bike/bus/car). Intersections, sidewalks, crosswalks, bike lanes and traffic signs and signals. Thus far we have accumulated a lot of empirical data, photos and in the field observations. We are now taking in peoples thoughts. A public forum was held this past week and another will be soon. I do not know the date as yet - I will get it and post.

As a representative on the Advisory Board, I would love to bring your thoughts, questions, ideas, pictures and so on. So please email me atjim@05408.org

What I am looking for is:

(A) North Avenue specific - any mode of travel and any part of the North Ave.jp} North avenue is SLOW. I don't think it should be posted at 25 mph but that's the decision to date. Seems to take forever to travel this section of roadway sometimes between all the old folks in Buicks and all the red lights and especially when it becomes one lane. Frequently takes over a minute to wait for a break in traffic to enter from a side street. Of course this is true at rush hour but it's frequently true and any time of the day, and even evening.

(B) Your street(s) - Getting to and from your home to any other point in northern Burlington

(C) The bike path. - Intersections with the bike path and streets. Are there safety concerns or improvement ideas? jp} I wonder if it would be prudent/safer to have a bike "slip lane" or decompression zone to assist in transition from bike path to side road sidewalk. Sometimes the transition cannot occur without riding in the street, or entering the street before turning onto sidewalk. I'm mainly speaking about riding with children in the mix.

(D) Bus routes and times. If your a rider or if you travel in any other mode AND have interactions with the buses, what are your thoughts? jp} busees seem SO SLOW. They take forever to pick up and drop off, frequently disabled or less-than-optimal passengers, and drive extremely slowly. The slowness, frequency of stops and generally crowded conditions preclude me from using the bus on a voluntary basis. From a perspective of a driver, they are like slowly moving roadblocks.

What are your safety concerns? jp} I think there are significant safety concerns with bikers. Many bikers, rightly or not, think they have just as much right to be in the roadway as a car. (not talking about designated bike lanes here) The law allows them to ride in the road and drivers must respect a clear zone. However many bikers are just arrogant about this and I think invite injury. If a rider insists on being in the main travelled part of the road and is travelling at 10 mph while the general traffic flow is going 25 mph, there's an issue. Many riders do not even bother to check their surroundings before making maneuvers or travelling in the main roadway.

I see riders in the center of the roadway, with automobiles behind them, and the autos have no choice but to follow them at 10 mph, because there is not enough room to pass safely. I see bikers annoyed when a car passes them.

They may assume that their "rights" should somehow protect them, but with dark conditions at rush hours now, their right's are not the equivalent of being in a car with seat belts, body protection and airbags. They will be crushed in any interactions with any motorized vehicle. Many do not use adequate lights (even though that is now city statute) or high-visibility clothing. With almost everyone on the road at rush hour texting and talking on the phone while driving, and poor visibility conditions, serious accidents are inevitable. (I don't support these activities, but they ARE widespread)

I am a bike rider and personally there are very few times I will ride in the roadway. It's just far too risky. I ride on the sidewalk and ALWAYS ride the sidewalk with children. Many bike riders feel that although they are driving in

the roadway, they do not have to respect the standard rules of the road and take sudden turns or do not stop at red lights. It's just a big and dangerous conflict. And, I must say, I see more and more car drivers every year ignoring red lights. MANY people now seem to feel that if the light is just turning red, or if they are the first car through the red light, that this is fine. I see it at least one time every day on my commute. Honestly. Aand ten or twenty years ago this would be almost unheard of. Now it just seems to be an extension of the yellow light.

What ideas do you want to be passed on through the Advisory board / Public Works / Parks & Rec / other? jp} see above. also, there's an issue with WALK lights I think deserves some attention. I have seen some close calls (mainly in the downtown Main Street area) and I am surprised no one has been killed yet. Here's the scenario; pedestrian activates WALK light switch. The WALK light illuminates and they proceed across the road thinking they are safe. In the meantime, a car approaches the intersection and has a green light. There's nothing but common sense telling that car that they cannot proceed due to a pedestrian in the road. The car driver is annoyed or scared at the dangerous encounter, and the pedestrian is surprised that a car is bearing down on them when the light and audible signal tells them they are in the safe zone. Again, add in some poor visibility at dusk, and the car driver is talking on a cell phone...it's not cool. I think the city should either eliminate all WALK lights (not ideal) or synchronize them with the traffic signals (far better).

Thanks Jim, Joseph Petrarca, 26 Edgemoor Drive

19. I love the bike path BUT I never use it. My husband can no longer walk with me and I am afraid to walk alone as there are so many people who blatantly ignore Burlingtons leash law. I realize my fear of dogs is mine to deal with but why have a law that isn't enforced? Sent from my iPhone, Betsy Burns

20. Thanks, Jim, for representing Ward 4 in the North Avenue Corridor Study.

I tend to drive my car with only me in it to and from work at UVM. I have experimented with riding my bike on some days and taking the bus on some days. However, I live off Shore Road, and when I turn right (to head south) on North Avenue on my bike, I feel very unsafe because of the lack of a bike lane or even a shoulder, particularly between Shore Road and the corridor past the Hannaford's plaza until one reaches the high school. I think it would be helpful to transform that stretch of the avenue the way Colchester Avenue was redesigned a short while ago. Rather than a four lane road, there could be bike lanes on both sides, a single lane going in the north and south directions and a center turning lane. As a driver, sometimes when I see a biker in the right hand lane, I try to give them the entire lane, and sometimes the car behind me starts to speed ahead as I shift into the left lane only to suddenly see that I was yielding to the biker who is now in danger of getting rear ended by the speedster trying to pass me.

I tend to not walk to North Avenue to take the bus to work, even though as a UVM employee it is a free ride, because I have experienced delays in the transfer to the bus that takes me up to UVM, and I worry about making it to my destination on time, especially when I teach an early class. I wonder if ridership would increase from the North End if one did not have to transfer busses at Cherry Street to get to UVM and Fletcher Allen. In addition, during one "Way to Go" week a few years back, when riding the bus with my then toddler, the amount of profanity we had to listen to was overwhelming and made me reluctant to use the bus again.

Another issue that concerns me is the intersection at the end of Shore Road where Heineberg Road is not directly across from Shore but is a jog to the left. There is often confusion about who has the right of way when a car from Shore Road is going straight to continue down Heineberg. Additionally, cars traveling north on North Ave often speed through the light when it turns red, whether intentionally or because they have a hard time gauging where the intersection is. This is particularly problematic because it is a school crossing route. In the mornings and afternoons there is a crossing guard helping children on bike and foot navigate this tricky intersection. However, children who come home from after school (at CP Smith) when there is no crossing guard must navigate this intersection on their own if they are not picked up from school.

Also, when cars turn from Shore Road onto North Avenue, heading south, and the light is red, drivers look to the left to see if there are cars coming south on North Avenue. When there is a break in the southbound traffic, they make the turn, often without also looking to the right to see if there are pedestrians or bicyclists crossing. Even though the pedestrian has a walk signal, the pedestrian is risking getting hit unless the driver is also looking for foot traffic. I have seen a couple of accidents there where bicyclists on the sidewalk heading north have been hit by cars because the driver is not checking for them.

Thanks again for bringing the concerns of NNE-ers to the committee. Best-- Sheila Boland Chira, 24 Vine Street

21. Hello! I saw your post on FPF and wanted to chime in. I live on Lakewood Parkway so i use these roads a lot!

Firstly I think some kind of bike lane/turning lane restructuring of NOrth Ave would work really well. Sort of like how Williston rd as been changed. I think it will make traffic run smoother with turning lanes so people are stuck behind someone turning or rear end someone turning! Plus I have noticed lately that a lot of cyclist are taking a lane (which you can - I'm an cyclist as well) but its concerning because it is so dangerous! I like by the over pass going down Williston rd that they have also colored the bike lane bright green. seems more like you shouldn't be driving in it!

One of the biggest things i have thought about since my daughter started school at CP Smith was Ethan Allen Parkway. There are so many kids that walk and bike to school everyday. We all share the sidewalk which is kind of sketchy with kids. That is such a big road and newer - i always wonder why there isn't a bike lane. My ideal scenario would be to have a bike lane parallel to it in Ethan Allen park. Kids would have a buffer from traffic and they can ride faster and more freely than on the sidewalk. But really i would settle for a bike lane on the parkway itself!

Thank you and looking forward to seeing what suggestions rise to the top and what gets done. - Keri Piatek-Crafts

22. Hi Jim, I live on Killarney Drive. I do not own a car, so I ride a bike or walk to work on College Street (about 3 miles each way). I recently moved from a house on Ferguson Ave at the south end of town, so I have a lot of experience biking on Shelburne Rd as well as North Avenue.

The basic problems for people on a bike are:

1. Having to share space with deadly vehicles. If a car "bumps" another car it is a problem for the auto body shop; if it "bumps" a bicycle it is a problem for a doctor. I have been "tagged" a couple of times at streets by cars turning right across the bike lane and have luckily not been injured--though my bike took a hit.

2. Bikes must ride on bumpy sidewalks (and then conflict with pedestrians) or in the gutter of the road. This is a big problem when it is rainy. Car splash is also a big problem.

3. Some places on North Ave have lots of room for bikes, while others do not. This inconsistency is a problem, since it changes how drivers must pay attention. For instance, north of the highschool North Ave is one lane for vehicles and almost a full lane for bikes. Then at the high school traffic light (going south) the bike needs to navigate between a right turn lane into the school and the lane to continue south. This can be a problem as people comute to work and are less patient or paying more attention to their coffee or smart phone than they are to the road.

4. Parking on North Ave creates a real problem for people biking. For instance, while Packard Lofts was being constructed the workers parked over sized pick-ups took up all the space bikes would normally go in. Cars sharing the space are understandably unhappy to slow down to the 10 mph of a bike when they could be speeding at 40 mph. It is very uncomfortable to have a vehicle honking behind you, or pushing you into vehicles.

The signs that make it clear bikes have the right to use the full lane are nice, but it is difficult to get this across to an impatient driver.

5. The bike path is nice for recreation, but a pain for the daily commute. First of all, I want to travel up and down hill as little as possible and the bike path is at Burlington's lowest point. Also, the weather, especially wind is worse along the lake than in the city proper, so biking is more difficult and colder. Finally, snow removal is better on the roads.

The solution is to separate vehicular traffic and parking from bike traffic, which should be separate from pedestrian traffic. If there is really a commitment in Burlington to reduce the use of cars, then we need to make it safer and easier to use alternatives. Jim Palmer

23. KENNETH PETERSON - TRACY DRIVE

Good Day to all my neighbors and friends whom use North Ave each day.... seems to me that there are a of issues to look at or study, yet at the same time,, we make so many issue out of one issue. There are only two problems to consider and it's simple.... have to think about it over and over,,,,,,, here is is..... One we have to speed up traffic,,,,,,,, Second one is we have to slow down traffic..... now that i have you thinking that is a dumb statement,, think hard..... we need to speed up the traffic flow right?? At teh same time we have so many using North Avenue as a race track as it is so we have to slow these guys down....

first off, four lanes etc like in front of Ethan allen shopping center is about the dumbest way to control traffic.... everyone is passing on right, left, cutting off, rear ending, serving to miss, pulling out, . just count how many times you see the brake lights coming on. Tailgating while doing this is very common.. which in turn can cause the accidents.. What we need to do is put in the two lanes of traffic with on center left turn lane..... this way the traffic flows steady, and normally moves faster as it is more even. Most people do go over the speed limits by mim. of 5MP. so lets say somebody actually does 5MPH under the MAX. So what, it takes how many mroe seconds to get to where you are going wow, to give up those few seconds in order to make it safer. After all, if you have a drivers lic. you should be able to read what the speed limit signs say. once again I stress on the fact this is the MAX speed...... when was the last time you saw anyone going the speed limit. With the center turn lane it stops the slaming on breaks for those that decide to turn left at the last second. Where we came from in Michigan had the same type problems and the three lane deal solved it.. safer for the drivers,,,, safter for the people crossing the street and also in many cases makes space for a bike lane to make safer for bikers..... This would solve the issues all the way from Platsburgh Ave to the high school at least as there it dose get narrow (without spend a ton of money making the street wider. Also, why is it that we have such a beautiful recreation trail (bike path) that can be shared by all, yet we don't allow (supposely) any bikes on teh sidewalks (perhaps getting the bikes off the road in that area would work out. and as far as parking goes, sorry, thatis not my problem..... not to be nasty but movement of traffice is more important then parking in front of your home (tennant or not). motorist and bikes share most of the miles, and pedestrians and bikes share the last few. miles (from sa the high school to the Police station. . I can vision all this being done. have visoned this since 1999 saying how simple it can be done... and now for the last and big issue..... nobody wants any type of roundabouts on North Avenue. i dont know where in heck these studies come form but i have not heard of any good comments on any roundabouts anyplace... makes it confusing, makes it dangerous, makes it hard for truckers, and once again, the traffice is speeding way too fast . Out on Williston Road they went to the three lanes which is so great, but they should ahve kept going all the way up main street. sure certain times in the day it would be busy..... so what, then travel it at 3:00 AM...... the college campus for example is nuts, speed limit is 25 and in ever see anyone doing less then 35.... just using that in comparison. we have the speed limit at 30 MPH MAX and if you find anyone doing that its like a needle in the haystack. Thanks for letting me spout off and hope some of our leaders will take to heart waht we locals want and don't want.. and don't forget most people who are traveling to work can hop on the beltway with no problems....., Ken Peterson,,,,,, Tracy Drive.

24. Hello Jim Holway, My name is Darlene Scarano and I live on North Avenue across from Alliance Church. I

have noticed a large improvement in traffic calming at the 127 traffic light since the on ramp was shut down and am thankful to the city for that.

My other feedback is:

1. Most cars are going considerably over the posted 30 mph speed limit. I am not sure if there is anything that could be done to calm traffic on the Avenue.

2. It would improve safety tremendously if there was an easier way to cross North Ave. Maybe a North Ave crosswalk between 127 and Ethan Allen Park? Also if cars were going the speed limit, it would not be as dangerous to cross. The crosswalk at Ethan Allen Park is not convenient for all the neighborhood streets and pedestrians so there are a lot of bikes and families crossing at their own risk. Thanks for asking, Darlene Scarano

25. Dear Jim, Thanks for getting back to me. I cannot come on the 20th I will be in Montpellier.

I had one other thought about traffic issues and that relates to road crossings over the bikeway. As you probably know there have been several accidents on the Staniford Road crossing and even more near misses. Cyclists are very angry about motorists paying attention to them, but most of the problems on this crossing are the result of cyclists failure to obey the stop signs (motorists have the right of way here). One way to cut down on the problem (and make some money for the City), would be to station a cop here and give out tickets to the 40% of cyclists who do not even slow down. This crossing will be increasingly dangerous with the new development at the corner of Staniford & Appletree Point Road. Keith Tarr-Whelan

26. Hi Jim, Thank you for offering the opportunity to express thoughts and suggestions regarding North Ave. There are a few areas regarding traffic that I would like to express concern about.

I live on Dodds Court, on the north side of St. Mark's Church. Our street is heavily traffic with fast moving cars cutting from North Ave to Shore Road and vice versa, Shore Rd to North Ave in order to avoid the light on Shore Rd/North Ave intersection. Besides adults, teens, pets and many walkers, there are many young children that now live on our small little street. My partner and I have frequently thought it would be great to have this part of Dodds Court be a one way to stop the speeding that occurs. The likey-hood of our street becoming a one way is probably unlikely. In addition to the one way thought, would the commission consider adjusting the flow of traffic and the speed with a modification to the structure? Such as the bump out in combination with speed humps that has been done on the top of North Street? Something needs to shift.

Two points of concern that dove tail with each other, speed and the traffic pattern north of the intersection of Shore Rd/North Ave. In this area the speed is marked as 25, however that is typically not the speed of traffic at any time of the day. This issue in combination with the two lanes being used as if there are four, is very unsafe. As a frequent biker for commuting and pleasure, this area of North Ave is a nightmare. Since there is only the double center line, drivers frequently pass cars on the right making for very dangerous spaces for bikers, people using cross walks on North Ave. and drivers needing to turn left onto side streets. Adding solid white lines going north and south, more speed coverage, as well as a few more strategically placed cross walks may help to have drivers be more attentive and bikers/walkers be more safe. Thank you again for the opportunity to express my concerns. best, Ann, Ann Barlow, 26 Dodds Court

Comments from Tony Redington

From: TONY Redington Sent: Monday, January 27, 2014 11:12 AM To: paul kervick Subject: Ethan Allen Residence--Street Crossing Good Day Paul: Took a look at the Ethan Allen Residence last week and the question of crossing to the medical service facility across the street. With the new apartment complexes, shopping center access, etc., across the street from Ethan Allen there is a clear need for some kind of crossing provision there, as you expressed interest in at the December meeting.

My own sense is that at some point in addition to providing a cycle track in each direction and, obviously reducing the lanes there to two, a roundabout may also make sense at the main entrance to the shopping center by using some right-of-way on the east side thereby displacing the current Chinese eatery.

At some point in this evolutionary process it may well be reasonable to add a dedicated crossing with proper signing and possible signaling at the crossroad area at Ethan Allen. Ideally, such a crossing would also have a median refuge so one would deal with traffic in one direction at a time. A roundabout at the shopping center would among other benefits reduce speeds at Ethan Allen. The new walker activated crossings along Pine Street are one type of crossing but currently lack traffic calming of any type. Yours truly, Tony Redington, Alternate NPA 3, North Avenue Advisory Committee

cc RJ Lalumiere, NPA 7 Alternate, North Avenue Advisory Committee Tad Cook, NPA 3, North Avenue Advisory Committee Jim Holway, NPA 5 North Avenue Advisory Committee Eleni Churchill, CCRPC

From: TONY Redington Sent: Wednesday, January 08, 2014 4:48 PM Subject: Categorized Statements of Ward 4 and 7 Responses to Request for Comments on North Avenue

Hello Mr. Barr: This message submits a draft document categorizing the survey responses obtained by Mr. Jim Holway, W 7 NPA representative on the North Avenue Advisory Committee, and submitted to the study staff.

The citizen comments really make an important contribution to the discussion and process of addressing the needs of this corridor. The analysis here uncovers several noteworthy elements which need consideration. These elements include but are certainly not limited to the following:

1. It was extremely helpful to mention roundabouts at BHS, VT 127, Plattsburgh Ave and Ethan Allen Parkway in the survey as it opened this new option for discussion. The survey elicited responses not really rejecting any specific intersection with most negative opinions (6) "general" (it included one public affairs appointed official from NY DOT who while rejecting roundabouts because of lack of space did say there is room at BHS). (Note, as you know, NYDOT "roundabouts first" policy has been in force since 2005 and three states transportation departments and two provincial ones in Canada now follow a similar policy.) Three respondents were positive on roundabouts and 16 made no comment in regard to roundabouts. 4. The Shore Rd/Heineberg Rd intersection shows up in a major way. That whole section from Shore Rd/Henneberg through the two intersections just north which feed the schools and Miller Center represent a really key element of decision-making for walking and bicycling--and vehicle--safety. In my view this intersection as well as the next two intersections, including how to move bicycles on paths/cycle track connections to the adjacent schools, Miller Center and recreation fields.

5. The number of comments about bicycling is stunning. No better case for cycle track could be made than the lack of safety, problems identified, and the number of "concerns" expressed, 25, which amount to more than twice any other category--really three times any other category because the second category, 9 concerns, are in the Bikepath category separate from North Avenue proper.

I can attest that this survey changed my viewpoint significantly and strengthens the approach of a quality street design and infrastructure for the entire corridor. Yours truly, Tony Redington
From: TONY Redington Sent: Wednesday, December 18, 2013 10:01 AM Subject: Fwd: Elementary Schools in US with RABs nearby - Updated

The question asked last night at the North Avenue study committee was whether there are examples of schools and roundabouts and safety. The following emails from a few weeks ago document the location of quite a number--and do not forget the Main Street Middle School in Montpelier, exactly 300 feet from Keck Circle. There is another set of lists of roundabouts in and adjacent to colleges--come to think of it St. Bernard's Catholic School (elementary) as well as Keene State College (it has two raised crossings distal of the roundabout) are within 100 feet or so of the Main Street Roundabout (two lanes, 25,000 entering vehicles, \$4 million totally funded with local taxes) in my hometown of Keene, NH.

Can do some more scouting around for high schools if that would be helpful. Remember, with about 3,500 roundabouts in place, not a single walker fatality yet--also a five year period since 2000 of over 4,000 Melbourne roundabouts without a single walker fatality--and these all reflect mixes of single and multilane roundabouts. Looks like we will experience the French rate or lower of one walker fatality per 15,000 roundabouts per year (they top the world with about 30,000 roundabouts).

------ Forwarded message ------From: Gail Hershey Date: Thu, Sep 12, 2013 at 10:23 AM Subject: Re: Elementary Schools in US with RABs nearby - Updated To: <u>ROUNDABOUTS@listserv.ksu.edu<mailto:ROUNDABOUTS@listserv.ksu.edu</u>> Freedom Trail Elementary School, Lewis Center, Ohio <u>http://goo.gl/maps/UsXku</u> Olentangy Orange Middle School, Lewis Center, Ohio <u>http://goo.gl/maps/Sr3Dn</u> Olentangy Orange High School, Lewis Center, Ohio <u>http://goo.gl/maps/dHy9N</u>

The roundabouts are all very new so you need to zoom in to bird's eye view to see them. (and they are all on the same road so you can click one link and just pan....). Attached is a woefully non-current spreadsheet of Roundabouts at Schools. Please keep posting those new school locations !

It might be possible to search the Kittelson roundabout database for "school" - I haven't tried this. -Ken Sides, PE

Sent: Wednesday, September 11, 2013 6:34 PM Subject: Re: Elementary Schools in US with RABs nearby - Updated

Schools with modern roundabouts nearby:

Ladera Ranch Middle/Elementary School, Ladera Ranch, CA <u>http://tinyurl.com/oxzxkga</u> Truscott Elementary, Loveland, CO <u>http://tinyurl.com/o3qvszm</u> Skyview Elementary, Clearwater, FL <u>http://tinyurl.com/pwbx46a</u> Windermere Elementary, Windermere, FL <u>http://tinyurl.com/psszrga</u> Fruitville Elementary, Venice, FL <u>http://tinyurl.com/ph755gd</u>

Watch at 3:45 into this video posted at http://sarasotaconnectivity.com/honore-642/. Sunflower Elementary, Lawrence, KS http://tinyurl.com/q9jnlbb Eastview Elementary, Fenning and Meadow Oak, Monticello, MN http://tinyurl.com/q9jnlbb Eastview Elementary, Fenning and Meadow Oak, Monticello, MN http://tinyurl.com/q9jnlbb Eastview Elementary, Charlotte, NC http://tinyurl.com/pvjktry Randleman Middle School, Randleman, NC http://tinyurl.com/q5qfrf6 Cherokee Elementary, Cincinnati, OH http://tinyurl.com/q5qfrf6 Cherokee Elementary, Cincinnati, OH http://tinyurl.com/q5qfrf6 Cherokee Elementary, Cincinnati, OH http://tinyurl.com/ogeu6hd Sunset Elementary, Bellevue, WA http://tinyurl.com/ogeu6hd Sunset Elementary, Bellevue, WA http://tinyurl.com/ogeu6hd Sunset Elementary, VT http://tinyurl.com/oprqf9q St Mary's High School, Homer and Blockline, Kitchener, Ontario, Canada <u>http://tinyurl.com/pedroundabout</u>> - Scott Batson

Subject: Fwd: Pedestrian impact on vehicle capacity A transportation colleague in Sacramento, who is quite sympathetic to roundabouts, has sent me the forwarded message below. I have never encountered school-age pedestrians reducing the vehicular capacity of roundabouts, so I am throwing this out to the other 399 members of our listserv. Please answer if you have knowledge to contribute, and I will pass it along to my colleague. My initial reaction is to sketch roundabouts at all four corners, and say four-way STOPs always suck. But I know some of you out there will be much more eloquent. Thanks for your input in advance. John Burnside, P.E., T.E.

From: TONY Redington Sent: Wednesday, December 18, 2013 9:45 AM Subject: Getting Across the Street

Hello Mr. Kervick: Must be something in the air in Waterville, ME that leads to innovative residential care services--your brochure presents a welcome change from the stereotypic "nursing home" image and the recent difficult rehabilitative experience in Berlin. Long ago doing a few day "market" study for a senior day care demonstration grant the task was simply to provide data on the number of over 75 age non-institutional population within a 10 mile radius of Waterville.

Your pointing to the available services to those in your residence, but inaccessible because of the street crossing barrier immediately brought to mind the Gary Home, Main Street, Montpelier where some residents regularly, some by cane and walker, were able to use the then new roundabout to cross the street to the beauty salon occupying the ground floor of a mixed use older large house. The salon which closed some time ago can be seen the five minute 43 second video put together by RJ Lalumiere during our field visit November 1. http://goo.gl/DdajOC

Before the roundabout the closest crossing to the Gary Home was about a block away in either direction and the speeds in front of the home were 25-30 miles an hour as Main Street flow was not controlled.

At one point two tourists (?) can be seen standing in the splitter island refuge admiring the unique bike sculpture/wheel-mill, one of several remnants of a Citywide bike-sulpture promotion from a few years ago.

If the Shore Road/Heinneberg intersection--and a crossing about 25 feet south of the intersection would be the location--meets the need to "cross the street" you describe, then a simple one lane roundabout may well be a solution there. With the Church and other institutional/commercial facilities nearby access to all for those on foot or using parking nearby would be enhanced. Let us know whether a roundabout might benefit the Ethan Allen residents and staff.

A one-lane roundabout is also ADA compliant. Thank you for taking the time to give us more evidence of the need for safe and comfortable walking infrastructure. As you will note my first interest in transportation is safety for those who walk.

Finally, am attaching a powerpoint (text only) presentation last month to the AARP Champlain Valley Advocacy Team providing the issues of seniors and other related to intersection safety which explains the AARP policy advocating conversion of existing intersections to roundabouts.

Am copying this email to the study staff and neighborhood representatives who attended last night as well as Committee member representing AARP, Kelly Stoddard Poor. Yours truly, Tony Redington

From: TONY Redington

Sent: Tuesday, December 17, 2013 9:50 PM Subject: VT 127/NORTH AVE INTERSECTION NUMBERS

Hi David: Congratulations on your new position at Worcester. We will miss you and your special knowledge of the corridor.

Checked out some of the numbers on the VT 127 intersection which were sent to you earlier in the fall from VAOT counts. The entering data as presented there are as follows (all 2009 numbers):

 VT 127 Connector
 7,700 daily

 Institute Drive to VT 127
 4,800

 VT 127 to Ethan Allen Pkwy 7,750
 700 daily

 Total
 20,250

The traffic numbers have dropped significantly in recent years. A 10% peak hour factor suggests about 2,000 peak hour. Even assuming a higher peak factor and some growth (unlikely), a single lane roundabout would appear easily handling the traffic. Further, the trend on these three links is slightly downward 2000-2009. As you correctly point out some traffic can be accommodated by a controlled turn lane (CTL) though that should be avoided if possible for the benefit of walker and bicyclist accommodation.

Note the Montpelier US 2/302 intersection capacity using two software analysis was estimated at 2,900 vehicles peak hour and current traffic on Friday p.m. peak is about 2,000.

Incidentally, there is a list of dozens of roundabouts located at U.S. public schools and colleges which I can send you if it would be of help. Respectfully, Tony Redington

Burlington College Participation North Avenue Corridor Study Project and NPA Meeting Notes Complete Streets Concepts and Corridor Studies

Meeting was held on April 30th, 2014, at 6:00pm.

Posters were distributed throughout the college to encourage student involvement. (See attachment)

An email with a survey was sent to all BC students encouraging those who cannot attend to voice their opinions. (See attachment) *4 surveys were collected via email from students. This is a great response as students are hard to track down at the end of the year.

Present were Burlington College President Christine Plunkett, Attorney and professor of law at BC as well as chair of The Institute for Civic Engagement; Sandy Baird, NPA members; Lea Turnhune, Jim Holway, Tony Redington, and Barry Trutor.

Posters were provided by Barry Trutor of sections of the corridor study that highlighted the stretch with Burlington College

Presentation was a <u>Power Point</u> of the North Avenue Corridor Study and the Complete Streets Concept. Presentation was very clear and broke down basic concepts for students to learn some aspects of city planning. Major focus was Civic Engagement (as it pertained to Sandy class topic) and why it was important for community members, and students, to become actively involved in basic grassroots democracy. This presentation took place during Sandy Baird's class time for her Civic Engagement class. 6-8 students were present providing input and discussion with myself, Sandy, Lea, Tony, Barry, Jim and Christine Plunkett.

Refreshments were provided by a student of Sandy's, Fatuma Bulle

At the end of class the students filled out a survey. A copy of a blank survey is attached to this document, as well as all surveys that were filled out by students. I have compiled a survey with all of the information for a streamlined look. That is also attached.

Students were actively engaged, asked questions, and interested in future for Burlington College and it's future development.

Overall the meeting was an hour and a half long.

Overview of suggestions from students from surveys and discussion

- Students were largely interested in cycle tracks, safer bike lanes, informed drivers of cyclists
- Wanted to see a large covered bus stop outside of BC
- Benches and seating available for students by bus stops

- Great idea to have a "**community bulletin board**" outside the college near the sidewalk and bus stop for upcoming events, news, and information.

- Have the school become the hub of the community for events, concerts, art exhibits, and other events

- Larger sidewalks and sidewalks maintained for those students that live close to school.

- Crosswalk directly in front of the school for pedestrians to move freely to and from opposing sides of the street. Accessibility to neighboring convenience stores.

- Trash and recycling bins throughout the corridor for ease of trash disposal and to maintain an attractive appearance.

- Attractive plants and parks
- Lighting/ Safety
- No real mention of roundabouts from students. Some expressed concern and disliked them.
- Light rail or trolley use was mentioned for future

Quotes from students

"The New North End, where I lived for a year about one year ago, is relatively fine. I used to run outside and feel safe when I was doing it. The proximity to the bike path and beaches is a major benefit. In fact, we were looking to buy a house in the New North End, but nothing was in our price range, so we ended up buying in Colchester."

"When I lived in the New North End, on Starr Farm Rd, my roommates and I had a saying, "No matter where you want to go, it takes half an hour to get there from the NNE."

"It would be absolutely wonderful if you had some way to make 89 more accessible, but that is a tall order, I know. If not that, I would suggest making buss routes more common and accessible, maybe beef up the bus stop locations and make them look nicer. Also, maintaining sidewalks would be nice."

"My idea for the New North End is for it to be its own little booming area. Like a more residential downtown. It's a great place and I would absolutely love to be a part of helping out and coming up with ideas!"

"I use North Ave constantly, as it is the link between my house, my college, and my grocery store."

"Bike lane availability. When the bike lane disappears past BHS, I often mount the sidewalk which I would rather not do."

" I am concerned about the section of North Avenue that runs along BHS sports field— in the "dip" and near the Parks&Rec sign got North Beach. It seems to me the fall-off towards the marshy land below is rather steep and close to the sidewalk. I am not concerned about safety, but for the last structural integrity of the sidewalk and road. I should think the earth underneath the sidewalk and road is eroding. I realize we live near a lake and this is an issue everywhere, but perhaps more of a buffer would help slow the natural forces at work."

"Making biking easier and safer for commuters and keeping drivers aware of bikers as well. I'd love to help out with this project!"

"I live over an hour away, so I can't really have another method (of transportation), maybe car pool if someone else needed a ride at the same time and live in Barre."

"I think bike lanes for the bicyclist should have them all through town, both ways, like a car lane."

"I love the cycle tracks and micro parks as well as a different structure of parking and commuting."

"Always many cars in the street and it is hard sometimes to cross the street."

"Developing bike lane availability, sidewalks, and more lighting so that bikes and people walking sidewalks are protected. I also want to see that the bus City are running on Sundays so that our community has reliable transportation."

"Bicycle tracks would be amazing and would encourage more bicyclists and improve safety."

Final Report on Public Engagement North Avenue Corridor Study, Burlington, VT October 2014

6) Advertisements & Media Clips

Help Define the Future of North Avenue



This is a photo of North Avenue at Bessery's Market & Staniford Road. photo by Cliff Coop

North Avenue in Burlington is the fundamental route connecting homes and businesses in the North End of the City with destinations to the south and east. Cars, trucks, buses, pedestrians and bicyclists all share North Avenue, as do residents and visitors of all ages.

Parts of this busy corridor were constructed in the early 1900's, while others were constructed mid-century. As development shifted farther north, North Avenue transitioned from a twolane, narrow urban street with on-street parking, to a much wider, two- to fourlane street serving neighborhood commercial centers.

The North End continues to evolve, witnessing a shift in population and demographics as well as new developHowever, North Avenue itself has not evolved since it was constructed. Through a series of four public meetings (and other opportunities for participation), the community will review the existing corridor and identify how the corridor should look, feel and function in the future. Join us for the first public meeting on Tuesday, October 29, 2013 at 7:00 pm in the Hunt Middle School cafeteria.

If you can't attend or want to learn more, visit www.ccrpcvt.org and search for North Avenue Corridor Study.

Check back soon to submit ideas in the online input tool!

Submitted by Nicole Losch - Dept. of Public Works erfront.

O Center Sustainability Park: to support creation of new outnities, educational installations, protection facilities on land sur-ECHO. New plantings, a boardnsion, stormwater mitigation, and al installations all would be con-1 a first phase of what ultimately ned to be an approximately \$3.8 hancement to the ECHO site, with e to be funded without further dinvestment.

Sincerely, Miro Weinberger

Handbags & Hope • February 7th • 6-9 pm Essex!

Milton Family Community Center, a leading community services agency in the field of children's & family support programs, will host Handbags & Hope at The Essex Resort & Spa on Fri. Feb. 7th from 6pm - 9pm. We feature the sales of over 200 high-quality, designer brand handbags, wallets, shoes and more. The event will feature emcee Jamie Polli of Game-

showsVT and live auctioneer Charles Barsalow. Ticket sales and at the door are \$40/person.



Public Workshop #2

February 20th at 7:00 PM St. Mark's Church, 1251 North Avenue

Come review concepts and share your ideas on how to improve travel along North Avenue for drivers, walkers, and bikers!

http://bit.ly/north-ave

The meeting is free and open to the public. Refreshments will be served. The Study is sponsored by the City of Burlington and the Chittenden County Regional Planning Commission (CCRPC). Questions? Call Diane at 865-1794.



February 7, 2014 North Avenue News Page 23

th Jennie Kristel, M.A., C.E.T, RMT Michael Watson, M.A., Ph.D., LCMHC

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i, Shamanic healing, classes, groups

Diane Meyerhoff

From:

Sent: To: Subject: Kesha Ram, Burlington CEDO [kram=burlingtonvt.gov@mail128.us2.mcsv.net] on behalf of Kesha Ram, Burlington CEDO [kram@burlingtonvt.gov] Monday, February 17, 2014 5:18 PM diane@thirdsectorassociates.com CEDO Neighborhood Buzz - Champfest Announcement

Upcoming events in and around Burlington

Is this email not displaying correctly? View it in your browser.



Neighborhood BUZZ

Find us on Facebook and on Twitter

- Local Govt/Neighborhood & Community Engagement
- <u>Art Exhibits & Performances</u>
- <u>Classes</u>, Workshops & Lectures
- Volunteer Opportunities
- Fundraisers
- Sports & Recreation
- Other Great Stuff

Dear Neighbors,

Join ECHO in the celebration of our most beloved lake monster...Champ! Champfest will be taking place from February 15th until March 2nd and will include a variety of activities and events focused on this mysterious, elusive and magical creature.

Every day during Champfest there will be things to do, explore, witness and watch that help folks understand a little more about and what it would mean for us if Champ was swimming around in our Lake Champlain. One of the main events will take place on February 22nd, and will include the first public exhibition of the actual photo of Champ taken by Sandra Mansi in 1977. The festival will also include daily showings at 2 PM of an exclusive film short that tells the story of Ms. Mansi and the now famous photo. displays at ECHO (free and open to the public), a new marina, changes to waterfront park, expansion of the Community Sailing Center, and development of the Moran plant. However, the question also states that should the financing not come together for Moran development, we shall tear it down. I tried to amend that final clause from the ballot language and lost the vote. I do not want to tear it down and I do not want any responsibility for it being torn down. If the question passes, we will EITHER build Moran OR tear it down. If the question does not pass, nothing will change (yet). However, if it does not pass, we will also not be able to move forward with the other projects. If it passes, I will do what I can to ensure that the financing comes together and the building is not demolished.

#3 General City Tax increase YES

I know every tax dollar paid hurts the personal budget, but the City needs this to improve operations. We havent had an increase in 10 years and the costs of running the City have certainly gone up.

#4 Purchase of Winooski Dam YES

This will not increase rates and will possibly decrease them in the long term.

#5 Redistricting UNDECIDED

I do not like the map that we voted out of City Council. I did vote for it at the time because I liked it more than the other options. It was the classic lesser of two evils. This map breaks the city into four districts which will have one councilor each. Within each district there will be two wards (eight total) which will have one councilor each. There will be 12 councilors total (less representation than currently). Everyone will vote for one councilor each year. Everyone will have one and a half councilors per ward. If it passes, it will go into effect in one year. If it does not pass, we will need to come up with another plan for next years ballot.

#6, 7, and 8 Gun Safety questions YES

These three questions, in short, will do the following: Require safe storage of guns in homes (unless they are on your person) which will lessen the possibility of accidental shootings by children and lower the suicide rate (see <u>www.meansmatters.com</u>); ban firearms in bars (this is supported by the Police Chief and area establishment owners); and give the police more ability to seize firearms in domestic abuse situations.

North Avenue Reimagined - Meeting Feb. 20

Emma Long • Communications Manager, Chittenden County Regional Planning Commission, Chittenden County Posted to: ONE West

The North Avenue Corridor Studys second community meeting is right around the corner, and we need your participation during this exciting phase of the project. Weve collected data, observed the corridor, identified issues, and established a vision. The fun and interactive phase is now launching, so join your friends and neighbors for a hands-on workshop as we begin to develop the improvements that will remake North Avenue into a more walkable, bikeable, and safe corridor for all users. Well supply the maps, markers, and information to answer questions; you bring your creativity and collaborative energy!

Join us on Thursday, February 20, 2014 at 7:00 PM at St. Marks Church (1251 North Avenue). Questions? Call Diane at 865-1794. If you cant attend or want to learn more, visit <u>http://bit.ly/north-ave</u>.

Event: Feb 19, 2014, 8:00 AM to 9:00 AM

Just a reminder that I have one more public coffee scheduled if you'd like to come talk about my campaign or any city business. I will be at Pearl Street Diner on Wednesday from 8:00-9:00 AM. If you cannot make it and would like to talk, please call me and we can arrange something.

See you at the poll on Tuesday, March 4th!

Sincerely, Rachel 777-2627

North Avenue Reimagined - by You!

<u>Diane Meyerhoff</u> • Blodgett St Posted to: ONE West Event: Feb 20, 2014, 7:00 PM to 9:00 PM

The North Avenue Corridor Studys second community meeting is right around the corner, and we need your participation during this exciting phase of the project. Weve collected data, observed the corridor, identified issues, and established a vision. The fun and interactive phase is now launching, so join your friends and neighbors for a hands-on workshop as we begin to develop the improvements that will remake North Avenue into a more walkable, bikeable, and safe corridor for all users. Well supply the maps, markers, and information to answer questions; you bring your creativity and collaborative energy!

Join us on Thursday, February 20, 2014 at 7:00 PM at St. Marks Church (1251 North Avenue)! Questions? Call Diane at 865-1794. If you cant attend or want to learn more visit <u>http://bit.ly/north-ave</u>.

Why is the School Tax Increase So High?

Linda Deliduka • School Board Member, Ward 7, Burlington Posted to: ONE West

This morning several folks at the Bagel Shop asked that question. There are several things that influence the budget The city's deteriorating bond credit rating and the cost of funding of the Burlington City Pension Fund are two reasons. The state funding formulas are adding 6.8% to the tax increase. Burlington pupil enrollment is increasing. The decrease in federal funding also impacts our costs.

