

Bike & Pedestrian Crossing Study: Williston Road at I-89 Exit 14



Options Workshop
April 14, 2017
South Burlington, Vermont



CHITTENDEN
COUNTY
RPC



Who are we?



Christine Forde

Peter Keating



Ilona Blanchard

Ashley Parker



Greg Goyette

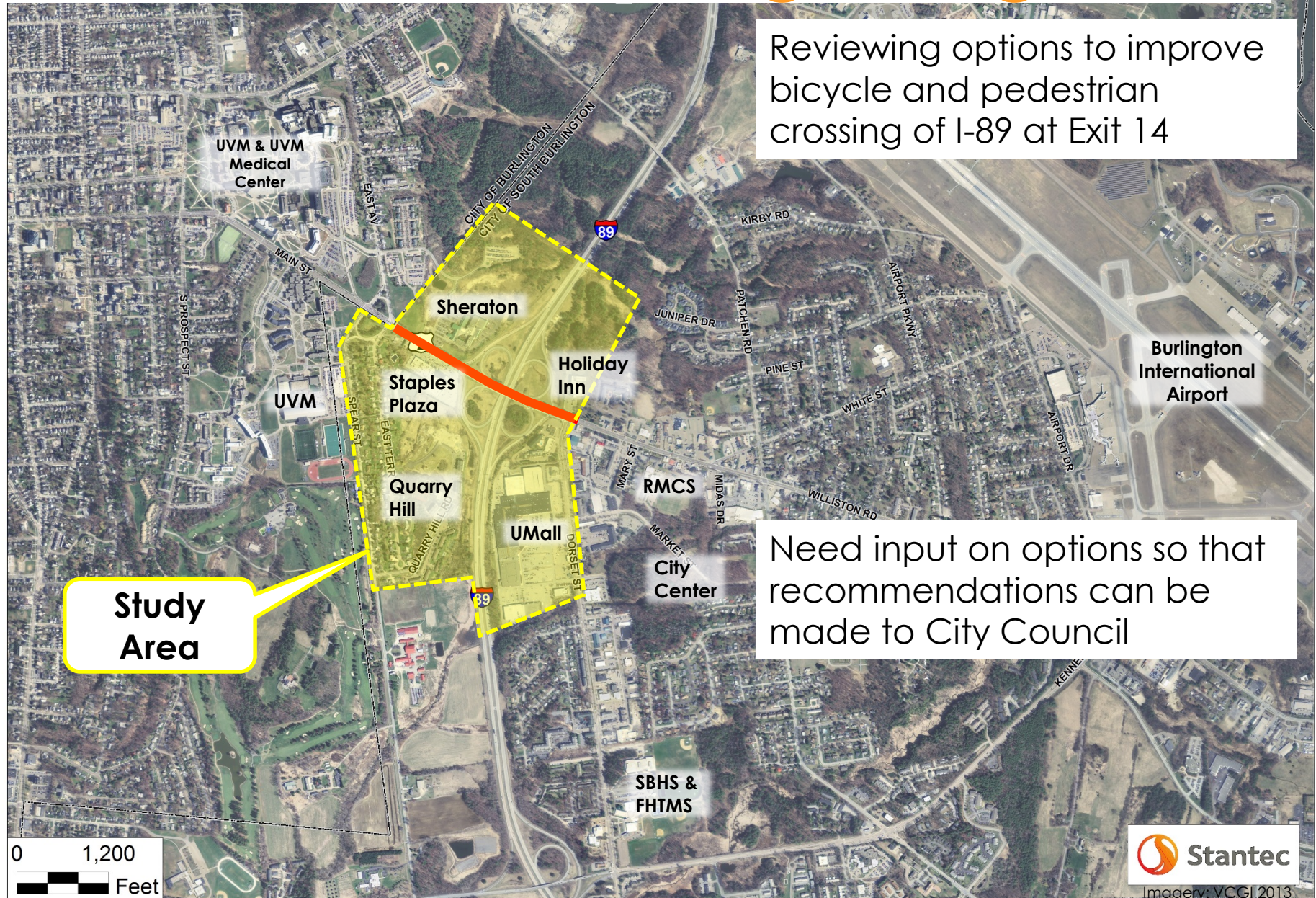
Sean Neely



What are we doing tonight?

