Cross Section Concepts

Cross Section	Existing Roadway Width	Short-Term Concepts (Less than 3 years) Concept A (Within Existing Curbs)	Long-Term Concepts (More than 10 years)					
Segment								
			Concept B	Concept C	Concept D	Concept E	Concept F	
Corridor-wide	33' to 42'	Safe for all users of the street Consistent transportation facilities 25 mph speed limit, reinforced with traffic calming elements Parking, when present, on one side	Same as Concept A + 5' minimum bike lanes throughout the corridor	Same as Concept A + Buffered Bike Lanes: 5' bike lanes with 2' buffer	Same as Concept A + On-street one-way cycle tracks	Same as Concept A + Raised one-way cycle tracks	Same as Concept A + Two-way raised cycle track on SB (west) side of North Ave	
Segment 1: Plattsburg Ave to Shore Rd	40'	Two 10.5' travel lanes One 6' bike lane along parking One 5' bike lane on other side Approx. 8' tree zone Maintain 8' parking on one side 40' total curb-to-curb width	Same as Concept A	Two 10.5' travel lanes Two 5' bike lanes with 2' buffer Approx. 6.5' tree zone Maintain 8' parking on one side 43' total curb-to-curb width	Two 11' travel lanes Two 5' on-street one-way cycle tracks with 3' curb buffer Approx. 5' tree zone Maintain 8' parking on one side 46' total curb-to-curb width	Two 11' travel lanes Maintain 8' parking on one side 30' total curb-to-curb width 6.5' raised one-way cycle tracks with 1' sidewalk delineator Approx. 5.5' tree zone/buffer	Two 11' travel lanes Maintain 8' parking on one side 30' total curb-to-curb width 12' raised two-way cycle track with 2' sidewalk delineator Approx. 6' tree zone/buffer	
Segment 2: Shore Rd to VT 127 Ramps (Three Lanes)	40'	Note: The 4-to-3 conversion is considered medium term (< 7 years) Two 10' travel lanes One 10' center turn lane Two 5' bike lanes Approx. 8' tree zone 40' total curb-to-curb width	Two 10.5' travel lanes One 10' center turn lane Two 5' bike lanes Approx. 7.5' tree zone 41' total curb-to-curb width	Two 10.5' travel lanes One 10' center turn lane Two 5' bike lanes with 2' buffer Approx. 5.5' tree zone 45' total curb-to-curb width	Two 11' travel lanes One 10' center turn lane Two 5' on-street one-way cycle tracks with 3' curb buffer Approx. 4' tree zone 48' total curb-to-curb width	Two 11' travel lanes One 10' center turn lane 32' total curb-to-curb width 6.5' raised one-way cycle tracks with 1' sidewalk delineator Approx. 4.5' tree zone/buffer	Two 11' travel lanes One 10' center turn lane 32' total curb-to-curb width 12' raised two-way cycle track with 2' sidewalk delineator Approx. 5' tree zone/buffer	
(Four Lanes)	40'	Four 10' travel lanes Sharrows on curbside lanes Approx. 8' tree zone 40' total curb-to-curb width	Four 10.5' travel lanes Two 5' bike lanes Approx. 2' tree zone 52' total curb-to-curb width	Two 10.5' travel lanes (center) and two 10' travel lanes (outside) Two 5' bike lanes with 2' buffer No tree zone 55' total curb-to-curb width	Four 10.5' travel lanes Two 5' on-street one-way cycle tracks with 2' curb buffer No tree zone 56' total curb-to-curb width	Four 10.5' travel lanes 42' total curb-to-curb width 5' raised one-way cycle tracks with 1' buffer and 1' sidewalk delineator No tree zone	Four 10.5' travel lanes 42' total curb-to-curb width 8' raised two-way cycle track with 1' sidewalk delineator Approx. 2' - 3' tree zone/buffer	
Segment 3: VT 127 Ramps to Institute Rd	40'	Two 10.5' travel lanes One 6' bike lane along parking One 5' bike lane on other side Approx. 8' tree zone Maintain 8' parking on one side 40' total curb-to-curb width	Same as Concept A	Two 10.5' travel lanes Two 5' bike lanes with 2' buffer Approx. 6.5' tree zone Maintain 8' parking on one side 43' total curb-to-curb width	Two 11' travel lanes Two 5' on-street one-way cycle tracks with 3' curb buffer Approx. 5' tree zone Maintain 8' parking on one side 46' total curb-to-curb width	Two 11' travel lanes Maintain 8' parking on one side 30' total curb-to-curb width 6.5' raised one-way cycle tracks with 1' sidewalk delineator Approx. 5.5' tree zone/buffer	Two 11' travel lanes Maintain 8' parking on one side 30' total curb-to-curb width 12' raised two-way cycle track with 2' sidewalk delineator Approx. 6' tree zone/buffer	
Segment 4: Institute Rd to Washington St	35'	Two 10.5' travel lanes Two 5' bike lanes with 2' buffer Approx. 4' – 11' tree zone 35' total curb-to-curb width	Same as Concept A	Same as Concept A	Two 11' travel lanes Two 5' – 7' on-street one-way cycle tracks with 3' curb buffer Approx. 7' – 9' tree zone 38' – 42' total curb-to-curb width	Two 11' travel lanes 22' total curb-to-curb width 6.5' raised one-way cycle tracks with 1' sidewalk delineator Approx. 9.5' tree zone/buffer	Two 11' travel lanes 22' total curb-to-curb width 12' raised two-way cycle track with 2' sidewalk delineator Approx. 10' tree zone/buffer	
Segment 5: Washington St to North St	33' typ.	Two 10.5' travel lanes One 4' NB bike lane and sharrows in the SB travel lane Approx. 10' tree zone Maintain 8' parking on one side 33' total curb-to-curb width	Two 10.5' travel lanes One 6' bike lane along parking One 5' bike lane on other side Approx. 6.5' tree zone Maintain 8' parking on one side 40' total curb-to-curb width	Two 10.5' travel lanes Two 5' bike lanes with 2' buffer Approx. 5' tree zone Maintain 8' parking on one side 43' total curb-to-curb width	Two 11' travel lanes Two 5' on-street one-way cycle tracks with 2' curb buffer Approx. 4.5' tree zone Maintain 8' parking on one side 44' total curb-to-curb width	Two 11' travel lanes Maintain 8' parking on one side 30' total curb-to-curb width 6.5' raised one-way cycle tracks with 0.5' sidewalk delineator Approx. 4.5' tree zone/buffer	Two 11' travel lanes Maintain 8' parking on one side 30' total curb-to-curb width 12' raised two-way cycle track with 1' sidewalk delineator Approx. 5' tree zone/buffer	