News from Neighboring FPFs

<u>Shared postings from ONE Central FPF</u> Speak Up for Vermonters with Lyme Disease by Julielyn Gibbons Read Post (and 2 More) »

HOME NEWS MAPS CALENDAR JOBS EMAIL UPDATES 🖂		I WANT TO	SEARCH	
BUBLINGTON VERMONT				
LIVE	WORK	PLAY	CITY	
BURLINGTON A-Z A	BCDEFGHIJK	LMNOPQRST	U V W X Y Z	
CEDO CELEBRATING 30 YEARS 1983 - 2013	Home > Community & Economic Development Offic	Ē		
About CEDO	Community & Economic Developmen	t Office (CEDO)		
Americorps	Room 32 City Hall / 149 Church Street / Burlington, VT 05401 802-865-7144 / cedofd@burlingtonvt.gov Find us on <u>facebook</u> and <u>twitter</u> !			
Brownfields				
Business Resources				
Community Justice Center	The Community and Economic Development Office (CEDO) is a department of the City of Burlington. We work with the community to foster economic vitality; preserve and enhance neighborhoods, quality of life and the environment; and promote equity and opportunity for all residents of Burlington.			
Housing				
Tax Increment Financing	What's New:			
Waterfront				
Public Investment Action Plan	 North Avenue Reimagined – by you! The be held on Thursday, February 20, 2014 a 	second community meeting for the North Ave	unity meeting for the North Avenue Corridor Study will	
Community Services and Engagement	North Avenue). The Chittenden County Regional Planning Commission (CCRPC) has collected data, observed the corridor, identified issues, and established a vision. Join your neighbors for a fun, hands-on workshop to begin to develop improvements to make North Avenue a more walkable, bikeable, and safe corridor for all users. For more information, visit <u>http://bit.ly/north-ave</u> .			
CDBG				
Legacy				
Burlington Lead Program	Mayor Announces PIAP Slate of Projects City Council to place on the March hellet the	six waterfront projects to		
	To view the press release and details on the projects, visit <u>http://www.burlingtonvt.gov/Mayor/DMS-Documents/Press-ReleasesDMS-Documents/Mayor-Miro-Weinberger-Announces-Slate-of-Public-Investment-Action-Plan-Projects-for-Waterfront-TIF-District_including-Mayor-s-Open-Letter-to-the-People-of-Burlington/. For more information about the projects themselves, visit <u>http://www.burlingtonvt.gov/CEDO/Public-Investment-Action-Plan/</u>. For more information about the projects themselves, visit <u>http://www.burlingtonvt.gov/CEDO/Public-Investment-Action-Plan/</u>.</u>			
	 Burlington Parking Summit Keynote Add Works sponsored a Parking Summit hosted improving downtown Burlington's parking sy: 	ress: On November 13, 2013, CEDO and the by the Burlington Business Association to exp stem. You can view the keynote address <u>here</u>	Department of Public lore options for	
	CEDO's programs are available to all people regated place of birth, or national origin. For information or cedofd@burlingtonvt.gov.	rdless of race, color, religion, sex, sexual orien the accessibility of CEDO's programs, contac	ntation, age, disability, ct us at 802-865-7144 /	
COMMUNITY AND ECONOMIC DEVELO	PMENT OFFICE CITY HALL, 149 CHURCH ST, BURLING	3TON VT (802) 865-7144 CEDOFD@burlingtonv	t.gov [+] feedback	

February 10, 2014 CEDO Neighborhood BUZZ LOCAL GOVT/NEIGHBORHOOD AND COMMUNITY ENGAGEMENT

WARD 1 NPA MEETING

The Ward 1 NPA meeting will be held this week on Wednesday, February 12th at 7:00 PM. The meeting will take place at Fletcher Allen Healthcare Center in the McClure Lobby Conference Room. Free parking is available in the McClure parking garage. All are welcome to attend.

ELECTION FORUMS

Live elections forums with Burlington candidates for City Council and School Board alongside City and School Budget presentations start Thursday, February 6. Complete Schedule and link for Live Viewing can be found at <u>http://bit.ly/BTVForums</u>. These forums are LIVE and viewers are encouraged to call in with their questions at 862-3966.

NORTH AVENUE CORRIDOR STUDY MEETING

The North Avenue Corridor Study's second community meeting needs your participation. We've collected data, observed the corridor, identified issues, and established a vision. Join your neighbors for a fun hands-on workshop to begin to develop the improvements to make North Avenue a more walkable, bikeable, and safe corridor for all users. We'll supply the maps, markers, and information; you bring your creativity and collaborative energy! Join us on Thursday, February 20, 2014 at 7:00 PM in the Community Room of St. Mark's Church (1251 North Avenue)! If you can't attend or want to learn more visit <u>http://bit.ly/north-ave</u>.

Diane Meyerhoff

From: Sent: To: Subject:	Local Motion [jane@localmotion.ccsend.com] on behalf of Local Motion [info@localmotion.org] Thursday, February 06, 2014 5:40 PM diane@thirdsectorassociates.com Walk 'n Roll News: Shelburne's Cul-de-Sacs, Bike Commuter Leader Needed, Reimagining North Avenue, Spring Internships and more
	Avenue, Spring internships and more

Hi! You are receiving this newsletter because you are a Local Motion member or have signed up for Local Motion's email list. Please remember to add info@localmotion.org to your address book so we'll be sure to land in your inbox! You can always unsubscribe to our emails by using the link below (but we'll miss you!).

You may <u>unsubscribe</u> if you no longer wish to receive our emails.



Promoting people-powered transportation and recreation

February 2014

This Issue Sponsored by American Flatbread Burlington Hearth



Thanks for your continued support and the Benefit Bake!

2014 Vermont Walk/Bike Summit



Saturday, March 29, Burlington

Hilton Hotel, Burlington Saturday, March 29 9:30am - 4pm

Plan to attend this dynamic event filled with great speakers, workshops, activities, networking and fun. Attend

Travel Talk - 4000 Miles Across 15 Countries!

When: Wednesday, February 12, 7:00pm

Where: ArtsRiot 400 Pine St, Burlington

Without a chosen route, a few poorly detailed maps, and minimal camping gear, Ryan Crehan set out in 2002 on a 3-month adventure of 4,000 miles across 15 countries. The route stretched from the



snows of the Pyrenees to the heat of the Adriatic Coast and the return trip from Budapest to Belgium. Join us for a night of photos and stories about riding solo in foreign countries.

We will be raffling off an Earl's gift card, free day passes to the Bike Ferry, bike lights, bike bells, and more! A full menu of food beverages will be available for purchase or you are welcome to bring dinner to enjoy during the presentation. Click here to print out one FREE raffle ticket you can bring to enter!

Fun and Competition on the (Great) Ice!

When: Saturday & Sunday, February 8th & 9th Where: Hero's Welcome Center, North Hero one day or both. Read about topics and the keynote speaker here! Registration available soon.

We are coordinating homestays for those coming from afar. If you <u>need somewhere to stay</u>, or live near Burlington and <u>can offer</u> <u>a room to a traveler or two</u>, please contact martel@localmotion.org.

Help Reimagine North Avenue

When: Thurs, Feb 20th @ 7pm Where: St. Mark's Church Community Room



Join your friends and neighbors for a hands-on workshop as we begin to develop the improvements that will remake North Avenue into a more walkable, bikeable, and safe corridor for all users.

Click here for more info!

Wintervale All Day!

When: Sun, Feb 16th @ 10am Where: Burlington Intervale, 282 Intervale Rd.



Free ski and snowshoe rentals, kids activities, lessons and demos! Food and drink will be available to purchase.

Go to the Intervale's page here for info.

A Man on Emission

When: Thurs, Feb 13 @ 7pm Where: Champlain College, Perry Hall Presentation Room

Come to the 6th annual Great Ice at Grand Isle this weekend for two jampacked days of winter

festivities! Enjoy skating, skate races, a trek to Knight Island, bike races, pick-up hockey, Nordic skating, a Flapjack Breakfast and sled dog rides!

On Sunday at noon there will be a bonfire on the ice and a chili contest. There will



be free parking, too! And top it all off on February 14, Valentine's Day, with a dance at the North Hero Community Hall.

Call 802-372-4161 for up-to-date ice conditions...Click here for the full schedule of events!

We've Upped Our Game for VerMontreal 2014

For the first time, the VerMontreal tour pairs Local Motion's mission with Sojourn's expertise to offer you an unforgettable four-day adventure.

This year's trip will begin in Burlington, ride the repaired causeway Bike Ferry, enjoy lodging in the Champlain Islands and experience the **30th anniversary** celebration of Montreal's Tour de l'Ile!



Not only is the VerMontreal an amazing experience, but all proceeds are donated to making Vermont safe and fun for everyone to walk and bike.

Head over to Sojourn's website to learn more or register today!

Shelburne: Connect-the-Sacs

If you live in Shelburne you may be familiar with the over 40 Cul-de-sacs and dead end roads. Shelburne advocacy blog Changing Gears discusses the contradictory nature of having a disconnected landscape in a community where people love to walk and bike. Appreciation for the outdoors should be reflected in the routes we take every day, and birds-eye views of the town show that there is lots of potential for connectivity. Having trouble viewing this email? Click here

Winter 2014

Connecting You With Transportation Choices <u>www.CATMAVT.org</u> 802-656-RIDE

The Joys of Winter

Hope you all are enjoying the Winter Olympics and supporting the great 13 Vermont athletes in Sochi! It's been a cold and icy winter and according to the famous groundhog Phil, we've got six more weeks of winter. So bundle up and keep going commuters!

Events, Resources & Updates

Fletcher Allen receives Bike Friendly Business Designation



The League of American Bicyclists recognized Fletcher Allen Health Care with a Bronze level Bicycle Friendly Business (BFB) award in November for leading America toward a more sustainable future. Fletcher Allen joins UVM and the City of Burlington in BF designations. <u>Click</u> here to read the Press Release.

GMTA Unlimited Access Pilot Program



Beginning on February 17th, Champlain College and UVM affiliates with a valid college ID can ride local and commuter GMTA buses for FREE through our <u>Unlimited</u> <u>Access Program</u>. This pilot will run from February

17 to June 16. Simply show the bus driver your ID when boarding these buses and remember to ask for a transfer if you are connecting to a CCTA or other GMTA bus. <u>Click</u> <u>here for a summary of GMTA routes that link with CCTA. GMTA</u> <u>Schedules, click here.</u> Employees who take the bus 2-3 times a week are eligible to <u>register</u> in CATMAs Emergency Ride Home program.

Pledge to Go Idle Free: Feb 13 Idle Threat Screening



We encourage you to go idle free this winter season. Simply turning off the key when parked can have major benefits to your pocket, air quality, health, climate change and energy conservation, plus it just might be the law. Visit <u>Idle-Free VT</u> and learn. Check out a screening of **Idle Threat** on February 13 at 7pm in Perry Hall at Champlain College, <u>click</u> <u>here</u> to learn more.

CATMA's 10th Student Transportation Survey to Launch this Spring to over 12,000 UVM students and 3,000 Champlain students. This data is valuable in campus master planning and in enhancing mobility options. Once students complete the 6-minute survey, they can enter our drawing for a Burton snowboard, movie tickets & more.



E-Newsletter

Check it out...

Idle-Threat Screening VT Indoor Cycling

Quick Links

CCTA CarShare Vermont Go! Vermont LocalMotion

Commuter Resources/Links Monthly Restaurant Winners Upcoming Events

Save The Date

VT Bike-Walk Summit <u>March 29</u> Way To Go! Week 2013 <u>May 12-16</u> Vermont Bike Challenge <u>May 1 - September 30</u>

Join our Mailing List!

Register with CATMA



Burlington's candidates for City Council make their case

BUR 12:08 a.m. EST March 1, 2014

The Burlington Free Press recently conducted email interviews with City Council candidates seeking election on Tuesday which is Town Meeting Day. Candidates were asked to limit responses to 80 words per question, focus on how they would serve the city and refrain from personal attacks.

Candidates from Wards 1, 2, 3 and 4 5, 6 and 7 are represented. Ryan Emerson, who is listed on the ballot in Ward 2, announced this month that he had exited the race and did not provide responses.

Read or Share this story: http://bfpne.ws/1bTN08j

MORE STORIES



<u>Modern-day Mark Twain joins</u> <u>governor race</u>

(/story/news/politics/2014/06/16/modern-

• day-mark-

twain-joins-

<u>governor-</u> race/10628751/)

(/story/news/politics/2014/06/16/modern-daymark-twain-joins-governor-race/10628751/) June 17, 2014, 3:53 p.m.



DMV: TD Bank teller stole from state's deposit

(/story/news/local/2014/06/17/dmvtd-bank-tellerstole-statesdeposit/10678481/) (/story/news/local/2014/06/17/dmv-td-bankteller-stole-states-deposit/10678481/) June 17, 2014, 2:20 p.m.

What happened to political competition? (/story/news/politics/2014/06/16/happenedpolitical-competition/10639287/)

Ward 4: Carol Ode, Democrat

BUR 12:06 a.m. EST March 1, 2014



(Photo: COURTESY)

How long have you lived in your ward? In Burlington? In Vermont? I have lived in Ward 4 for 26 years, in Burlington for 34 years, and in Vermont for 35 years.

Age: 58

Previous political or civic experience: Ward 4 elected me five times to the School Board, which I chaired for seven years. Governor Howard Dean appointed me to the Vermont State Board of Education where I served for seven years, one as chair. The Burlington City Council appointed me to the Waterfront Board and Ward 4's NPA selected me to represent them on a Community Development Block Grant committee. I served on the board of the Lund Family Center and the Vermont Bar Foundation.

Is there a particular issue that inspired you to run for office this year? I love Burlington and I am inspired to advocate strongly for Ward 4 concerns, including safety on North Avenue, bringing more city resources to the ward, repairing Leddy Park Road and other streets and sidewalks, and increasing the

number of Ward 4 residents serving on city commissions. I want to bring new energy and new ideas to the New North End and I will focus on Burlington.

What issues in Burlington don't get enough attention from city government, in your opinion? Burlington must seek solutions to its pension issues and address its deteriorating infrastructure needs sooner rather than later.

I will work to restore financial stability and improve the City's bond rating; seek solutions to pension issues; address deteriorating infrastructure needs; support the Burlington Telecom settlement and protect taxpayer interests; support a strong airport; and support efforts to improve our vibrant downtown.

Where should the city cut back on spending, if at all? I support the process the Mayor and the Council went through to cut and prioritize spending in the FY 2014 budget. I support the \$0.024 general fund tax increase as a short term investment to produce long term savings. I support the continuing review of all budget expenditures to ensure their on-going need and to make sure all services are delivered efficiently and effectively.

How many City Council meetings have you attended in the last six months? What impressed you about those meetings? What concerned you? In the past six months, I attended two meetings and watched parts of others on public access television. I have lost count of how many council meetings I attended over the past three decades; I have worked with current and former City Councilors on numerous issues over the years. I have been impressed with the civility and respect with which City Councilors and the Mayor treat each other, regardless of party affiliation. I am concerned about the prioritization of agenda items.

How would you like to see North Avenue improved? I would like to see safety improved on North Avenue. A draft of the North Avenue Corridor Study's report is due this spring, and its focus is safety for pedestrians, cars, bikes and buses all along the avenue and at difficult intersections.

The waterfront? I support the Waterfront/Moran ballot item. If the ballot item passes there will either be a successful mixed use redevelopment of Moran, or TIF funds will be used to remove the building. It is time to resolve the uncertainty about Moran and to use TIF dollars to increase public access to and use of the waterfront.

Read or Share this story: http://bfpne.ws/1bTMQxE



LEARN MORE

Ward 4: Kurt Wright, Republican

BUR 12:06 a.m. EST March 1, 2014



(Photo: EVA DEITCH/FREE PRESS)

How long have you lived in your ward? In Burlington? In Vermont? 26 years in Ward 4. Over 30 years in Burlington. Native Vermonter.

Age: 58

Previous political or civic experience: Ten years on the City Council. President of the Council 07-09. State Legislator 14 years. Appointed to serve on the Judicial nominating Board. Appointed to serve on the Joint Legislative Housing Committee. Justice of the Peace. Served on the Ward 4 Neighborhood planning Assembly Steering committee. Past member of transportation, finance, waterfront, ordinance, public safety housing and charter change committees.

Is there a particular issue that inspired you to run for office this year? I ran so that Ward 4 would have another strong voice, and to bring needed experience, leadership and balance to the Council. My passion is seeing Burlington thrive, with good economic development helping to stabilize taxes and create

jobs. I also want to ensure that we restore our bike path as one of the crown jewels of our City. There are many other issues but most of all we must maintain our quality of life, while making Burlington more affordable.

What issues in Burlington don't get enough attention from city government, in your opinion? I sponsored a resolution previously that led to the City crafting a funding plan to improve the condition of our streets and sidewalks, but we can still do better. There are streets and sidewalks that are in need of repaving and neighbors have been waiting too long. I believe customer service in some city departments is excellent and in others could be better. Our permit system also needs to be more fair and predictable for both home owners and businesses.

Where should the city cut back on spending, if at all? I constantly hear people complain about sidewalk plows rumbling down the street when there is virtually no snow on the sidewalk, at times when it doesn't appear to make sense. I believe every department in city government should be thoroughly scrutinized for cost savings and efficiencies. Let's consider giving city employees a bonus if they come up with a cost saving idea because they are the ones in the trenches that see it first hand.

How many City Council meetings have you attended in the last six months? What impressed you about those meetings? What concerned you? My commitment to Ward 4 and Burlington runs deep. I am proud to say I have stayed very involved and have attended MANY Council meetings long before deciding to run. I have worked across party lines with virtually every Councilor on one issue or another. I've been impressed by Councilor's getting along but there is a shortage of experience, strong voices and balance on the Council, one of the reasons I am running.

How would you like to see North Avenue improved? Our shopping Center has new businesses coming in, adding to existing businesses that we love, like the Bagel and Smitty's. I helped create the bike path task force and one of our goals is adding signage that would direct tourists to our local businesses to help them thrive. It would be great to have an exciting new development in the vacant movie theater and I will work with the owner of the shopping center to see what possibilities there may be..

The waterfront? We need to revitalize the waterfront in a way that keeps it open to the public while bringing good new economic development, creating jobs and helping to stabilize taxes. I support the Mayor's plan. Along with the bike path and the church Street Marketplace, the waterfront is one of our crown jewels. Let's protect it and ensure that everyone can enjoy its beauty, while also making it more vibrant with expanded tax revenues.

Read or Share this story: http://bfpne.ws/1fxqInD

Ward 4: Loyal Ploof, Libertarian

BUR 12:06 a.m. EST March 1, 2014



(Photo: GLENN RUSSELL/FREE PRESS)

How long have you lived in your ward? In Burlington? In Vermont? I have been living in the ward for about 6 years and in Burlington most of my life.

Age: 43

Previous political or civic experience: I have the community experience which helps with the transition to the City Council.

I was appointed by the City Council to serve on the Housing Board of Review. 2003-2006 and again 2009-2013 and reappointed in 2013. Also serving the community as a member of the NPA. Wards 2/3 2003-2004 and ward 4/7 2010-2012.

I was elected by the voters of ward 3. To serve the following positions.

Ward clerk 2002-2004

School board 2004-2006

I worked several elections as a ward 4 poll worker.

Is there a particular issue that inspired you to run for office this year? The city council has lost it's energy and sense of direction. I want to work to get the City Council back on track so we can get the Cities financial situation fixed like the pension plan that does not get addressed. It is time for the city council to deal with these problems that hurt the city. I will be that candidate who Will get the City Council moving again and working for you.

What issues in Burlington don't get enough attention from city government, in your opinion? As the only candidate who opposed to the tax increases we need to sell Burlington Telecom to the cooperative group this will help get us back on track. When I am elected. I will review each department to look for wasteful spending.

Where should the city cut back on spending, if at all? It is getting too expensive to live here and the Council is not addressing these issues. That is why I am calling for a financial summit to get the city together with school department, business community and landlords to get the city on track to a healthier credit rating. We can also use this summit to get rid of any ordinances that hinders business growth and landlords ability. To build more housing also hurts the rights of tax paying citizens

How many City Council meetings have you attended in the last six months? What impressed you about those meetings? What

concerned you? I have not been able to attend City Council meeting because of my commitment to the Housing Board of Review but I have keeping my eye on the council. And my concern is that our council seems to be all over the place and no direction. Instead of working on our financial situation they have been taking our rights away. I want to get the council organized by having 9 month sessions and having all the city council committees come up with their yearly goals this will help give the focus needed. I am the only city councilor candidate who has a plan to get things moving. The choice is clear.

How would you like to see North Avenue improved? The waterfront? North Avenue is a mess and the city needs to be addressing the problems with roads and sidewalks. I will be the city councilor who will make the New North End the number one priority. Burlington needs a City Councilor who is creative and compassionate. A councilor who does his research. I will be that councilor. To give the city council balance vote Loyal Ploof March 4th loyalploof.org (http://loyalploof.org/).

Read or Share this story: http://bfpne.ws/1bSs8yd

Ward 7: Bianka LeGrand, Democrat

BUR 12:07 a.m. EST March 1, 2014



(Photo: COURTESY)

How long have you lived in your ward? 2

In Burlington? 16

In Vermont? 17

Age: 33

Previous political or civic experience: I have worked as an adjunct instructor at Norwich University, director of training and development at Armistead, and currently own Red Coral Consulting, an employee

training service. I was recently recognized by Vermont Business Magazine as a Vermont Rising Star. I served for 2 years as the Vice President of the Young Democrats, and am currently serving on the CDBG Committee and the NPA for Wards 4 & 7. I served as the director of development for Vermont Young Professionals, and I assisted entrepreneurs with business start-ups.

Is there a particular issue that inspired you to run for office this year? What inspired me to run for the office are my neighbors and a strong sense of community in Ward 7. My entire professional experience has been dedicated to serving and helping others. Serving on the City Council seat will allow me to contribute with my professional experience to the positive growth and development of Ward 7, and serve as the support system, advocate, and voice of all residents.

What issues in Burlington don't get enough attention from city government, in your opinion? The city government is diligently working on addressing several issues at this time. The growing issue of heroin abuse and the lack of necessary treatments are concerning. The recent \$10 million federal grant to expand early intervention and treatment programs for young adults will hopefully allow us to be more efficient and proactive in our service delivery to people in need. Further, lack of parking availability or the awareness of existing 35% of available space is an issue. Better signage and stronger financing so that the current parking infrastructure can be maintained.

Where should the city cut back on spending, if at all? This brings us to the discussion of general fund tax increase which is the first one in 10 years, approved unanimously by the City Council, and which I personally endorse. Further, there has been continuous discussion about school taxes, which while not the purview of the City Council, are rising at unsustainable rates. I pledge to work with the Mayor and City Council to seek a more collaborative relationship with the School Board, and by extension with state government, to seek means of containing spiraling spending.

How many City Council meetings have you attended in the last six months? What impressed you about those meetings? What concerned you? I have not attended many of the City Council meetings in person due to previous scheduling conflicts; however, I have followed up on most of them via Channel 17 Live Streaming and I consistently stayed informed on the issues presented at the Council Meetings. I am always glad to see people of Burlington taking stance and participating. Their voice truly matters and their participation is the reason why many issues in our city have been addressed.

How would you like to see North Avenue improved? The waterfront? The North Avenue Corridor Study holds the promise of improved pedestrian and bicycle safety along the full length of North Avenue. In that plan, I hope to contribute with my own ideas on the bike-share program that will further enhance the solution related to the pedestrian and bicycle safety concerns, including traffic speed from the Ethan Allen Parkway northward and from Lakeview Terrace to the high school, etc. On the question of the waterfront, I look forward to the construction and development of the Moran Plant.

Read or Share this story: http://bfpne.ws/1fxqM6X

Ward 7: Tom Treat, Republican

BUR 12:07 a.m. EST March 1, 2014



(Photo: COURTESY)

How long have you lived in your ward? In Burlington? In Vermont?

My wife and I moved to South Burlington VT in the spring of 1995 where we both found employment and learned about the area. In 1997, after saving enough money for down payment we purchased our first home in the New North End of Burlington where we live to this day. We have three children that attend the Burlington public schools. I work, shop and play in Burlington. We feel lucky to live in such a great place.

Age: My name is Tom Treat and I am 47 years old.

Previous political or civic experience: I have never held public office. However, knowingly or unknowingly we all engage in politics daily. Politics is the tactful exchange of ideas and management of relationships with the people around us. I am a critical thinker and an inventive problem solver. If elected I could be the lone Republican. This will require me to present my ideas in a way that others feel compelled to agree with. This is a challenge I would optimistically and eagerly accept.

Is there a particular issue that inspired you to run for office this year? The ballot items over firearms represent the dangerous results that can occur when people in power think with hearts instead of heads. Hundreds responded. They were heard, but not listened to. The decisions had been made, the public hearings were just a necessary formality. The council, while well intentioned chose to seize protected rights that are important to many, but not to them. Make no mistake our rights are a permanent blessing not to be voted on by temporary representatives.

What issues in Burlington don't get enough attention from city government, in your opinion? The underfunded city pension hurts us all. Aside from being a potentially broken promise to men and women who work to keep the city functioning, it is a serious black eye to Burlington when it comes to our credit worthiness. The school budget is a very contentious topic this cycle and I was surprised to learn recently that the amount of my school tax increase was also affected by our pension status. Borrowing from this fund should require ballot approval.

Where should the city cut back on spending, if at all? Similar effects to spending cuts can be realized through increases to the property tax base. Burlington has many worthwhile non-profits. Most pay nothing, yet occupy property that if owned by for-profits would yield millions. Change the word TAX to FEE so Burlington gets paid. If non-profits can't afford a modest fee then they can't afford to be in Burlington. Think UVM. While our relationship is symbiotic, they take in hundreds of millions and pay a pittance in lieu of taxes.

How many City Council meetings have you attended in the last six months? What impressed you about those meetings? What concerned you? Until recently my work schedule did not permit me to attend actual meetings. I have been forced to monitor city issues through meeting minutes and friends who could attend. Fortunately I have sufficient flexibility at my job that I was able to adjust my schedule permitting me to run for office.

How would you like to see North Avenue improved? The waterfront? I can't imagine spending a single penny on a feel good project like the proposed changes to North Ave. Keeping in mind that I am a bicycle enthusiast and I live in the North End. Plow the bike path during winter. That is affordable, and benefits the entire city. Oh and rotaries never ever work. We need our money for real city challenges. The waterfront projects benefit the entire city, improve valuable property, and if done wisely could generate revenue.

Read or Share this story: http://bfpne.ws/1bSuAEU

What's the NPA?

In late February my son and I were putting up the NPA signs at the intersection of North Avenue and Ethan Allen Parkway, smooshing it down in the snow bank so it could be seen among the School Board and City Councilor campaign signs.

Our sign advertised the Wednesday night Ward 4 and Ward 7 candidates' forum, the very people whose signs had the advantage in the snow bank over our sign. A red Ford Fusion pulled up beside us, awaiting the light, and rolled down the window.

"What's the NPA?"

Amazing how the mind works. In that second or so before my mouth went into gear, I thought about the proposal to supply Burlington Electric with 2.5 megawatts from a solar farm on Sunset Cliff Road, a presentation suggesting gun safety training in our schools, the bike lanes, roundabouts, lane changes and light rail being considered in the

By Barry Trutor, Ward 7 NPA

North Avenue Corridor Study, plans for expanding the Ethan Allen Residence, the City's Master Plan for our parks, Burlington College's vision for the institution, first-hand accounts of Montpelier business from our legislators, the complexities of a school budget, and crash courses on redistricting. I even got to shake hands and talk with Chief Scully at the last meeting!

"What's the NPA? That's the Neighborhood Planning Assemblies!"

The Ward 4 and Ward 7 Neighborhood Planning Assemblies meet together on the fourth Wednesday of every month at the Miller Center from 7-9 PM.

Every Ward in the City has an NPA that meets on a regular schedule - check the City's website: http://www.burlingtonvt.gov for more information. Come join your neighbors and participate in Burlington!

Page 6 North Avenue News April 4, 2014

he state goes to a living ild afford to lower taxes on class and business with our lated economy. We would ther states and municipalie done this and thrived. Alber fully seventy percent of y is consumer driven. The consumers have the more y blossoms.

Sullivan can be reached at n231@gmail.com.

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important it was to our constituents that we take this stand and give you the your other legislators: kesha.ram@kesharam.org, 881-4433.

VT Italian Club's Lecture; Fascism & Immigration

A Lecture and Discussion by Louis Mannie Leonni, Editor & Publisher, Tue. May 20th at 7pm at Main Street Landing, Board Room, 2nd floor, 60 Lake St. Burlington. Sponsored by the Vermont Italian Club, www.vermontitalianclub.org

and Peace and Justice Center, For more information call Nicole at 802 453-4157.



Public Workshop #3

May 20th at 7:00 PM

St. Mark's Church, 1251 North Avenue

Come learn about ways to improve travel along North Avenue for drivers, walkers, and cyclists!

http://bit.ly/north-ave

The meeting is free and open to the public. Refreshments will be served. The Study is sponsored by the City of Burlington and the Chittenden County Regional Planning Commission (CCRPC). Questions? Call Diane at 865-1794.

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May 2, 2014 North Avenue News Page 9

From: Kesha Ram, Burlington CEDO [mailto:kram=burlingtonvt.gov@mail77.atl51.rsgsv.net]
 Sent: Monday, May 26, 2014 3:08 PM
 Subject: CEDO Neighborhood Buzz - Memorial Day Remembrance and a New North Avenue Web Tool



Neighborhood BUZZ

Find us on Facebook and on Twitter

Dear Neighbors,

As we look ahead to a week of community events and exciting new online forums for community members, we first pause in celebration of Memorial Day and extend our gratitude to all Vermonters who have served. We take this day, and every day, to honor, thank and remember our Service men and women and our fallen soldiers and their families.

The North Avenue Corridor Study now has a live, interactive online map tool that allows community members to provide direct feedback on proposed infrastructure developments throughout the neighborhood. The map features icons representing proposed crosswalks and intersections, as well as proposals for street lighting, transit shelters, raised intersections and other suggested community improvements.

Users can select a specific intersection, crosswalks or project to then "like" or "dislike," and leave comments regarding potential infrastructure developments. In receiving public recommendations and input, the North Avenue Corridor Study seeks to "remake the corridor as a more walkable, bikeable, and safe corridor for travelers of all ages, abilities, and preferred mode of transportation." To view the map and start sharing your input with the City, click <u>here</u>.

All the best,

Kesha Ram, CEDO Public Engagement Specialist Karolina Ramos, CEDO AmeriCorps Internship Coordinator





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Cargobikes Take to the Road Throughout Vermont

Dave Cohen, a presenter at last month's Walk Bike Summit, is excited to announce plans for cargobikes on a state-wide basis.

Over the past few years, new revolutionary cargobike designs have emerged in the US that are capable of hauling 400 lbs.or more. That means we can now carry the kids,



laundry, and groceries - and perhaps all at the same time! It's a utilitarian cyclist's dream. If this dream sounds a little too much like a fairytale, then you've got to check out the new documentary in-the-making, Less Car, More Bike by filmmaker and cargobike aficionado., Liz Canning

Spark Catches Fire at First Statewide Walk Bike Summit

More than 250 great minds and

Read more

eager enthusiasts came together at the first ever statewide Walk Bike Summit, hosted at the Burlington Hilton this past Saturday.

The bicycle and pedestrian culture that is emerging in the Burlington region and throughout Vermont was expressed in a wide variety of lectures, workshops and tours on offer. Our very own Jason Van Driesche and Katelin Brewer-Colie presented on laying out a safe



Read more.

Spring & Summer 2014 Internship Opportunities

This spring and summer we have a number of great internship opportunities! See the details for each potition by clicking the below links:

- · Youth Engagement Internship
- · BRV Summer Programs Coordinator
- · Outreach and Events Internship (Spring-Summer)
- · Bike Ferry Internship (Summer)

Local Motion provides a structured, supported internship experience. Interns are fully integrated into the Local Motion staff, have regular meetings with their supervisor, and attend staff meetings and employee gatherings. For more information, please contact Charlene Wallace, Director of Operations

Let's Make 2014 the Best Year Ever for Walking and **Biking in Vermont!**





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Rental



Changes coming to Burlington's North Ave?

Posted: May 20, 2014 11:44 PM EDT Updated: May 20, 2014 11:55 PM EDT By Shelby Cashman - bio | email

BURLINGTON, Vt. - North Avenue is what the department of public works calls a "complete street," meaning it sees all modes of transportation: cars, bikes and pedestrians. But, that does not mean it is currently safe, and residents took to a public meeting Tuesday to express their concerns.

"You put the pedestrians at a risk," one Burlington resident said.

The Department of Public Works says the stretch of North Avenue between Plattsburgh Avenue to North Street-is a high crash zone.

"Everything from confusing intersections, some skewed intersections, high speeds, the 4 lane section can sometimes the lanes are very narrow, with a lot of left turns," said Nicole Losch of Public Works. And the approximate 2 mile stretch is in dire need of improvements.

The public hearing on Tuesday was the culmination of a year long study of the North Ave corridor by the state and developers.

The Department of Public Works says some proposed fixes, like the reconstruction of intersections and addition of roundabouts, could take up to a decade to complete.

"We have about one third of Burlington's population out here so it really seems justified that we try to accommodate all residents who are trying to get to work, the grocery store, by whatever means for transportation they would like to choose," Losch said.

But other fixes, like adding more pedestrian crosswalks with longer cross times and bike lane improvements, could be seen sooner.

Public Works said they will now take all resident input that they have gathered over the past year and put the finishing touches on a plan within the next few months, including a final price tag. They will then present to the city council and ask them to adopt the improvements.



20 celebrities we didn't know were gay before they came out.



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City of Burlington, Vermont

Public Works Customer Service: 863-9094 Water, Wastewater & Stormwater Billing: 863-4501 More Info

> BTV Public Works @STVDPW 17 A: Clean Sweep runs from 4-30 – 5-9-14.

On 4-16-14 through 5-9-14 all

entrance Lights will be flashing to alert you we will be sweeping soon

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OPERATION CLEAN SWEEP

Operation Clean Sweep is coming to Burlington April 30 – May 9 2014. <u>Beginning Wednesday April 16, 2014 through Friday.</u> <u>May 9, 2014 all entrance Maintenance Lights will be flashing in</u> <u>order to alert you that the City of Burlington will be sweeping</u> <u>soon!</u> Please watch for the lights to be on in your area. "When the lights are on the cars are gone from 10:00 PM to 7:00 AM". Any Questions please call 863-9094 between 7:00 am to 4:30 pm. <u>Click here for maps and additional information</u>

GREEN UP!

The first Saturday of May is quickly approaching, so <u>visit the</u> <u>CEDO website</u> to find out how you can spruce up, sweep up, clean up, and Green Up our Queen City.

NORTH AVENUE CORRIDOR STUDY

Join your friends and neighbors to reimagine North Avenue as a more walkable, bikeable, and functional corridor. <u>Visit the</u> <u>project website</u> to learn more, and stay tuned for our web input tool -- coming soon!

FISCAL YEAR 2014 APPROVED STREET RECONSTRUCTION LIST

At their December 2012 meeting, the Public Works Commission approved the street reconstruction list for fiscal year 2014

BUILDING PERMIT FEE INCREASE EFFECTIVE JULY 25, 2012

Effective July 25, 2012, building construction permit fees will change from \$7.00 per \$1,000.00 of the estimated cost of the work to \$8.50 per \$1,000.00.

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Parking in Burlington

Burlington Considers Its Parking Options

by Ken Picard

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JUNE 04, 2014

Why is there an intermittent bike lane on Burlington's North Avenue?

By ETHAN DE SEIFE

@ETHANDESEIFE



A bicyclist heading south on North Avenue

MATTHEW THORSEN

North Avenue, one of Burlington's busiest north-south thoroughfares, presents a challenge for the law-abiding bicyclist. A cyclist pedaling north from downtown to, say, Burlington College has a well-marked bike lane that provides safety and guidance. However, a cyclist headed south through the same neighborhood will find a bike path that, around the intersection with Washington Street, abruptly vanishes. In place of that path, there's typically a line of parked cars. Cyclists are obliged to find their own paths through the downtown business district, as a southbound bike lane does not reappear until Pine Street.

In a city that prides itself on supporting alternative transportation, WTF is up with this "broken" bike lane in such a heavily traveled artery?

The intermittence of the North Avenue bike lane is just one node in a network of interrelated transportation dilemmas that are informed by Burlington's history, geography and economic development. The leadership of Burlington's Department of Public Works is fully aware of these issues and has both commissioned a study of and solicited public input on the North Avenue corridor. No simple solution has yet presented itself.

It's easy enough to have both north- and southbound bike lanes on the mile-long section of North Avenue between Washington Street and Institute Road, says Nicole Losch, transportation planner at the DPW. "There's very little development [in that area]," she says. "You've got [Lakeview] Cemetery on one side, you've got a handful of houses on the east side, and then the high school and Arms Park. Because there is very little parking demand through there, it was a little bit easier to continue the bike lane on both sides."

South of that point, though, Losch admits, the problem becomes significantly more vexing. Starting at the intersection of North Avenue and Washington Street, the development is "much more compact," as she puts it. All of a sudden there are more houses — some of them multifamily dwellings, most of them located close to the street and many of them with driveways that do not accommodate all the vehicles at that address.

Compounding the difficulties for cyclists is Burlington's dumbbell-like shape, with a bulge of streets at either end of the slender connecting "bar" that is North Avenue. The Intervale — the large, reclaimed, treasured green space bounded by the Winooski River, Route 127 and a railway line — prevents roadway expansion.

Characteristically narrow New England streets don't help. They were laid out many years before the term "bike lane" was coined. The city has addressed similar traffic dilemmas in the past by physically widening the streets, but this is a noisy, costly process to which Losch, for one, seems disinclined.

At present, a cyclist has two options when confronted with the disappearance of the bike lane at Washington Street: Share the road with cars or ride on the sidewalk. (Depot Street, a steep, downhill, no-cars-allowed road that empties into Waterfront Park, is an exhilarating alternative, but its northern entrance is about five heavily trafficked blocks south of Washington.) Riding alongside moving (and parked) cars can be dicey for cyclists. And, while riding on the sidewalk is not technically illegal on this stretch of road, owing precisely to the absence of a bike lane, it can result in angry or injured pedestrians. None of the options is ideal, a fact well known at Public Works.





The ongoing North Avenue Corridor Study was designed, in part, to remediate the problem of the area's inconsistent bike lanes. DPW is considering a wide range of solutions, including remarking roads for maximum clarity. But the challenges are numerous.

"It depends on the situation, but sometimes we do need some extra funding" for such projects, e.g., when a curb would be physically moved, says Losch. "Other times, you have to figure out where you want to have those hard conversations: Do we *need* parking here?"

For the moment, judging by the responses to an online survey DPW conducted, the answer is yes: This section of North Avenue is sufficiently densely developed to require street parking.

"We could hold off on striping bike lanes until we could have a continuous network everywhere," says Losch, "or we can chip away at it, and try to piece it all together. Our strategy has been 'Let's get what we can and try to fill in the blanks, but where we have the ability to put the bike lane in — though it's not ideal by any means — let's try to get something in and keep working to try to improve it.""

She adds, "We've done all the easy projects so far. Now we're into the more difficult ones. We don't want to come in and just overhaul a street if it's not what's really right for that part of town."

DPW continues to solicit input on the project at **burlingtonvt.gov/public-input**. For the time being, cyclists will have to trust that the city is working on the problem, strap on their helmets and pedal with caution.

Got something to say? Send a letter to the editor and we'll publish your feedback in print! VERMONT'S INDEPENDENT VOICE

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Cyclist Spencer Tackles Parking and Potholes

By ALICIA FREESE



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Burlington Considers Its Parking Options

by Ken Picard

Chapin Spencer

MATTHEW THORSEN

Chapin Spencer, Burlington's director of the Department of Public Works, holds a coil of plastic tubing and gushes about upgrades to the city's water lines — some of which, he says, date back to the Civil War. Earlier, standing in the DPW garage on Pine Street, he proudly recounted how DPW mechanics discovered a faulty air filter on a fire truck.

During moments like these one could forget that less than a year ago Spencer was a prominent cycling and pedestrian advocate heading up Local Motion, an organization he founded.

Spencer's predecessor, Steve Goodkind, said he was surprised that when he retired, he was replaced with a cycling advocate, not an engineer.

Burlington city councilor Kurt Wright, who's also a state representative, said he "had concerns" about Mayor Miro Weinberger's nontraditional choice. "Would he tilt too far toward the biking community?" Wright recalled wondering.