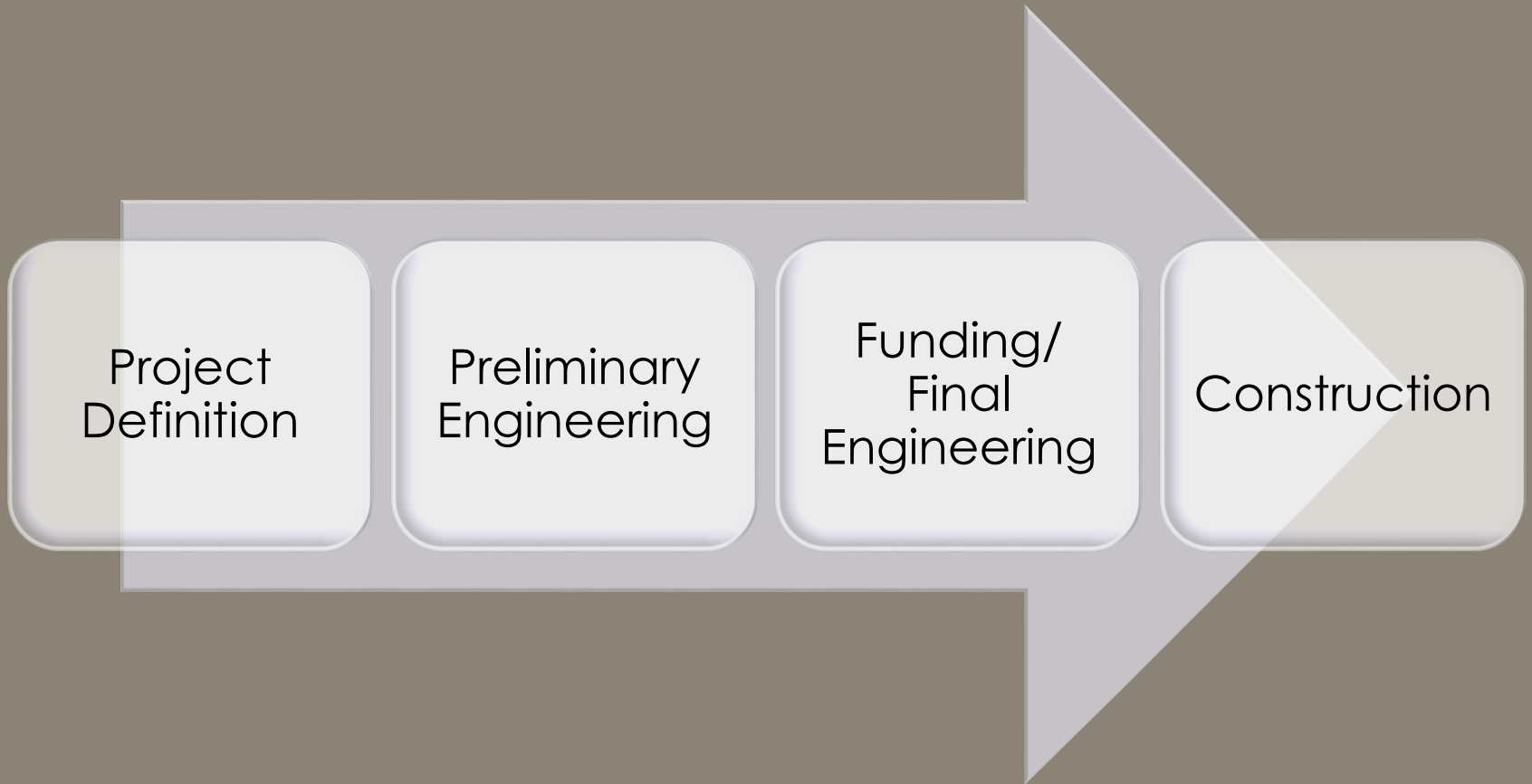


Reviewing options to improve bicycle and pedestrian crossing of I-89 at Exit 14



Need input on options so that recommendations can be made to City Council

Project Development



How are we doing this?