Cross Section Improvement Concepts for Pedestrians and Transit

Segment	Pedestrian Concepts	Transit Concepts
Corridor-wide	Countdown timers and improved ADA ramps at all signalized intersections Improved visibility (refuges), accessibility (ADA ramps), and safety of existing crossings More trees where feasible	Additional shelters (Awaiting information from CCTA) Increased service frequency Bikes conflict with buses in bike lanes (leapfrog), or bikes conflict with bus passengers in cycle tracks (assuming cycle tracks behind bus shelters)
Segment 1: Plattsburg Ave to Shore Rd	New pedestrian crossings with curb extensions/raised center medians (as appropriate): • Loaldo Dr/Fairmont Pl • Green Acres Dr/Cayuga Ct • Cross Pkwy • Staniford Rd • Gosse Ct/Dodds Ct	
Segment 2: Shore Rd to VT 127 Ramps	New pedestrian crossings with curb extensions/raised center medians (as appropriate): • Poirier Pl • Mid-block (Snap Fitness) • Leddy Park Rd • Lakewood Pkwy • Village Green/Killarney Dr • Saratoga Ave	
Segment 3: VT 127 Ramps to Institute Rd	New pedestrian crossing with curb extensions/raised center medians (as appropriate): • Midblock, south of VT 127 by bus stops	
Segment 4: Institute Rd to Washington St	New pedestrian crossings with curb extensions/raised center medians (as appropriate): • Cemetery entrance • Burlington College entrances • Convent Square	Larger shelters at Burlington High School
Segment 5: Washington St to North St	New pedestrian crossing with curb extensions/raised center medians (as appropriate): • Crowley St • Ward St • Canfield St	