The easygoing, 44-year-old Spencer needed to show the city that he could address ailing parking garages and deal with stormwater drainage. That he could get just as jazzed up about installing new parking meters as he'd been about building new bike paths.

In fact, the city is gearing up to make major changes to downtown parking, and Spencer is an important cog in the wheel. Sitting last Friday in his modest office, spare but for several ceremonial hard hats and a plastic light saber on the windowsill, he spoke passionately about plans to automate parking-garage kiosks and install parking meters that can be

JUNE 04, 2014

paid with cellphones and credit cards. "We've been managing parking in much the same way for the last couple of decades," he said. Now, there's an opportunity to leap forward, he said.

Of his own leap from a small nonprofit to what Weinberger called the "most complicated" public department, Spencer said, "It's been a smooth transition."

But Wright's question still stands. Asked if he felt he'd successfully shed any bias he might have arrived with, Spencer responded, "We've sat here and talked for an hour, and I don't know how many times we've talked about walking and biking." (Zero times.)

Not everyone is convinced.

The DPW is studying how to improve North Avenue — a process that some worry will pit drivers against bikers. At a recent public hearing, Local Motion advocates showed up in full force, promoting a plan to add a bike lane to the street "sooner rather than later." The proposal stoked concern among New North End residents who are worried they'll lose car lanes to make room for cyclists.

Local Motion advocacy and education director Jason Van Driesche insists that isn't the case, and he says his organization is committed to finding fixes that work for everyone. Still, the appearance that evening — Spencer in the same room with his old cycling cronies — wasn't great, according to Wright. "There has been some grumbling," he said.

Spencer acknowledges that he still has to fight the perception of bias. "I feel like it's a work in a progress. Things like the North Avenue Corridor Study indicate that I haven't gotten there yet."

Any major makeover for North Ave won't happen for a while, he said, and he's intent on reaching a consensus before it does.

With his distinctive sideburns and soul patch, purple shirt and small hoop earring, Spencer doesn't blend in with his staff, but his rapport with them seems solid. One of his foremen, a man named Richard "Dicky" Hammond who sports a crew cut and a deep tan, gives him points for not meddling with his work. Pat Buteau, assistant director of maintenance and parking services, said he's "appreciative of the fact that he isn't walking in here figuring he knows all the answers."

It's probably a wise move, given that Spencer was still in grade school when Hammond and Buteau started working at the DPW. According to Spencer's calculations, his four assistant directors have a cumulative 100 years of experience.

People who've worked alongside Spencer say he's skilled at accommodating competing interests. "Being inclusive and deliberate and thoughtful in general about how he does his work is in Chapin's bones, and honestly I can't think of anyone better to be in that job right now," Van Driesche said.

Michele Boomhower of the Chittenden County Regional Planning Commission, which is also working on both the North Avenue project and the city's parking initiative, describes him as a "very refined negotiator."

When he took the job, there were questions about whether the director of a 12-person nonprofit with a \$1 million budget had the chops to manage 110 employees and a \$30 million budget. Not to mention 96 miles of streets, 127 miles of sidewalks, three water-treatment plants and three parking garages.

Spencer said he's focused on finding new funding and figuring out better ways to deliver services. He created a DPW mission statement: "We steward Burlington's infrastructure and environment by delivering efficient, effective and equitable public services." He set three department-wide goals: operational excellence, exemplary customer service and a culture of innovation.

That might sound like nonprofit mumbo jumbo to the crews patching up potholes, but Spencer said the department has embraced his vision for change. "People are hungry for it," he said, adding, "This is not Chapin's idea of how public works should run. This is me listening to people."

Spencer doesn't spend all his time in the office, dreaming grand visions and playing with a plastic light saber. At 2 a.m. on a recent workday, he delivered muffins to Hammond's crew, which was taking advantage of the quiet hours to mend a section of Main Street.

"Chapin is personally trying to get out there and make sure there are partnerships and relationships," said Jim Barr, University of Vermont's director for transportation and parking services.

Beyond mission statements and muffins, Spencer can point to more concrete accomplishments during his nine months on the job — sidewalk repairs, new crosswalks and flashing beacons on Pine Street, a simplified budgeting process, and a new text-alert system that's reduced the number of towed cars during street cleanings.

Also worth noting: Despite a brutal winter, the department is on pace to spend within its budget.

Richard Hillyard, a citizen watchdog who's known Spencer since he represented Ward 1 as a (Progressive) city councilor, said progress at the DPW can be glacial, but he described its new director as "approachable and very willing to engage."

Even Wright says Spencer deserves "high marks" in many areas, such as expediting several badly needed repaving projects in the New North End.

Not that he's pleasing everyone. Ironically, one of his critics is a bicycle advocate. "We've been going around in circles for years," said City Councilor Max Tracy (P-Ward 2)*, who wore a bike helmet to drive his message home at Spencer's first appearance before the council. One of the projects on Spencer's plate is the city's "Go for Gold" initiative. Its goal is to earn Burlington gold-level designation from the national Walk Friendly Communities program as a bike- and pedestrian-friendly city by 2016.

"We've said we're going to go for the gold, and now we need to get going," Tracy said. "I think we need to be much more aggressive than we've been about repairing sidewalks and biking networks."

Spencer knows things aren't proceeding as quickly as some would like, and said he's had some cycling advocates ask why he's so focused on parking.

"Can we do more?" he asks rhetorically. "Yes, but are we moving with deliberate speed with the resources we have." And, he points out, "It's easier being an advocate." At the DPW, "We've got to keep the water running."

The original print version of this article was headlined "Still on a Roll: A Cyclist at Heart, Spencer Tackles Parking and Potholes"

*Correction 06/04/14: An earlier version of this story stated that Burlington City Councilor Max Tracy is from Ward 1. He's actually from Ward 2.

> Got something to say? Send a letter to the editor and we'll publish your feedback in print!

speaking of...



Progressive Party Leader Running For VT House Seat

Jun 6, 2014



Burlington Jun 4, 2014

Considers Its Parking Options



Burlington Why is there an intermittent bike lane on Burlington's Jun 4, 2014 North Avenue?



Art Review: 'Impressions' at Vermont Metro Gallery Jun 4, 2014

Mayor's Message

mayor@burlingtonvt.gov The Hon. Mayor Miro Weinberger

Mayor's Message

full City Council later this year.

North Avenue Corridor Study

Recently, I have heard both considerable concern and excitement about the North Avenue Corridor Study and possible changes to the North Avenue roadway that could come from this effort. Here is where this effort stands;

A study of potential improvements to North Avenue was identified as a priority in the City's 2011 Transportation Plan, a plan then adopted by the Planning Commission and unanimously approved by the City Council. The City received funding from the Chittenden County Regional Planning Commission for 80 percent of the study. The study's purpose is to develop conceptual transportation alternatives that accommodate safe and efficient travel for all users of all abilities.

For the last year, the North Avenue Steering Committee – including representatives from the NPAs, City Council, City Departments, and local stakeholder organizations – has been working on developing a Vision and Goals Statement for the corridor and, in recent months, to develop conceptual alternatives for more detailed analysis. If you have not had a chance to participate in the recent public workshops, you still have the opportunity to weigh in using the City's online input tool (www.burlingtonvt.gov/publicinput) or through our contact form on the project website (www.bit.ly/north-ave).

From my perspective, there is potential for significant positive change from this effort. During my coffees at the Bagel Café, I have heard many seniors express concern about the difficulties they face crossing North Avenue on foot. I also have heard a desire for new services and job opportunities in parts of

Continued from page 3...

the New North End – possibilities that could perhaps be boosted by some roadway changes. Further, I am impressed by the job creation, health benefits, and environmental benefits enjoyed by other cities that have created real networks of connected bike lanes – not the patchwork of intermittent lanes Burlington has today.

City

That said, I am very aware that the residents of the New North End already face considerable travel times driving to downtown and the highway. No substantial intersection or roadway design concepts resulting from the Corridor Study process will advance without further study to determine their feasibility and impacts on travel times. The study's Advisory Committee will recommend a Corridor Plan that will include shortterm, low-cost improvements and longterm, alternative concepts for intersections and cross-sections.

Depending on public input, shortterm recommendations could include small and non-complex improvements such as crosswalks, signal timing adjustments, and pedestrian signals. Any longterm, alternative concepts for intersections or the road's design will need future evaluation or a demonstration to determine if they are feasible and whether they should advance. The Department of Public Works assures me that the public, NPA participants, and elected officials will have numerous additional opportunities to weigh in on any proposed longterm concepts.

If you'd like to talk, you can find me at the Bagel Café most Wednesday mornings from 8-9am. To stay informed about City progress, visit www.Facebook.com/ MiroBTV. I hope to see you soon.

Page 26 North Avenue News June 6, 2014

Please vinyour Kurt Wright can be reached at 658-1410 ewright@ burlingtontthoughts and ideas on these, or any Enjoy the Summer Councilor Dave Hartnett, that will have the Charter Change committee explore changes to provide greater accountability. It is a discussion that needs to contact me other issues. ter year. I sponsored a resolution, with already have voted on the new School forward we have real problems to deal with in the School District. We cannot ported by the residents of the NNE. If meeting day ballot so people can truly Budget. Whatever the result is, going continue with large increases year afthe controversial plan emerges I will work to have it placed on our next town By the time you read this we will not proceed with a plan that is not supeveryone! Continued from page 3... happen. with or weigh in. June 6, 2014 North Avenue News Page 3 **City Councilor's Corner** kind of plan? In my opinion we should spend our tax dollars where they are fixing more sidewalks, and focusing our efforts where the current needs are greatest. I support a plan that involves small steps that can make crossing the I have been assured that we will have paths running along both sides of Avenue safer but that is not overly ex-"Beltline Bike Path" which means we With all that in mind, is it really the time to invest scarce resources in this needed the most: Paving more streets, We are also fortunate to have the pensive or controversial. North Avenue. A monthly column which rotates among the City Councilors of this tion that created controversy centered A significant part of the presentaon three issues: The potential for one or more roundabouts, reducing the number of lanes to provide room for it from 30 to 25. While I know there are people that like this idea, my gut cells me that the majority do not. The bike lanes and changing the speed limand redesign the bike path and I have sentiment that I heard people express We are spending money now and more in the future to pave, widen, plow been a strong supporter of that. The brings in millions to Burlington in bike path is one of our crown jewels, providing not only recreation and ransportation opportunities, but it also economic activity. Continued on page 24 **Councilor's Corner** not stick around to fill out the charts. great City. This month: By Kurt Wright - Ward 4 repeatedly was "why?"

column of my new term, so let me take this opportunity to thank the voter's of Ward 4 for electing me back to the This is my first Councilor's Corner Council back in March. It is an incredible honor and I was overwhelmed with the outpouring of support on Town Meeting Day. Across the Ward people told me they appreciated my service and they wanted me to help restore balance on the Board.

Margaret Poirier, our longtime clerk in charge of voter registration has retired after a quarter century of service to Burlington. We cannot thank Margaret enough for the great job she did. I will greatly miss her spirit and We all wish you the best in retirement Margaret: Enjoy it, you certainly have ner help in the voter registration office. earned it!

There is a group working on a plan to redesign North Avenue and at a meeting at St. Marks, they recently dents. There was a lot to digest and after a lengthy presentation people were presented plans and options to resiyou that most of the residents from the asked to rank what they liked on multiple charts around the room. I can tell New North End were frustrated and did 10A BURLINGTONFREEPRESS.COM

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B worth your time

MONDAY, SEPTEMBER 8, 2014

A new ride on North Avenue

Burlington has been looking at a study for changes to North Avenue, including a reduction of speed to 25 mph, a pilot of reducing the number of lanes from four lanes to three lanes, adding a new bike lane and updates to intersections with Vermont 127 and other roads. The City Council Transportation, Energy and Utilities Committee hosts a hearing on the plans Thursday evening.

When: 6 p.m., Wednesday Where: Burlington Police Department meeting room, 1 North Ave., Burlington
City weighs changes to North Avenue



Riders gather together at Merola's Market before a bike train down North Avenue on Wednesday in support of a plan intended to make North Avenue into a "complete street" that can accommodate all types of transportation. BRIAN JENKINS and RYAN MERCER/FREE PRESS

April Burbank, Free Press Staff Writer 10:53 a.m. EDT September 12, 2014



(Photo: BRIAN JENKINS/for the FREE PRESS) It takes a certain kind of bicyclist to brave Burlington's North Avenue.

The street is perilous and inconsistent for bicycles, city planners and cycling advocates say. They're pressing for changes they argue would make North Avenue safer for everyone.

"For biking, North Avenue is really intimidating and really quite unsafe," said Jason Van Dreische, director of advocacy and education for Local Motion, an advocacy group. "The setup right now is also really no good for drivers when there are bicyclists on the road."

Several dozen people filled a Burlington Police Department meeting room Wednesday night to discuss a new vision for North Avenue. The vast majority in attendance said they support changes that would narrow a stretch of the road to three lanes, remove onstreet parking, add bike lanes on either side and paint new crosswalks.

ALSO IN BURLINGTON: After rejection, Champlain dorm plan back on table (/story/news/local/2014/09/08/city-champlain-settle-studenthousing/15317553/)

Where have all the mailboxes gone? (/story/news/local/2014/09/11/mailboxes-gone/15403913/)

The plans, which are intended to make North Avenue into a "complete street" that can accommodate all types of transportation, have been hammered out in studies and committees for more than a year. The City Council is expected to take a look later this month, and short-term steps could take effect within three years.

"I think I'm a typical Vermont bike rider. When I'm in my car, I hate the bike guys," said Joe Harig of Burlington. "When I'm on my bike, I hate the cars."

Bike lanes would reduce animosity, Harig said, by getting bikes out of the way.

"Everybody breathes easier if everybody has their own space," Van Dreische said.

ALSO SEE: Driver to be ticketed in biker-driver encounter (/story/news/local/vermont/2014/08/28/driver-ticketed-biker-driverencounter/14744479/)

But many people in the New North End would rather keep the current traffic configuration on North Avenue, said City Councilor Kurt Wright, R-Ward 4. Some are concerned that narrowing the road for vehicles would lengthen motorists' commutes, and, those people point out, cyclists can use the bike path along Lake Champlain to get downtown.

Wednesday morning, Wright was walking around the New North End when a "bike train" in support of the street changes rode by.



Riders get ready to leave Merola's Market before the bike train down the length of North Avenue to show support for the changes proposed in the North Avenue corridor study Wednesday morning. (Photo: BRIAN JENKINS/for the FREE PRESS)

"That got them talking about this whole proposal," Wright said, "and a lot of them were not happy with it. ... I ran into other people who said, 'It took me an extra 10 minutes to get off my street.' "

Wright has yet to decide how he will vote when the City Council weighs the recommendations Sept. 22.

Paul Sisson, former interim chief administrative officer for Burlington, said he opposes the three-lane concept because he thinks it would have a "detrimental effect" on traffic — but that doesn't mean he hates bikes.

Sisson asked city councilors to wait for more public input before making a decision.

"What's the hurry?" Sisson asked.

The proposal

The proposal on the table emerges from a Chittenden County Regional Planning Commission study, which was filtered through an advisory committee of local residents and organizations.

The study's analysis of North Avenue? Street parking is confusing, bike lanes are inconsistent, and sidewalks are in poor condition. Some intersections, such as Lakewood Parkway and Ethan Allen Parkway, have high crash rates.

"Whatever we do should help make Ward 4 look like a neighborhood and not like a speedway," Russell Ellis, a former city councilor, said during public comment time at the meeting.

Proposed changes to the road would take effect any time from one year to more than seven years in the future.

One set of changes would be short-term pilot projects that would be retained only if deemed successful:

City weighs changes to North Avenue

• Reduce the four-lane road to three lanes, with the middle lane as a turning lane, between Vermont 127 and Shore Road — similar to the city's recent change on Colchester Avenue.

Add bike lanes between Vermont 127 and Plattsburg Avenue, with protected bike lanes, separated from traffic with a barrier, between Burlington High School and Vermont 127.

· Eliminate all on-street parking north of Washington Street.



Other short-term proposals include new crosswalks and countdown signals for pedestrians, curb ramps and changes to some intersections, including making the intersection with Vermont 127 more closely resemble a traditional four-way junction.

An advisory group that worked on the proposal also wanted to reduce the speed limit to 25 mph, down from 30 mph. However, the Transportation, Energy and Utilities Committee voted 2-1 Wednesday to pass over that suggestion.

Longer-term changes to North Avenue would include adding roundabouts, additional crosswalks and protected bike lanes throughout.



City weighs changes to North Avenue

Riders stop at the Bagel Cafe on North Avenue to talk to Mayor Miro Weinberger about the addition of bike lanes to the street. (Photo: RYAN MERCER/FREE PRESS)

Further approvals

The City Council is considering an implementation plan, which would authorize the Department of Public Works and other departments to run with the ideas. Funding and other details remain to be worked out.

Frequent bike rider Chapin Spencer — who co-founded Local Motion — is cautious about some elements of the plan in his role as Public Works director.

Specifically, Spencer said he remains unconvinced about removing on-street parking.

"My concern is that this recommendation to remove both sides of parking has not been fully vetted with the neighbors," Spencer said.

There's still time. Any changes to parking, among other things, would have to be approved by the Public Works Commission. The recommendations need to be implemented carefully and deliberately, Spencer said.

Mayor Miro Weinberger said he decided to support the short-term recommendations, with some caveats, after hearing support from all councilors in the New North End.

"I think when we implement the first short-term changes, North Avenue will be a better road for everyone," Weinberger said.

The mayor acknowledged that some people in the New North End have concerns, but he pointed out that some of the changes, including the three-lane proposal, would be probationary.

"If they don't work — and we're going to agree up front on what the metrics of success are going to be — if they don't work, they won't be permanent," Weinberger said. "They'll be removed."

Contact April Burbank at 660-1863 or aburbank@freepressmedia.com. Follow her on Twitter at www.twitter.com/AprilBurbank.



After stopping at the Bagel Cafe to talk to Mayor Miro Weinberger, Liam Griffin gets back on his bike to ride the rest of the way down North Avenue as part of a bike train in support of more bike lanes on the street. (Photo: BRIAN JENKINS/for the FREE PRESS)

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"Open Streets" Promotes Pedestrian Use Of Roads

Staci DaSilva (http://www.mychamplainvalley.com/aboutus/newsteam/stacidasilva)

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BURLINGTON, Vt. -

Roads aren't just for cars. That's the message of Open Streets BTV.

The first ever Open Streets encouraged people to walk or ride their bike through Burlington's Old North End. Cars were not allowed.

"It's just a really joyful feeling to be riding out in the middle of the street surrounded by other people," said Local Motion's Katelin Brewer-Colie, the event organizer. "It's pure joy."

"It's really fun to bike on open streets without cars in your way," said 7-year old Abby Bunting.

Abby's parents Matt and Hadley Bunting let their kids experience bike riding in a different way.

"We don't let our kids ride their bikes on the streets unless we're with them," said Hadley Bunting.

One of the missions of Open Streets is to promote the importance of safety on roads for both pedestrians and cyclists. And changes could be coming to Burlington streets in the form of safer bike lanes.

"Just painting a line works fine for someone like me," said Local Motion's Jason Van Driesche. "It does not work fine for my daughter."

Jason Van Driesche is a supporter of "Build It For Isabella," a national campaign to design roads and bike lanes with kids in mind.

To Van Driesche and Local Motion that means protected bike lanes.

"Something that the car hits before the car hits you," said Van Driesche.

Protected bike lanes are a part of the City's North Ave. corridor long-term plan.

"It's a part of the proposal for North Ave," explained Van Driesche. "It has to be approved by City Council. Plastic, flexible posts which would be removed in winter."

"I love it. I think it's awesome," said Hadley Bunting.

"Get people out of their cars, engaging with their community, riding around, absolutely it's a good idea," said Matt Bunting.

Another important aspect of Open Streets was to link all of the area's parks.

"To allow people to enjoy some of the amenities that may exist in 1 park that's not in their neighborhood," said Jesse Bridges, Director of Burlington Parks & Recreation. "So if they can jump on the bike path or ride in a bike lane or walk on the sidewalk and get to another park that may have the playground or the tennis court or the field that they want to use that day, that's just a huge benefit to the community."

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Vol. 44, No. 10

"NEWS GOOD FOR THE WHOLE MONTH"

Mayor's Message City mayor@burlingtonvt.gov Hall The Hon. Mayor Miro Weinberger

Navy Memorial on the Waterfront

The Lone Sailor Navy Memorial on the waterfront just south of ECHO is one of the most beautiful and - because it is hard to see from the bike path - least visited spots on our stunning waterfront (this should change when extended boardwalk approved by the voters last spring is built). On the morning of September 18, however, the small peninsula park was filled with dozens of Navy veterans (many of them wearing blue baseball caps embroidered with the name of the ship on which they served), family members, uniformed active-duty Navy sailors, a color guard assembled by the Vermont Air National Guard representing all the services, Governor Peter Shumlin, and the U.S. Secretary of the Navy, Ray Mabus, who announced that for the first time in over 120 years he was naming a ship the USS Vermont. It was moving to look out over the crowd and see so many Vermonters who have served our country from World War II to the present gathered in one place.

Improving North Avenue For Everyone in the City

I wrote about the North Avenue Corridor Study just a couple months ago, but am writing again because I



know that as this transportation plan progresses to the City Council this month, it is continuing to generate both excitement and concern, and because my thoughts on the initiative have continued to evolve.

After speaking with many New North Enders at the Bagel Café and elsewhere about the topic in recent months, my sense is that some of the concern about the plan comes from the people viewing the initiative as one that pits cars against bicyclists.

I don't see it that way. I believe we have an opportunity to make changes in the roadway that will improve North Avenue for everyone.

From my perspective, North Avenue today has numerous problems. Continued on page 26 ...

Mayor's Message

The road is the site of an unusually high number of automobile accidents, and those accidents are unusually expensive because they generally occur at relatively high speed. We have a large and growing number of seniors living near the Avenue, and many of them have considerable difficulty crossing the road on foot. There are three schools on or near North Avenue. and the road makes biking or walking to school impossible for many of these students. We have a large and growing number of New North End residents who want to bike on the Avenue, and currently when they do so, the experience is uncomfortable for them and for the passing drivers.

The plan coming to the City Council will allow us to make progress - or in some cases, experiment with changes that we hope will make progress on all of these challenges. This is an exciting time for our country's streets - in recent years many cities have successfully redesigned their roads to be safer and more appealing. Often, these retrofits have led to increased property values for nearby owners and new customers for nearby businesses.

This plan isn't about cars versus bikes, or even just about transportation - it's about a long-term effort to make the New North End and part of the Old North End even better places to live, work, and visit.

A Look Ahead for the week of 10/6

Posted: Oct 05, 2014 9:34 AM EDTUpdated: Oct 05, 2014 9:39 AM EDT By WCAX News

NORTH AVENUE CHANGES

Monday night, Burlington's City Council is deciding whether to approve changes to Burlington's longest street.

Among the proposed changes to North Avenue, creating a center turn lane from the Route 127 to Shore Road, crosswalk improvements, and continuous bike lanes.

Cycling advocates say the changes would make it more accessible to bicyclists and pedestrians.

http://www.wcax.com/story/26707372/a-look-ahead-for-the-week-of-106

WPTZ Channel 5 North Avenue Corridor project passes http://www.wptz.com/news/vermont-new-york/burlington/north-avenue-corridor-projectpasses/28983428

North ave project up for debate in Burlington <u>http://www.wptz.com/news/vermont-new-york/burlington/north-ave-project-up-for-</u> <u>debate-in-burlington/28983396</u>

A Look Ahead for the week of 10/6

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WPTZ Channel 5 North Avenue Corridor project passes http://www.wptz.com/news/vermont-new-york/burlington/north-avenue-corridor-projectpasses/28983428

North ave project up for debate in Burlington <u>http://www.wptz.com/news/vermont-new-york/burlington/north-ave-project-up-for-</u> <u>debate-in-burlington/28983396</u>

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MONDAY, OCTOBER 6, 2014 15A

Make room for bikes?

The Burlington City Council could sign off today on a proposal to experiment with new bike lanes on stretches of North Avenue. The plans would reduce the number of vehicle traffic lanes and, as currently proposed, would eliminate all on-street parking.

When: 7 p.m. today Where: Contois Auditorium at City Hall, 149 Church St., Burlington

10/7/2014		North Avenue	Corridor proje	ect passes Vermo	ont - WPTZ Home			
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By Rachel Karcz

More than 50 people speak out during public forum Published 12:15 AM EDT Oct 07, 2014

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BURLINGTON, Vt. - The Burlington City Council passed the North Avenue Corridor Project with a 9-3 vote, with two council members absent.

Nearly 50 people spoke out tonight about the project. Most were in RELATED favor of the project as is however it did pass with four amendments. · Cruisers hit; Driver arrested after ... Mobile News Now: Monday The project aims to open up the avenue to bikers and pedestrians. October 06, 2014 Those in favor said the stretch is too dangerous in its current state. Jurors selected in Allen The few speaking out against the project expressed concerns that it be Prue murder... updated and altered as time goes on. · City suspends early voting after... Project coordinators say implementation for the project can be Healing Winds offers refuge to cancer ... expected to start in 2016.

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TAGS Bikes. North Ave Burlington

Comments

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B vermont

TUESDAY, OCTOBER 7, 2014 9A

Debate over bike plan for Burlington street

Proposal seeks to make room for bicycles, pedestrians as well as cars on North Avenue



APRIL BURBANK Free Press Staff Writer

The meeting chamber for
 Burlington City Council
 overflowed Monday night
 ple gathered for a passionate fo-

with people gathered for a passionate forum on bike lanes and a narrower roadway in the city's New North End. Several dozen commentors spoke dur-

Several dozen commentors spoke during a public forum that lasted about 90 minutes. Dozens more people filled the chairs, stood along the edges and spilled into the second-floor balcony of Contois Auditorium at City Hall. North Avenue the main road in Bur-

North Avenue, the main road in Burlington's New North End, would have bike lanes, additional crosswalks, upgraded crosswalks and less parking according to the plan, which was recommended to the City Council following a public process and a study by the Chittenden County Regional Planning Commission. In some portions, the bike lanes would be separated from traffic by physical barriers or extra space.

One piece of the plan would reduce traffic lanes from four to three as a pilot project that would be evaluated later. The changes are a short-term component of a

> larger vision for making North Avenue a "complete street" that supports all transportation options.

Supporters said the proposed changes would make the street safer for everyone, upgrading a street that's widely regarded as unsafe for bicyclists and pedestrians. Some who spoke Monday said they had been struck by cars while riding bikes. Others said the Burlington bike path is not a viable alternative for commuter, especially at night or during the winter.

Critics suggested the changes were unnecessary and could add to traffic congestion. Nancy Berger was one of several peo-

Nancy Berger was one of several people who came to Contois Auditorium to oppose the plans — but speaking toward the end of public forum, after hearing supportive comments, she said, "I changed my mind."

The City Council had not yet made a decision as of 10 p.m., but the council was set to consider the resolution along with three amendments proposed by New North End councilors:

Councilor Tom Ayres, D-Ward 7, wanted to allow some parking on the street. Instead of eliminating all parking —which Ayres said had not gone through sufficient public engagement — he wanted to reduce parking to one side between Institute Road and Vermont 127, and between Shore Road and Plattsburg Avenue. Ayres also wanted to use bike lanes that were not protected by barriers or buffered from traffic with extra space.



BRIAN JENKINSFOR THE FREE PRESS Liam Griffin gets back on his bike to ride down North Avenue on Sept. 10 as part of the bike train in support of the proposed changes for more bike lanes to the streets.

» Councilor Kurt Wright, R-Ward 4, asked that the city evaluate the three-lane pilot project, using metrics and community feedback, after four months and again at the end of the pilot.

» Councilor Dave Hartnett, D-Ward 4, wanted to add additional representatives from Ward 3, Ward 4 and Ward 7 to a task force that would guide the implementation of the project.

Progressive Councilors Max Tracy, Vince Brennan and Rachel Siegel displayed bicycle helmets on the council table throughout the evening in support of the proposal.

Mayor Miro Weinberger supported the proposed pilot project for redesigning North Avenue overall.

In the mayor's monthly update posted on the city website for October, Weinberger wrote that North Avenue has safety problems, and biking there is uncomfortable for everyone.

"After speaking with many New North Enders at the Bagel Café and elsewhere about the topic in recent months, my sense is that some of the concern about the plan comes from the people viewing the initiative as one that pits cars against bicyclists," Weinberger wrote.

"I don't see it that way," he continued. "I believe we have an opportunity to make changes in the roadway that will improve

North Avenue for everyone." Chapin Spencer, director of public works, said in response to Council questions that the four- to three-lane pilot changes would likely begin in 2016 and

Also in City Council business:

last about a year.

Oct. 20 has been declared John Dewey Day, marking the birthday of the educational theorist and philosopher who was born in Burlington with mask-making and a parade on Church Street.

Contact April Burbank at (802) 660-1863 or aburbank@freepressmedia.com. Follow her on Twitter at www.twitter.com/AprilBurbank WEDNESDAY, OCTOBER 8, 2014 21A

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Council approves North Avenue changes

Free Press Staff

The Burlington City Council approved a set of changes to North Avenue, a main street in the city's New North End, in a Monday meeting that stretched late into the night.

The plan would add bike lanes, reduce onstreet parking, add crosswalks and make other changes to North Avenue.

One of the changes, a reduction of four vehicle traffic lanes to three lanes, would be a pilot project that would be evaluated after a given period of time, Public Works Director Chapin Spencer said.

Councilors approved

four amendments to the plan: Two amendments gave the city options for public input before deciding how much on-street parking to eliminate. After working through parking issues, the city will add buffered and protected bicycle lanes to the street where possible.

Another amendment added additional members from Ward 3, Ward 4 and Ward 7 to a task force that will guide the implementation of the changes, and a fourth specified that the city will use data and community input to evaluate the success of the threelane pilot project.

The City Council unanimously approved the North Avenue project overall.

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Wermont

FRIDAY, OCTOBER 10, 2014 9A

Funding sought for North Avenue crosswalks



Liam Griffin was as part of the North Avenue bike train Sept. 10 in Burlington.



APRIL BURBANK Free Press Staff Writer After months of discussion and debate, the Burlington

City Council this week approved a makeover for North Avenue, the main street in the New North End, though the elements will take effect in stages. The plan, which includes new cross-

The plan, which includes new crosswalks and bike lanes and an experiment with fewer traffic lanes, has been described as a one- to three-year process. This week's vote was a milestone after a lengthy public process and community debate.

"I understand we all kind of need a little bit of a breather right now," said City Councilor Tom Ayres, D-Ward 7. At the same time, he doesn't want to lose momentum on a project he says would make the road safer.

As a first step, the Department of Public Works is looking for funding for North

Avenue crosswalks and curb ramp upgrades with a grant application through the state. "We are already working to put this plan into action," said Public Works Director Chapin Spencer. "I'm very impressed that staff has already jumped on this grant opportunity."

Later, city officials will appoint a task force to work on implementing the North Avenue changes, and the city will have to set up a process to decide whether to eliminate parking on both sides of the street.

A pilot study that would narrow the road to three lanes and add bike lanes will likely not happen until 2016.

That piece has been controversial — so if it doesn't seem to be working, based on community input and metrics that have yet to be defined, the road would return to four lanes. Councilor Kurt Wright, R-Ward 4, added language to the resolution that gives particular weight to the opinions of people in the New North End.



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Continuing the Conversation About the Future of North Avenue



There has been a lot of discussion in Burlington over the last few weeks about the City Council's vote on October 6th to approve a plan for transforming North Avenue over the next one to three years into a walkable, bikeable street for everyone. Some people think it's too much, too fast. Others think it doesn't go nearly far enough. Our take is that, all in all, it's a big step in the right direction.

Just a few months ago, very few of the improvements that the Council recently approved were being considered for the short term. While the consultant's original proposal did indeed call for taking North Avenue from four lanes to three, adding bike lanes for its full length, building multiple crosswalks, and reworking intersections to improve safety, those improvements were envisioned for the medium term (four to seven years).

What happened in the interim? Dozens and dozens of residents of the New North End and of Burlington as a whole spoke up for a safe, walkable, bikeable North Avenue, and sooner rather than later. For them, the choice between short term and medium term was a consequential one. In particular, many young families expressed concern that if North Avenue wasn't made safe for everyone until seven years down the road, their kids might never get to bike to school.

In response to the clear sense of urgency expressed by many members of the community, the North Avenue Corridor Study Advisory Committee sent a proposal to the Transportation, Energy, and Utilities Committee (TEUC) of the

City Council that moved many of the medium-



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Thu Nov 6th VT Transportation Board College Tour All Day

Wed Nov 12th



VT Transportation Board College Tour All Day



Thu Nov 13th VT Transportation Board College Tour All Day



Sat Nov 15th Bike Jam at BRV 10:00am - 1:00pm



Sun Nov 16th The Great Turkey Chase pt. 7 11:00am - 2:00pm

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term recommendations into the short term. Four dozen people showed up at the TEUC's September meeting to speak out in favor of this plan, and the TEUC voted in favor of the plan.

Continuing the Conversation About the Future of North Avenue

While many of those who had spoken up about North Avenue expressed a desire to see Burlington's longest street become safer for everyone (and soon!), there were others who were concerned about the speed of change, the impact that it might have on commute times or other changes that they considered inappropriate for the Avenue. With these competing perspectives in mind, the New North End city council delegation began working on a series of proposed amendments to the resolution they felt were necessary to honor the range of perspectives they were hearing.

Heading into the final City Council vote, a growing number of people from the New North End and across Burlington were weighing in on the walkable, bikeable design for North Avenue and, most importantly, were recognizing that the proposed design would make the Avenue a whole lot safer and more welcoming for people on foot and on bike *and* for people in cars. There were many more reasons to move forward than to hold back.

The October 6th City Council meeting was standing room only. **There were well over 100 people there, most of them focused on North Avenue.** Of the 40 people who made comments before Council, 34 of them -- mostly New North Enders -- spoke out in favor of the resolution as proposed to transform North Avenue for everyone.

The proposed amendments introduced by the New North End councillors provoked strong debate on a variety of questions. Did it make sense to remove parking on both sides of the road without an in-depth study? How would the public continue to have a voice in the process and the evaluation of the performance of the pilot 4-to-3 lane conversion? Should the resolution remove any mention of protected bike lanes? The two amendments addressing further study concerning parking and the structure of a review committee passed.

As the discussion progressed, several councillors started citing the testimony of the many people who had spoken in favor of protected bike lanes and the public safety improvements they could bring to the project. Councilor Max Tracy stepped in and introduced a new amendment that put **protected bike lanes back into the resolution -and it passed unanimously.** This was followed by a unanimous vote in favor of the resolution as a whole.

What is clear at this point is that much progress has been made in the efforts to remake North Avenue in a way that works for everyone, more voices and a greater diversity of voices have been brought into the conversation, and these voices were heard by City Councillors from all parties.

While North Avenue has cleared another hurdle, much work remains to be done. As the North Avenue Task Force is appointed and the City Twitter. Join in and spread the word! Like Us Follow Us

In This Issue

- Biking Season Kicks Off for Elementary School Students!
- Silver on the Hill!
- Continuing the Conversation About
 the Future of North Avenue
- Our Hats (and Bike Helmets) Off to You!

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Continuing the Conversation About the Future of North Avenue

continued engagement of many Burlingtonians, with a wide variety of opinions, is essential to collectively move the vision for North Avenue forward. Ultimately, North Avenue has to work for all modes of travel, whether you are driving or biking, heading to school or visiting friends, commuting to work or just stretching your legs. We are all in this together. Let's create a future for North Avenue that we can all be proud of.



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Appendix B: Existing and Future Corridor Conditions



NORTH AVENUE CORRIDOR STUDY

Existing and Future Corridor Conditions Report

March 2014

Prepared for:



Prepared by:



In association with:

Third Sector Associates

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Corridor Setting

The North Avenue corridor in Burlington, Vermont is the primary street linking the New North End neighborhood, which is located along Lake Champlain between downtown Burlington and Colchester, with the Old North End and Downtown. This study evaluates transportation conditions along an approximately 2.8-mile segment of North Avenue extending from the intersection with Plattsburg Avenue in the north to the intersection with North Street in the south (Exhibit 1). The study area does not extend beyond North Street to Battery Park because that segment must be evaluated in coordination with other streets in that area, which will likely be the subject of a future study. North Avenue functions as a north-south minor urban arterial and predominately serves the residential, commercial, institutional and recreational uses that straddle the corridor; very few pass-through trips use the corridor given the availability of more direct routes (VT 127) for those trips that do not originate or end in the New North End.

Existing Land Uses

Existing development along North Avenue consists of a mix of residential, commercial and municipal uses. Residential uses predominate, and typically consist of single family homes on moderately sized lots. More recently, several higher-density, multifamily infill residential developments have been constructed along the corridor. A mobile home park is located on the east side of North Avenue, opposite the Ethan Allan Shopping Center, while a large public housing development is located east of North Avenue just south of Plattsburg Avenue. The major commercial travel generator along the corridor is the Ethan Allen Shopping Center, which is anchored by a Hannaford Supermarket & Pharmacy (Exhibit 2 on the following page). Other commercial uses include several convenience stores, food services, professional offices, banks, and gas stations located throughout the corridor.







Exhibit 2: Major Trip Generators



Institutional uses along North Avenue include the Flynn Elementary School, located just north of the study corridor at Starr Farm Road, Burlington Fire Station located between Staniford Road and Woodbury Road, the Lyman Hunt Middle School and Miller Community Center at Woodbury Road, nearby Smith Elementary School accessed via Ethan Allen Parkway, the Post Office at Ethan Allen Shopping Center, the Burlington High School and Burlington Technical Center located at Institute Road. North Avenue also provides access to several park and recreation areas, such as Ethan Allen Park and Leddy Park, located at and just north of the North Avenue/Ethan Allen Parkway intersection, respectively.

Other notably uses that are located on or accessed from North Avenue include major trip generators such as private schools and churches. From north to south, these include Saint Mark Church at Shore Road, Champlain Valley Baptist Church in the Ethan Allen Shopping Center, North Avenue Christian School at the North Avenue/VT 127 intersection, Rock Point School and the Episcopal Diocese of Vermont located off of Institute Road, and Burlington College located just south of the Lakeview Cemetery.

Exhibit 3 illustrates the City of Burlington zoning districts, which largely reflect the existing land use patterns. Along North Avenue, the corridor is zoned Residential-Low Density from Plattsburg Avenue to just south of Shore Road. South of this location, the corridor is zoned Residential-Low Density and Residential-Medium Density to Ethan Allen Parkway, with Neighborhood Activity Center zones at the location of the Ethan Allen Shopping Center and the Rite Aid lot. From Ethan Allen Parkway to Burlington College, the corridor is surrounded bv Residential-Low Density. Recreation/Greenspace, and Conservation zoning districts. Farther south in the Old North End the corridor is primarily surrounded by medium density residential zones. While the corridor is largely built out, infill development at higher intensity is possible in the areas that allow higher density, including the Old North End and near the Ethan Allen Shopping Center.







Planning Vision

The City of Burlington Transportation Plan, *Moving Forward Together*, adopted in March 2011 presents the long-term transportation vision for the City. The adopted vision states:

"...transportation functions as part of an interconnected system which offers a range of choices that are safe, affordable, efficient, and convenient for residents, employees, and visitors alike. As a result, rail, air, ferries, transit, cycling, and walking are successfully competing with the automobile for the dominant mode of choice. Local and regional multimodal corridors and centers are maximizing our use of existing infrastructure, while eliminating congestion, preserving air quality, and conserving energy. Commuters, families, and employers are benefiting from a diverse array of transportation demand management strategies such as car- and van-pools, flexible work schedules, and telecommuting. Land use and transportation decisions are considered together, significantly reducing the need for individual automobiles and large parking facilities. Greater use of rail for freight has been embraced as an effective means of removing trucks from neighborhood streets. City streets are attractive public spaces, and function as part of a system of interconnecting streets. Circulation within the downtown, waterfront, neighborhood activity centers, and institutional campuses is predominantly oriented to the pedestrian. A series of trails and paths provide access between neighborhoods and areas of protected open space."