- Task 1: Data gathering, existing conditions analysis; **Completed**
- Task 2: Stakeholder Meeting and Public Workshop #1; **November 2016**
- Task 3: Purpose & Need Statement; **Dec 2016**
- Task 4: Alternatives development; **Dec 2016 – Apr 2017**
- **Task 5: Options Workshop**
- Task 6: Prepare draft recommendations; **May 2017**
- Task 7: Present final recommendations to City Council for consideration; **June 2017**

Do you WALK or BIKE over this bridge?

We want YOUR feedback!



Send us your input to help improve the experience for all users!

Be Heard! Scan or visit the survey link:

Survey link: <http://bit.ly/2eIPwT6>



Brought to you by

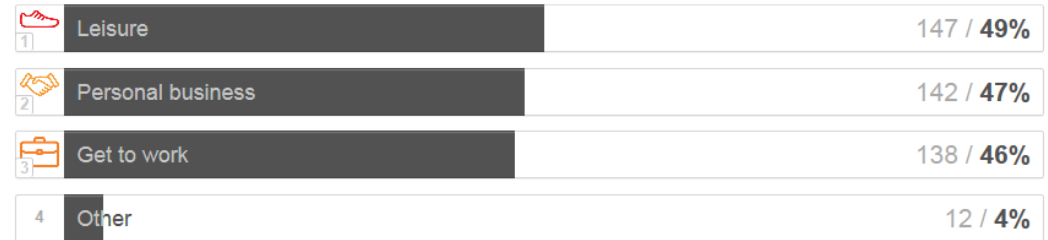


US Route 2 User Survey

- Posted at various locations along walking/biking route
- 336 responses!
- Received many comments on user experiences
- Will be included with Final Report

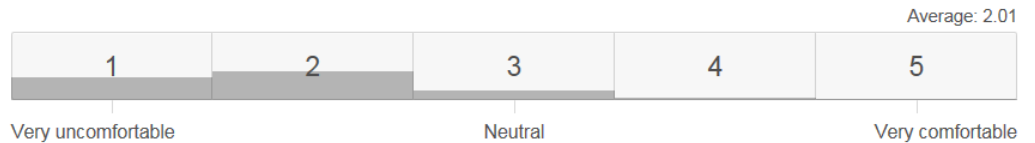
Why do you walk or bike across this bridge?

302 out of 336 people answered this question

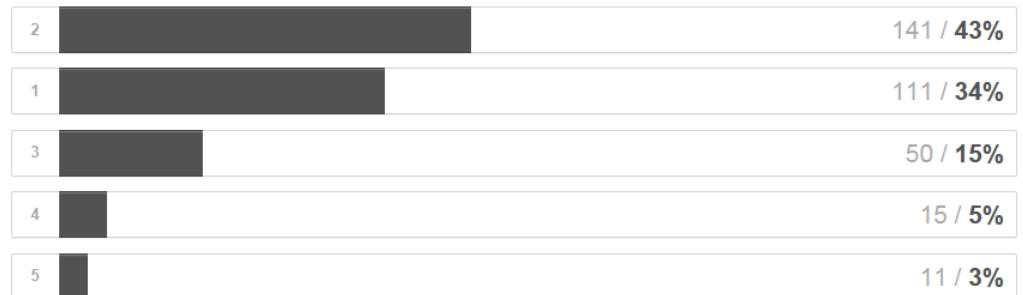


How comfortable are you with walking or biking across this bridge?