Intersection Treatments

			Implementation			
Intersection	Treatment	Short Term (< 3 Years)	Medium Term (< 7 Years)	Long Term (> 10 Years)		
Corridor-wide	ADA-accessible curb ramps and crosswalks on all approaches	✓				
	Pedestrian countdown timers and 5-second leading pedestrian interval (push-button actuation) at all crosswalks	✓				
	Maintain bike treatments through the intersection. Include bike boxes and two-stage left-turn boxes, where appropriate.	✓				
Plattsburg Ave	No right on red	✓				
	Resolve Tracy Dr turns	✓				
	Exclusive pedestrian phase for south crosswalk only if right-turn lane remains (Otherwise concurrent walk signal with 5-second LPI if right-turn lane removed)	✓				
	Minor realignment of Plattsburg Ave with curb bulb-out to shorten pedestrian crossing distances, slow right-turning traffic, and create a more compact intersection		✓			
	Right-turn lane removal		✓			
	Resolve access to and from market/liquor store		✓			
	Gateway treatments (northern entrance to the corridor)		✓			
	Mini-roundabout		✓			
Shore Rd/	No right on red	✓				
Heineberg Rd	Audible walk signals and longer pedestrian crossing times for nearby senior population	✓				
	Split phasing of traffic signal	✓				
	Opposing left turn lanes on North Ave	✓				
	Realign Shore Rd to meet Heineberg Rd			✓		
Ethan Allen	No right on red	✓				
Shopping Center	Audible walk signals and longer pedestrian crossing times for nearby senior population	✓				
C enter	Opposing left turn lanes on North Ave	✓				
	Reconstruct Bamboo Hut curbs and curb cuts, and reconstruct Farrington's Mobile Home Park driveway into true street with crosswalk		✓			
Ethan Allen	Opposing left turn lanes on North Ave	✓				
Pkwy	Expand signal to incorporate Little Eagle Bay	✓				
	Relocate Ethan Allen Park entrance farther from the intersection		✓			
	Minor realignment of Ethan Allen Pkwy with curb bulb-out to shorten pedestrian crossing distances, slow right-turning traffic, and create a more compact intersection		✓			
	Resolve driveway access on west side of intersection		✓			
	Roundabout, no flare on approaches for 10 to 15 mph turns			✓		
VT 127 Ramps	Remove gantry north of the intersection.	✓				
	Remove channelized, high-speed NB right turn to VT 127 ramps and WB free right to NB North Ave	✓				
	Dual SB left-turn lanes onto VT 127 ramps (allows for south crosswalk pedestrian refuge)		✓			
	Gateway treatments (transition from high speed corridor to 25 mph corridor)		✓			
	Roundabout, no flare on approaches for 10 to 15 mph turns (includes dual SB and WB approach lanes)			✓		

Intersection Treatments (Continued)

			Implementation		
Intersection	Treatment	Short Term (< 3 Years)	Medium Term (< 7 Years)	Long Term (> 10 Years)	
Institute Rd	No right on red	✓			
	Fix broken vehicle detection	✓			
	Reduce size of bus pull out south of intersection to create space for southbound bike treatment	✓			
	Address conflict between SB cyclists and right-turning vehicles	√ (Shared turn lane)	√ (Cycle track)		
	Move northbound bus stop to far side (shift roadway west to accommodate)		✓		
	Resolve bus driveway location		✓		
	Roundabout, no flare on approaches for 10 to 15 mph turns (includes SB right-turn bypass lane)			✓	
Washington St/	Rectangular rapid flash beacon for crosswalk	✓			
Berry St	Raised intersection and gateway treatments (transition between Old and New North End)		✓		
North St	No right on red	✓			
	Right in, right out at parking lot entrance/exit near Depot St, or remove curb cut	✓			
	Realign south crosswalk to reduce crossing distance	✓			
	Realign north crosswalk to be adjacent to push-button and to reduce crossing distance	✓			
	Pedestrian refuge in south crosswalk	✓			
	Protected/permitted SB left turns onto North St	✓			
	Gateway treatments (southern entrance to the corridor)		✓		