The Transportation Plan recommends a proposed street system for the City, depicted in Exhibit 4 on the following page. The strategy includes the following proposed elements relevant to the North Avenue corridor that are key to realizing Burlington's transportation vision:

• North Avenue is proposed as a "complete street" that will accommodate all travel modes, including cars and trucks, buses, bikes, and pedestrians as effectively as possible within the existing right-of-way.



Exhibit 4: City of Burlington Proposed Street System

- Plattsburg Avenue, which intersects North Avenue at the north end of the Study Area, is proposed as a "transit street", designed to accommodate bus and other transit service efficiently, giving transit a "leg up" over the automobile.
- North Street and the VT 127 connector are proposed as "bicycle streets", designed to accommodate bicycles with priority treatment to enhance bicycle convenience and safety.
- Neighborhood Activity Centers, which are mixed-use centers designed to support multi-modality amongst surrounding neighborhoods, are identified at the North Avenue/Plattsburg Road intersection and at Ethan Allen Shopping Center near the North Avenue/Leddy Park Road intersection.

The *Street Design Guidelines*, included as an appendix to the Transportation Plan, detail the key elements, dimensions, and cross-sections for each street typology in the identified transportation strategy.

Corridor-Wide Transportation Characteristics

The following sections detail transportation conditions from a system, or corridor-wide perspective. Segment-by-segment details are presented later in this chapter.

North Avenue is a multi-lane, minor arterial. The roadway ranges from a two lane to four lane cross section with travel lanes that vary from 10 to 13 feet in width. On-street parking is provided on some segments of the corridor. Bicycle accommodations vary, with onstreet bicycle lanes provided on either one or both sides of the roadway in portions of the corridor; on other portions of the corridor, on-street bicycle accommodations do not exist. The total curb-to-curb roadway zone ranges from approximately 33 to 50+ feet wide. A continuous sidewalk system is provided on both sides of North Avenue, located directly adjacent to the roadway in some locations and separated from the roadway by several feet of vegetated buffer in other locations.



Traffic Control and Regulations

Traffic signals govern traffic movements at major intersections along North Avenue (Exhibit 5):

- Plattsburg Avenue
- Woodbury Road
- Shore Road/Heineberg Road
- Ethan Allen Shopping Center
- Ethan Allen Parkway
- VT 127 Connector
- Institute Road
- North Street

At the North Street/North Avenue intersection, traffic signals are installed on the street light posts. The other intersections comprise signals heads that hang from an overhead wire that runs diagonally across the intersection. These signals can be buffeted in windy conditions and are sometimes more difficult to see.

Connections to North Avenue from surrounding collector and local streets are stop-sign controlled. Numerous driveways with direct access to North Avenue are also present on the corridor, as many single family residences line both sides of the street.

Exhibit 5: Location of Signalized Intersections





Current Traffic Volumes and Operating Conditions

Traffic Volumes

North Avenue between Ethan Allen Parkway and VT 127 is the busiest segment on the corridor, carrying some 19,100 vehicle per day (Exhibit 6). Volumes elsewhere on the corridor range from about 10,800 to 12,000 vehicles daily. The VT 127 connection carries about 7,700 vehicles daily, while Plattsburg Avenue to the north accommodates 6,600 vehicles (also connecting to VT 127).





As typical in urban areas, traffic peaks during the morning and afternoon commute. Because of the high prevalence of schools along the corridor, the morning peak is guite pronounced, and the afternoon peak extends from around 3:00 PM (end of school) to 5:00 PM. Exhibit 7 shows the 24-hour distribution of traffic south of Institute Road, where both morning and afternoon traffic peaks at just over 1,000 vehicles per hour (total, both directions). The higher southbound volumes during the morning, and conversely higher northbound volumes during the afternoon, reflect commute trips into the downtown Burlington area. Exhibit 8 similarly shows the hourly distribution of traffic between 7:00 AM and 6:00 PM between Ethan Allen Parkway and VT 127. This location is less dominated by school trips, hence the afternoon peak is more spread out than the morning peak; commute, shopping and school trips tend to occur during the late afternoon. Note that volumes for each signalized intersection are provided in the Segment Descriptions section later in this document.





Exhibit 8: North Ave Hourly Traffic between 7:00 AM and 6:00 PM between Ethan Allen Pkwy and VT 127 Ramps



AM and PM Peak Hour Operating Conditions

Traffic operating conditions along North Avenue were evaluated using Synchro, a traffic analysis software package developed by Trafficware. Results are based on analytical methodologies detailed in the 2010 Highway Capacity Manual (HCM).

Results are presented in terms of Level of Service (LOS) using the ranges established by the 2010 HCM:

- LOS A Less than 10 seconds of delay per vehicle
- LOS B 10 to < 20 seconds
- LOS C 20 to < 35 seconds
- LOS D 35 to < 55 seconds
- LOS E 55 to < 80 seconds
- LOS F 80 seconds or more delay per vehicle

Level of Service (LOS)

Level of Service, or LOS, is a standard measure of operational effectiveness for transportation facilities. LOS is defined by the Highway Capacity Manual, published by the Transportation Research Board (current edition: 2010). LOS is graded from LOS **A** (best conditions) to LOS **F** (very poor conditions), and for signalized intersections is based on the estimated average vehicle delay for traffic at the intersection. LOS A represents little to no delay, or uncongested conditions, whereas LOS F indicates very congested conditions with long delays. In urbanized areas such as along Shelburne Road, LOS conditions of D or better are generally considered satisfactory during the peak hours. LOS E conditions indicate an intersection that is operating at or near peak capacity, while intersections operation at LOS F cannot effectively serve peak demand.

Exhibit 9 shows intersection LOS for the AM and PM peak hours under existing conditions. Congestion is essentially limited to the VT 127 connection during the morning peak, and not significant at all during the PM peak. Isolated periods of congestion have also been observed prior to the start of school and immediately after school lets out, particularly at Institute Road.

Congestion at the connection to VT 127 during the AM commute is a result of a heavy southbound left turn from North Avenue onto VT 127, and a moderately heavy northbound through (straight) volume. These movements cannot occur at the same time, and therefore require exclusive green phases.

While the corridor is busy during the afternoon, heavy congestion does not typically form. Intersections operate at LOS A or B, with all approaches operating at LOS C or better, indicating busy, but only lightly congested conditions.



Exhibit 9: Existing AM and PM Peak Hour Level of Service (LOS)

Intersection Location	Eastbound	Westbound	Northbound	Southbound	Intersection
Plattsburg Ave		Plattsburg Ave	North Ave	North Ave	Overall
AM Peak Hour		С	А	В	В
PM Peak Hour		С	А	В	В
Woodbury Rd	Woodbury Rd	School Driveway	North Ave	North Ave	
AM Peak Hour	С	С	А	А	А
PM Peak Hour	С	С	А	А	А
Shore Rd/Heineberg Rd	Shore Rd	Heineberg Rd	North Ave	North Ave	
AM Peak Hour	С	С	А	А	В
PM Peak Hour	С	С	А	А	А
Ethan Allen Shopping	Shopping Center	Mobile Home Park	North Ave	North Ave	
AM Peak Hour	С	С	А	А	А
PM Peak Hour	С	С	А	В	В
Ethan Allen Pkwy	Little Eagle Bay	Ethan Allen Pkwy	North Ave	North Ave	
AM Peak Hour	А	С	А	А	В
PM Peak Hour	А	С	А	А	А
VT 127	Christian School	VT 127	North Ave	North Ave	
AM Peak Hour	С	С	F	E	F
PM Peak Hour	С	А	В	А	А
Institute Rd	Institute Rd	Condo Driveway	North Ave	North Ave	
AM Peak Hour	С	С	В	В	В
PM Peak Hour	С	С	А	А	А
North St		North St	North Ave	North Ave	
AM Peak Hour		С	А	А	А
PM Peak Hour		С	А	А	А



Forecast (Year-2035) Future Traffic Conditions

The study team considered both historic growth patterns (population and traffic growth) as well as future growth forecasts from the CCRPC's regional travel demand model to develop growth projects through the year-2035. The CCRPC model estimates future year traffic volumes based on forecast changes in population and employment throughout the greater Burlington region. This process is further detailed in the technical memorandum, *Growth Summary for North Avenue Corridor*, September 2013.

In general, both population and traffic in the study area has been fairly stable since 1990. Traffic volumes have increased modestly along the southern portions of the corridor, while decreasing modestly to the north.

The CCRPC travel demand model assumes that growth in occupied housing units will continue at a rate comparable to the historic average since 1990. By 2035, an addition 848 housing units are expected in zones covering the study area. More residential growth is expected in the central and south portions of the study area than to the north (Exhibit 10). No significant change in employment is presumed by the model.

Exhibit 10: Projected Households by Subarea

Subarea	2010	2035	Increase	Average Annual Growth Rate
North	952	1,017	65	0.3%
Central	3,012	3,641	620	0.7%
South	1,115	1,278	163	0.5%
Total	5,088	5,936	848	0.6%

Source: CCRPC Travel Model (2013)

Other Future Growth Considerations

Institutional uses along the corridor, including the new Burlington College campus, could influence traffic volumes in the future. Specific information regarding the scale and timing of proposed improvements at these uses is not presently available, however.

Year-2035 Growth Scenario

Households are expected to continue increasing at comparable rates to historic trends in the study area. Little (if any) additional commercial development is forecast, though institutional expansion is an unknown. In the absence of more specific information, it is reasonable to assume higher growth rates in the southern portion of the corridor given the potential for development at Burlington College and the historically higher growth rates in this portion of the corridor. The study therefore developed a 2035 traffic scenario that increased volumes relative to existing levels as follows:

- Plattsburgh Avenue: 5 percent increase through 2035 (equivalent to approximately 0.2 percent annually).
- North Avenue:
 - 5 percent increase north of Shore Road (equivalent to approximately 0.2 percent annually);
 - 10 percent increase between Shore Road and VT 127 (0.4 percent annually);
 - 15 percent between VT 127 and North St (0.6 percent annually).
- VT 127: 5 percent increase (0.2 percent annually).

Operational Assessment

Traffic analysis results, presented in Exhibit 11 on the following page, indicate no significant changes from current conditions.



Intersection Location	Eastbound	Westbound	Northbound	Southbound	Intersection
Plattsburg Ave		Plattsburg Ave	North Ave	North Ave	Overall
AM Peak Hour		С	А	В	В
PM Peak Hour		С	А	А	В
Woodbury Rd	Woodbury Rd	School Driveway	North Ave	North Ave	
AM Peak Hour	С	С	А	А	А
PM Peak Hour	С	С	А	А	А
Shore Rd/Heineberg Rd	Shore Rd	Heineberg Rd	North Ave	North Ave	
AM Peak Hour	С	С	А	А	В
PM Peak Hour	С	С	А	А	А
Ethan Allen Shopping	Shopping Center	Mobile Home Park	North Ave	North Ave	
AM Peak Hour	С	С	А	А	А
PM Peak Hour	С	С	А	В	В
Ethan Allen Pkwy	Little Eagle Bay	Ethan Allen Pkwy	North Ave	North Ave	
AM Peak Hour	А	С	А	А	В
PM Peak Hour	А	С	А	А	А
VT 127	Christian School	VT 127	North Ave	North Ave	
AM Peak Hour	С	С	F	F	F
PM Peak Hour	С	А	В	А	А
Institute Rd	Institute Rd	Condo Driveway	North Ave	North Ave	
AM Peak Hour	С	С	E	В	С
PM Peak Hour	С	С	А	А	Α
North St		North St	North Ave	North Ave	
AM Peak Hour		С	А	В	В
PM Peak Hour		С	А	А	Α

Exhibit 11: Future Scenario (2035) AM and PM Peak Hour Level of Service (LOS)



Corridor Crash History

High Crash Locations

VTrans identifies High Crash Locations (HCLs) for intersections and segments statewide. In order to be designated a HCL segment or intersection, a location must have experienced five or more crashes over a five year period, and crashes must occur at higher frequency than the average rate for similar roadways statewide.

During the 2006-2010 period, four segments on the study corridor were identified as HCLs (Exhibit 12 on the following page).

The Actual/Critical Ratio compares the crash rate for these locations to the average ratio for comparable facilities statewide. A ratio over 1.0 indicates higher than average frequency of crashes at all locations. The Severity Index, which is the average cost associated with crashes, indicates that the average severity of crashes is greatest between Lakewood Parkway and Ethan Allen Parkway; the Actual/Critical Ratio is highest here too. This segment is four-lanes, with frequent cross street and driveway connections. Crash records indicate high instances of at-angle crashes, typically associated with turning traffic.

Crashes Involving Pedestrians or Bicyclists

Six of the crashes occurring during the 2006-2010 period involved pedestrians. Two of these occurred near the Ethan Allen Shopping Center, indicating that specific attention may be necessary at this location. None of the crashes recorded over this period involved bicyclists. However, because of the relatively low sample size, it is not uncommon for pedestrian and bicycle crashes to exhibit patterns that do not lead to specific conclusions, requiring that these safety issues be analyzed proactively during design, rather than based on specific data analysis.

Other Potential Safety Issues

A number of potential safety concerns for pedestrians, bicyclists and motorists on the corridor were identified by staff review of the corridor and through the public outreach process:

- Excessive speeds, particularly where lanes are wide and onstreet parking lanes are sparsely used.
- Considerable distance between crosswalks for pedestrians crossing North Avenue, and no accommodations to improve the convenience or safety of pedestrians crossing the street.
- Lack of pedestrian signals and poor visibility of traffic signal heads at many locations (pedestrians do not know who has the right-of-way).
- Narrow travel lanes in the four-lane segment.
- Lack of accommodations for bicyclists.
- Worn and missing pavement markings.
- Skewed intersection at Shore Road/Heineberg Road.
- High speed, heavy volume turns at the VT 127 connection, along with unclear geometry and allocation of pavement space.
- High speed, heavy volume right turns at Ethan Allen Parkway and Plattsburg Avenue, which conflict with pedestrians and bicyclists.
- Difficulty in making left turns at several critical locations.
- Presence of frequent residential and commercial driveways.
- Uncomfortable pedestrian environment along the rock bluff immediately adjacent to the sidewalk in the southbound direction between the VT 127 ramps and the Institute Road intersections.









Transit

North Avenue is served by CCTA Route 7 and Route 18 local bus service (Exhibits 13 and 14, respectively). Route 7 is a fixed route local service that begins in Downtown Burlington at Cherry Street, and then travels via North Street to North Avenue, continuing along North Avenue to its terminus at Northgate Apartments. Service operates on weekdays from 5:40 AM to 10:15 PM and on Saturdays from 6:15 AM to 7:55 PM. On weekdays, service operates as frequently as every 30 to 35 minutes during the day. Following the PM peak, evening service frequency is less than one bus per hour. On Saturdays, service operates every 30 minutes during peak periods and every 60 minutes during off-peak periods. Weekday ridership on Route 7 averages 1,125 riders while Saturday ridership averages 602 riders (FY09 Average). The busiest stops are Cherry Street (369 boardings), Burlington High School (144 boardings), Ethan Allen Shopping Center (63 boardings), and Northgate Apartments (53 boardings).¹

Route 18 operates as a fixed route local service in the late morning and afternoon hours and as a point deviation service in the early morning. The route begins in Downtown Burlington at Cherry Street, then travels south to Price Chopper via Pine Street, then travels north to UVM, then continues north via VT 127 to Plattsburg Avenue, then travels south along North Avenue towards Downtown. Service operates one day a week on Sundays from 8:25 AM to 5:20 PM. The late morning and afternoon service runs approximately every hour. Sunday ridership averages 124 riders (FY09 Average). The busiest stops are Cherry Street (33 boardings), Price Chopper (21 boardings), City Market (6 boardings), Northgate Apartments (6 boardings), and Ethan Allen Shopping Center (5 boardings).¹

The fare for these services are in line with CCTA's local fare structure, with a single ride costing \$1.25, ten-ride tickets costing \$12.00, and a monthly pass costing \$50.00. Children, seniors, and persons with disabilities ride at discounted rates.

Exhibit 13: CCTA Route 7



¹ http://www.cctaride.org/pdf/Documents/AppendixB.pdf





North Avenue Corridor Study

Bus Stops

Within the study area, there are currently 23 bus stops in the southbound direction and 21 bus stops in the northbound direction. Bus pull-outs are not provided at the bus stops in most locations, and buses must typically stop in the right-most travel lane, creating potential conflicts between transit vehicles and general traffic. Exhibit 15 indicates the location of each stop, along with whether a sign and/or shelter are present. Exhibit 16 illustrates bus stop locations along the corridor and the areas along the corridor that are located within ¼-mile (highlighted in blue) and ½-mile (highlighted in yellow) of a bus stop. The current stop locations provide good coverage of the corridor, as all uses abutting the corridor are within a ¼-mile walk of a bus stop, although the stop spacing is very close in certain cases.

Exhibit 15: Bus Stops on North Avenue

	Southbound		Northbound		
Cross Street	Location	Amenity	Location	Amenity	
Plattsburg Ave	Near side	Sign			
Loaldo Dr	N/A	Sign	N/A	Sign/shelter	
Birch Ct			N/A	Sign	
Gr. Acres Dr	N/A	Sign	N/A	Sign	
Cross Pkwy	N/A	Sign			
Edgemore Dr			N/A	Sign	
Staniford Rd	N/A	Sign	N/A	Sign	
Woodbury Rd	Near side	Sign			
Gosse Ct	N/A	Sign	N/A	Sign	
Heineberg Rd	Near side	Sign	Near side	Sign	
Poirier Pl	N/A	Shelter	N/A	Sign	
EA Shopping	Far side	Sign/shelter	Near side	Sign/shelter	
Lakewood Pkwy	N/A	Sign	N/A	Sign	



	Southbound		North	nbound
Cross Street	Location	Amenity	Location	Amenity
Killarney Dr	N/A	Sign	N/A	Sign
Saratoga Ave	N/A	Sign	N/A	Sign
VT 127	Near side	Sign	Near side	Sign
Institute Rd (N)	N/A	Sign	N/A	Sign
Institute Rd	Far side	Sign/shelter	Near side	Shelter
Cemetery	N/A	Sign	N/A	Sign
Bur. College	N/A	Sign	N/A	Sign
Shell Station	N/A	Sign	N/A	Sign
Yankee Med.	N/A	Sign	NA	Sign
Berry St	N/A	Sign/shelter	N/A	Sign
Ward St	N/A	Sign		
Strong St			N/A	Sign
Canfield St	N/A	Sign/shelter		

Exhibit 16: North Avenue Corridor Bus Stops


Walking and Bicycling

Pedestrian Accommodations

Sidewalks are provided continuously along both sides of North Avenue within the study corridor and are a consistent five feet wide. Sidewalks are generally separated from traffic by a planting strip that varies in width depending on location. The planting strip provides separation from traffic, particularly where on-street parking is not allowed, and also provides for snow storage in the wintertime.

All intersections have curb ramps to accommodate wheelchair users and others with assistive devices; however many ramps lack aprons on either side of the ramp or tactile indicators that alert visuallyimpaired pedestrian that they are standing at an intersection. Additionally, the orientation of curb ramps could be improved in some locations to improve pedestrian safety. For example, at the Plattsburg Avenue/North Avenue intersection, the orientation of the north side Plattsburg Avenue curb ramp leads pedestrians into a travel lane, as opposed to across the intersection.

Cross street intersections with North Avenue tend to have smaller turning radii. This is ideal for a complete street, as the smaller radii decreases the in-road distance pedestrians must cross and slows turning speeds. Curb cuts with larger turning radii are limited to locations where this design is necessary due to a larger design vehicle, such as at Ethan Allen Shopping Center where larger truck deliveries are commonplace.

Within the approximately 2.8-mile long corridor, 11 pedestrian crossing locations are provided:

- Plattsburg Avenue
- Woodbury Road
- Shore Road/Heineberg Road
- Ethan Allen Shopping Center
- Little Eagle Bay/Ethan Allen Parkway
- VT 127 Connector
- Institute Road



- Shell Station
- Berry Street/Washington Street
- Strong Street
- North Street

With the exception of the North Street intersection, only a single crosswalk of North Avenue is provided at each signalized intersection location. Additionally, the average distance between crosswalks is considerably greater than the maximum distance of 600 feet recommended in ITE's *Designing Walkable Urban Thoroughfares* handbook. The lack of pedestrian accommodations across North Avenue may pose a safety risk to pedestrians, particularly if pedestrians jaywalk in locations where convenient crosswalks are not provided. There is particular concern for dangerous jaywalking at locations where bus riders cannot easily access corresponding stops on the opposite side of the street for their return trip. Such is the case at Loaldo Drive, Green Acres Drive, Staniford Road, Gosse Court, Poirier Place, Lakewood Parkway, Killarney Drive, Saratoga Avenue, north of Institute Road, Lakeview Cemetery, Burlington College, and Yankee Medical.

Bicycling Accommodations

On-street bicycle lanes are currently provided on North Avenue between North Street and VT 127 in the northbound direction, and between Institute Road and Berry Street in the southbound direction (see Exhibit 17). A paved multi-use trail connects with North Avenue at Ethan Allan Parkway; however this portion of the corridor does not have on-street bicycle facilities. An unpaved multi-use trail connects to the corridor just north of Institute Road; however bike lanes are only present on the northbound side of the roadway at this location.

North of VT 127, the roadway configuration is not well suited to accommodate bicyclists, particularly given segments that have little to no shoulder and frequent turning vehicles throughout the corridor. Moreover, sidewalk bicycle riding is problematic due to potential conflicts between pedestrian and bicyclists, especially given the relatively narrow sidewalk width (five feet). This poses a safety issue for bicyclists traveling on this segment of North Avenue to reach points beyond the corridor as well as for local trips that must travel via North Avenue due to a lack of connectivity in the local street grid on the east and west sides of the roadway.



Exhibit 17: North Avenue Corridor Area Bicycle Facilities

Segment Descriptions

The remainder of the document describes more detailed characteristics about the pedestrian, bicycle, and transit environments, as well as the signalized intersections, along the North Avenue corridor. To better focus the information, the corridor has been divided into five segments:

- Washington St/Berry St to North St
- Institute Rd to Washington St/Berry St
- VT 127 Ramps to Institute Rd
- Shore Rd/Heineberg Rd to VT 127
- Plattsburg Ave to Shore Rd/Heineberg Rd

Exhibit 18 on the following page summarizes the conditions along the corridor within these five segments.



Characteristic	Washington/Berry St to North St	Institute Rd to Washington/Berry St	VT 127 to Institute Rd	Shore Rd to VT 127	Plattsburg Ave to Shore Rd
Approximate Length	1,460 ft (0.28 miles)	3,870 ft (0.73 miles)	1,870 ft (0.35 miles)	4,240 ft (0.80 miles)	3,290 ft (0.62 miles)
Paved Width	33'	35'	42'	40' - 43'	40'
ROW	65′	65'	65'	65'	65'
Travel Lanes	1 NB & 1 SB	1 NB & 1 SB	1 NB & 1 SB	2 NB & 2 SB	1 NB & 1 SB
Turn Lanes	North St (SB left)	Institute Rd (NB left)	Institute Rd (SB right)	• Shore Rd (NB left) • VT 127 (SB left)	None
Existing AADT	12,000	12,000	12,000	 13,700 north of Ethan Allen Pkwy 19,100 south of Ethan Allen Pkwy 	10,800
Traffic Signals	North St	None	Institute Rd	 Ethan Allen Shop. Ctr. Ethan Allen Pkwy VT 127	Plattsburg AveWoodbury RdShore Rd
On-Street Parking	SB only	None	Both sides	None	Both sides
Sidewalks	Both sides w/ landscape strip	Both sides w/ landscape strip	Both sides w/ sporadic landscape strip	Both sides w/ landscape strip	Both sides w/ landscape strip
Bicycle Lanes	NB only	NB and SB	NB (stencils and sign only – no lane marking)	None	None
Land Use	Residential	Residential, institutional	Residential, institutional	Residential, retail	Residential, retail, institutional
Further Observations	 Narrow NB bike lane Narrowest portion of corridor Highest residential density in corridor w/ distinct feel 	 Open space/low- intensity uses on west side No on-street parking for residences Midblock crosswalk at Champlain Farms 	 NB bike lane sometimes very wide/not clearly differentiated from parking lane. No SB bike facility Bike lane drops at Institute Rd 	 Left turns block through lanes Narrow lanes Most retail in corridor Ethan Allen Pkwy intersection difficult to negotiate Busiest in corridor 	 Few spots to cross Walking schoolchildren Outdated ADA ramps Wide travel way Unclear where parking is allowed Frequent driveways Offset intersections

Exhibit 18: Study Corridor Existing Conditions by Segment



Washington St/Berry St to North St

The narrowest segment within the corridor—between Washington St/Berry St and North St—features a curb-to-curb width of 33 feet. On-street parking is permitted in the southbound direction only, and the only bicycle facility is a narrow northbound bicycle lane. Observations revealed that on-street parking capacity may be underutilized, likely because each home has its own driveway.

The remainder of the ROW is dedicated to sidewalks with generous landscaped buffers. These landscaped buffers house bus shelters, mature trees, fire hydrants, and utility poles that support streetlights.

This segment feels the most distinct within the study corridor, as it located in Old North End and was developed before other segments, which are in the New North End. Its residential density is notable, and its homes are closer to the street and on smaller lots.

Exhibit 19: Typical Cross Section between Washington St/Berry St and North St





Pedestrian Environment

Sidewalks are generally in fair condition with some cracking that may be problematic for disabled pedestrians. North Avenue crosswalks are found in three locations within this segment: North Street, Strong Street, and Washington Street/Berry Street. Distances between these crosswalks range from 470 feet to 950 feet. In addition, all side street crossings have crosswalks.

Most crosswalks exhibit white continental striping, though a few, notably the entire North Street intersection, use solid red paint. While crosswalks are visible, vehicles have worn away some portions that are now faded. All crosswalks include curb ramps for enhanced accessibility. Water ponding is a particular issue at these ramps during and after rain storms.

Exhibit 20: Views of Crosswalks between Washington St/Berry St and North St





Exhibit 21: Pedestrian Environment between Washington St/Berry St and North St





Bicycle Environment

This segment has no dedicated bicycle facility in the southbound direction. At 3.5-feet wide, the northbound bicycle lane is narrow and does not meet current standards. This bicycle lane is in direct conflict with buses, which much temporarily pull into the bicycle lane to serve bus stops.

Observations revealed some vehicles parked in the bicycle lane. Stormwater grates, which are located in the bicycle lane and are thus a nuisance to bicyclists, do not entirely eliminate water ponding in the bicycle lane. As a result, bicyclists must ride closer to moving traffic or entirely within the northbound travel lane to avoid puddles and grates. Some bicyclists were observed riding on the sidewalks.

Exhibit 22: Views of Northbound Bicycle Lane between Washington St/Berry St and North St



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Exhibit 23: Bicycle Environment between Washington St/Berry St and North St





Transit Environment

Two northbound/southbound bus stop pairs are located within this segment: Berry Street/Washington Street and Canfield Street/Strong Street. Shelters are included at these stops in the southbound direction only, reflecting that these stops primarily serve waiting passengers traveling to downtown. Both of these bus stop pairs are served by a North Avenue crosswalk.

Shelters include a bench, are oriented toward the sidewalk, and are adjacent to a concrete pad that connects the sidewalk to the curb for easier boarding. These pads, however, are constructed as ramps, and slope down toward street level, which makes it more difficult for disabled or elderly passengers to board.

An additional southbound-only stop is located at Ward Street. This stop, which is only 350 feet north of the Canfield Street stop, does not have a shelter and has no connecting crosswalk over North Avenue.

Exhibit 24: Shelter at Berry St Southbound Bus Stop



Exhibit 25: Bus Stop Locations between Washington St/Berry St and North St





Signalized Intersections

The only traffic signal within this segment is located at the North Street intersection. Southbound parking is restricted north of this intersection to accommodate a southbound left-turn lane. Faded red crosswalks, each with ADA-compliant curb ramps, and push-button-activated walk signals are provided at each approach.

This intersection presently operates at LOS A in both the morning and afternoon peaks.

Exhibit 26: Views of North Ave at North St Intersection









Exhibit 27: North Ave at North St Intersection





Institute Rd to Washington St/Berry St

With a curb-to-curb width of 35 feet, the segment between Institute Rd and Washington St/Berry St is relatively narrow for the study corridor. On-street parking is not permitted, as bicycle lanes are present in the northbound and southbound directions. Houses, businesses, and other land uses have dedicated off-street parking. Travel lanes are wide and bicycle lanes are somewhat narrow.

The remainder of the ROW is dedicated to sidewalks with generous landscaped buffers. These landscaped buffers house bus shelters, mature trees, fire hydrants, and utility poles that support streetlights.

This segment acts as a transition between more densely developed ends of the study corridor. Low-intensity land uses line the west side of North Avenue, while open space and single and multi-family residential define the street's east side. Schools located in this stretch are major generators of pedestrian traffic.

Exhibit 28: Typical Cross Section between Institute Rd and Washington St/Berry St





Pedestrian Environment

Sidewalks are generally in fair condition with some cracking that may be problematic for disabled pedestrians. North Avenue crosswalks are limited to three locations in this segment: Washington Street/Berry Street, midblock at Champlain Farms, and at Institute Road. Distances between these crosswalks range from 900 to 2,950 feet. In addition, all side street crossings (Convent Square and Institute Road) have crosswalks. Pedestrians have precedence when crossing residential and commercial driveways, as the concrete sidewalk material continues across driveways uninterrupted.

All but the North Avenue crosswalk at Institute Road, which is painted red, exhibit white continental striping. While crosswalks are visible, vehicles have worn away some portions that are now faded. All crosswalks include curb ramps for enhanced accessibility. Like other segments, water ponding is a particular issue at curb ramps during and after rain storms.

Exhibit 29: Midblock Crosswalk at Champlain Farms



Exhibit 30: Pedestrian Environment between Institute Rd and Washington St/Berry St





Bicycle Environment

This segment has narrow (4.5 feet wide) bicycle lanes in both the northbound and southbound directions. However, both lanes are eliminated 230 feet south of Institute Road to accommodate a left-turn lane for vehicles. These bicycle lanes are in direct conflict with buses, which much temporarily pull into bicycle lanes to serve bus stops.

Observations revealed vehicles parked in the bicycle lanes. Stormwater grates, which are located in the bicycle lane and are thus a nuisance to bicyclists, do not entirely eliminate water ponding in the bicycle lane. As a result, bicyclists must ride closer to moving traffic or entirely within the travel lanes to avoid puddles and grates. Some bicyclists were observed riding on the sidewalks.

Exhibit 31: Views of Bicycle Lanes between Institute Rd and Washington St/Berry St



Exhibit 32: Bicycle Environment between Institute Rd and Washington St/Berry St





Transit Environment

Several northbound/southbound bus stop pairs are located within this segment, as shown in the map. Stops are more closely spaced in the southern portion of the segment, between Lakeview Cemetery and Washington Street/Berry Street. Northbound and southbound shelters are present at the Institute Road stop only, which serves Burlington High School. Both shelters are adjacent to a concrete pad that connects the sidewalk to the curb for easier boarding. The southbound stop at the midblock crossing adjacent to Champlain Farms includes a bench without a shelter or concrete boarding pad. All other stops in this segment are marked by signs only and have no other passenger amenities.

Exhibit 33: Views of Bus Stops between Institute Rd and Washington St/Berry St





Exhibit 34: Bus Stop Locations between Institute Rd and Washington St/Berry St





Signalized Intersections

The only traffic signal within this segment is located at the Institute Road intersection, which provides access to Burlington High School and North Beach Park. Bicycle lanes drop at this intersection to accommodate a northbound left-turn and southbound right-turn lane. In the southbound direction at the far-side bus stop, the roadway zone is slightly wider than the typical cross section to allow vehicles to pass buses serving the Institute Road stop. Immediately north of the intersection is an access driveway for buses going to Burlington High School; this driveway is located in such close proximity that vehicle queues at the intersection interfere with entering and exiting vehicles.

Only two approaches are marked with crosswalks, as shown in Exhibit 36. While each corner includes curb ramps to some degree, only the southwest corner's curb ramp is in good enough condition to be considered ADA accessible. The red North Avenue crosswalk includes push-button-activated walk signal, while pedestrians crossing the Institute Road crosswalk do not have a walk signal.

This intersection presently operates at LOS B in the morning peak and LOS A in the afternoon peak.

Exhibit 35: View of North Ave at Institute Rd Intersection



Exhibit 36: North Ave at Institute Rd Intersection





VT 127 Ramps to Institute Rd

The shortest segment in the study corridor, VT 127 Ramps to Institute Road has a curb-to-curb width of 40 to 42 feet. On-street parking is permitted in both directions. While there are no bicycle lanes, this segment contains bicycle stencils in the northbound direction only, informing drivers to share the lane. Because houses along this street have dedicated off-street parking, on-street parking remains underutilized, which makes travel lanes feel significantly wider and encourages speeding. Sidewalks are available on both sides of North Avenue. This segment marks the transition from narrower landscaped buffers to the north and wider landscaped buffers to the south. Where present, these landscaped buffers house fire hydrants and utility poles. Utilities are buried where there landscaped buffers are absent.

This segment is primarily lined with single-family homes, though some multi-family residential is located near Institute Road.

Exhibit 37: Typical Cross Section VT 127 Ramps and Institute Rd





Pedestrian Environment

Sidewalks are generally in fair condition with some cracking that may be problematic for disabled pedestrians. The pedestrian environment suffers from long stretches without a landscaped buffer, locating pedestrians adjacent to moving traffic. This is a particular issue north of Institute Road in the southbound direction where the sidewalk abuts a large rock wall, leaving little room to walk comfortably. Drivers have a free right-turn movement from North Avenue onto VT 127 ramps. While the crosswalk here is accompanied by a small yieldto-pedestrians sign, this vehicle movement poses a danger to pedestrians because it accommodates high-speed turns.

North Avenue crosswalks in this segment are located at the signalized intersections at the VT 127 ramps (white continental striping) and Institute Road (solid red paint and white continental striping), which are 1,850 feet apart. Vehicles have worn crosswalk striping in areas. At the VT 127 intersection, crosswalks are missing at the northwest leg and the Christian School driveway. Concrete sidewalks continue across all other driveways uninterrupted, giving pedestrians priority at these conflict zones. All crosswalks include curb ramps for enhanced accessibility. Like other segments, water ponding is a particular issue at curb ramps during and after rain storms.

Exhibit 38: Missing Landscaped Buffer between VT 127 Ramps and Institute Rd



Exhibit 39: Pedestrian Environment between VT 127 Ramps and Institute Rd



Bicycle Environment

There are no marked bicycle lanes between VT 127 and Institute Road. However, bicycle stenciling is present on the pavement in the northbound travel lane, reminding drivers to share the street. There are no stencils in the southbound direction. The approach to the intersection with the VT 127 ramps has been noted as being particularly difficult for bicyclists because of the presence of a high-speed right-turn ramp. Observations revealed that some bicyclists prefer riding on the sidewalks.

Exhibit 40: Northbound Bicycle Markings between VT 127 Ramps and Institute Rd



Exhibit 41: Bicycle Environment between VT 127 Ramps and Institute Rd





Transit Environment

A few northbound/southbound bus stop pairs are located within this segment, as shown in Exhibit 43. All of these stops are marked by signs only and lack any passenger amenities. Passengers have little space between themselves and moving traffic to wait comfortably, as the landscaped buffer found throughout the study corridor is often missing within this segment. There are no midblock crosswalks to serve bus stops in the center of this segment.

Exhibit 42: Views of Bus Stops between VT 127 Ramps and Institute Rd



Exhibit 43: Bus Stop Locations between VT 127 Ramps and Institute Rd





Signalized Intersections

The only traffic signal within this segment is located at the VT 127 ramps intersection, the busiest intersection within the study corridor. The VT 127 ramps intersection marks a transition from two to four travel lanes on North Avenue: the second southbound travel lane becomes a dedicated left-turn lane onto VT 127, while the westbound right-turn lane from VT 127 becomes the second northbound travel lane (note that this right-turn lane replaced the abandoned right-turn slip lane onto northbound North Avenue visible in Exhibit 45). A large right-turn slip lane from North Avenue onto VT 127 is located south of the intersection as well. Drivers must yield to pedestrians at this slip lane, but its design accommodates high-speed turns, the yield sign is small, and pedestrians and bicyclists do not feel safe here.

Only two approaches are marked with crosswalks, as shown in the plan view. Curb ramps are located at the ends of each crosswalk. All crosswalks at the intersection, with the exception of the right-turn slip lane, also include push-button-activated walk signals.

This intersection presently operates at LOS F in the morning peak and LOS A in the afternoon peak.

Exhibit 44: View of North Ave at VT 127 Ramps Intersection



PM Peak Traffic AM Peak Traffic 4 764 519 2 278 301 11 467 86 11 467 86 127 RAMPS " CD CD North Ave at /T 127 Ramps Existing Intersection Striping 20' 40' 0



Exhibit 45: North Ave at VT 127 Ramps Intersection

Shore Rd/Heineberg Rd to VT 127 Ramps

The longest and widest segment in the study corridor, Shore Rd to the VT 127 ramps has a curb-to-curb width ranging from 40 to 43 feet. This segment includes four travel lanes. As a result, travel lanes are relatively narrow, on-street parking is prohibited, and there are no bicycle facilities. This segment is notable for its many intersections, almost all unsignalized.

This segment is adjacent to the Ethan Allen Shopping Center, the streetlights. commercial center of the study corridor, and the high-density **Exhibit 46: Typical Cross Section between Shore Rd/Heineberg Rd and VT 127 Ramps**

residential development Thayer Commons. It provides access to a large portion of the study corridor's residential development, particularly via the intersection of Ethan Allen Parkway north of the VT 127 ramps. With traffic volumes totaling 13,700 to 19,100 per weekday, it is the busiest segment of the study corridor.

Sidewalks with landscaped buffer zones are found on both sides of North Avenue. Where present, these landscaped buffers house bus shelters, trees, fire hydrants, and utility poles that support streetlights.





Pedestrian Environment

Sidewalks are generally in fair condition with some cracking that may be problematic for disabled pedestrians. A portion of the sidewalk north of the VT 127 ramps intersection lacks a landscaped buffer, creating an uncomfortable environment by locating pedestrians directly adjacent to moving traffic. Water ponding was observed at curb cuts, driveway entrances, and at curb ramps throughout this segment. Crosswalks—often with faded striping—with curb ramps are present at signalized intersections, side streets, and major driveway crossings, though not at all locations. Crosswalks over North Avenue are located at the signalized intersections at the VT 127 ramps, Ethan Allen Parkway, Ethan Allen Shopping Center, and Shore Road/Heineberg Road (1,390 to 1,540 feet apart). Concrete sidewalks generally continue uninterrupted across most driveways, giving pedestrians priority at these conflict zones.

Exhibit 47: Crosswalks and Sidewalks between Shore Rd/Heineberg Rd and VT 127 Ramps



Exhibit 48: Pedestrian Environment between Shore Rd/Heineberg Rd and VT 127 Ramps



Bicycle Environment

There are no bicycle facilities between Shore Road/Heineberg Road and the VT 127 ramps. As a result, bicyclists prefer to ride on the sidewalk in this segment, though some bicyclists were observed in the travel lanes. Signage alerting drivers to share the road is present.

Exhibit 49: Bicyclists between Shore Rd/Heineberg Rd and VT 127 Ramps





Exhibit 50: Bicycle Environment between Shore Rd/Heineberg Rd and VT 127 Ramps



Transit Environment

Six northbound/southbound bus stop pairs are located within this segment, as shown in Exhibit 52. Shelters are located at two southbound stops (Thayer Commons and Ethan Allen Shopping Center) and one northbound stop (Ethan Allen Shopping Center). Shelters include a bench and are adjacent to a concrete pad that connects the sidewalk to the curb for easier boarding. All other stops are marked by signs only and lack passenger amenities. There are no midblock crosswalks on North Avenue to serve bus stops that are not located at signalized intersections.

Exhibit 51: Northbound Bus Stop at Ethan Allen Shopping Center



Exhibit 52: Bus Stop Locations between Shore Rd/Heineberg Rd and VT 127 Ramps





Signalized Intersections

Three traffic signals are located within this segment: Ethan Allen Parkway, Ethan Allen Shopping Center, and Shore Road/Heineberg Road.

The Ethan Allen Parkway intersection is difficult to negotiate as a result of its skewed geometry. The angle at which Ethan Allen Parkway intersects North Avenue allows for high-speed right turns from North Avenue, putting pedestrians at risk. The angle also results in a long crosswalk for pedestrians.

Only two approaches are marked with crosswalks, as shown in Exhibit 54. Curb ramps and push-button-activated walk signals accompany both crosswalks, but sidewalk condition and geometry are poor.

This intersection presently operates at LOS B during the morning peak and LOS A during the afternoon peak.

Exhibit 53: Views of North Ave at Ethan Allen Pkwy Intersection



Exhibit 54: North Ave at Ethan Allen Pkwy Intersection





There are no dedicated left turn lanes on North Avenue at the Ethan Allen Shopping Center intersection. While congestion is light to moderate, without dedicated left-turn lanes, turning vehicles block through traffic and adversely affect safety. The intersection is complicated by the extensive curb cuts at the Bamboo Hut restaurant in the north corner. Nearly the entire street frontage of this parking lot is a curb cut, allowing drivers to enter and exit almost anywhere. As a result, the sidewalk along Bamboo Hut is in need of repair and is subject to considerable water ponding during and after a rain storm.

Only two approaches are marked with crosswalks, as shown in Exhibit 56. The crosswalk over the shopping center entrance is painted solid red, while the North Avenue crosswalk features white continental stripes. Curb ramps and push-button-activated walk signals accompany both crosswalks. Crosswalk paint is considerably faded in spots.

This intersection presently operates at LOS A during the morning peak and LOS B during the afternoon peak.

Exhibit 55: Views of North Ave at Ethan Allen Shopping Center Intersection









The North Avenue and Shore Road/Heineberg Road intersection marks a transition between North Avenue's two- and four-lane cross sections. North Avenue's second northbound lane transitions to a dedicated left-turn movement to westbound Shore Road; North Avenue's second southbound lane is striped south of Shore Road with the removal of on-street parking. The left-most northbound lane can be a lane trap for unfamiliar drivers who expect to continue northbound, but find themselves in a left turn lane. Shore Road and Heineberg Road have a green light concurrently, which is problematic given the overlapping left turns and the skewed geometry.

Three approaches are marked with crosswalks, as shown in Exhibit 58, and all feature white continental striping patterns. Curb ramps and push-button-activated walk signals accompany these crosswalks. Crosswalk paint is considerably faded in spots.

This intersection presently operates at LOS B during the morning peak and LOS A during the afternoon peak.

Exhibit 57: Views of North Ave at Shore Rd/Heineberg Rd Intersection



Exhibit 58: North Ave at Shore Rd/Heineberg Rd Intersection





Plattsburg Ave to Shore Rd

Plattsburg Ave to Shore Rd is the northernmost segment within the study corridor and is notable for its many intersections, almost all unsignalized, and residential driveways. Its curb-to-curb width measures 40 feet, accommodating two travel lanes and on-street parking. Because abutting homes include off-street parking, on-street parking remains underutilized, giving the impression that travel lanes are significantly wider than intended—signage within this segment reminds drivers to "Keep Single Lane". It is often ambiguous where on-street parking is permitted due to restrictions near intersections.

Exhibit 59: Typical Cross Section between Plattsburg Ave and Shore Rd

There are no bicycle facilities within this segment. Sidewalks with landscaped buffer zones are found on both sides of North Avenue. Where present, these landscaped buffers house bus shelters, trees, fire hydrants, and utility poles that support streetlights.

Traffic volumes here are the lowest within the study corridor with 10,800 vehicles per weekday. Conversely, pedestrian activity is high because of the adjacent Lyman C. Hunt Middle School.





Pedestrian Environment

Lyman C. Hunt Middle School is a major generator of pedestrian traffic within this segment. Sidewalks are generally in fair condition with some cracking that may be problematic for disabled pedestrians. Crosswalks—some with faded striping—with curb ramps are present at signalized intersections, side streets, and major driveway crossings, though not all (e.g. at the fire station's large curb cut). However, like the rest of the corridor, curb ramps are outdated and prone to water ponding, and North Avenue crossings are limited.

North Avenue crosswalks are located at signalized intersections only (Shore Road/Heineberg Road, Woodbury Road, and Plattsburg Avenue), which are between 1,140 and 2,030 feet apart. Concrete sidewalks continue uninterrupted across residential and commercial driveways, giving pedestrians priority at these conflict zones.

Exhibit 60: Crosswalks and Sidewalks between Plattsburg Ave and Shore Rd





Exhibit 61: Pedestrian Environment between Plattsburg Ave and Shore Rd





Bicycle Environment

There are no bicycle facilities between Plattsburg Avenue and Shore Road/Heineberg Road. Bicyclists were observed riding on the sidewalks and in travel lanes within this segment.

Exhibit 62: Bicyclist North of the Shore Rd/Heineberg Rd Intersection



Exhibit 63: Bicycle Environment between Plattsburg Ave and Shore Rd



Transit Environment

Many northbound and southbound bus stops are located within this segment, as shown in Exhibit 65. Stops are aligned with cross streets and not necessarily in northbound/southbound pairs. There are no midblock crosswalks on North Avenue to serve bus stops that are not located near signalized intersections.

One shelter is located at the northbound stop between Fairmont Place and Franklin Square, just south of the Plattsburg Avenue intersection. The shelter includes a bench and is adjacent to a concrete pad that connects the sidewalk to the curb for easier boarding. The southbound stop at Plattsburg Avenue includes a concrete pad as well. All other stops are marked by signs only and lack passenger amenities. Grass within the landscaped buffer has disappeared at several stops within this segment, the result of frequent use by passengers entering and exiting the bus at these locations.

Exhibit 64: Views of Bus Stops between Plattsburg Ave and Shore Rd



Exhibit 65: Bus Stop Locations between Plattsburg Ave and Shore Rd





Signalized Intersections

Two traffic signals are located within this segment: Woodbury Road and Plattsburg Avenue.

The Woodbury Road intersection serves as the primary access point to Lyman C. Hunt Middle School, located 500 feet northeast of North Avenue. All approaches to this intersection are simple two-lane cross sections without dedicated left- or right-turn lanes. The 25 mph school zone on North Avenue extends from Heineberg Road to Staniford Road. School zone signage is static and does not incorporate flashing beacons during school hours. Woodbury Road is one-way (westbound) east of North Avenue, accommodating traffic exiting the school.

Three of the four approaches are marked with crosswalks, as shown in Exhibit 67, marked with red paint (over Woodbury Road) or white continental striping (over North Avenue and the school driveway). Many students were observed utilizing these crosswalks as they walked to and from Lyman C. Hunt Middle School. While each crosswalk also includes curb ramps, only the North Avenue crosswalk includes a push-button-activated walk signal.

This intersection presently operates at LOS A during the morning and afternoon peaks.

Exhibit 66: View of North Ave at Woodbury Rd Intersection



Exhibit 67: North Ave at Woodbury Rd Intersection





The Plattsburg Avenue intersection is located at the northern end of the study corridor. The angle at which Plattsburg Avenue intersects North Avenue allows for high-speed right turns from North Avenue, putting pedestrians at risk, particularly because there is no crosswalk or walk signal at Plattsburg Avenue. This intersection is complicated by Tracy Drive, a stop-controlled side-street located partially within the signalized intersection. Drivers exiting Tracy Drive must gauge which opposing movements have green signal indications and watch for acceptable gaps when pulling out into traffic, which is particularly difficult for left-turning vehicles.

The intersection provides a single crosswalk with white continental striping on North Avenue directly within the middle of the intersection. This crosswalk includes a push-button-activated walk signal as well as curb ramps of varying quality, one of which is a residential driveway's crumbling asphalt apron. Near the intersection to the south is a solid red crosswalk at Tracy Drive, which includes curb ramps but no walk signal (as this approach does not operate as part of the signal).

This intersection presently operates at LOS B during the morning and afternoon peaks.

Exhibit 68: Views of North Ave at Plattsburg Ave Intersection









Appendix C: Growth Summary of North Avenue Corridor

Growth Summary for North Avenue Corridor

Historical Population Estimates

The study area is generally covered by census tracts 1 and 2. Since 1990, the number of occupied households in CT1 and CT2 has increased by an average annual rate of 0.5 percent, with slower growth occurring during the second decade (2000-2010) than during the 1990's (Table 1). However, decreases in average household size (Table 2) have counteracted the increase in number of households, resulting in a very small net increase in population in the North Ave Study area since 1990 (Table 1), and a decrease relative to the population in 2000.

	Increase in Households	Avg. Annual Change
1990 to 2000	352	0.9%
2000 to 2010	57	0.1%
1990 to 2010	409	0.5%

Table 1: Occupied Housing Units ("Households")

Source: US Decennial Census, 1990, 2000, 2010

Table 2: Average Household Size

	Persons per Household		
1990	2.71		
2000	2.57		
2010	2.46		

Source: US Decennial Census, 1990, 2000, 2010

Table 3: Population

		Avg. Annual
	Change	Change
1990 to 2000	375	0.4%
2000 to 2010	-306	-0.3%
1990 to 2010	69	0.0%

Source: US Decennial Census, 1990, 2000, 2010

Historic Traffic Volumes

Traffic volumes on North Avenue have remained fairly steady in the north since 1990 (Figure 1), while increasing at an average annual rate of 0.9 percent to the south (Figure 2). Closer inspection of the available count data in Figure 2 that traffic volumes here too have been relatively steady, with a jump occurring between 2001 and 2003, perhaps attributable to development activity at that time.







Traffic on Plattsburg Avenue, which connects the northern portions of North Avenue to VT 127, has steadily decreased over time at an average rate of 1.7 percent annually. It should be noted that this trend is derived from fewer counts than other locations, meaning that there is more uncertainty in its accuracy, particularly over a longer timeframe.

Traffic feeding the corridor from VT 127 increased slightly between 1993 and 2005 at an average rate of 0.3 percent annually. However, a 2007 traffic count was sharply lower. It is unknown whether this single count reflects a true change in demand or was something of an anomaly. If all counts are accounted for, then the resulting trend is an average annual decrease of 0.9 percent, which is strongly influenced by the lower 2007 count.







CCRPC Household and Jobs Projections.

The CCRPC travel demand model assumes that the rate of growth in occupied housing units will continue at a rate comparable to the historic average since 1990. By 2035, an addition 935 units are

expected in TAZs near the study area (Note: these TAZs cover slightly different areas than the census tracts described previously). The areas with the most growth allocated are TAZs 3 and 5 along the northern portions of the corridor, and TAZ 7 near the Ethan Allan Shopping Center. Growth is also forecast for TAZs 6, 9 and 11, which correspond to the Old North End. Very little growth is expected to the far north (TAZs 1 and 2)

No change in commercial activity (measured by jobs) is forecast for TAZs bordering the corridor (Table 5). Only TAZ 6 is forecast to experience commercial growth, and these trips would access the street network at Intervale Road (leading to Riverside Avenue).



Source: CCRPC Travel Model (2013) Figure 5: Projected Household Growth by TAZ

Table 4: Projected Households by TAZ

				Average Annual
TAZ	2010	2035	Increase	Growth Rate
1	270	286	16	0.2%
2	682	731	49	0.3%
3	1264	1457	193	0.6%
4	203	263	60	1.0%
5	1145	1370	225	0.7%
6	387	474	87	0.8%
7	409	551	142	1.2%
8	100	131	31	1.1%
9	520	573	53	0.4%
11	495	574	79	0.6%
Total	5475	6410	935	0.6%

Source: CCRPC Travel Model (2013)

				Average Annual
TAZ	2010	2035	Increase	Growth Rate
1	25	25	0	0.0%
2	275	275	0	0.0%
3	319	319	0	0.0%
4	14	14	0	0.0%
5	443	443	0	0.0%
6	551	859	308*	1.8%
7	688	688	0	0.0%
8	307	307	0	0.0%
9	62	63	1	0.1%
11	222	222	0	0.0%
Total	2906	3215	309	0.4%

Table 5: Projected Employment by TAZ

Note: * Trips generated by this new commercial development in TAZ 6 are external to the North Ave Corridor Source: CCRPC Travel Model (2013)

Other Future Growth Considerations

Institutional uses along the corridor, including the new Burlington College campus, Burlington High School, and other schools could influence traffic volumes in the future.

Recommendations

Households are expected to continue increasing at comparable rates to historic trends in the study area. Little (if any) additional commercial development is forecast, though institutional expansion is an unknown. In the absence of more specific information, it is reasonable to assume higher growth rates in the southern portion of the corridor given the potential for development at Burlington College and the historically higher growth rates in this portion of the corridor. The study therefore developed a 2035 traffic scenario that increased volumes relative to existing levels as follows:

- Plattsburgh Avenue: 5 percent increase through 2035 (equivalent to approximately 0.2 percent annually).
- North Avenue:
 - o 5 percent increase north of Shore Road (equivalent to approximately 0.2 percent annually);
 - o 10 percent increase between Shore Road and VT 127 (0.4 percent annually);
 - o 15 percent between VT 127 and North St (0.6 percent annually).
- VT 127: 5 percent increase (0.2 percent annually).

Resulting raw volumes will be post-processed to balance movements, resulting in some minor variation in the stated growth rates presented above.
Appendix D: Evaluation Matrix

Worksheet	Description
Explanation of Criteria	This worksheet describes the criteria used the evaluate Cross Sections and Intersections, which are rated separately. Each criterion is
	This worksheet also includes a description of the scoring (1 to 5 point scale) used to translate the qualitative evaluation in the Compa
	worksheets into comparable quantitive results shown in the Scores worksheets.
Cross Section Comparison	This worksheet compares the six cross section concepts (A through F) to existing conditions using a variety of criteria defined in the E
·	Criteria worksheet. Most of these criteria are qualitative, but some are quantitative.
Cross Section Scores	This worksheet mirrors the Cross Section Comparison worksheet, but translates the cross section comparisons into a 1 to 5 scoring s
	quick comparison amongst concepts. The scoring system is defined in the Explanation of Criteria worksheet.
Intersection Comparison	This worksheet compares the generalized intersection alternatives to existing conditions using a variety of criteria defined in the Expl
·	Criteria worksheet. Most of these criteria are qualitative, but some are quantitative.
Intersection Scores	This worksheet mirrors the Intersection Comparison worksheet, but translates the intersection comparisons into a 1 to 5 scoring system
	comparison amongst concepts. The scoring system is defined in the Explanation of Criteria worksheet.
Corridor LTS Overall	This worksheet organizes the Level of Traffic Stress (LTS) results for all cross section concepts. Because the LTS evaluation is based on
	approach, all 5 segments (i.e. Plattsburg to Shore, Shore to VT 127, VT 127 to Institute, Institute to Washington, and Washington to N
	be compared for each overall cross section concept (A through F) to determine the overall LTS score.
NACTO, BCSG Compliance	This final worksheet compares each cross section concept to minimum recommended dimensions for cycling facilities and tree zone (
<i>,</i> , , , , , , , , , , , , , , , , , ,	strip) per the NACTO Urban Bikeway Design Guide and the Burlington Complete Streets Guidelines, respectively. This worksheet iden
	the cross section alternatives are not meeting minimum recommended dimensions for all segments within each cross section concep

is described. **arison**

Explanation of

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Please read this before proceeding to the comparison and score worksheets!

pedestrian environment not covered in the acessibility category.

The following information explains the ratings criteria used to compare cross section and intersection concepts to baseline existing conditions. Ratings Explanation 1 Point = Much Worse than Existing Each criterion is rated against the existing conditions on a relative scale. Each rating corresponds to a number (higher is better), which is useful to 2 Points = Worse than Existing assign overall ratings for cross section and intersection concepts. 3 points = Same as Existing 4 points = Better than Existing 5 points = Much Better than Existing Explanation Corridor Criteria Burlington Complete Street Design Guidelines How many of the complete streets design guidelines do the proposed corridor designs incorporate or support compared to existing conditions (ones that would vary or are diagnostic between options)? Consistency Level of Traffic Stress How much better or worse are cycling conditions compared to existing conditions? Bike Conflicts with Turning Vehicles To what degree to bicycles conflict with left- and right-turning vehicles at signalized intersections compared to existing? (Signalized Intersctions) Bike Conflicts with Turning Vehicles To what degree to bicycles conflict with left- and right-turning vehicles at unsignalized intersections and driveways compared to existing? (Unsignalized Intersections/Driveways) Bike Conflicts with Buses To what degree to buses and bicycles conflict compared to existing conditions? *Opportunities to Improve Accessibility* How much better or worse is accessibility compared to existing conditions? Examples include ADA compliant sidewalks/ramps/crossings, sufficient crossing time for elderly and persons with disabilities, audible pedestrian signals, pedestrian countdown signals, and leading pedestrian/bicycle intervals. Vehicle Speed Reduction Treatments To what degree are speed reducing treatments incorporated into the design compared to existing conditions? Examples include lane width reduction, 10'-15' turn radii, striped parking, midblock crossings with neckdowns or pedestrian islands, curb extensions with parking, gateway treatments, checkered parking scheme/chicanes. Bus Stop and Crosswalk Pairing To what degree are bus stops paired with crosswalks compared to the existing conditions? To what degree are bus bulbs and bus stop amenities feasible in the design compared to existing conditions? **Opportunities for Bus Bulbs and Bus Stop** Amenities Access to Major Destinations for Cyclists Because crossing traffic on a bicycle is a barrier for potential cyclists, to what degree are bicycle turning movements made safer or minimized compared to the existing conditions? New Right-of-Way Needs Do corridors require additional right-of-way? Planting Strip Impacts Would corridor designs impact planting strip compared to existing conditions? Impacts include reduction in width, removal/relocation of utility poles, lights, trees. Snow Plowing and Storage (Maintainability) Would snow storage and removal be easier or more difficult compared to existing conditions? Drainage (Maintainability) To what degree can observed drainage issues be resolved? **Intersection Criteria** Explanation How much better or worse is LOS compared to existing conditions? Level of Service (LOS) Average Queue Length How much better or worse are averagequeue lengths compared to existing conditions? Queue lengths are reported in terms of number of vehicles, assuming 20' for the typical vehicle. Pedestrian Experience How much better or worse is the pedestrian experience compared to existing conditions? Pedestrian experience includes crossing distances and opportunities, impact of vehicular traffic on safety, size of intersection footprint, etc. Anything that may negatively or positively impact the

			Burlington Complete Street													
			Consistency			Improves Saf	ety for All Users			Im	proves Multimodal Connec	tivity	Right-of	-Way Impacts	Mainta	inability
Timeline	Cross Section Conce	Segment 2 ts Configuratio	# of Design n Guidelines Met	Level of Traffic Stress Rating (Bicycle)	Bike Conflicts with Turning Vehicles (Signalized Intersctions) Paceline Ne ovicting bike	Bike Conflicts with Turning Vehicles (Unsignalized Intersections/Driveways) Baseling Conflicts at all	Bike Conflicts with Buses	Opportunities to Improve Accessibility Paceline, 5' wide	Vehicle Speed Reduction Treatments Paceling No expecting	Bus Stop and Crosswalk Pairing	Opportunities for Bus Bulbs and Bus Stop Amenities	Access to Major Destinations for Cyclists Paceline, Almost all	New ROW Needs	Planting Strip Impacts	Snow Plowing and Storage	Drainage Paceling, Water pending
(< 3 Years)	EX conditio	4 Lanes	14	4	lanes continue through intersections. As a result, cyclists conflict with turning and through traffic at all intersections. In addition, left-turning drivers' visibility limited in 4-lane Segment 2.	driveways and unsignalized intersections.	bike lanes, where they exist. Cyclists and buses "leapfrog" one another.	sidewalks of varying quality, curb ramps of varying quality, few opportunities to cross.	treatments	paired with crosswalks	few shelters.	destinations on west side of street (Island Line Trail connection, Burlington College, Cemetery, High School, Christian School, Shopping Center, Beaches, St. Mark's, Flynn Elementary, Merola's). NB cyclists must cross traffic to access these destinations.	Dasenne	disappears between Institute Rd and VT 127, immediately north of VT 127, and in front of St. Mark's Church. When present, It is of varying width, between a few feet wide to up to 10' wide.	block bike lanes and push parked vehicles into adjacent travel lane. Existing planting strip, when present, provides 2' minimum required storange space.	baseline. water politing issues observed along bike lanes and at many sidewalk curb ramps.
Short Term (< 3 Years)	A Bike Lan within Existing Curbs	s 4 Lanes	19.5	4	Same as baseline. While striped bike lanes (when present) will continue through intersections for some separation, 4-lane Segment 2 and SB Segment 5 do not have bike lanes. In addition, bike boxes/two- stage bike turn boxes not implemented in short term. Left-turning drivers' visibility limited in 4-lane Segment 2.	Same as baseline. While drivers' visibility of cyclists is improved in segments with parking (as parking would be limited to one side only), left-turning drivers' visibility still limited in 4-lane Segment 2. Also no Segment 5 SB lane.	Same as baseline.	Improvement over baseline. ADA ramps, pedestrian countdown timers, audible signals, leading pedestrian intervals, and more opportunities to cross. Shorter crossing distances at some locations, but not on 4- lane cross section. Four lanes also precludes additional unsignalized crossings in Segment 2.	Improvement over baseline. Narrowed vehicle lanes, striped parking, new pedestrian crossings and potential mid-block pedestrian refuge islands will help in most of the corrodiro. However, 30-mph 4-lane section remains, providing opportunities for aggressive driving in that segment.	Significant improvement over baseline. New crosswalks proposed at bus stops throughout corridor.	Improvement over baseline. With parking on one side only for much of the corridor, opportunity for bus bulbs is limited to one side of the street. Sum of planting zone and sidewalk wide enough throughout corridor for shelters and other bus amenities.	Same as baseline.	Same as baseline. All cross section improvements anticipated to fit within 66' ROW.	Same as baseline.	Same as baseline.	Same as baseline.
Medium Term (< 7 Years)	A Bike Lan within Existing Curbs	s 3 Lanes	27	2	Improvement over baseline. Striped bike lanes (missing in SB Segment 5) will continue through intersection. Bike boxes and two-stage bike turn boxes implemented where applicable. Left-turning drivers' visibility improved with conversion to 3-lane Segment 2.	Improvement over baseline. Drivers' visibility of cyclists is improved because of 4-to-3-lane conversion in Segment 2 and parking (where present) is limited to one side. Cyclists have dedicated lanes on Segment 2 from the 3-lane conversion. Still no Segment 5 SB lane.	Same as baseline.	Significant improvement over baseline. ADA ramps, pedestrian countdown timers, audible signals, leading pedestrian intervals, shorter crossing distances, and more opportunities to cross. Opportunity for spot sidewalk reconstruction.	Significant improvement over baseline. Narrowed vehicle lanes, striped parking, curb extensions, new pedestrian crossings and potential mid-block pedestrian refuge islands. 25 mph speed limit. Turning radii at intersection narrowed where needed.	Significant improvement over baseline. New crosswalks proposed at bus stops throughout corridor.	Improvement over baseline. With parking on one side only for much of the corridor, opportunity for bus bulbs is limited to one side of the street. Sum of planting zone and sidewalk wide enough throughout corridor for shelters and other bus amenities.	Improvement over baseline. Bike boxes and two-stage bike turn boxes provided.	Same as baseline. All cross section improvements anticipated to fit within 66' ROW.	Same as baseline.	Same as baseline.	Same as baseline.
Long Term (>10 Years)	B ^{5' Minin} Bike Lak	um 3 Lanes s	30	2	Improvement over baseline. Striped bike lanes on all segments will continue through intersection. Bike boxes and two-stage bike turn boxes implemented where applicable. Left-turning drivers' visibility improved with conversion to 3-lane Segment 2.	Improvement over baseline. Drivers' visibility of cyclists is improved because of 4-to-3-lane conversion in Segment 2 and parking (where present) is limited to one side. Cyclists have dedicated lanes all segments.	Same as baseline.	Significant improvement over baseline. ADA ramps, pedestrian countdown timers, audible signals, leading pedestrian intervals, shorter crossing distances, and more opportunities to cross. Opportunity for full sidewalk reconstruction.	Significant improvement over baseline. Narrowed vehicle lanes, striped parking, curb extensions, new pedestrian crossings and potential mid-block pedestrian refuge islands. 25 mph speed limit. Turning radii at intersection narrowed where needed.	Significant improvement over baseline. New crosswalks proposed at bus stops throughout corridor.	Improvement over baseline. With parking on one side only for much of the corridor, opportunity for bus bulbs is limited to one side of the street. Sum of planting zone and sidewalk wide enough throughout corridor for shelters and other bus amenities.	Improvement over baseline. Bike boxes and two-stage bike turn boxes provided.	Same as baseline. All cross section improvements anticipated to fit within 66' ROW.	Worse than baseline. Planting strip reduced in segment 2 and 5, but would add planting strip north of Institute Rd alongside rock face.	Same as baseline.	Improvement over baseline. Reconstruction can address on-street ponding issues. Unsignalized side street crosswalks can be raised to sidewalk level to eliminate ponding at those crossings because there would be no need for ramps.

			Burlington													
			Design Guidelines													
			Consistency			Improves Sa	fety for All Users			Im	proves Multimodal Conne	ctivity	Right-of	-Way Impacts	Maint	ainability
Timeline	Cross Section Concepts	Segment 2 Configuration	# of Design Guidelines Met	Level of Traffic Stress Rating (Bicycle)	Bike Conflicts with Turning Vehicles (Signalized Intersctions)	Bike Conflicts with Turning Vehicles (Unsignalized Intersections/Driveways)	Bike Conflicts with Buses	Opportunities to Improve Accessibility	Vehicle Speed Reduction Treatments	1 Bus Stop and Crosswalk Pairing	Opportunities for Bus Bulbs and Bus Stop Amenities	Access to Major Destinations for Cyclists	New ROW Needs	Planting Strip Impacts	Snow Plowing and Storage	Drainage
Long Term (>10 Years)	B ^{5' Minimum} Bike Lakes	4 Lanes	27.5	3	Same as baseline. Striped bike lanes on all segments will continue through intersection. Bike boxes and two-stage bike turn boxes implemented where applicable. However, left- turning drivers' visibility limited in 4-lane Segment 2.	Same as baseline. While bike lanes present on all segments and drivers' visibility of cyclists is improved in segments with parking (as parking would be limited to one side only), left-turning drivers' visibility still limited in 4- lane Segment 2.	Same as baseline.	Improvement over baseline. ADA ramps, pedestrian countdown timers, audible signals, leading pedestrian intervals, and more opportunities to cross. Shorter crossing distances at some locations, but not on 4- lane cross section. Four lanes also precludes additional unsignalized crossings in Segment 2.	Improvement over baseline. Narrowed vehicle lanes, striped parking, new pedestrian crossings and potential mid-block pedestrian refuge islands will help in most of the corrodiro. However, 30-mph 4-lane section remains, providing opportunities for aggressive driving in that segment.	Significant improvement over baseline. New crosswalks proposed at bus stops throughout corridor.	Worse than baseline. With parking on one side only for much of the corridor, opportunity for bus bulbs is limited to one side of the street. Sum of planting zone and sidewalk wide enough throughout corridor for shelters and other bus amenities except for Segment 2 where the planting zone is eliminated.	Improvement over e baseline. Bike boxes and two-stage bike turn boxes provided.	Same as baseline. All cross section improvements anticipated to fit within 66' ROW.	Significantly worse than baseline. Plantng strip eliminated in segment 2 and reduced in segment 5, but would add planting strip north of Institute Rd alongside rock face.	Worse than baseline. Four lane Segment 2 eliminates much of the planting strip, reducing area for snow storage.	Improvement over baseline. Reconstruction can address on-street ponding issues. Unsignalized side street crosswalks can be raised to sidewalk level to eliminate ponding at those crossings because there would be no need for ramps.
Long Term (>10 Years)	C Buffered Bike Lanes	3 Lanes	30	1	Improvement over baseline. Striped bike laness on all segments will continue through intersection. Bike boxes and two-stage bike turn boxes implemented where applicable. Left-turning drivers' visibility improved with conversion to 3-lane Segment 2.	Improvement over baseline. Drivers' visibility of cyclists is improved because of 4-to-3-lane conversion in Segment 2 and parking (where present) is limited to one side. Cyclists have dedicated lanes all segments.	Same as baseline.	Significant improvement over baseline. ADA ramps, pedestrian countdown timers, audible signals, leading pedestrian intervals, shorter crossing distances, and more opportunities to cross. Opportunity for full sidewalk reconstruction.	Significant improvement over baseline. Narrowed vehicle lanes, striped parking, new pedestrian crossings and potential mid-block pedestrian refuge islands. 25 mph speed limit. Turning radii at intersection narrowed where needed.	Significant improvement over baseline. New crosswalks proposed at bus stops throughout corridor.	Improvement over baseline. With parking or one side only for much o the corridor, opportunity for bus bulbs is limited to one side of the street. Planting zone wide enough throughout corridor for shelters and other bus amenities.	Improvement over n baseline. Bike boxes and f two-stage bike turn y boxes provided.	Same as baseline. All cross section improvements anticipated to fit within 66' ROW.	Worse than baseline. Planting strip reduced in all but segment 4, but would add planting strip north of Institute Rd alongside rock face.	Same as baseline.	Improvement over baseline. Reconstruction can address on-street ponding issues. Unsignalized side street crosswalks can be raised to sidewalk level to eliminate ponding at those crossings because there would be no need for ramps.
Long Term (>10 Years)	C Buffered Bike Lanes	4 Lanes	27	3	Same as baseline. Striped bike lanes on all segments will continue through intersection. Bike boxes and two-stage bike turn boxes implemented where applicable. However, left- turning drivers' visibility limited in 4-lane Segment 2.	Same as baseline. While bike lanes present on all segments and drivers' visibility of cyclists is improved in segments with parking (as parking would be limited to one side only), left-turning drivers' visibility still limited in 4- lane Segment 2.	Same as baseline.	Improvement over baseline. ADA ramps, pedestrian countdown timers, audible signals, leading pedestrian intervals, and more opportunities to cross. Shorter crossing distances at some locations, but not on 4- lane cross section. Four lanes also precludes additional unsignalized crossings in Segment 2.	Improvement over baseline. Narrowed vehicle lanes, striped parking, new pedestrian crossings and potential mid-block pedestrian refuge islands will help in most of the corrodiro. However, 30-mph 4-lane section remains, providing opportunities for aggressive driving in that segment.	Significant improvement over baseline. New crosswalks proposed at bus stops throughout corridor.	Worse than baseline. With parking on one side only for much of the corridor, opportunity for bus bulbs is limited to one side of the street. Sum of planting zone and sidewalk wide enough throughout corridor for shelters and other bus amenities except for Segment 2 where the planting zone is eliminated.	Improvement over baseline. Bike boxes and two-stage bike turn boxes provided.	Same as baseline. All cross section improvements anticipated to fit within 66' ROW.	Significantly worse than baseline. Plantng strip eliminated in segment 2 and reduced in all but segment 4, but would add planting strip north of Institute Rd alongside rock face.	Significantly worse than baseline. Four lane Segment 2 eliminates the planting strip, reducing area for snow storage.	Improvement over baseline. Reconstruction can address on-street ponding issues. Unsignalized side street crosswalks can be raised to sidewalk level to eliminate ponding at those crossings because there would be no need for ramps.
Long Term (>10 Years)	D On-Street One-Way Cycle Tracks	3 Lanes	30	1	Significant Improvement over baseline. Striped bike lanes will continue through all intersections. Bike boxes unncessary. Two-stage bike turn boxes implemented at all signals. Left-turning drivers' visibility improved with conversion to 3-lane Segment 2. Cycle tracks provide opportunity for temporal separation at signals.	Improvement over baseline. While consolidating parking 6 (where present) to one 9 side significantly improves visibility on that side, parking setbacks required to daylight driveways for visibility of cyclists behind parked cars. Left-turning drivers' visibility improved in Segment 2 by 4-to-3 conversion.	Significant improvement over baseline. Conflict is avoided with buses because of separation. Cycle tracks would be located behind bus bulbs, so passengers can enter/exit buses safely. Passengers must cross cycle track to sidewalk.	Significant improvement over baseline. ADA ramps, pedestrian countdown timers, audible signals, leading pedestrian intervals, shorter crossing distances, and more opportunities to cross. Opportunity for full sidewalk reconstruction.	Significant improvement over baseline. Narrowed vehicle lanes, striped parking, new pedestrian crossings and potential mid-block pedestrian refuge islands. 25 mph speed limit. Turning radii at intersection narrowed where needed.	Significant improvement over baseline. New crosswalks proposed at bus stops throughout corridor.	Improvement over baseline. With parking or one side only for much o the corridor, opportunity for bus bulbs is limited to one side of the street. Planting zone wide enough throughout corridor for shelters and other bus amenities.	Improvement over h baseline. Two-stage bike f turn boxes or protected / turning areas provided. D	Same as baseline. All cross section improvements anticipated to fit within 66' ROW.	Worse than baseline. Planting strip reduced in all segments, but would add planting strip north of Institute Rd alongside rock face.	Improvement over baseline. Planting strips maintained and can accommodate snow storage. Existing sidewall plow program can be extended to plow on- street cycle tracks.	Improvement over baseline. Reconstruction can address on-street ponding issues. Unsignalized side street crosswalks can be raised to sidewalk level to eliminate ponding at those crossings because there would be no need for ramps.

				Burlington Complete Street Design Guidelines													
				Consistency			Improves Sa	fety for All Users			Imj	proves Multimodal Connec	tivity	Right-of	f-Way Impacts	Mainta	inability
Timeline	Cross Se	ction Concepts	Segment 2 Configuration	# of Design Guidelines Met	Level of Traffic Stress Rating (Bicycle)	Bike Conflicts with Turning Vehicles (Signalized Intersctions)	Bike Conflicts with Turning Vehicles (Unsignalized Intersections/Driveways)	g Bike Conflicts with Buses	Opportunities to Improve Accessibility	Vehicle Speed Reduction Treatments	Bus Stop and Crosswalk Pairing	Opportunities for Bus Bulbs and Bus Stop Amenities	Access to Major Destinations for Cyclists	New ROW Needs	Planting Strip Impacts	Snow Plowing and Storage	Drainage
Long Term (>10 Years)	D	On-Street One-Way Cycle Tracks	4 Lanes	27.5	1	Improvement over baseline. Striped bike lanes will continue through all intersections. Bike boxes unnecessary. Two-stage bike turn boxes implemented at all signals. Left-turning drivers' visibility still limited in 4- lane Segment 2, but cycle tracks provide opportunity for temporal separation at signals.	Same as baseline. While consolidating parking (where present) to one side significantly improves visibility on that side, parking setbacks required to daylight driveways for visibility of cyclists behind parked cars. Also, left- turning drivers' visibility still limited in 4-lane Segment 2.	Improvement over baseline. Conflict is avoided with buses because of separation. However, no room for cycle tracks to be located behind bus bulbs in the 4- lane segment. Cycle tracks must rise to curb level and become part of the boarding area for the bus in this segment, meaning cyclists would yield to buses to safely allow passengers to enter or exit. In a sense, "leapfrogging" would still exist.	Improvement over baseline. ADA ramps, pedestrian countdown timers, audible signals, leading pedestrian intervals, and more opportunities to cross. Shorter crossing distances at some locations, but not on 4- lane cross section. Four lanes also precludes additional unsignalized crossings in Segment 2.	Improvement over baseline. Narrowed vehicle lanes, striped parking, new pedestrian crossings and potential mid-block pedestrian refuge islands will help in most of the corrodiro. However, 30-mph 4-lane section remains, providing opportunities for aggressive driving in that segment.	Significant improvement over baseline. New crosswalks proposed at bus stops throughout corridor.	Worse than baseline. With parking on one side only for much of the corridor, opportunity for bus bulbs is limited to one side of the street. Sum of planting zone and sidewalk wide enough throughout corridor for shelters and other bus amenities except for Segment 2 where the planting zone is eliminated.	Improvement over baseline. Two-stage bike turn boxes or protected turning areas provided.	Same as baseline. All cross section improvements anticipated to fit within 66' ROW.	Significantly worse than baseline. Plantng strip eliminated in segment 2 and reduced in all other segments, but would add planting strip north of Institute Rd alongside rock face.	Worse than baseline. Four lane Segment 2 eliminates the planting strip, reducing area for snow storage, but small cycle track buffer may be able to hold some snow. Existing sidewalk plow program can be extended to plow on-street cycle tracks.	Improvement over baseline. Reconstruction can address on-street ponding issues. Unsignalized side street crosswalks can be raised to sidewalk level to eliminate ponding at those crossings because there would be no need for ramps.
Long Term (>10 Years)	E	Raised One- Way Cycle Tracks	3 Lanes	30	1	Significant Improvement over baseline. Striped bike lanes will continue through all intersections. Bike boxes unncessary. Two-stage bike turn boxes implemented at all signals. Left-turning drivers' visibility improved with conversion to 3-lane Segment 2. Cycle tracks provide opportunity for temporal separation at signals.	Significant improvement over baseline. While consolidating parking (where present) to one side significantly improves visibility on that side, parking setbacks required to daylight driveways for visibility of cyclists behind parked cars. Raised cycle tracks will help increase visibility behind parked cars, and will cross driveways and unsignalized side streets at curb level. Left-turning drivers' visibility improved in Segment 2 by 4-to-3 conversion.	Significant improvement over baseline. Conflict is avoided with buses because of separation. Cycle tracks would be located behind bus bulbs, so passengers can enter/exit buses safely. Passengers must cross cycle track to sidewalk.	Significant improvement over baseline. ADA ramps, pedestrian countdown timers, audible signals, leading pedestrian intervals, shorter crossing distances, and more opportunities to cross. Opportunity for full sidewalk reconstruction.	Significant improvement over baseline. Narrowed vehicle lanes, striped parking, new pedestrian crossings and potential mid-block pedestrian refuge islands. 25 mph speed limit. Turning radii at intersection narrowed where needed.	Significant improvement over baseline. New crosswalks proposed at bus stops throughout corridor.	Improvement over baseline. With parking on one side only for much of the corridor, opportunity for bus bulbs is limited to one side of the street. Planting zone wide enough throughout corridor for shelters and other bus amenities.	Improvement over baseline. Two-stage bike turn boxes or protected turning areas provided.	Same as baseline. All cross section improvements anticipated to fit within 66' ROW.	Worse than baseline. Planting strip reduced in all segments, but would add planting strip north of Institute Rd alongside rock face.	Improvement over baseline. Planting strips maintained and can accommodate snow storage. Existing sidewalk plow program can be extended to plow raised cycle tracks adjacent to sidewalk.	Significant improvement over baseline. Reconstruction can address on-street ponding issues. Unsignalized side street crosswalks can be raised to sidewalk level to eliminate ponding at those crossings because there would be no need for ramps. With cycle tracks at sidewalk leve, cyclists benefit as well.
Long Term (>10 Years)	E	Raised One- Way Cycle Tracks	4 Lanes	27	1	Improvement over baseline. Striped bike lanes will continue through all intersections. Bike boxes unnecessary. Two-stage bike turn boxes implemented at all signals. Left-turning drivers' visibility still limited in 4- lane Segment 2, but cycle tracks provide opportunity for temporal separation at signals.	Improvement over baseline. While consolidating parking (where present) to one side significantly improves visibility on that side, parking setbacks required to daylight driveways for visibility of cyclists behind parked cars. Raised cycle tracks will help increase visibility behind parked cars, and will cross driveways and unsignalized side streets at curb level. Left-turning drivers' visibility still limited in 4- lane Segment 2.	Improvement over baseline. Conflict is avoided with buses because of separation. However, no room for cycle tracks to be located behind bus bulbs in the 4- lane segment. Cycle tracks must become part of the boarding area for the bus in this segment, meaning cyclists would yield to buses to safely a llow passengers to enter or exit. In a sense, "leapfrogging" would still exist.	Improvement over baseline. ADA ramps, pedestrian countdown timers, audible signals, leading pedestrian intervals, and more opportunities to cross. Shorter crossing distances at some locations, but not on 4- lane cross section. Four lanes also precludes additional unsignalized crossings in Segment 2.	Improvement over baseline. Narrowed vehicle lanes, striped parking, new pedestrian crossings and potential mid-block pedestrian refuge islands will help in most of the corrodiro. However, 30-mph 4-lane section remains, providing opportunities for aggressive driving in that segment.	Significant improvement over baseline. New crosswalks proposed at bus stops throughout corridor.	Worse than baseline. With parking on one side only for much of the corridor, opportunity for bus bulbs is limited to one side of the street. Sum of planting zone and sidewalk wide enough throughout corridor for shelters and other bus amenities except for Segment 2 where the planting zone is eliminated.	Improvement over baseline. Two-stage bike turn boxes or protected turning areas provided.	Same as baseline. All cross section improvements anticipated to fit within 66' ROW.	Significantly worse than baseline. Plantng strip eliminated in segment 2 and reduced in all other segments, but would add planting strip north of Institute Rd alongside rock face.	Significantly worse than baseline. Four lane Segment 2 eliminates the planting strip, reducing area for snow storage. Existing sidewalk plow program can be extended to plow raised cycle tracks.	Significant improvement over baseline. Reconstruction can address on-street ponding issues. Unsignalized side street crosswalks can be raised to sidewalk level to eliminate ponding at those crossings because there would be no need for ramps. With cycle tracks at sidewalk leve, cyclists benefit as well.

				Burlington Complete Street													
				Design Guidelines Consistency			Improves Sa	fety for All Users			Im	oroves Multimodal Conne	ctivity	Right-o	-Way Impacts	Maint	ainability
			Sogmont 2	# of Docign	Level of Traffic	Bike Conflicts with Turning	Bike Conflicts with Turning		Opportunities to	Vahisla Speed Poduction	Bus Ston and Crosswalk	Opportunities for Bus	Access to Major			Show Blowing and	
Timeline	Cross See	ction Concepts	Configuration	Guidelines Met	(Bicycle)		Intersections/Driveways)	Bike Conflicts with Buse	s Improve Accessibility	Treatments	Pairing	Amenities	Destinations for Cyclists	New ROW Needs	Planting Strip Impacts	Storage	Drainage
Imeline Long Term (>10 Years)	F1	Rasied Two- Way Cycle Track (SB Side)	Configuration 3 Lanes	Guidelines Met 30.5	(Bicycle) 1	Significant Improvement over baseline. Striped bike lanes will continue through all intersections. Bike boxes unncessary. Two-stage bike turn boxes implemented at all signals. Left-turning drivers' visibility improved with conversion to 3-lane Segment 2. Temporal separation required at signals. Majority of conflict eliminated (North St, VT- 127, Ethan Allen Pkwy, Plattsburg Ave) because on SB side of street, but drivers would have to adapt to expecting two- way bicycle traffic on one side of street.	Intersections/Driveways) Significant improvement over baseline. Number of conflicts approximately halved as the cycle track is located on the SB side and visibility is improved because parking will be on the NB side of the street. Raised cycle track will help increase visibility of cyclists for drivers exiting driveways and side streets, and will cross driveways and unsignalized side streets at curb level. However, drivers would need to become accustomed to NB cyclists on the SB side of the street. Left-turning drivers' visibility improved in Segment 2 by 4-to-3 conversion.	Bike Conflicts with Buse Significant improvement over baseline. Conflict is avoided with buses because of separation. Cycle tracks would be located behind bus bulbs so passengers can enter/exit buses safely. Passengers must cross cycle track to sidewalk.	Significant improve Accessibility Significant improvement over baseline. ADA ramps, pedestrian countdown timers, audible signals, leading pedestrian intervals, shorter crossing distances, and more opportunities to cross. Opportunity for full sidewalk reconstruction.	Ireatments Significant improvement over baseline. Narrowed vehicle lanes, striped parking, new pedestrian crossings and potential mid-block pedestrian refuge islands. 25 mph speed limit. Turning radii at intersection narrowed where needed.	Pairing Significant improvement over baseline. New crosswalks proposed at bus stops throughout corridor.	Amenities Improvement over baseline. With parking or one side only for much of the corridor, opportunity for bus bulbs is limited to one side of the street. Planting zone wide enough throughout corridor for shelters and other bus amenities.	Destinations for Cyclists Significant improvement over baseline.Cycle track focated along SB side of street, eliminating need to cross traffic for most corridor destinations (except at the middle school, Ethan Allen Park, and VT 127 path). Two- stage bike turn boxes or protected turning areas provided.	New ROW Needs Same as baseline. All cross section improvements anticipated to fit within 66' ROW.	Planting Strip Impacts Worse than baseline. Planting strip reduced in all segments, but would add planting strip north of Institute Rd alongside rock face.	Storage Improvement over baseline. Planting strips maintained and can accommodate snow storage. Existing sidewalk plow program can be extended to plow raised cycle tracks adjacent to sidewalk.	Significant improvement over baseline. Reconstruction can address on-street unsignalized side street crosswalks can be raised to sidewalk level to eliminate ponding at those crossings because there would be no need for ramps. With cycle tracks at sidewalk leve, cyclists benefit as well.
Long Term (>10 Years)	F2	On-Street Two-Way Cycle Track (SB Side)	3 lanes	30.5	1	Significant Improvement over baseline. Striped bike lanes will continue through all intersections. Bike boxes unncessary. Two-stage bike turn boxes implemented at all signals. Left-turning drivers' visibility improved with conversion to 3-lane Segment 2. Temporal separation required at signals. Majority of conflict eliminated (North St, VT- 127, Ethan Allen Pkwy, Plattsburg Ave) because on SB side of street, but drivers would have to adapt to expecting two- way bicycle traffic on one side of street.	Significant improvement over baseline. Number of conflicts approximately halved as the cycle track is located on the SB side and visibility is improved because parking will be on the NB side of the street. On street cycle tracks will help increase visibility of cyclists for drivers entering driveways and side streets. However, drivers would need to become accustomed to NB cyclists on the SB side of the street. Left-turning drivers' visibility improved in Segment 2 by 4-to-3 conversion.	Significant improvement over baseline. Conflict is avoided with buses because of separation. Cycle tracks would be located behind bus bulbs so passengers can enter/exit buses safely. Passengers must cross cycle track to sidewalk.	Significant improvement over baseline. ADA ramps, pedestrian countdown timers, audible signals, leading , pedestrian intervals, shorter crossing distances, and more opportunities to cross. Opportunity for full sidewalk reconstruction.	Significant improvement over baseline. Narrowed vehicle lanes, striped parking, new pedestrian crossings and potential mid-block pedestrian refuge islands. 25 mph speed limit. Turning radii at intersection narrowed where needed.	Significant improvement over baseline. New crosswalks proposed at bus stops throughout corridor.	Improvement over baseline. With parking or one side only for much of the corridor, opportunity for bus bulbs is limited to one side of the street. Planting zone in conjunction with 3' buffer space wide enough (8' total) throughout corridor for shelters and other bus amenities.	Significant improvement over baseline. Cycle track focated along SB side of street, eliminating need to cross traffic for most corridor destinations (except at the middle school, Ethan Allen Park, and VT 127 path). Two- stage bike turn boxes or protected turning areas provided.	Same as baseline. All cross section improvements anticipated to fit within 66' ROW.	Worse than baseline. West side (SB) planting strip reduced in all segments, but would add planting strip north of Institute Rd alongside rock face. Planting strip on east side (NB) would remain untouched north of Washington, but would be affected south of Washington.	Improvement over baseline. Planting strips maintained and can accommodate snow storage. Existing sidewalk plow program can be extended to plow raised cycle tracks adjacent to sidewalk. Cycle track may be wide enough to accommodate vehicle plow for some or all of its length (depending on exactly where the bollards are placed).	Improvement over baseline. SB reconstruction can address on-street SB ponding issues only (NB curb to remain in place north of Washington). Unsignalized side street crosswalks can be raised to sidewalk level to eliminate ponding at those crossings because there would be no need for ramps.

				Burlington Complete Street Design Guidelines Consistency				Improves Safety for All Use	ers				Improves Multim	odal Connectivity			Right-of-Way Impacts			Maintainability	
Timeline	Cross Section Concepts	Segment 2 Configuration	Total Score (Higher is Better)	# of Design Guidelines Met	Level of Traffic Stress Rating (Bicycle)	Bike Conflicts with Turning Vehicles (Signalized Intersctions)	Bike Conflicts with Turning Vehicles (Unsignalized Intersections/Driveways)	Bike Conflicts with Buses	Opportunities to Improve Accessibility	Vehicle Speed Reduction Treatments	Subtotal	Bus Stop and Crosswalk Pairing	Opportunities for Bus Bulbs and Bus Stop Amenities	Access to Major Destinations for Cyclists	Subtotal	New ROW Needs	Planting Strip Impacts	Subtotal	Snow Plowing and Storage	Drainage	Subtotal
Short Term (< 3 Years)	EX Existing conditions	4 Lanes	3.0	3	3	3	3	3	3	3	3.0	3	3	3	3.0	3	3	3.0	3	3	3.0
Short Term (< 3 Years)	A Bike Lanes within Existing Curbs	4 Lanes	3.4	4	3	3	3	3	4	4	3.3	5	4	3	4.0	3	3	3.0	3	3	3.0
Med. Term (< 7 Years)	A Bike Lanes within Existing Curbs	3 Lanes	3.9	5	4	4	4	3	5	5	4.2	5	4	4	4.3	3	3	3.0	3	3	3.0
Long Term (>10 Years)	B 5' Minimum Bike Lakes	3 Lanes	3.9	5	4	4	4	3	5	5	4.2	5	4	4	4.3	3	2	2.5	3	4	3.5
Long Term (>10 Years)	B 5' Minimum Bike Lakes	4 Lanes	3.4	5	4	3	3	3	4	4	3.5	5	2	4	3.7	3	1	2.0	2	4	3.0
Long Term (>10 Years)	C Buffered Bike Lanes	3 Lanes	4.0	5	5	4	4	3	5	5	4.3	5	4	4	4.3	3	2	2.5	3	4	3.5
Long Term (>10 Years)	C Buffered Bike Lanes	4 Lanes	3.3	5	4	3	3	3	4	4	3.5	5	2	4	3.7	3	1	2.0	1	4	2.5
Long Term (>10 Years)	D On-Street One- Way Cycle Tracks	3 Lanes	4.3	5	5	5	4	5	5	5	4.8	5	4	4	4.3	3	2	2.5	4	4	4.0
Long Term (>10 Years)	D On-Street One- Way Cycle Tracks	4 Lanes	3.6	5	5	4	3	4	4	4	4.0	5	2	4	3.7	3	1	2.0	2	4	3.0
Long Term (>10 Years)	E Raised One-Way Cycle Tracks	3 Lanes	4.4	5	5	5	5	5	5	5	5.0	5	4	4	4.3	3	2	2.5	4	5	4.5
Long Term (>10 Years)	E Raised One-Way Cycle Tracks	4 Lanes	3.6	5	5	4	4	4	4	4	4.2	5	2	4	3.7	3	1	2.0	1	5	3.0
Long Term (>10 Years)	F1 Rasied Two-Way Cycle Track (SB	3 Lanes	4.5	5	5	5	5	5	5	5	5.0	5	4	5	4.7	3	2	2.5	4	5	4.5
Long Term (>10 Years)	F2 (SB Side)	3 Lanes	4.4	5	5	5	5	5	5	5	5.0	5	4	5	4.7	3	2	2.5	4	4	4.0

			Balances Trans	sportation Choices				Improves Safety for All Us	sers		Right-of-	Way Impacts
		Future Vehicle AM Peak (LOS)	Future Vehicle PM Peak (LOS)	Future Average Queue AM Peak (# Cars)	Future Average Queue PM Peak (# Cars)	Level of Traffic Stress Rating	Bike Conflicts with Turning Vehicles (Signalized	Opportunities to Improve		Vehicle Speed Reduction		
Intersection	Concept	(NB/SB/EB/WB)	(NB/SB/EB/WB)	(NB/SB/EB/WB)	(NB/SB/EB/WB)	(Bicycle)	Intersctions)	Accessibility	Pedestrian Experience	Treatments	New ROW Needs	Planting Strip Impacts
Note that all intersection c • ADA-accessible curb ramp • Audible, pedestrian count • Maintained bike facilities Note that all signalized into • Bike boxes and two-stage Gateway treatments are p • Plattsburg Ave. VT 127 ramp	oncepts include the following short-t os and crosswalks on all approaches tdown timers and 5-second leading pe through the intersection. ersection concepts include the follow efft-turn boxes where appropriate. roposed in the medium-term for all in mps. Washington St. and North St	erm treatments: edestrian interval (pu ing medium-term tre ntersection concepts	ish-button actuation eatments: at:) at all crosswalks								
Plattsburg Ave	Existing configuration	A/B/-/C	A/B/-/C	2/4/-/-3	3/3/-/5	4	No bicycle facilities. Unsafe high-speed NB right turn.	Baseline	Unsafe vehicle turning speeds, limited crossing opportunities, 40' crossing distance	Wide lanes, large turning radii, unsafe vehicle turning speeds	Baseline	Baseline
	Concept 1: • No right on red • High-speed right eliminated • Exclusive pedestrian phase at south crosswalk	B/C/-/C	B/C/-/C	2/3/-/3	3/3/-/6	Will vary by segment option. LTS at intersections highly dependent on design.	Improvement over baseline, provided that cycling facilities continue through the intersection. NB right turn slowed with partial realignment of Plattsburg Ave.	Improvement over baseline. Leading pedestrian intervals, rebuilt ramps.	Improvement over baseline. Additional crosswalks, reduced vehicle turning speeds, smaller intersection footprint, and shortened Plattsburg Ave crossing.	Improvement over baseline. Narrowed lanes and narrowed turning radii from straightened intersection.	No new ROW needed	Same as baseline. While straightening intersection adds to planting strip in east corner, long-term bicycle facilities will narrow planting strip in others.
	Concept 2: • No right on red • High-speed right eliminated • Right-turn lane eliminated	С/С/-/В	C/B/-/C	5/4/-/3	10/4/-/9	Will vary by segment option. LTS at intersections highly dependent on design.	Improvement over baseline, provided that cycling facilities continue through the intersection. NB right turn slowed with partial realignment of Plattsburg Ave and closure of North Ave right-turn lane.	Improvement over baseline. Leading pedestrian intervals, rebuilt ramps.	Significant improvement over baseline. Additional crosswalks, reduced vehicle turning speeds, very small intersection footprint, simplified traffic movement, and shortened Plattsburg Ave crossing and shortened North Ave crossing distance.	Significant improvement over baseline. Narrowed lanes and narrowed turning radii from straightened intersection and elimination of right turn lane.	No new ROW needed	Significant improvement over baseline. Straightening intersection and closing right-turn lane adds significantly to planting strip, but long- term bicycle facilities will narrow planting strip in others.
	Concept 3: • Mini-roundabout • High-speed right eliminated • Right-turn lane eliminated	C/D/-/B	D/C/-/C	2/2/-/1	4/3/-/4	Will vary by segment option. LTS at intersections highly dependent on design.	Improvement over baseline provided that cycling facilities continue through the intersection. NB right turn slowed with mini- roundabout design assuming no flare on approach or exit lanes (i.e. non-tangential).	Same as baseline. Rebuilt ramps, shortened crossings on all approaches with pedestrian refuge islands are improvements. However, may be difficult for disabled persons without signalized crossings.	Significant improvement over baseline. Additional crosswalks, reduced vehicle turning speeds, very small intersection footprint, and simpler traffic movement.	Improvement over baseline. Narrowed lanes from road diet, narrowed turning radii from mini- roundabout (assume no flare on approaches/exits).	No new ROW needed	Significant improvement over baseline. Straightening intersection and closing right-turn lane adds significantly to planting strip. Roundabout islands allow additional landscape opportunities, but long- term bicycle facilities will narrow planting strip in others.

			Balances Trans	sportation Choices				Improves Safety for All Us	sers		Right-of-V	Vay Impacts
Intersection Shore Rd/ Heineberg Rd	Concept Existing configuration	Future Vehicle AM Peak (LOS) (NB/SB/EB/WB) A/A/B/C	Future Vehicle PM Peak (LOS) (NB/SB/EB/WB) A/A/B/C	Future Average Queue AM Peak (# Cars) (NB/SB/EB/WB) 0/9/1/2	Future Average Queue PM Peak (# Cars) (NB/SB/EB/WB) 5/6/1/2	Level of Traffic Stress Rating (Bicycle) 4	Bike Conflicts with Turning Vehicles (Signalized Intersctions) No bicycle facilities.	Opportunities to Improve Accessibility Baseline	Pedestrian Experience Limited crossing opportunities, 40' crossing distance, partial 4-lane cross section.	Vehicle Speed Reduction Treatments Wide lanes, large turning radii, four-lane cross section south of Shore Rd.	New ROW Needs Baseline	Planting Strip Impacts Baseline
	Concept 1 (Three Lanes): • Pedestrian crossing times long enough for seniors • No right on red • Split phasing	B/C/D/D	B/B/D/D	1/14/5/2	4/6/2/2	Will vary by segment option. LTS at intersections highly dependent on design.	Improvement over baseline, provided that cycling facilities continue through the intersection.	Improvement over baseline. Leading pedestrian intervals, audible signals, rebuilt ramps, sufficient pedestrian crossing time for seniors.	Improvement over baseline. An additional crosswalk, smaller intersection footprint, shortened North Ave crossing distance.	Improvement over baseline. Narrowed lanes, consistent cross section, inability to pass.	No new ROW needed	Same as baseline. Missing planting strip in front of St. Mark's could be added back with reconstruction, but long-term bicycle facilities will narrow planting strip in others.
	 Concept 1 (Four Lanes): Pedestrian crossing times long enough for seniors No right on red Split phasing 	C/C/D/D	B/B/D/D	4/14/5/2	8/7/2/2	Will vary by segment option. LTS at intersections highly dependent on design.	Improvement over baseline provided that cycling facilities continue through intersection and that south leg is constrained to 3 lanes at the intersection.	Improvement over baseline. Leading pedestrian intervals, audible signals, rebuilt ramps, sufficient pedestrian crossing time for seniors.	Improvement over baseline. An additional crosswalk, smaller intersection footprint, shortened North Ave crossing distance provided that south leg is constrained to 3 lanes at the intersection.	Same as baseline. Narrowed lanes will help slow vehicles, but 4-lane cross section provides opportunity for aggressive driving.	No new ROW needed	Worse than baseline. Missing planting strip in front of St. Mark's could be added back with reconstruction. However, planting strip would be removed south of Shore for bicycle facilities.
	Concept 2 (Three Lanes): • Pedestrian crossing times long enough for seniors • No right on red • Shore Rd realignment	B/C/C/C	A/A/C/C	4/12/4/2	6/3/2/1	Will vary by segment option. LTS at intersections highly dependent on design.	Improvement over baseline, provided that cycling facilities continue through the intersection.	Improvement over baseline. Leading pedestrian intervals, audible signals, rebuilt ramps, sufficient pedestrian crossing time for seniors.	Significant improvement over baseline. An additional crosswalk, considerably smaller intersection footprint, shortened North Ave crossing distance, simplified traffic movement.	Significant improvement over baseline. Narrowed lanes, consistent cross section, inability to pass, and narrowed turning radii from straightened intersection.	ROW impacts at St. Mark's Church lawn (including one mature tree)	Improvement over baseline. Missing planting strip in front of St. Mark's could be added back with reconstruction, but long- term bicycle facilities will narrow planting strip in other locations. Green space lost to St. Mark's is made up for on other side of Shore Rd with straightening. Opportunity for community space.
	Concept 2 (Four Lanes): • Pedestrian crossing times long enough for seniors • No right on red • Shore Rd realignment	B/C/C/C	A/A/C/C	4/12/4/2	6/3/2/1	Will vary by segment option. LTS at intersections highly dependent on design.	Improvement over baseline provided that cycling facilities continue through intersection and that south leg is constrained to 3 lanes at the intersection.	Improvement over baseline. Leading pedestrian intervals, audible signals, rebuilt ramps, sufficient pedestrian crossing time for seniors.	Significant improvement over baseline. An additional crosswalk, considerably smaller intersection footprint, shortened North Ave crossing distance, simplified traffic movement provided that south leg is constrained to 3 lanes at the intersection.	Improvement over baseline. While narrowed lanes and narrowed turning radii from realigned Shore Rd will slow vehicle speeds, the 4 lane cross section provides opportunity for aggressive driving.	ROW impacts at St. Mark's Church lawn (including one mature tree)	Same as baseline. Missing planting strip in front of St. Mark's could be added back with reconstruction. However, planting strip would be removed south of Shore for facilities. Green space lost to St. Mark's is made up for on other side of Shore Rd with straightening. Opportunity for community space.

			Balances Tran	sportation Choices				Improves Safety for All Us	sers		Right-of-\	Way Impacts
Intersection	Concept	Future Vehicle AM Peak (LOS) (NB/SB/EB/WB)	Future Vehicle PM Peak (LOS) (NB/SB/EB/WB)	Future Average Queue AM Peak (# Cars) (NB/SB/EB/WB)	Future Average Queue PM Peak (# Cars) (NB/SB/EB/WB)	Level of Traffic Stress Rating (Bicycle)	Bike Conflicts with Turning Vehicles (Signalized Intersctions)	Copportunities to Improve Accessibility	e Pedestrian Experience	Vehicle Speed Reduction Treatments	New ROW Needs	Planting Strip Impacts
Ethan Allen Shopping Center	Existing configuration	A/A/B/C	A/B/C/C	1/1/2/1	4/4/5/1	4	No bicycle facilities.	Baseline	Limited crossing opportunities, degraded sidewalk and curbs at Bamboo Hut, 40' crossing distance, 4-lane cross section	High-speed four-lane cross section with ability to pass. Large turning radii at the shopping center entrance.	Baseline	Baseline
	 Concept 1 (Three Lanes): Pedestrian crossing times long enough for seniors No right on red 	B/C/D/D	C/C/D/D	8/14/2/1	17/7/7/1	Will vary by segment option. LTS at intersections highly dependent on design.	Improvement over baseline, provided that cycling facilities continue through the intersection.	Improvement over baseline. Leading pedestrian intervals, audible signals, rebuilt ramps, sufficient pedestrian crossing time for seniors.	Improvement over baseline. An additional crosswalk, smaller intersection footprint, shortened North Ave crossing distance.	Improvement over baseline. Reduced number of lanes, narrowed lanes, consistent cross section, inability to pass.	No new ROW needed	Worse than baseline. Long-term bicycle facilities will narrow planting strips.
	 Concept 1 (Four Lanes): Pedestrian crossing times long enough for seniors No right on red 	B/C/D/D	B/C/D/D	3/5/2/1	5/3/7/1	Will vary by segment option. LTS at intersections highly dependent on design.	Same as baseline. New cycling facilities will create dedicated space for cyclists, but conflicts with vehicles would persist without left turn lanes. Limited visibility of cyclists for turning vehicles because crossing two trave lanes.	Improvement over baseline. Leading pedestrian intervals, audible signals, rebuilt ramps, sufficient pedestrian crossing time for seniors.	Same as baseline. An additional crosswalk will be convenient, but cross section, intersection footprint, and crossing distance remains the same.	Same as baseline. 4-lane cross section provides opportunity for aggressive driving.	No new ROW needed	Significantly worse than baseline. Planting strip would be removed to accommodate bicycle facilities.
	Concept 2 (Three Lanes): • Pedestrian crossing times long enough for seniors • No right on red • Farrington's Mobile Home Park private drive reconstruction • Bamboo Hut sidewalk and curb reconstruction	B/C/D/D	C/C/D/D	8/14/2/1	17/7/7/1	Will vary by segment option. LTS at intersections highly dependent on design.	Improvement over baseline, provided that cycling facilities continue through the intersection. Leading pedestrian/ bicycle interval reduces conflicts.	Improvement over baseline. Additional crosswalk, leading pedestrian interval, audible signals, and sufficient pedestrian crossing time for seniors.	Significant Improvement over baseline. An additional crosswalk, smaller intersection footprint, shortened North Ave crossing distance, and reconstruction of driveway and its crosswalk and Bamboo Hut's sidewalk and curb	Improvement over baseline. Reduced number of lanes, narrowed lanes, consistent cross section, inability to pass.	No new ROW needed	Same as baseline. Missing planting strip in front of Bamboo Hut could be added back with reconstruction, but long- term bicycle facilities will narrow other planting strips.
	Concept 2 (Four Lanes): • Pedestrian crossing times long enough for seniors • No right on red • Farrington's Mobile Home Park private drive reconstruction • Bamboo Hut sidewalk and curb reconstruction	B/C/D/D	B/C/D/D	3/5/2/1	5/3/7/1	Will vary by segment option. LTS at intersections highly dependent on design.	Same as baseline. New cycling facilities will create dedicated space for cyclists, but conflicts with vehicles would persist without left turn lanes. Limited visibility of cyclists for turning vehicles because crossing two trave lanes.	Improvement over baseline. Leading pedestrian intervals, audible signals, rebuilt ramps, sufficient pedestrian crossing time for seniors.	Slight improvement over baseline. An additional crosswalk and reconstructed driveway/Bamboo Hut sidewalk will be benefitcial, but cross section, intersection footprint, and crossing distance remains the	Same as baseline. 4-lane cross section provides opportunity for aggressive driving.	No new ROW needed	Significantly worse than baseline. Planting strip would be removed to accommodate bicycle facilities.

			Balances Trans	sportation Choices				Improves Safety for All U	sers		Right-of-V	Vay Impacts
Intersection Ethan Allen Pkwy	Concept Existing configuration	Future Vehicle AM Peak (LOS) (NB/SB/EB/WB) A/A/D/A	Future Vehicle PM Peak (LOS) (NB/SB/EB/WB) A/A/A/C	Future Average Queue AM Peak (# Cars) (NB/SB/EB/WB) 2/9/2/0	Future Average Queue PM Peak (# Cars) (NB/SB/EB/WB) 5/1/1/2	Level of Traffic Stress Rating (Bicycle) 4	Bike Conflicts with Turning Vehicles (Signalized Intersctions) No bicycle facilities. Unsafe high-speed NB right turn.	Opportunities to Improve Accessibility Baseline	Pedestrian Experience Unsafe vehicle turning speeds, limited crossing opportunities, 40' crossing distance	Vehicle Speed Reduction Treatments Wide lanes, large turning radii, unsafe vehicle turning speeds, ability to pass.	New ROW Needs Baseline	Planting Strip Impacts Baseline
	 Concept 1 (Three Lanes): Little Eagle Bay included in signal High-speed NB right turn lane eliminated Relocate park entrance and add curb extension to further slow right turns 	A/D/B/E	C/A/B/D	2/22/1/8	36/3/1/4	Will vary by segment option. LTS at intersections highly dependent on design.	Improvement over baseline, provided that cycling facilities continue through the intersection. NB right turn slowed with partial realignment of Ethan Allen Pkwy and removal of park entrance.	Improvement over baseline. Leading pedestrian intervals with audible signals, rebuilt ramps.	Improvement over baseline. Additional crosswalks, reduced vehicle turning speeds, smaller intersection footprint, simplified traffic movement, and shortened Ethan Allen	Improvement over baseline. Reduced number of lanes, narrowed lanes, narrowed turning radii from straightened intersection.consistent cross section, inability to	Relocated Ethan Allen Park entrance will cause ROW impacts.	Worse than baseline. Long-term bicycle facilities will narrow planting strips.
	 Concept 1 (Four Lanes): Little Eagle Bay included in signal High-speed NB right turn lane eliminated Relocate park entrance and add curb extension to further slow right turns 	A/B/A/D	A/A/B/C	3/8/1/6	6/3/1/3	Will vary by segment option. LTS at intersections highly dependent on design.	Same as baseline. New cycling facilities will create dedicated space for cyclists, but conflicts with vehicles would persist without left turn lanes. Limited visibility of cyclists for turning vehicles because crossing two trave lanes.	Improvement over baseline. Leading pedestrian intervals with audible signals, rebuilt ramps.	Same as baseline. Additional crosswalks and shortened Ethan Allen Pkwy crossing distance are notable, but North Ave cross section remains wide and large intersection footprint remains.	Same as baseline. Vehicle speeds are slowed on NB right-turn, but 4-lane cross section provides opportunity for aggressive driving.	Relocated Ethan Allen Park entrance will cause ROW impacts.	Significantly worse than baseline. Planting strip would be removed to accommodate bicycle facilities.
	Concept 2 (Three Lanes): • Roundabout with dual SB approach lanes and NB right-turn lane, no flare on approaches • Relocate park entrance	C/E/D/D	E/D/B/E	1/1/1/1	1/1/1/1	Will vary by segment option. LTS at intersections highly dependent on design.	Worse than baseline. A cycle track around the roundabout must be provided for full separation (which is an improvement), but crossing dual approach lanes is not recommended. International practice is to grade separate such interactions.	Worse than baseline. Rebuilt ramps, pedestriar refuge islands, and shortened crossings are notable. However, dual approach lane crossings would be difficult for disabled to safely cross without signals.	Worse than baseline. Large roundabout adds walking distance for pedestrians, traffic pattens are relatively complicated.	Same as baseline. Narrowed lanes, removal of high-speed NB right turn, and slower turns throughout (because of assumption of no flare or approaches/exits) are notable. However, dual approach lanes provide opportunity for passing and aggressive driving.	Relocated Ethan Allen Park entrance will cause ROW impacts. Roundabout footprint would impact adjacent residential and commercial properties.	Significant improvement over baseline. Roundabout would require more land, so there would be opportunities for additional landscaping on islands. Would require cycle track, which would be protected by a landscape buffer as well.
	Concept 2 (Four Lanes): • Roundabout with dual SB and NB approach lanes, no flare on approaches • Relocate park entrance	A/D/B/E	C/C/E/A	1/1/1/1	1/1/3/1	Will vary by segment option. LTS at intersections highly dependent on design.	Worse than baseline. A cycle track around the roundabout must be provided for full separation (which is an improvement), but crossing dual approach lanes is not recommended. International practice is to grade separate such interactions.	Worse than baseline. Rebuilt ramps, pedestrian refuge islands, and shortened crossings are notable. However, dual approach lane crossings would be difficult for disabled to safely cross without signals.	Worse than baseline. Large roundabout adds walking distance for pedestrians, traffic pattens are relatively complicated.	Same as baseline. Narrowed lanes, removal of high-speed NB right turn, and slower turns throughout (because of assumption of no flare or approaches/ exits) are notable. However, 4-lane cross section provides opportunity for passing and aggressive driving.	Relocated Ethan Allen Park entrance will cause ROW impacts. Roundabout footprint would impact adjacent residential and commercial properties.	Improvement over baseline. Roundabout would require more land, so there would be opportunities for additional landscaping on islands. Would require cycle track, which would be protected by a landscape buffer as well. However, planting strip would be removed on intersection approaches to accommodate bicycle facilities.

			Balances Trans	portation Choices				Improves Safety for All Us	sers		Right-of-V	Vay Impacts
Intersection	Concept Existing configuration	Future Vehicle AM Peak (LOS) (NB/SB/EB/WB) F/E/B/C	Future Vehicle PM Peak (LOS) (NB/SB/EB/WB) B/B/B/A	Future Average Queue AM Peak (# Cars) (NB/SB/EB/WB) 21/16/1/4	Future Average Queue PM Peak (# Cars) (NB/SB/EB/WB) 4/1/1/1	Level of Traffic Stress Rating (Bicycle) 4	Bike Conflicts with Turning Vehicles (Signalized Intersctions) No bicycle facilities. Unsafe	Opportunities to Improve Accessibility Baseline	Pedestrian Experience Limited crossing	Vehicle Speed Reduction Treatments High-speed four-lane	New ROW Needs Baseline	Planting Strip Impacts Baseline
							high-speed NB right turn. WB free right-turn places NB cyclists between two NB travel lanes with fast- moving and lane-changing traffic.		opportunities, two high- speed turning movements, 40' crossing distance, 4-lane cross section.	cross section with ability to pass. Large turning radii with high speed NB and WB right turns.		
	Concept 1 (Three Lanes): • Remove high-speed NB and WB right turn lanes	D/D/C/C	D/C/C/C	15/18/1/3	21/6/1/4	Will vary by segment option. LTS at intersections highly dependent on design.	Improvement over baseline, provided that cycling facilities continue through the intersection. NB and WB right turns slowed with reconfiguration.	Improvement over baseline. Leading pedestrian intervals, rebuilt ramps, removal of high speed right turns.	Significant Improvement over baseline. Additional crosswalks, smaller intersection footprint, shortened North Ave and VT 127 ramps crossing distances, and simplified traffic movement.	Significant improvement over baseline. Reduced number of lanes, narrowed lanes, consistent cross section, inability to pass, eliminating merging, and removal of high-speed turns.	No new ROW needed	Improvement over baseline. Removal of high speed NB right turn presents opportunity to reclaim greenery.
	Concept 1 (Four Lanes): • Remove high-speed NB and WB right turn lanes	C/D/C/C	D/C/C/C	12/15/1/3	21/6/1/6	Will vary by segment option. LTS at intersections highly dependent on design.	Improvement over baseline, provided that cycling facilities continue through the intersection and that north leg is constrained to 3 lanes at the intersection. NB and WB right turns slowed with reconfiguration.	Improvement over baseline. Leading pedestrian intervals, rebuilt ramps, removal of high speed right turns.	Improvement over baseline. Additional crosswalks, smaller intersection footprint, shortened North Ave and VT 127 ramps crossing distances, and simplified traffic movement provided that north leg is constrained to 3 lanes at the intersection.	Improvement over baseline. Narrowed lanes and removal of high speed NB and WB right turn lanes will help slow vehicles, but 4-lane cross section provides opportunity for aggressive driving.	No new ROW needed	Same as baseline. Removal of high speed NB right turn presents opportunity to reclaim greenery. However, planting strip would be removed north of intersection to accommodate bicycle facilities.
	Concept 2 (Three Lanes): • Remove high-speed NB and WB right turn lanes • Dual SB left-turn lanes	B/B/C/C	C/B/C/C	9/4/1/3	13/5/1/7	Will vary by segment option. LTS at intersections highly dependent on design.	Improvement over baseline, provided that cycling facilities continue through the intersection. NB and WB right turns slowed with reconfiguration. Dual SB left-turn movement would be protected phase only, eliminating conflicts with cyclists.	Improvement over baseline. Leading pedestrian intervals, rebuilt ramps, removal of high speed right turns.	Same as baseline. Additional crosswalks, south crosswalk pedestrian refuge, and removed high-speed turns are notable, but long crossing North Ave and VT 127 ramp crossing disances remain.	Significant improvement over baseline. Reduced number of lanes, narrowed lanes, consistent cross section, inability to pass, eliminating merging, and removal of high-speed turns.	No new ROW needed	Same as baseline. Dual VT 127 receiving lanes would remove some of the green area, but removal of high speed NB right turn presents an opportunity to reclaim some greenery.

			Balances Tran	sportation Choices				Improves Safety for All Us	sers		Right-of-V	Vay Impacts
Intersection	Concept	Future Vehicle AM Peak (LOS) (NB/SB/EB/WB)	Future Vehicle PM Peak (LOS) (NB/SB/EB/WB)	Future Average Queue AM Peak (# Cars) (NB/SB/EB/WB)	Future Average Queue PM Peak (# Cars) (NB/SB/EB/WB)	Level of Traffic Stress Rating (Bicycle)	Bike Conflicts with Turning Vehicles (Signalized Intersctions)	Copportunities to Improve Accessibility	e Pedestrian Experience	Vehicle Speed Reduction Treatments	New ROW Needs	Planting Strip Impacts
VT 127 Ramps (continued)	Concept 2 (Four Lanes): • Remove high-speed NB and WB right-turn lanes • Dual SB left-turn lanes	B/B/C/C	C/B/C/C	9/12/1/3	13/3/1/8	Will vary by segment option. LTS at intersections highly dependent on design.	Improvement over baseline, provided that cycling facilities continue through the intersection. NB and WB right turns slowed with reconfiguration. Dual SB left-turn movement would be protected phase only, eliminating conflicts with cyclists.	Improvement over baseline. Leading pedestrian intervals, rebuilt ramps, removal of high speed right turns.	Same as baseline. Additional crosswalks, south crosswalk pedestrian refuge, and removed high-speed turns are notable, but long crossing North Ave and VT 127 ramp crossing disances remain.	Improvement over baseline. Narrowed lanes and removal of high speed NB and WB right turn lanes will help slow vehicles, but 4-lane cross section provides opportunity for aggressive driving.	No new ROW needed	Worse than baseline. Dual VT 127 receiving lanes would remove some of the green area, but removal of high speed NB right turn presents an opportunity to reclaim some greenery. However, planting strip would be removed north of intersection to accommodate bicycle facilities.
	Concept 3 (Three Lanes): • Remove high-speed NB right-turn lane • Roundabout with dual SB approach lanes, a WB right-turn bypass lane, and no flare on approaches	D/D/D/B	C/A/A/A	2/2/1/1	1/1/0/1	Will vary by segment option. LTS at intersections highly dependent on design.	Worse than baseline. A cycle track around the roundabout must be provided for full separation (which is an improvement), but crossing dual approach lanes is not recommended. International practice is to grade separate such interactions.	Worse than baseline. Rebuilt ramps, pedestrian refuge islands, and some shortened crossings are notable. However, dual approach lane crossings and a WB right turn bypass lane would be difficult for disabled to safely cross without signals.	Worse than baseline. Large roundabout adds walking distance for pedestrians, traffic pattens are relatively complicated, and WB right-turn bypass lane has the potential to be a safety concern as vehicles leave VT 127, a high- speed corridor.	Same as baseline. Narrowed lanes, removal of high-speed NB right turn, and slower turns throughout (because of assumption of no flare or approaches/ exits) are notable. However, the WB right-turn bypass has the potential for high- speed turns unless carefully designed.	No new ROW needed for roundabout, as it would likely fit within existing transportation ROW	Significant improvement over baseline. There appears to be plenty of space for roundabout to include a planting strip. Additional greenery from islands.
	Concept 3 (Four Lanes): • Remove high-speed NB right-turn lane • Roundabout with dual SB approach lanes, a WB right-turn bypass lane, and no flare on approaches	D/D/D/B	C/A/A/A	2/2/1/1	1/1/0/1	Will vary by segment option. LTS at intersections highly dependent on design.	Worse than baseline. A cycle track around the roundabout must be provided for full separation (which is an improvement), but crossing dual approach lanes is not recommended. International practice is to grade separate such interactions.	Worse than baseline. Rebuilt ramps, pedestrian refuge islands, and some shortened crossings are notable. However, dual approach lane crossings and a WB right turn bypass lane would be difficult for disabled to safely cross without signals.	Worse than baseline. Large roundabout adds walking distance for pedestrians, traffic pattens are relatively complicated, and WB right-turn bypass lane has the potential to be a safety concern as vehicles leave VT 127, a high- speed corridor.	Same as baseline. Narrowed lanes, removal of high-speed NB right turn, and slower turns throughout (because of assumption of no flare or approaches/ exits) are notable. However, the WB right-turn bypass has the potential for high- speed turns unless carefully designed. 4-lane cross section on north side of intersection provides opportunity for aggressive driving.	No new ROW needed for roundabout, as it would likely fit within existing transportation ROW	Improvement over baseline. There appears to be plenty of space for roundabout to include a planting strip. Additional greenery from islands. However, planting strip would be removed north of intersection to accommodate bicycle facilities.

			Balances Tran	sportation Choices					Right-of-Way Impacts			
Intersection	Concept	Future Vehicle AM Peak (LOS) (NB/SB/EB/WB)	Future Vehicle PM Peak (LOS) (NB/SB/EB/WB)	Future Average Queue AM Peak (# Cars) (NB/SB/EB/WB)	Future Average Queue PM Peak (# Cars) (NB/SB/EB/WB)	Level of Traffic Stress Rating (Bicycle)	Bike Conflicts with Turning Vehicles (Signalized Intersctions)	Opportunities to Improve Accessibility	Pedestrian Experience	Vehicle Speed Reduction Treatments	New ROW Needs	Planting Strip Impacts
Institute Rd	Existing configuration	В/А/С/В	А/А/В/С	3/5/4/1	5/3/1/1	4	turning volumes during peaks	Baseline	opportunities, 50' crossing distance over North Ave, 40' crossing distance over Institute	wide lanes, cross section widens significantly at intersection.	Baseline	Baseline
	Concept 1: • No right on red • Reduce intersection footprint • Relocate NB bus stop to far side • Resolve bus driveway access	B/C/D/C	A/C/D/C	2/16/5/1	7/8/2/1	Will vary by segment option. LTS at intersections highly dependent on design.	Improvement over baseline, provided that cycling facilities continue through the intersection and there is some degree of physical and temporal separation from vehicles entering Institute Rd.	Improvement over baseline. Leading pedestrian intervals, rebuilt ramps.	Improvement over baseline. Additional crosswalks, smaller intersection footprint, and shortened crossing distances.	Improvement over baseline. Narrowed lanes and smaller intersection footprint to slow drivers.	No new ROW needed	Improvement over baseline. Planting strip must be widened to accommodate relocated NB bus shelter. Long-term bicycle facilities may narrow planting strips elsewhere, but impacts are uncertain because the existing intersection footprint is very wide.
	Concept 2: • Roundabout with SB right-turn bypass and no flare on approaches • Resolve bus driveway access	B/B/A/A	A/B/A/A	1/1/1/1	1/2/1/1	Will vary by segment option. LTS at intersections highly dependent on design.	Improvement over baseline, provided that cycling facilities continue through the intersection and there is some degree of physical separation from vehicles entering Institute Rd, priority for cyclists at the Institute Rd crossing, and assuming no flare on approach or exit lanes (i.e. non-tangential).	Same as baseline. Rebuilt ramps, shortened crossings on all approaches with pedestrian refuge islands are improvements. However, may be difficult for disabled persons without signalized crossings, particularly at the dual SB approach lanes.	Improvement over baseline. Additional crosswalks, potentially reduced vehicle turning speeds (if no flare is provided on approaches). However, SB right-turn lane has the potential to be a safety concern unless designed carefully.	Improvement over baseline. Narrowed lanes and slower turning speeds in roundabout (assuming no flare on approaches/exits). The SB right-turn lane must be designed carefully to avoid high-speed turns.	New ROW likely needed on Burlington High Schoo lawn	Improvement over baseline. Narrowed lanes south of intersection leave room for widened planting strip. Additional greenery from islands. However, some of the planting strip on the high school side would likely be removed to accommodate roundabout footprint.
North St	Existing configuration	A/B/-/B	B/A/-/B	2/7/-/1	6/3/-/1	4	NB bike lane north of North St only.	Intersecton ramps and walk signals recently reconstructed. Push button located far from north crosswalk ramp.	Full crossing opportunities, but North Ave crosswalk angles create distances longer than the curb-to-curb width of the street.	Appropriate travel lane width, large NE corner turning radii.	Baseline	Baseline
	 Concept 1: No right on red Parking lot right in, right out or curb cut removal. South crosswalk realignment and pedestrian refuge North crosswalk realignment to be located adjacent to push button Protected/permitted SB left turns 	B/B/-/C	C/A/-/C	5/7/-/2	15/3/-/2	Will vary by segment option. LTS at intersections highly dependent on design.	Improvement over baseline, provided that cycling facilities continue through the intersection. Realigned south crosswalk and refuge can provide a safer crossing for cyclists entering and exiting the parking lot to access Depot St.	Same as baseline.	Improvement over baseline. Pedestrian crossings shortened with relaigned crosswalks, north crosswalk placed adjacent to existing push- button (and moved away from drain grate), and south crosswalk pedestrian refuge provides safe waiting area.	Improvement over baseline. NE corner turning radii can be made smaller in conunction with moving back SB left turn stop bar. SB crosswalk pedestrian refuge eliminates ability for drivers to pass.	No new ROW needed	Worse than baseline. Implementation of full bicycle facilities will narrow planting strips because the existing strips are so wide, but the resulting strips will be at least approximately 5' wide, compliant with Burlington guidelines.

			Balances Transportation Choices						-	Improves Safety f	or All Users			Rig	nt-of-Way Impacts	
Intersection	Concept	Total Score (Higher is Better)	Future Vehicle AM Peak (LOS) (NB/SB/EB/WB)	Future Vehicle PM Peak (LOS) (NB/SB/EB/WB)	Future Average Queue AM Peak (# Cars) (NB/SB/EB/WB)	Future Average Queue PM Peak (# Cars) (NB/SB/EB/WB)	SUBTOTAL	Level of Traffic Stress Rating (Bicycle)	Bike Conflicts with Turning Vehicles (Signalized Intersctions)	Opportunities to Improve Accessibility	Pedestrian Experience	Vehicle Speed Reduction Treatments	SUBTOTAL	New ROW Needs	Planting Strip Impacts	SUBTOTAL
Plattsburg Ave	Existing configuration	3.0	3	3	Not scored	Not scored	3.0	3	3	3	3	3	3.0	3	3	3.0
	Concept 1: • High-speed right eliminated • Exclusive pedestrian phase at south crosswalk	3.5	3	3	Not scored	Not scored	3.0	Dependent on Design	4	4	4	4	4.0	3	3	3.0
	• High-speed right eliminated • Right-turn lane eliminated	4.0	3	3	Not scored	Not scored	3.0	Dependent on Design	4	4	5	5	4.5	3	5	4.0
	Concept 3: • Mini-roundabout • High-speed right eliminated • Right-turn lane eliminated	3.5	2	2	Not scored	Not scored	2.0	Dependent on Design	4	3	5	4	4.0	3	5	4.0
Shore Rd/	Existing configuration	3.0	3	3	Not scored	Not scored	3.0	3	3	3	3	3	3.0	3	3	3.0
Heineberg Rd	Concept 1 (Three Lanes): • Pedestrian crossing times long enough for seniors • No right on red • Solit phasing	3.3	2	2	Not scored	Not scored	2.0	Dependent on Design	4	4	4	4	4.0	3	3	3.0
	Concept 1 (Four Lanes): • Pedestrian crossing times long enough for seniors • No right on red • Split phasing	3.0	2	2	Not scored	Not scored	2.0	Dependent on Design	4	4	4	3	3.8	3	2	2.5
	Concept 2 (Three Lanes): • Pedestrian crossing times long enough for seniors • No right on red • Shore Rd realignment	3.8	3	3	Not scored	Not scored	3.0	Dependent on Design	4	4	5	5	4.5	2	4	3.0
	Concept 2 (Four Lanes): • Pedestrian crossing times long enough for seniors • No right on red • Shore Rd realignment	3.5	3	3	Not scored	Not scored	3.0	Dependent on Design	4	4	5	4	4.3	2	3	2.5
Ethan Allen	Existing configuration	3.0	3	3	Not scored	Not scored	3.0	3	3	3	3	3	3.0	3	3	3.0
Shopping Center	Concept 1 (Three Lanes): • Pedestrian crossing times long enough for seniors • No right on red	3.1	2	2	Not scored	Not scored	2.0	Dependent on Design	4	4	4	4	4.0	3	2	2.5
	Concept 1 (Four Lanes): • Pedestrian crossing times long enough for seniors • No right on red	2.6	2	2	Not scored	Not scored	2.0	Dependent on Design	3	4	3	3	3.3	3	1	2.0
	Concept 2 (Three Lanes): • Pedestrian crossing times long enough for seniors • No right on red • Farrington's Mobile Home Park private drive reconstruction • Bamboo Hut sidewalk and curb reconstruction	3.4	2	2	Not scored	Not scored	2.0	Dependent on Design	4	4	5	4	4.3	3	3	3.0
	Concept 2 (Four Lanes): • Pedestrian crossing times long enough for seniors • No right on red • Farrington's Mobile Home Park private drive reconstruction • Bamboo Hut sidewalk and curb reconstruction	2.8	2	2	Not scored	Not scored	2.0	Dependent on Design	3	4	4	3	3.5	3	1	2.0

			Balances Transportation Choices				Improves Safety for All Users						Right-of-Way Impacts			
Intersection	Concept	Total Score (Higher is Better)	Future Vehicle AM Peak (LOS) (NB/SB/EB/WB)	Future Vehicle PM Peak (LOS) (NB/SB/EB/WB)	Future Average Queue AM Peak (# Cars) (NB/SB/EB/WB)	Future Average Queue PM Peak (# Cars) (NB/SB/EB/WB)	SUBTOTAL	Level of Traffic Stress Rating (Bicycle)	Bike Conflicts with Turning Vehicles (Signalized Intersctions)	Opportunities to Improve Accessibility	Pedestrian Experience	Vehicle Speed Reduction Treatments	SUBTOTAL	New ROW Needs	Planting Strip Impacts	SUBTOTAL
Ethan Allen	Existing configuration	3.0	3	3	Not scored	Not scored	3.0	3	3	3	3	3	3.0	3	3	3.0
Pkwy	Concept 1 (Three Lanes): • Little Eagle Bay included in signal • High-speed NB right turn lane eliminated • Relocate park entrance and add curb extension to further slow right turns	3.0	2	2	Not scored	Not scored	2.0	Dependent on Design	4	4	4	4	4.0	2	2	2.0
	Concept 1 (Four Lanes): • Little Eagle Bay included in signal • High-speed NB right turn lane eliminated • Relocate park entrance and add curb extension to further slow right turns	2.9	3	3	Not scored	Not scored	3.0	Dependent on Design	3	4	3	3	3.3	2	2	2.0
	Concept 2 (Three Lanes): • Roundabout with dual SB and NB approach lanes, no flare on approaches • Relocate park entrance	2.1	1	1	Not scored	Not scored	1.0	Dependent on Design	2	2	2	3	2.3	1	5	3.0
	Concept 2 (Four Lanes): • Roundabout with dual SB and NB approach lanes, no flare on approaches • Polocate park entrance	2.0	1	1	Not scored	Not scored	1.0	Dependent on Design	2	2	2	3	2.3	1	4	2.5
VT 127 Ramps	Existing configuration	3.0	3	3	Not scored	Not scored	3.0	3	3	3	3	3	3.0	3	3	3.0
	Concept 1 (Three Lanes): • Remove high-speed NB and WB right turn lanes	3.9	4	2	Not scored	Not scored	3.0	Dependent on Design	4	4	5	5	4.5	3	4	3.5
	Concept 1 (Four Lanes): • Remove high-speed NB and WB right turn lanes	3.5	4	2	Not scored	Not scored	3.0	Dependent on Design	4	4	4	4	4.0	3	3	3.0
	• Remove high-speed NB and WB right turn lanes	3.8	5	3	Not scored	Not scored	4.0	Dependent on Design	4	4	3	5	4.0	3	3	3.0
	Dual SB left-turn lanes Concept 2 (Four Lanes): Remove high-speed NB and WB right-turn lanes	3.5	5	3	Not scored	Not scored	4.0	Dependent on Design	4	4	3	4	3.8	3	2	2.5
	Dual SB left-turn lanes Concept 3 (Three Lanes): Remove high-speed NB right-turn lane Dual documents the dual SD	3.0	4	3	Not scored	Not scored	3.5	Dependent on Design	2	2	2	3	2.3	3	5	4.0
	approach lanes, a WB right-turn bypass lane, and no flare on approaches Concept 3 (Four Lanes): • Remove high-speed NB right-turn lane • Roundabout with dual SB approach lanes, a WB right-turn	2.9	4	3	Not scored	Not scored	3.5	Dependent on Design	2	2	2	3	2.3	3	4	3.5
	bypass lane, and no flare on															

				Balances Transportation Choices							Right-of-Way Impacts					
Intersection	Concept	Total Score (Higher is Better)	Future Vehicle AM Peak (LOS) (NB/SB/EB/WB)	Future Vehicle PM Peak (LOS) (NB/SB/EB/WB)	Future Average Queue AM Peak (# Cars) (NB/SB/EB/WB)	Future Average Queue PM Peak (# Cars) (NB/SB/EB/WB)	SUBTOTAL	Level of Traffic Stress Rating (Bicycle)	Bike Conflicts with Turning Vehicles (Signalized Intersctions)	Opportunities to Improve Accessibility	Pedestrian Experience	Vehicle Speed Reduction Treatments	SUBTOTAL	New ROW Needs	Planting Strip Impacts	SUBTOTAL
Institute Rd	Existing configuration	3.0	3	3	Not scored	Not scored	3.0	3	3	3	3	3	3.0	3	3	3.0
	Concept 1: • No right on red • Reduce intersection footprint • Relocate NB bus stop to far side • Resolve bus driveway access	3.4	2	2	Not scored	Not scored	2.0	Dependent on Design	4	4	4	4	4.0	3	4	3.5
	Concept 2: • Roundabout with SB right-turn bypass and no flare on approaches • Resolve bus driveway access	3.4	3	3	Not scored	Not scored	3.0	Dependent on Design	4	3	4	4	3.8	2	4	3.0
North St	Existing configuration	3.0	3	3	Not scored	Not scored	3.0	3	3	3	3	3	3.0	3	3	3.0
	Concept 1: • No right on red • Parking lot right in, right out or curb cut removal. • South crosswalk realignment and pedestrian refuge • North crosswalk realignment to be located adjacent to push button • Protected/permitted SB left turns	3.3	3	3	Not scored	Not scored	3.0	Dependent on Design	4	3	4	4	3.8	3	2	2.5

The following table summarizes segment-by-segment and corridor-wide Level of Traffic Stress (LTS) scores for each short-, medium-, and long-term cross section concept. Level of Traffic Stress--a combination of perceived danger, noise, and exhaust associated with riding in or adjacent to vehicle traffic--is an evaluation tool to classify the stress of different types of bicycle facilities. The scoring system is as follows:

- LTS 1: A level of traffic stress tolerable by most children
- LTS 2: A level of traffic stress tolerable by the mainstream adult population, those who are "interested but concerned"
- LTS 3: A level of traffic stress toilerable by the "enthused and confident" cyclists who still prefer their own riding space.
- LTS 4: A level of traffic stress tolerable only by those characterized as "strong and fearless.

The analysis employs a weakest-link approach. If one segment of a corridor is rated LTS 4, the entire corridor is rated LTS 4 even if all other segments are LTS 1, 2, or 3.

	Short Term (< 3 Years)		Med. Term (< 7 Years)		Long Term (> 10 Years)								
		Concept A (Bike Lanes within		Conc	ept B	Concept C		Concept D (On-Street One-Way		Concept E (Raised One-Way		Concept F1 (Raised Two- Way Cycle Track on	Concept F2 (On-Street Two- Way Cycle Track on SB
			g Curbs)	(5' Minimum	n Bike Lanes)	(Buffered	Bike Lanes)	Cycle ⁻	Fracks)	Cycle	Tracks)	SB Side)	Side)
	Existing	4-Lane	3-Lane	4-Lane	3-Lane	4-Lane	3-Lane	4-Lane	3-Lane	4-Lane	3-Lane	3-Lane	3-Lane
	Conditions	Segment 2	Segment 2	Segment 2	Segment 2	Segment 2	Segment 2	Segment 2	Segment 2	Segment 2	Segment 2	Segment 2	Segment 2
Segment 1: Plattsburg Ave to Shore Rd	3	2	2	2	2	1	1	1	1	1	1	1	1
Segment 2: Shore Rd to VT-127 Ramps	4	4	2	3	2	3	1	1	1	1	1	1	1
Segment 3: VT 127 Ramps to Institute Rd	3	2	2	2	2	1	1	1	1	1	1	1	1
Segment 4: Institute Rd to Washington St	2	1	1	1	1	1	1	1	1	1	1	1	1
Segment 5: Washington St to North St	2	2	2	2	2	1	1	1	1	1	1	1	1
LTS Rating for Concept	4	4	2	3	2	3	1	1	1	1	1	1	1
Compared to Existing		Same	Better	Better	Better	Better	Much Better	Much Better	Much Better	Much Better	Much Better	Much Better	Much Better

Key

Mixed Lane LTS Criteria Bike Lake LTS Criteria (see LTS Bike Lane worksheet) Cycle Track LTS (LTS = 1)

Notes

Existing conditions assumes 30 mph speed limit north of VT 127 ramps and 25 mph speed limit south of VT 127 ramps Concepts A-F assume 25 mph speed limit along the entire corridor, including 4-lane segment 2 LTS uses a weakest link approach. The portion of each concept with the highest LTS dictates the overall rating.

	Do the Cross Section Concepts Meet Minimum Desired Widths from NACTO and Burlington Complete Street Guidance?													
	Short Term (< 3 Years)			Long Term	(> 10 Years)									
Segment	Concept A Modifications Within Existing Curb-to Curb Width (No curb movement)	Concept B 5' Minimum Bike Lanes	Concept C Buffered Bike Lanes (5' bike lane, 2' buffer)	Concept D On-Street One-Way Cycle Tracks (5-7' cycle track, 3' buffer)	Concept E Raised One-Way Cycle Tracks (6.5' cycle track integrated into planting strip)	Concept F1 Raised Two-Way Cycle Track (8-12' cycle track integrated into planting strip)	Concept F2 On-Street Two-Way Cycle Track (9'-12' cycle track, 3' buffer)							
1: Plattsburg to Shore	Yes	Yes	Yes	Yes	Yes	Yes	Yes							
2: Shore to VT 127 (3 Lane)	No ; outside lanes 10' (need 11' for bus safety), but bike lane will provide some breathing room. Note that the 4- to 3-lane conversion is a medium- term concept .	Yes	Yes	No ; 4' landscape zone proposed (BCSG recommends 5').	Possibly ; 4.5' landscape zone proposed (BCSG recommends 5'). We could reallocate 1' sidewalk-cycle track delineator into the tree zone to bring it to 5', if desired. Recommend keeping the delineator, though.	Yes	Yes ; While vehicle lanes adjacent to curbs are 10.5' (11' lanes against curbs preferred for buses), they are also adjacent to a two-way left-turn lane, providing a buffer between oncoming buses.							
2: Shore to VT 127 (4 Lane)	No ; sharrows proposed (NACTO recommends sharrows on streets with < 3,000 vpd; no mention of sharrows in BCSG).	No ; 2' landscape zone proposed (BCSG recommends 5').	No ; no landscape zone proposed (BCSG recommends 5'). Outside lanes 10' (prefer 10.5' for buses), but 2' buffer will help.	No; 2' buffer proposed (NACTO recommends 3') and no landscape zone proposed (BCSG recommends 5'). Outside lanes 10.5' adjacent to curb (prefer 11' striped as 10.5' for buses).	No ; 5' cycle track proposed (NACTO recommends 6.5') and no landscape zone proposed (BCSG recommends 5'). Outside lanes 10.5' adjacent to curb (prefer 11' striped as 10.5' for buses).	No ; Not feasible with 4-lane concept because two-way cycle track would become bus boarding area.	No ; Not feasible with 4-lane concept because two-way cycle track would become bus boarding area.							
3: VT 127 to Institute	Yes	Yes	Yes	Yes	Yes	Yes	Yes							
4: Institute to Washington	Yes	Yes	Yes	Yes	Yes	Yes	Yes							
5: Washington to North	No; 4' bike lane proposed in NB direction (NACTO and BCSG recommend 5' – 6'), while sharrows proposed in SB direction (NACTO recommends sharrows on streets with < 3,000 vpd; no mention of sharrows in BCSG).	Yes	Yes	No ; 2' buffer proposed (NACTO recommends 3'); 4.5' landscape zone (BCSG recommends 5').	Possibly ; 4.5' landscape zone proposed (BCSG recommends 5'). We could reallocate 0.5' sidewalk- cycle track delineator into the tree zone to bring it to 5', if desired. Recommend keeping the delineator, though.	Yes	Yes							

Appendix E: Health Impact Assessment

North Avenue Corridor Redesign: Potential Health Impacts

June 6, 2014

FINAL



Burlington District Office

healthwormont gov

Pathway diagram: potential health impacts Population health profile Chronic disease Injury Mental health Health equity Potential health impacts Access to multimodal options for all ages, abilities Bike facilities Bike facilities on North Avenue

Introduction

Separated bike facilities

- Public transportation
- Pedestrian facilities
- Motorist facilities
- Intersections: safety and air quality
- On-street parking
- Traffic calming
- Access to physical activity assets
- Access to grocery stores
- Access to healthcare
- Mental health and wellbeing
- **Conclusions**
- **Limitations**

Maps

- 1 Subsidized housing
- <u>2 Schools</u>
- <u>3 C.P. Smith school travel plan: intersections of concern</u>
- <u>4 Potential bike routes</u>
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- 6 Access to grocery stores analysis
 - 6A All residential locations used in analysis
 - 6B Access to all food stores
 - 6C Access to full-service grocery stores
 - 6D Access to full-service grocery stores vs. subsidized housing locations
- 7 Access to healthcare

Appendix

- <u>1 Elevation profile of routes along North Avenue corridor</u>
- <u>2 Current conditions and proposed alternatives</u>

Sources

Acknowledgments

Nora Purcell, BA, Edwin DeMott, MS, Heather Danis, MPH, RD Burlington District Office | Vermont Department of Health | 108 Cherry Street | Burlington, VT 05402

Introduction

An ongoing corridor study is examining possible ways to make North Avenue, situated in Burlington's New North End, a more complete street that provides "safe, inviting, and convenient travel for all users of all ages and abilities." ¹The study is led by Parsons-Brinkerhoff consulting and directed by the Burlington Department of Public Works and Chittenden County Regional Planning Commission. The corridor study encompasses North Avenue from the North Street intersection to the intersection with Plattsburg Avenue. The nature of this project is closely tied to public health because it has the potential to impact chronic disease, injury, health equity, and mental wellbeing.

Including the public health perspective in planning ensures that the physical and mental wellbeing of residents is considered when developing and implementing policies that impact health. One approach for incorporating public health is through the use of Health Impact Assessments (HIA), which is a process for considering the health effects of a decision and providing recommendations. HIA is a systematic, flexible approach that uses data, research, and stakeholder input to assess the potential health impacts of policies or projects. As a "desktop" or "rapid" HIA, this report draws from existing data such as local reports, public meetings, and published literature about similar scenarios, rather than creating new data.

This HIA complements the ongoing North Avenue corridor study by answering the following questions:

- What are the potential health impacts of proposed changes to North Avenue?
- Which proposals have the most potential to improve the health of vulnerable populations?

The pathway diagram on the next page explores the relevant components of the proposals, the most important health impacts, and the linkages between the two. The current burden of disease from the health outcomes that are most impacted are discussed in the first half of the report. The relationship between the proposals and those outcomes is explored in the second half.

It is important to note several limitations of this HIA. Though air quality may be affected and has negative impacts on conditions such as asthma, other respiratory conditions, and cardiovascular disease, there is not enough data available to comment on whether air quality will improve, decline, or remain constant as a result of the proposed changes. Similarly, little information is available on the relationship between the design of communities and the mental health and wellbeing of residents, so these outcomes are discussed only briefly and in broad terms. The current proposals do not include significant changes to motorist or transit facilities, so there are correspondingly fewer health impacts that might be expected. Motorist and transit facilities are therefore not shown explicitly in the pathways diagram, though they are discussed later in the report. Finally, the proposals that were considered (Appendix 2) are the proposals presented at the second public workshop. They are not yet developed in detail so only broad conclusions can be drawn about potential health impacts.



Population Health Profile

Chronic Disease

Chronic diseases are persistent, life-changing conditions that can be controlled but not cured.² They impact an individual's quality of life, risk of premature death, and healthcare costs. Chronic diseases are widespread; among Chittenden County adults 22% have ever been diagnosed with arthritis, 28% have been told they have high cholesterol, 23% have hypertension, 6% have been diagnosed with cardiovascular disease, and 6% have diabetes.³

Being overweight or obese increases an individual's risk of developing serious health problems such as heart disease, diabetes, stroke, cancer, and arthritis.² Nearly one quarter of high school students in the Burlington School District are overweight (13%) or obese (10%).⁴ Six in ten Chittenden County adults are overweight (37%) or obese (21%).³

Though most chronic diseases have multiple causes and risk factors, the three that are most pertinent to the proposed changes to the North Avenue corridor are physical inactivity, poor diet, and lack of access to healthcare.

Physical Activity

Physical activity is a key component of weight management and is associated with lower rates of chronic disease. To stay healthy, adults should participate in at least 150 minutes of moderate activity or 75 minutes of vigorous activity each week.⁵ Only 62% of adults in Chittenden County meet physical activity recommendations and 13% participate in no leisure time physical activity.³

The U.S. Department of Health and Human Services recommends that young people ages 6–17 participate in at least 60 minutes of physical activity every day.⁵ In the Burlington School District, 61% of middle school students were physically active for one hour each day for the past 7 days.⁴ Rates for boys meeting the physical activity recommendations (65%) were higher than for girls (56%). Only 23% of high school students were physically active for one hour each day for the past 7 days. Again rates for boys (32%) were higher than for girls (13%).

A 2009 policy statement by the American Academy of Pediatrics highlighted the importance of the built environment (including street design, green spaces, and neighborhood layout) in enabling children and adolescents to achieve the 60 minutes of activity they need each day to stay healthy.⁶ In particular, they highlighted that neighborhood design that promotes utilitarian physical activity, such as walking or biking to school, to a park, or to a friends' home, is "sustainable and important to health." Rather than allotting separate time during the day to be physically active, more families will be active if opportunities for walking and biking are built into their neighborhoods through attractive streetscapes, traffic calming, and safe and attractive sidewalks and bicycle routes.

Living in a community that helps build physical activity into the daily structure of life, such as safe routes for walking or biking to school or errands and proximity to parks and bicycle paths, can help children and their families get more physical activity each day.⁶ More than 70% of Chittenden County adults report using community resources for physical activity.³ Walking and biking figure prominently as popular

forms of physical activity, as they are accessible, affordable, and readily incorporated into one's daily routine.⁷

Nationally, children who walk or bicycle to school have higher daily levels of physical activity and better

cardiovascular fitness than do children who do not actively commute to school.^{8,9} Four decades ago, 48% of K-8th grade students usually walked or bicycled to school. By 2009, only 13% of K-8th grade students usually walked or bicycled to school.¹⁰ This graph, taken from an Active Living Research brief, shows this trend across three decades.¹¹

Data from the National Walking Survey (2011) demonstrated that school children tend to walk more if 1) their parents walk more or 2) if the children live in a more



walkable community. Taken together, the effect is additive; children whose parents are frequent walkers AND who also live in a more walkable community are considerably more likely to walk to school than if only one of these influences is present.¹²

Nutrition

Together, physical inactivity and poor diet are the second leading cause of preventable death nationally.¹³ In Chittenden County, 40% of adults consume two or more servings of fruit daily and only 21% consume three or more servings of vegetables daily.³

More detailed information about dietary habits is available for students in the Burlington School District.⁴ Among high school students, 43% ate fruits or fruit juice twice a day, 29% ate vegetables three or more times per day. Only 40% of students had breakfast every morning for the past seven days. High school students were also asked about what they drank. Every day in the past seven days, 11% of students drank at least one can, bottle, or glass of soda and 13% drank at least one can, bottle, or glass of another type of sugar-sweetened beverage.

Given the importance of appropriate nutrition to public health, access to food stores and full-service grocery stores are discussed in detail later in the report.

Access to healthcare

Access to healthcare plays an important role in ensuring that chronic diseases are diagnosed early and managed appropriately to keep people as healthy as possible. Among adults in Chittenden County, 63% had a routine doctor's visit and 77% had a dental visit in the last year.³ Cancer screenings, though not significantly different from the state, there is room for improvement: 81% of women are up to date on breast cancer screening, 84% of women are up to date on cervical cancer screening, and 76% of men and women meet guidelines for colorectal cancer screening.

Injury

On average, there are nearly 350 injury deaths, more than 4,250 injury-related hospitalizations and 68,420 injury-related emergency department visits each year among Vermont residents.¹⁴ Motor vehicle-related hospitalizations are the second leading cause of injury-related hospitalizations in the state, accounting for about one in eight injury-related hospitalizations (13%). Of those hospitalized 6% were pedestrians or bicyclists while the rest were passengers or drivers of motor vehicles.

In Vermont, the highest rates of hospitalization for motor vehicle injuries occur among 15 to 24 year olds and among those 85 years of age and older.¹⁴ Of those aged 15 to 24, the motor vehicle hospitalization rate is 159.3 per 100,000, more than one and a half times that of the next oldest age group (25 to 44 year olds, 95.5 per 100,000). Injury rates also spike among Vermont's oldest citizens, with 167.8 per 100,000 of those 85 years and older being hospitalized for a motor vehicle injury. Between the ages of 15 and 24 the rate of injury hospitalization for males is slightly higher – 192.6 per 100,000 men compared to 124.2 per 100,000 women. Among the oldest Vermonters, men are hospitalized at more than three and a half times that of women (336.1 per 100,000 for males, compared to 87.0 per 100,000 females).

Motor vehicles are the leading cause of injury-related death in Vermont.¹⁴ Between 2001 and 2005, there were an average of 77 motor vehicle deaths per year. This equates to an annual average rate of 12.5 deaths per 100,000 Vermonters. More than half of those motor vehicle injury deaths are among Vermonters between the ages of 15 and 44. Two-thirds of the motor vehicle deaths are male (68%).

Personal behaviors such as using a bicycle helmet, wearing a seatbelt, and not using cellphones while on the road can reduce injury risk. Among high school students in the Burlington School District, 27% have texted or e-mailed in the past 30 days while driving a car or other vehicle.⁴ Vermont has traffic laws in the books that prohibit texting and handheld cellphone usage, but use of electronic devices by motorists, and to a smaller extent, bicyclists and pedestrians is a growing concern. Among students in the Burlington School District, 53% of high school students and 35% of middle school students who rode a bicycle reported never or rarely wearing a bicycle helmet in the past 12 months. Seatbelt use is a more widely used personal injury prevention measure -6% of high school students and 3% of middle school students reported never or rarely wearing a seatbelt while riding in a car. Though unintentional injury to pedestrians, bicyclists and motorists is remediable, in part, through individual behavior change, transportation planning to reduce injury risk is an essential strategy.

Mental health

In Chittenden County, 10% of adults reported that they are in poor mental health, meaning they experienced 14 or more poor mental health days in the last month.³ The same survey found that 22% of Chittenden County adults have ever been diagnosed with a depressive disorder.

Students in the Burlington School District were asked whether they had, over the past 12 months, felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities.⁴ Among middle school students, 23% of girls and 15% of boys answered yes. For high school students, 35% of girls and 15% of boys answered yes.

Clearly, mental health is an important public health issue, but it will not be discussed at length given the lack of research exploring the relationship between mental health and the built environment. However, physical activity – which is discussed extensively in this report – does play an important role in reducing stress and improving mental health.¹⁵

Health Equity

The New North End is home to a vibrant and diverse community. In the North Avenue corridor vision statement, health equity is implied by the goal to "provide safe, inviting, and convenient travel for all users of all ages and abilities."¹ Transportation is an important component of health equity: access to transportation options other than driving is essential for people with disabilities, children too young to drive, older seniors, and those unable to afford cars. These groups represent a significant proportion of Chittenden County's population. Of all residents, 10% have a disability, 16% are less than 15 years old, 12% are seniors, and 12% live in poverty.¹⁶ The American Public Health Association recommends expanding transportation options for these groups wherever possible.¹⁷

Through its nature as a Complete Streets transportation study, the North Avenue corridor has the potential to better meet the needs of all of groups that disproportionally experience poor health. The report, "The Path to Complete Streets in Underserved Communities" summarized this, saying: "The transportation disadvantaged, including communities of color, the poor, older adults, youth and people with disabilities, are at a significant disadvantage without access to convenient, safe, well integrated transportation alternatives. All of these groups are often without easy access to cars and live in locations without convenient, safe transportation alternatives, which severely hampers their ability to function as productive members of society. Furthermore, statistics indicate that these demographic groups are growing in numbers, and are not currently being accommodated by the existing transportation system."¹⁸

Elderly residents

Twelve percent of Chittenden County residents are over the age of 65.¹⁶ Additionally, the North Avenue Corridor has two subsidized housing facilities with units reserved specifically for seniors. (Map 1).

Among the chief concerns of Burlington's elderly residents related to transportation are elderly pedestrian deaths¹⁴ and the need to have a range of transportation options that support aging in place.¹⁵

The Burlington Livability Project: An Action Plan for Burlington encourages Burlington residents and service providers to participate in development of Burlington's Transportation Plan in order to ensure that stakeholder mobility recommendations are incorporated.²⁰ Their principal mobility recommendation was to support roads designed primarily for pedestrians, not cars. Further recommendations include adequately timed crosswalk signals; safer bicycle lanes; better lighting and security at bus stops and parking lots; and placement of more resting spots such as benches along walking routes and at bus stops – with priority given to routes that connect senior housing to services and in high volume pedestrian routes on hills.

In 2009, the AARP led a walking audit of several neighborhoods within Burlington, including a route along North Avenue from the Heineberg Senior Center to Ethan Allen Parkway and back.²¹ The results of

their findings are included throughout the Potential Health Impacts section of this report to highlight the perspective of older residents of the New North End.

Children

The New North End is home to 7 schools with a total student population of more than 2,400 children. (Map 2) As discussed earlier, physical activity is critical for children, but they are often reliant on their immediate neighborhoods, parks, and routes to school for their physical activity. C.P. Smith, which serves an economically and ethnically diverse group of K-5 students including 51% free and reduced lunch and 14% English language learners, participates in the Safe Routes to Schools program (SR2S).²² Their participation in SR2S has generated a wealth of detail about how the ability of elementary school children in the New North End to walk and bike to school is affected by transportation infrastructure.

Most relevant to the North Avenue Corridor is the work C.P. Smith's Safe Routes to School team has done to identify engineering changes that can improve student safety. In their April 2013 School Travel Plan, C.P. Smith identified the intersection of North Avenue and Route 127, less than a mile from the school, as a top priority.²² The travel plan states: "The #1 priority is to implement pedestrian improvements at intersection of North Avenue and Route 127. Improvements include installation of crossing signals and construction of a greenbelt and new curb to accommodate for snow removal during winter months. The residents and the City are also exploring the possibility of closing one of the slip ramps." Additionally, they noted the need for current crosswalk signals to be replaced with countdown signals at several North Avenue intersections: a) Shore Rd. b) Woodbury Rd. c) Ethan Allen Shopping Center. (Map 3)

Parents of children who walked and biked to school were most concerned with traffic speed, distance, adults to go with, weather, intersection safety, and time.²² Many of these barriers are beyond the scope of the North Ave Corridor Study, but decreasing traffic speed and increasing intersection safety are possible through road and intersection design. This is discussed further in the Potential Health Impacts section of this report.

New Americans

Research conducted with Burlington's refugee population reveals that lack of transportation access is a particular challenge, with unique burdens, for New Americans.²³ Beyond the costs of purchasing a car, refugees and immigrants face the additional time, cost, and linguistic barriers of obtaining a driver's license and learning to drive. In lieu of driving, many refugee families must rely on public transportation or walking for all of their travel needs, which can be time-consuming and unsafe, particularly in poor winter weather or for those with young children.

The impact of being unable to access transportation is acute for recently arrived refugees: "This gap acts as a significant barrier in the adaptation of refugees to their new homes and their acculturation to their new host communities. Furthermore, limited transportation options can in substantial ways restrict the autonomy and independence of refugees, leaving them dependent on the services and schedules of others, which in turn can adversely affect their ability to seek and secure gainful employment, receive necessary medical care, and access other goods and services vital to survival, such as food and clothing."²³

More than 6,200 refugees have been resettled in Vermont since 1989, with the majority settling in and around Burlington.²⁴ The exact number of resettled refugees living in the New North End is difficult to determine, but census estimates for Chittenden County show that 7% of the population is foreign born

and 8.5% of the population speaks a language other than English at home.¹⁶ For younger generations, the number of New Americans is an even larger part of the population; 32% of students at Burlington High School are racial or ethnic minorities, 30% have a home language other than English, and 12% take English Language Learner classes.²⁵

Residents with disabilities

Physical or mental disabilities that impair mobility are a noteworthy concern that is not limited to one age group. Just over 10% of Chittenden County residents report having a disability. Specific disabilities that may reduce transport choice include ambulatory, visual, and auditory limitations. Roughly 17% of those over 65 years report an ambulatory disability with visual and auditory disabilities at 6% and 15% respectively. ¹⁶ The Special Services Transportation Authority (SSTA) is a private non-profit corporation that provides transportation for those with disabilities.²⁶ SSTA has 53 vehicles and provided 133,000 rides last year, making it an invaluable resource for those with disabilities that affect their mobility.

Low-income residents

Poverty makes people vulnerable to poor health.²⁷ In Chittenden County, residents with incomes below 250% of the federal poverty level are three times more likely to be diagnosed with diabetes, cardiovascular disease, and asthma and are twice as likely be diagnosed with depression.²⁸

Families living in poverty, regardless of age, ethnicity, or disability, may be heavily impacted by transportation decisions. In Chittenden County nearly 21,000 individuals – 12% of the population – live in poverty. Of households receiving 3SquaresVT benefits in Chittenden County, 44% are home to children under 18 years of age while 21% are home to individuals over 60 years of age.¹⁶

Burlington-specific indicators of low socio-economic status include the percentage of students in the Burlington school district receiving free and reduced lunch and the number of affordable housing units in neighborhoods adjacent to North Ave corridor. In the 2012-13 academic year just over 53% of students in Burlington School District received free or reduced school lunch benefits. Nearly 65% of these students attend schools in neighborhoods immediately adjacent to the North Avenue corridor.²⁹ Within the New North End there are 6 subsidized housing facilities with a total of 553 subsidized units for low-income, elderly, or disabled residents.³⁰ (Map 1)

Access to multimodal options for all ages, abilities

The National Physical Activity Plan advises communities to prioritize resources to increase active

One stated project goal is to "remake the North Ave corridor into a "Complete Street" that accommodates the safe and efficient travel of all users of all abilities and provides transportation choices."¹ transportation and other physical activity through community design, infrastructure projects, systems, policies, and initiatives.³¹ When people have safe active transportation options, every trip taken becomes an opportunity for physical activity. But there are many physical and social barriers to walking and bicycling, which can be grouped into three major categories: long distances, lack of facilities and traffic safety concerns. These barriers are the product of engineering, zoning, land use and urban design trends prevalent in United

States transportation systems for the last half century. Eliminating these barriers means changing the way we think about transportation; a more inclusive and equitable approach requires shifting the paradigm from mobility to accessibility.³²

Roads that support active transportation options such as biking and walking, promote physical activity. In a study examining the environmental and policy determinants of physical activity, when participants were asked where and how they engaged in physical activity, the most common responses were as follows: on neighborhood streets (66%), at shopping malls (37%), at parks (30%), on a walking and jogging trail (25%), on a treadmill (25%), and at an indoor gym (21%).³³

Infrastructure adaptations and policies that support bicycling can significantly increase levels of bicycling for daily travel.³⁴ Accumulated evidence strongly suggests, perhaps intuitively, that creating activity-friendly communities will increase levels of recreational and destination-driven physical activity over time.⁷ The National Institute for Health and Clinical Excellence provided recommendations on the most promising transportation changes that can increase the number of people in a community who are physically active.³⁵ These include:

- re-allocation of road space to support physically active modes of transport (as an example, this could be achieved by widening pavements and introducing cycle lanes)
- restrict motor vehicle access (for example, by closing or narrowing roads to reduce capacity)."

Access to a variety of transportation options is important to public health because not all members of a community are able to drive – nor are all members of a community able to use active transportation. The factors that determine people's transportation options include age, disability, cost, and convenience. ¹⁸ The *Burlington Livability Project* reported that seniors who used multiple forms of transportation were more mobile than seniors who used a single mode.²⁰ The availability of a wide variety of options ensures that all road users are accommodated. Arguments using pedestrian and bicycle counts that show low use/ridership as a defense to maintain a current infrastructure configuration is not an accurate perception. "Lack of pedestrians or bicyclists using a street does not equate to a lack of demand." ³⁶ This lack of use is more attributable to safety concerns than lack of demand.

Current Bike Facilities

Here, the term bike facilities refers to the transportation infrastructure that supports biking, such as sharrows (painted markings that remind cars to share the road and bicyclists to ride predictably), bike lanes (a separate lane painted onto the roadway that is reserved for cyclists), and protected bike lanes. The term *cycle track* is often used by transportation professionals to refer to a one or two-way bike lane that is separated from motor (and sometimes pedestrian) traffic by a physical barrier.

Bike Facilities on North Avenue

Perceptions of safety and convenience determine an individual's decision to walk or bike. Important considerations include: distance to destination, vehicular speed, number of lanes, slope (elevation), presence of sidewalks, bike lanes and traffic volume.⁷

Improved bicycle facilities along North Avenue are necessary despite the nearby presence of the Lakeshore and Route 127 Bike Paths. To compare these routes more rigorously, distance and elevation slope were measured in MapMyRun to evaluate the three potential biking routes between the northern and southern endpoints of the corridor study (Plattsburg Avenue and North Street respectively). This start and endpoint, though not representative of a given individual's actual commute, were used because they delineate the study corridor and because they serve as an approximation of commuting from the New North End into the core of Burlington. The three potential biking routes that were evaluated were 1) along the Lakeshore bike path, 2) along the Route 127 bike path, and 3) along North Avenue itself. (Map 4)

Travel distance was calculated for each of the three routes:

Lakeshore bike path: 3.8 miles Route 127 bike path: 5.0 miles Biking along North Avenue: 2.8 miles

Elevation profiles of the three different routes were evaluated to compare the steepest grade of the three routes:

Lakeshore bike path: 4% grade Route 127 bike path: 3% grade Biking along North Avenue: 2% grade

These results are summarized in Appendix 1.

Though flatter, shorter routes are desirable for all cyclists³⁷, novice, young, and elderly cyclists may be disproportionately affected by long, steep routes. Both in terms of shorter distance and flatter terrain, North Avenue is the preferable option.

Finally, it should be noted that while the Lakeshore and Route 127 bike paths offer excellent recreational opportunities for cycling, they do not provide the efficiency and connectivity that are essential to successful efforts to building physical activity into activities of daily living.³⁷ In addition to incorporating the need of New North End residents to commute to services in the core of Burlington, biking must be an option for accessing essential services within the New North End itself. The schools, grocery stores, pharmacies, and parks that line North Avenue must be accessible by bicycle as well as by car. If the majority of bicyclists only feel comfortable riding on the lakeshore or route 127 bike paths, then they will not have access to the businesses and services along North Avenue.

Separate Bike Facilities

The images below, from the consulting team's second presentation to the advisory committee on September 17, 2013, represent the current conditions of North Avenue and are provided here to highlight current bicycle facilities.³⁸



bike paths of travel. Mixed travel lanes in which bikes and cars must share space, the current situation in Sections Three, Four, and Five, may be suitable for bicyclists with advanced skills, but do not allow sufficient access to the North Avenue corridor for novice, young, elderly, or disabled cyclists. Where there are existing bicycle lanes in the North Avenue Corridor, the lanes are delineated only by painted lines. Compared to bikes and motorized vehicles sharing the same lane, painted bike lanes can calm traffic, provide an organized road space for bicyclists, and can help make the movements of people on bikes more predictable for people on foot or behind the wheel.

Currently, many bicyclists resort to travelling on the sidewalk, particularly in the corridor segment extending northward from VT 127. Despite a perception of safety, bicyclists on a sidewalk incur greater risk than those on the roadway (on average 1.8 times as great), most likely because of blind conflicts at intersections. Sidewalk bicycling appears to increase the incidence of wrong-way travel once the bicyclist re-enters the roadway or bike lane.³⁹ Data for cyclist-pedestrian collisions is not nearly as well documented as collisions involving automobiles.

A physical barrier such as a green strip or other barrier, would offer an additional level of safety for cyclists and other road users. Residents are more likely to choose to bike when there are dedicated cycle routes and cycle traffic is physically separated from vehicle traffic.²⁹ Studies have found that cycling in protected lanes is safer than riding on streets without bicycle facilities. Bike lanes can help improve safety for all road users.⁴⁰ Protected bike lanes make bicycling a more viable option for everyone, particularly children, seniors, or new riders who would be interested and willing to ride bicycles more if it felt safer. A study of the general public in Portland, Oregon found that 60% of residents were "interested but concerned" about riding bikes; for this group, a line of paint on the street isn't enough to get them onto a bike. Bike lanes with physical separation from roadway traffic were most appealing to the interested but concerned group. People are 2.5 times more likely to ride on the protected lanes than on the streets.⁴⁰



A physically separated bike lane is disproportionately attractive to the interested but concerned segment of the population; those who fear for their safety on the road.⁴⁰

Creating separated bicycle facilities promotes health equity by creating a viable and attractive place for physical activity for residents of all ages, income levels, and abilities. While creating additional, better-connected painted bicycle lanes

would help to allow advanced cyclists to safely negotiate the road, the greatest health gains would be achieved by creating a continuous, separated bicycle facility along the length of the corridor. Higher levels of bicycle infrastructure are positively and significantly correlated with higher rates of bicycle commuting.⁴¹

Infrastructure that promotes more of the population to walk and bike can reduce injuries through a "safety in numbers" effect. A study in California examined per capita injury rates to commuting pedestrians and bicyclists in 68 cities and towns, each with a very different proportion their populations that use these active modes. As bicycling and walking increased, the rates of injury went down. Similar studies in the United Kingdom, the Netherlands, and Denmark, all of which have greater cycling and walking rates than the US, yielded the same result. In all cases a motorist is less likely to collide with a pedestrian or bicyclist when there are more people walking or bicycling.⁴²

Public Transportation

Creating an efficient, safe, and inviting experience for those who travel by public transportation is an important component of an equitable corridor. Public transportation promotes health by taking cars off the road, which can improve air quality. Less widely known is the fact that public transportation is a healthy option for the travelers themselves because it's generally necessary to walk or bike a short distance to reach a bus stop. This builds physical activity into daily life, increases the number of "eyes on the street", and promotes casual interactions among neighbors. People who used public transportation for any reason were less likely to be sedentary or obese than adults who did not use public transit use and higher levels of physical activity among adults.¹¹ Hybrid commutes, that is, trips completed using several modes are an effective option when distance and areas not served by transit are barriers to a single-mode active commute.

The Burlington Liveable Communities Project found that efforts such as expanded span of service (especially during nighttime and weekends), improved access to bus stops, comfortable, safe, and welllit stops, and efficient flow of buses all improve the experience of transit users and make it more likely that additional residents will consider using transit instead of cars.²⁰ The American Community Survey (2012) commuter statistics for Chittenden County show that of nearly 87,000 commuters just over 8,000 rode to work in a car or van pool and just under 2,000 used transit services.¹⁶

Vermont Department of Health: Burlington District Office April 18, 2014
The North Avenue corridor study has not proposed drastic changes to public transportation, so health impacts are not likely to be significant. Proposals include some new stops and better integrating transit stops with pedestrian facilities, such as crosswalks, to make it easier for residents to safely walk to bus stops. It will be important to maintain a balance of frequent stops (to reduce the distance residents need to walk to access buses) and bus speed (too many stops can make bus commutes unnecessarily time-consuming). In order for North Avenue to be a truly complete street, any proposed changes to the lane structure (such as right-sizing and incorporating bike lanes), need to consider and mitigate any potential for increased crashes between buses and other users.

Pedestrian Facilities

Walking is the preferred form of physical activity by an overwhelming majority of the population. This preference spans a spectrum of age, gender and income groups. Importantly for public health, walking is the favored choice for physical activity among typically inactive segments of the population.⁷ Local streets are the most commonly used places for physical activity. Of the nearly 7,000 people who participated in the National Walking Survey, 64% reported walking exclusively on sidewalks or streets.¹² An aesthetically appealing street can increase residents' perceptions of safety on streets. The odds of achieving recommended levels of walking were nearly 50% higher among those who lived on a street with trees and/or lighter traffic than for residents in neighborhoods with heavier traffic and no street trees.⁴³

Residents who report living in a neighborhood with no nearby nonresidential destinations, absent or poorly maintained sidewalks, unpleasant community, or lack of interesting sites are more likely to be obese. Perceived and observed indicators of land use and aesthetics are also associated with obesity.⁴⁴ The presence of houses, pharmacies, a grocery store, schools, and parks along North Avenue all contribute to an engaging land-use mix, which is associated with increased walking. ⁴⁵ In the North Avenue walking audit conducted by AARP, participants rated the corridor as being generally attractive and having interesting features.²¹ Building on this foundation, more contiguous and well-maintained sidewalks would enhance the walkability of the New North End and support adults in achieving physical activity recommendations. ^{44, 11}

Facility improvements for pedestrians might include wide, well-lit sidewalks on both sides of every street; pedestrian refuge islands for crossing wide streets; clearly marked crosswalks, often raised and with special lighting for visibility; and pedestrian-actuated crossing signals, both at intersections and midblock crosswalks. These infrastructure upgrades adhere to the Complete Streets model of accommodating users of all ages and abilities.⁴⁶

Motorist Facilities

Injury prevention is one of the major public health concerns relating to automobile usage. The rate of injurious crashes is the largest public health concern because these are the crashes that go beyond property damage and result in physical injuries. The North Ave corridor has four high crash locations.³⁸ Two hundred nineteen crashes occurred at these intersections, collectively from 2006-2010.

One of the largest factors behind crashes is vehicular speed. While the speed limit in Burlington is 25 mph, the current roadway configuration of North Ave includes few if any traffic calming amenities. The current speed limit on North Avenue between Vermont Route 127 and Plattsburg Avenue is 30 mph. The Burlington Police Department reported that nearly 800 drivers were ticketed or warned for speeding along the corridor in 2013; an increase of over 32% from the previous year.⁴⁷ Faster speeds reduce a

driver's ability to steer safely around curves or objects in the roadway, extends the distance necessary to stop a vehicle, and increases the distance a vehicle travels while the driver reacts to a dangerous situation.⁴⁸ Reducing vehicle speed is discussed in the traffic calming section.

The common feature of the high crash locations identified along North Avenue are un-signalized intersections – often a cluster of intersections providing entry/egress from peripheral roadways or retail establishments.³⁸ **Right-sizing the road (also known as a road diet) is one infrastructure improvement that can improve the safety of drivers under such conditions.** Right-sizing a road means eliminating a lane and including a shared center turning lane; this provides a protected road space for turning cars and maintains more consistent vehicle flow in the travel lanes. Estimates for the reduction in crashes after right-sizing a road range from 19% in urban areas to 47% on rural highways.⁴⁹

Intersections: Safety and Air Quality

Intersection safety is a critical health concern for all roadway users. As described above, intersection safety was noted as a concern by C.P. Smith elementary school's School Travel Plan²², highlighting the disproportionate impact it has on the ability of children or other groups to safely walk and bike. Improving intersection safety makes roads more accessible to multimodal users of all abilities by increasing the perception of safety and decreasing injury rates.

Research indicates that well-designed roundabouts can be safer and more efficient than conventional intersections. Roundabouts create less delay for motorists than conventional stop- or signal-controlled intersection⁵⁰ and can be designed to accommodate emergency vehicles or traffic trailers through engineering features such as truck aprons.⁵¹

A recent review of 23 studies relating to bicycle safety at intersections and on straightaways found that cycle tracks through single-lane roundabouts resulted in the greatest reduction in crashes for people riding bikes.⁵² Multi-lane roundabouts, bikes riding on roadways with cars through roundabouts, and high volumes of traffic at roundabouts were found to be more dangerous configurations. Additionally, a review of 28 studies of motorist safety at roundabouts found that converting intersections to roundabouts decreased both the frequency and severity of vehicle crashes.⁵³ Indeed, injury and fatal crashes can be reduced by as much as 70% for traffic flows of single-lane roundabouts up to 20,000 cars per day.⁵⁰

Roundabouts reduce the number of decision points motorists encounter while driving into the intersection. A decision point is a place in an intersection in which a driver is required to make a decision about their travel path. Reductions in decision points means a reduction in the number of potential crash scenarios.⁵⁴



Number of decision points comparison

Though these results are promising, it is beyond the scope of the authors' technical knowledge to comment on

the engineering details of intersections that will best ensure safety for users of all travel modes in North Avenue. Not all intersections along the North Avenue corridor can be addressed in the same manner. Ultimately, the corridor may have a variety of intersection including pedestrian-actuated crosswalks signals, roundabouts, and traditional signalized intersections.

An additional element of intersection design that impacts health is traffic congestion, which is associated with poor air quality. Evaluating the impact of intersection changes on queueing, congestion, and air quality will be an essential step of the proposal evaluation to ensure sufficient air quality for those living near or traveling along North Avenue, but is beyond the scope of this report.

On-street Parking

In addition to the convenience for drivers, on-street parking can improve the pedestrian experience of roadways by serving as a buffer. A study that evaluated parking types in six New England towns, one of which was Brattleboro, VT, showed that towns with on-street parking and other compatible characteristics, such as mixed land use and higher density, recorded more than six times the number of pedestrians compared to sites that lacked these traits.⁵⁵

Free-flow speed on streets with on-street parking was reduced by 2.3 mph as compared to streets without on-street parking. The study showed that the largest decrease in speed occurred on those roadways with a combination of factors complementary to a street type facility with smaller building setbacks and on-street parking.⁵⁶ The resultant traffic calming seen is comparable to that seen in a study of driver's perceptions of street edges and the effects on travelling speeds.⁵⁷

Removal of curbside parking prohibitions has generally yielded a decrease in traffic collisions. One study conducted in Hamilton, Ontario found that non-intersection crash rates reduced by an average 37%.⁵⁸ However, an extensive study in Copenhagen, Denmark, found an increase in injurious crashes when a prohibition of curbside parking shifted parking onto side streets, which increased turning traffic.⁵⁹

On-street parking is one tool to help create a street that accommodates all users. However, reductions in on-street parking on North Avenue are unlikely to have large health impacts if they are balanced with other traffic calming features. Residents who drive cars are unlikely to be inconvenienced by any reduction in on-street parking because the number of spaces that may be affected is quite low.

In the long term, increased bicycling rates, pedestrian rates, transit use and car sharing may result in decreased demand for parking along North Avenue since those living on the corridor will have greatest access to all of these transport options. Demographic and cultural trends may also lead to a decrease in demand for automobile facilities; young adults are less likely to have driver's licenses⁶⁰ (particularly when alternative transportation is available⁶¹) and are more likely than other generations to prefer walkable neighborhoods.⁶²

Traffic Calming

Traffic calming impacts health and wellness through multiple routes. Firstly, crashes at lower speeds are less likely to result in severe injury or death.⁶³ Fast and heavy traffic is commonly cited by youth and adults as a barrier to walking and cycling. Infrastructure changes that decrease vehicle speeds, increase the attention of drivers and enhance pedestrian safety are known as traffic-calming devices. Devices such as speed bumps and visibility aids can improve pedestrian and bicyclist safety. Other devices, include reductions in the number or width of car lanes and sidewalk extensions into traffic lanes at street crossings to shorten the crossing distance.¹¹ Extensive reviews suggest that area-wide traffic calming in towns and cities may be a promising intervention for reducing the number of road traffic injuries, and deaths.⁶⁴

Secondly, when traffic is moving more slowly, people perceive the street to be a safer place.⁶⁵ Traffic speed was noted as an issue by C.P. Smith's Safe Routes to Schools parent surveys²² and in the AARP's livability study²¹, suggesting that this barrier affects all ages. The AARP study participants noted both traffic volume and traffic speed as major barriers to the walkability of their route through the New North End.¹⁶ Lower vehicular speeds, protected bike lanes, and clear edge demarcation with trees can reduce injury risk, but the increased perception of safety is even more impactful.^{40, 58, 63, 65, 66}



Calming traffic through engineering measures is most practical on moderate and low speed roadways. Once implemented, they are effective without constant attention (such as enforcement), and they can be placed in areas where regular enforcement is cost prohibitive. Also, they require little maintenance, so engineering changes can be implemented as funding is available without placing burdens on future budgets. The US DOT National Highway Safety Administration recommends a multi-faceted approach to reducing traffic speeds and thereby increasing safety. Some key elements are regulation (speed limits), signage, public information and education, enforcement, and engineering modifications.⁶³

The street edge acts as a structural reference for motorists, it enables them to distinguish the roadway from the surrounding environment.⁶⁶ Presence of street trees along that edge increase perception of safety. In a study of simulated driving environments, the significant reduction in driver speeds noted in the treed landscape indicates that street trees may provide positive operational values such as traffic calming as well as a potential driver "calming" effect. Although collisions with trees have a high rate of injuries, there may be fewer crashes overall.⁵⁸ This may partially explain reductions in severity and frequency of crashes on streets that have streetscape enhancements.^{67, 68}

One traffic calming measure that can be applied to four-lane roads is right-sizing, eliminating a lane and introducing a central turning lane. The only area of North Avenue that is currently four lanes is the segment between Route 127 and Shore Road. This segment has the highest volumes of traffic, four car lanes, no provision for bicyclists, the largest concentration of retail (including the only full-service grocery store), and one of the busiest intersections (Ethan Allen Parkway).

As discussed above, **right-sizing this segment could reduce congestion caused by vehicles waiting to turn into side streets or the shopping plaza and provide a less stressful driving experience.** Importantly for traffic calming, it could also reduce speeds. Insights on the potential speed impacts of right-sizing the road can be drawn from Colchester Avenue, which eliminated a lane and introduced a central turning lane in 2010-2011.⁶⁹ They found that there was no significant decrease in overall speeds to the restriping of the corridor, though vehicles traveling at the highest speeds did slow down. Eastbound traffic speeds actually increased by 8% which they noted as is likely due to "more uniform traffic flow" and "associated with increased driver expectancy and lower crash rates."

The City wide speed limit for Burlington is 25 mph (unless otherwise posted). The current posted speed limit on North Avenue between Vermont 127 and Plattsburg Avenue is 30 mph, but this is targeted to be redesigned with a 25 mph speed limit. Adding traffic calming features to this equation will increase safety and encourage non-local, higher-speed traffic to forgo the North Avenue corridor for Route 127.

Access to physical activity assets

Active transportation like walking and biking as a form of physical activity was discussed in prior sections, but there is also evidence that access to parks and recreation opportunities is important for physical activity. The National Institute for Health and Clinical Excellence has set forth the following guidance: *"Ensure public open spaces and public paths can be reached on foot, by bicycle and using other modes of transport involving physical activity. They should also be accessible by public transport. Ensure public open spaces and public paths are maintained to a high standard. They should be safe, attractive and welcoming to everyone." ³⁵*

These recommendations are particularly relevant for intersections along North Avenue that are access points to parks or recreational facilities. (Map 5) The **intersections of North Ave with Shore Road**, **Staniford Road**, **and Starr Farm Road** are all initial points of access to the Lakeshore bike path that must be negotiated by visitors or residents from the Eastern side of North Avenue. Starr Farm Park also has outdoor ice skating, playground, soccer fields, and a widely used dog park⁷⁰, so ensuring intersection safety for those trying to access these resources is important to make sure that residents traveling by any mode can take advantage of these features.

It is critical that **the intersections of North Avenue with Leddy Park Road, Institute Road, and Ethan Allen Parkway** are safe for users of all ages, abilities, and modes because these intersections provide access to Leddy Park, North Beach, and Ethan Allen Park (respectively). These three parks are all considered regional parks because they are larger than 50 acres⁷¹. Leddy Park attracts a large number of people because of it has an indoor ice-skating arena, picnic area, beach, playgrounds, basketball court, tennis court, baseball diamond, and soccer fields.⁷⁰ Not only does the intersection of North Ave and Institute Road provide access to Burlington High School and Rockpoint School, it also allows people access to Arthur Park and the Sea Caves on the Eastern side of North Ave and to North Beach and Rockpoint Peninsula on the Western side.

Finally, Ethan Allen Park is a natural area that caters to families with picnic areas and a playground⁷⁰, but which also provides a vital multi-use path that connects walkers and bikers to a large circuit of trails through the Ethan Allen Homestead. 1) Creating a safer means for pedestrians and bikers to travel from Ethan Allen Park's trails and the Lakeshore bike path would drastically improve the connectivity of Burlington's non-motorized multi-use paths. It could both encourage more physical activity and better

protect current users. 2) Improving Ethan Allen Parkway intersection safety is particularly important because the segment from 127 to Ethan Allen Parkway has the corridor's highest traffic volumes, with more than 19,000 cars each day⁷², Lakewood Parkway to Ethan Allen Parkway is a High Crash Location⁷², and the intersection has been noted as difficult to negotiate.⁷³

Gosse Court, which provides access to the Miller Center, which provides recreational facilities for youth and the community, is another important intersection. The segment of North Ave from Gosse Court to Poirier Place is a High Crash Location⁷².

Access to grocery stores

Residents in communities with a more imbalanced food environment typical of "food deserts" (large geographic areas with no grocery stores within reasonable proximity) have more health problems and higher mortality than residents of otherwise similar areas with a higher proportion of grocery stores.⁷⁴ The problem of food deserts is not limited to big cities; the rural nature of Vermont creates its own challenges for grocery store access. In 2013, Fletcher Allen Healthcare conducted a community health needs assessment of the Burlington Health Service Area (Chittenden County and adjacent towns).⁷⁵ Through discussion with focus groups and community leaders, access to food and nutrition was identified as one of the top priorities for maintaining a healthy community, with transportation to markets highlighted as a major community need. Similarly, the Burlington Healthy Food Assessment (BHFA) identified unreliable access to transportation as a significant barrier to food security.⁷⁶ Among Burlington residents who reported not always having enough or the kinds of food they want to eat, 10% said it was too hard to get to the store. These results are important to the North Avenue Corridor because they highlight how critical transportation to food resources is for the health of the residents of the New North End who rely on North Avenue to reach food stores.

The Burlington Healthy Food Assessment analyzed the number of residents within ¼, ½, and 1 mile of full-service supermarkets and other food stores for all of Burlington.⁷⁶ Specifically, for the BHFA Florence Becot conducted a network analysis to determine the geographic area that falls within ¼, ½, or 1 mile of each food store traveling along the existing road network (ie. *not* "as the crow flies"). To find results more relevant to the North Avenue corridor study, those areas were overlaid with the GIS file of New North End households to calculate the distance that households have to travel to reach a food store. Applying the methods used in the BHFA to the smaller geographic area of the New North End (Census Tracts 1 and 2), this section focuses on those households for whom North Avenue is the primary road they interact with in any errand – within or outside their immediate neighborhood. Residents of the Old North End living near the study area have more convenient access to services within Burlington and were hypothesized to be less directly impacted. Within the New North End, there are 3,937 households according to the E911 database, a geographic listing of households that is used by emergency responders. (Map 6A)

First, the analysis was conducted for all food stores – this included even very small convenience stores that sold some foods but were not full grocery stores. (Map 6B) By that measure, 789 households were within $\frac{1}{4}$ mile, 882 were $\frac{1}{4}$ - $\frac{1}{2}$ mile, and 1395 were $\frac{1}{2}$ - 1 mile. This means that 3066 total were less than 1 mile from some type of food store. Next, the analysis was repeated for just full-service supermarkets. (Map 6C) The Burlington Healthy Foods Assessment revealed that roughly three-quarters of residents shop for groceries at full-service supermarkets and that supermarkets and food coops have the highest availability of healthy foods including produce, protein, dairy, bread, and grains.⁷⁶ This means that access to a full-service supermarket, not a food store of any type, is most important for full access to a

range of affordable healthy foods. The only full-service market in the New North End is the Hannaford's, so all distances relate to the Hannaford's. Using just this single full-service supermarket, 99 households are within ¼ mile, 421 are ¼ - ½ miles, and 1280 are ½ - 1 mile from the full-service supermarket. In total 1800 households are less than 1 mile from the supermarket. For healthy adults, within a half mile is generally considered walkable and within one mile is considered bikeable⁷⁶, so these results demonstrate that 45% of New North End households could walk or bike to the Hannaford's if safe, inviting infrastructure is in place. The majority of residents, 2,137 households, live more than a mile from Hannaford and likely need access to efficient public transportation and driving options to be able to reach the Hannaford's. Given Vermont's long winters that make walking difficult – and the additional challenges of walking with grocery bags in any season – those without access to a car may need to make more frequent trips to grocery stores, further highlighting the importance of easy, multi-modal access.

Finally, this analysis was then repeated from a health equity perspective to look at the proximity of subsidized rental units to full-service supermarkets to better understand the options available to lower-income residents. (Map 6D) Avenue Apartments (33 affordable units) and Thayer House (36 units for elderly residents) are less than ¼ mile of the Hannaford's. Heineberg Senior Housing (82 units for elderly residents) is less than ½ mile from the Hannaford's. With well-maintained sidewalks and pedestrian intersection signals, this proximity presents an excellent opportunity for many older or lower-income residents of the New North End to easily access a full-service supermarket. Franklin Square (60 affordable units) is within 1 mile, but the remainder of subsidized housing in the region (the 336 affordable units at Northgate and 6 units for residents with disabilities at Pennington house) are more than 1 mile from the grocery store. This points to the need for sufficient car and bus accommodation along North Avenue for those who are beyond a walkable distance from the grocery store. Public transportation scheduling was a particular concern cited for transportation challenges that cause food insecurity in Burlington.⁷⁶

Access to healthcare

Good access to health care can influence a person's use of health care services and improves overall health.⁶⁹ Although behaviors contribute far more to a person's health than does healthcare access,⁷⁷ it is important to ensure that everyone is able to access the healthcare system regardless of the transportation they choose or can afford.

The New North End houses several pharmacies, two primary care practices (one pediatric and one general), and two long-term care facilities. (Map 7) However, the nearest federally-qualified healthcare center, hospital, and medical specialists are all outside of the New North End. To provide for access to healthcare, North Avenue thus must allow for safe, efficient travel to pharmacies and healthcare providers in the neighborhood as well as these and other services in the greater Burlington area. A well-balanced transportation system that allows people to drive, take public transportation, walk, or bike to their medical appointments or to refill prescriptions will best suit everyone's needs.

Mental Health and Wellbeing

The design of a community can contribute to overall mental health and social capital.⁷⁸ Closeness to green space and nature can relieve stress, so street trees and green space should be preserved or installed wherever possible.⁷⁹ AARP's livability study noted that there was insufficient shade on the route they evaluated between the Heineberg Senior Housing Complex along North Avenue to Ethan Allen parkway.²¹

A study which investigated the relationship between illness and the amount of natural land around a residential environment found that the prevalence rates for several diseases were lower where there were more natural environments. Furthermore, there was a strong association between depression and anxiety and the amount of nature in people's lives, especially for children.⁸⁰ Areas with sprawl, congested traffic, and high dependency on cars for transportation may increase the stress and social isolation of those who commute by car.⁷⁹

Perceptions of safety can be improved through pedestrian-scale lighting and consistent maintenance of roads, parks, and bus shelters.⁸¹ Overall corridor improvements that encourage more pedestrians and cyclists to use North Avenue may also increase the number of "eyes on the street", neighbors looking out for one another, which is another important component to a sense of safety.⁸²

Conclusions

The strategies for making the North Avenue Corridor provide "safe, inviting, and convenient travel for all users of all ages and abilities" are the same strategies that promote health by increasing safe opportunities for physical activity among those currently inactive.

- Continuous, **protected bike facilities**, those physically separated from the roadway, (proposed Options D, E and F in Appendix 2) would allow a larger number of inexperienced bicyclists to travel North Avenue. These configurations allow for safer travel than the current configuration. Any of these options may lead to an increase in the number of people making the choice to bicycle more frequently for utilitarian and recreational purposes. The corollary to this increase is potential improvement in the health of residents.
- Care should be taken in the **design of facilities**, particularly at intersections, driveways, crossings and transit stops to reduce any potential for increased crashes. Intersections designed to minimize injuries for users of all modes, may serve to increase the willingness of residents to be more physically active, and improve the quality of life of those who live along and travel through North Avenue.
- An array of **traffic calming** strategies can help reduce the severity of injuries and increase the number of people willing bike and walk in the New North End, due to a heightened perception of safety.
- **Right-sizing** can make roadway conditions safer both for motorists and other users of the roadways by limiting excessive speed and providing protected center turn lanes.
- **Pedestrian-scale details** like street trees, green space, and lighting, can contribute to a sense of mental wellbeing, safety and connectedness among residents in addition to amplifying the traffic calming effect.
- **Providing multi-modal transportation** options increases access and the potential that children, seniors, people with disabilities, New Americans, or those with limited financial resources can access a range of essential services such as grocery stores, pharmacies, parks, and places of employment.

The greatest gains in public health, through improvements in physical activity, social connectivity and equitable access to services will be attained through a truly multi-modal street that accommodates people of all ages and abilities.

Limitations

The proposals that were reviewed to create this report are, themselves, still under development and will continue to be shaped by the public, the advisory committee, and more detailed technical reviews throughout implementation. It is beyond the scope of this assessment to comment on the details of how any change is implemented, but consideration of the impacts on injury, air quality, access to services regardless of income, age, sex, or disability, and opportunities for physical activity should be emphasized throughout the course of the corridor study and the implementation of its recommendations.

Many of the proposals for North Avenue could improve health by reducing injury risk and improving access to physical activity opportunities. However, through lack of applicable research, ambiguity in the current proposals, or unexpected outcomes of changes to the corridor, there is potential for health to be adversely affected too. The list below explores potential unintended and unforeseen negative health impacts on health that could arise.

- Increasing the numbers of people walking and biking on the street could increase the number of injuries, particularly at driveways and intersections. Though traffic calming, increased driver expectation of encountering other road users, and physically separated bike and pedestrian facilities are shown to mitigate this danger, the number or severity of injuries on North Avenue should be monitored and responded to appropriately.
- Separating bikes from car traffic can increase the risk of bicyclists being struck by cars while making left-hand turns. Intersections should be designed to accommodate such turns and make them as safe as possible to reduce injury risk.
- If physically separated bike lanes are implemented, the interactions between cyclists and buses pulling out at transit stops should be carefully designed so as to reduce the risk of crashes and injury. As above, injuries should be monitored and adjustments to the corridor should be made if necessary.
- The safety of roundabouts or other intersection treatments is dependent on details of their design that are beyond the scope of this report. Planners and engineers should consider and mitigate any potential for increased injury risk at intersections to ensure that all road users are safe and that residents can use North Avenue for physical activity.
- Air quality is beyond the scope of this health impact report because there is insufficient data to project changes in air quality based on the proposed roadway changes. However, because of the importance to asthma, respiratory disease, adverse birth outcomes, and cardiovascular disease, planners should consider potential changes in air quality before implementing corridor changes.
- Proposed changes to North Avenue may result in increased traffic on Route 127. Though Route 127 is intended to accommodate higher-speed, pass-through traffic, the potential for increased car crashes, congestion, poor air quality, increased traffic at Route 127 access points, and negative impacts to users of the Route 127 bike path should be considered.









Map 3 – C.P. Smith School Travel Plan: Intersections of Concern

Map 4 - Potential Bike Routes





Map 5 - Access to Parks and Recreation Opportunities



Map 6A -All Residential Locations Used in Analysis

Map 6B -Access to all food stores



Map 6C –Access to full-service grocery stores





Map 6D - Full service grocery stores vs. subsidized housing locations

Map 7 – Access to Healthcare



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Appendix 1:

Elevation Profiles of Routes along North Avenue Corridor

Elevation profiles of routes were evaluated using MapMyRide with a starting point at North Ave and Plattsburgh Ave and an ending point at North Ave and North Street.

- The distances of the various routes is proportional to the width of the boxes.
- The grade (slope) of the routes is indicated by the shading: green represents a downhill, yellow is relatively flat, and orange represents a steep climb.

Lake Shore Bike Path (3.78 miles):

Southbound



Route 127 Bike Path (4.99 miles):

Southbound



North Avenue (2.79 miles):

Southbound



Appendix 2:

Current Conditions and Proposed Alternatives

The development of the preferred alternative should consider the potential health impacts of the road configuration in detail. This appendix is included so the reader can compare the current conditions and proposed alternatives as they read the health impact report. Current conditions images are taken from second presentation to the North Avenue advisory committee and the proposed options images are taken from handouts disseminated at the advisory committee meeting of 05/01/2014.

Washington/Berry Street to North Street



Figure 1. Current conditions



Institute Road to Washington/Berry Street



Figure 2. Current conditions



VT 127 Ramps to Institute Road



Figure 3. Current conditions



Shore/Heineberg Road to VT 127 (Var.1)



Figure 3. Current conditions



Shore/Heineberg Road to VT 127 (Var. 2)



Figure 4. Current conditions



Plattsburg Avenue to Shore/Heineberg Rd



Figure 5. Current conditions

Segment 1: Plattsburg Ave to Shore Rd/Heineberg Rd	
All Options Include: - Rightsized corridor - 25 mph speed limit - Parking on one side - Complete streets treatments	Existing: 40'
Option A: Bike facilities within existing curbs	Plattsburg Ave to Shore Rd: Option A Existing: 40' Proposed: 40' 5' 5' 10.5' 10.5' 6' 8' 5'
Option B: 5' minimum bike lanes (Same as Option A)	Plattsburg Ave to Shore Rd: Option B Existing: 40' Proposed: 40' 5' 5' 10.5' 10.5' 6' 8' 5'
Option C: Buffered bike lanes	Plattsburg Ave to Shore Rd: Option C Existing: 40' Proposed: 43' 5' 7' 10.5' 10.5' 7' 8' 5'
Option D: On-street cycle tracks (separated by mountable curb)	Plattsburg Ave to Shore Rd: Option D Existing: 40' Proposed: 43' 5' 7' 10.5' 10.5' 8' 7' 5'
Option E: Raised cycle tracks	Plattsburg Ave to Shore Rd: Option E Existing: 40' Proposed: 29' 5' 5' 10.5' 10.5' 8' 5' 5'
Option F: Raised two-way cycle track on southbound side	Plattsburg Ave to Shore Rd: Option F Existing: 40' Proposed: 29' 5' 10' 10.5' 10.5' 8' 5'

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Appendix F: City Council Resolution (October 2014)
NORTH AVENUE CORRIDOR PLAN

RESOLUTION 5.02

Sponsor(s):	Transportation, Energy,
Utilities Co	ommittee
Introduced:	10/06/14
Referred to:	

Action:	amended	; adopted	
Date:	10/06/14		
Signed	by Mayor:	10/17/14	•

CITY OF BURLINGTON

	In the year Two Thousand Fourteen	
	Resolved by the City Council of the City of Burlington, as follows:	
1	That WHEREAS, North Avenue is the primary transportation corridor connecting Burlington's New North	1
2	End with the rest of the city; and	
3	WHEREAS, in 2011 the Burlington Transportation Plan was unanimously adopted by the City Counc	il
4	as a chapter of the Municipal Development Plan in which North Avenue is envisioned as a Complete Street,	
5	designed to accommodate safe access for all users, including pedestrians, bicyclists, transit vehicles and rider	s,
6	and motorists; and	
7	WHEREAS, in 2013 the City Council resolved to commence a planning study of the North Avenue	
8	corridor through the Chittenden County Regional Planning Commission to study transportation issues betwee	'n
9	Plattsburg Avenue and North Street and to solicit public feedback on the preferred transportation	
.0	improvements for the corridor; and	
.1	WHEREAS, an Advisory Committee with broad public participation was convened to represent the	
2	various members of the North Avenue community and guide the development of transportation improvement	S
3	to the North Avenue corridor; and	
4	WHEREAS, the North Avenue Corridor Study shaped by this public input presents a high-level plan	
5	for the future transportation infrastructure of North Avenue by evaluating existing and future corridor	
6	conditions, articulating the vision and goals for the corridor, developing and comparing design concepts and	
7	other recommendations, and offering a plan of conceptual projects to implement the vision; and	
8	WHEREAS, the Transportation, Energy and Utilities Committee (TEUC) of the City Council has	
9	reviewed and supports the North Avenue Corridor Study recommendations that will achieve the corridor	
0	vision; and	
.1	WHEREAS, those recommendations are to be completed in stages: 1) short-term projects within one t	:0
2	three years, 2) medium-term projects within three to seven years, and 3) long-term projects in more than seve	n
3	years; and	

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Page 2Resolution Relating toNORTH AVENUE CORRIDOR PLAN

WHEREAS, each concept listed below will be fully evaluated and designed through project
 development before implementation; and

WHEREAS, generally the short-term concepts will have minimal design and additional public process as required for regulatory changes or project benefit, medium-term concepts will need design and additional public process, and long-term concepts will require detailed evaluation, scoping, design, and additional public process; and

WHEREAS, the short-term pilot project and VT 127 short-term project will include comprehensive data collection plans (i.e. metrics) and intensive public outreach efforts (e.g. neighborhood meetings, online input tools, community surveys); and

WHEREAS, a North Avenue Task Force appointed by the City Council could foster a collaborative process for implementation of the North Avenue Corridor Study for all phases of project development, including data collection development, review of metrics, and public outreach development, to ensure the full cooperation of City Departments and community stakeholders and establish regular reporting mechanisms to the City Council;

38 NOW, THEREFORE, BE IT RESOLVED that the City Council directs the Department of Public 39 Works (DPW), in coordination with the project area Councilors, to convene the North Avenue Task Force, 40 such Task Force to include members of the Ward 3 Neighborhood Planning Assembly, Ward 4 Neighborhood 41 Planning Assembly, Ward 7 Neighborhood Planning Assembly, representatives of the Burlington Departments 42 of Planning and Zoning, Community and Economic Development, Public Works, Police, and Fire, the 43 Chittenden County Transportation Authority (CCTA), and Burlington School District; and one representative 44 from each Ward (3,4,7) recommended by the project area Councilors and appointed by the Mayor; and 45 BE IT FURTHER RESOLVED that metrics and community input will begin to be collected at the 46 onset of the pilot project, to be fully reviewed and presented with staff recommendations 4 months into the pilot and again at the conclusion of the 4-3 lane pilot study. By its nature as a pilot study, if public input 47 48 from the New North End does not support its continuation, the City will restore the 4-3 lane pilot area to its 49 current configuration; and

50 BE IT FURTHER RESOLVED that DPW keep the City Council's Transportation, Energy, & Utility 51 Committee and project area Councilors informed on a regular basis of the work of the North Avenue Task 52 Force and that the Committee will in turn keep the Council informed of the work of the North Avenue Task 53 Force; and

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Page 3Resolution Relating toNORTH AVENUE CORRIDOR PLAN

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54	BE IT FURTHER RESOLVED that the City Council directs DPW, in coordination with the North
55	Avenue Task Force, to implement the recommendations of the North Avenue Corridor Study and present
56	designs, findings, and recommendations to the Transportation, Energy, & Utility Commission and the Public
57	Works Commission as appropriate; and
58	BE IT FURTHER RESOLVED that the short-term implementation plan includes the following action:
59	- At all intersections, upgrade curb ramps to be ADA-compliant, add crosswalks on all approaches of
60	signalized intersections, add audible pedestrian countdown timers with a minimum of five-second push-
61	button activated Leading Pedestrian Interval, and bicycle facilities maintained through the intersections
62	where they are provided in advance of intersections;
63	- Install new crosswalks (listed in order of priority) at Burlington College, Gosse Court, Killarney Drive /
64	Village Green Drive, Green Acres / Cayuga Court, Ward Street;
65	- At Shore Road, increase pedestrian crossing times, add pedestrian-activated no right turn on red, and split
66	phasing for Shore Road / Heineberg Road approaches;
67	- At Ethan Allen Shopping Center, increase pedestrian crossing times and add pedestrian-activated no right
68	turn on red;
69	- At the VT 127 ramps, optimize the signal timing to achieve greater efficiency, close the high speed
70	northbound ramp, remove the free-flow westbound right-turn movement, the gantry over North Avenue,
71 [.]	and add gateway treatments;
72	- At Institute Road, fix motor vehicle detection, reduce the intersection footprint with paint, relocate the
73	northbound bus shelter to north (far side) of the intersection, realign southbound sidewalk north of Institute
74	Road, and add pedestrian-activated no right turn on red;
75	- a pilot project to include no parking at least on one side of North Avenue between Institute Road and VT
76	127 ramps and between Shore Road and Plattsburg Avenue, buffered bike lanes between Washington
77	Street and Institute Road, bike lanes between Institute Road and the VT 127 ramps, a 3-lane cross section
78	with bike lanes between the VT 127 ramps and Shore Road, bike lanes between Shore Road and Plattsburg
79	Avenue, and, as needed, replace drain grates with bike-friendly grates;
80	- Create up to three additional transit shelters at high ridership stops (pending funding) and larger shelters at
81	Burlington High School; and
82	- where width and parking allow add buffering and protection for bikes lanes on both sides of North Ave. ;

83 and

ORIGINAL	RESOLUTION RELATING TO			Adopted by the City Council	 Clerk	Approved	Mayor	Vol Page
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Page 4 Resolution Relating to

NORTH AVENUE CORRIDOR PLAN

84 BE IT FURTHER RESOLVED that the City Council requests that the Chief Administrative Officer 85 for Administration send copies of this resolution to all the parties named herein.

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89 Ib/EMB /Resolutions 2014/DPW - North Avenue Corridor Plan; Create North Avenue Task Force
90 10/2/14 amended; adopted lo 10/06/14

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DISTRIBUTION:

I hereby certify that this resolution has been sent to the following department(s) on

All listed parties

ORIGINAL

RESOLUTION RELATING TO

North Avenue Corridor Plan

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..... Mayor

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