328 out of 336 people answered this question



► Hide detail



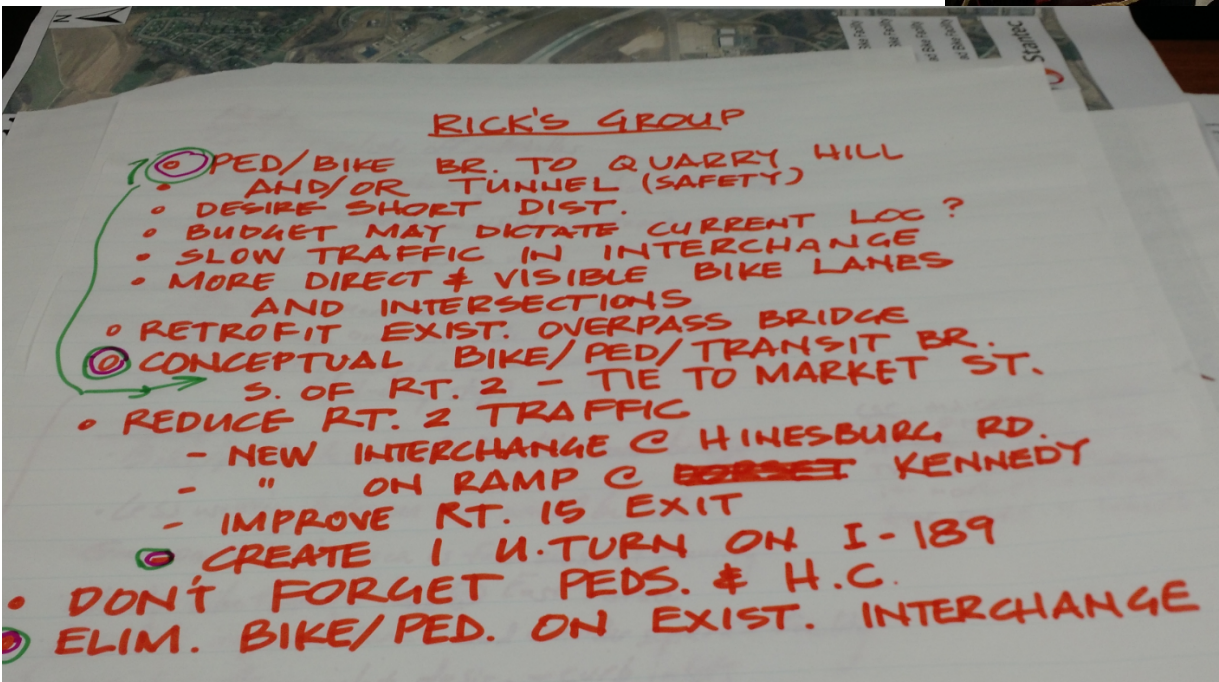
Does crossing this bridge deter you from traveling to destinations on the other end of the bridge?

328 out of 336 people answered this question



Community Workshop #1

- Safety
- Accommodate greatest number of users
- Connectivity
- Don't forget about pedestrians
- Think short-term and long-term
- A number of ideas for crossing



Rank these five (5) factors in the order of importance for walking/biking across I-89:

Comfort	1 2 3 4 5 2 3 4 5 1 3 4 5 1 2 4 5 1 2 3 5 1 2 3 4
Safety	1 1
Aesthetics	2 3 4 5 1 3 4 5 1 2 4 5 1 2 3 5 1 2 3 4 1 2 3 4 5
How direct (distance)	1 2 3 4 5 2 3 4 5 1 3 4 5 1 2 4 5 1 2 3 5 1 2 3 4
How fast (time)	4 5 5 5 5 4 5 5 5 5 4 5 5 5 5 4 5 5 5 5 4 5 5 5 5

Purpose & Need Statement

Purpose

The purpose of this project is to create a safe, visible, comfortable, convenient, direct and attractive year-round crossing for pedestrian and bicycle travel across I-89 in the vicinity of the Exit 14 interchange while:

- maintaining safe and efficient vehicular conditions on the I-89 mainline;
- supporting healthy and sustainable lifestyles;
- promoting compact growth and economic development in City Center;
- creating attractive public spaces in support of the region's identity;
- enhancing capacity of the US 2 corridor in a cost-effective manner;
- and reconnecting neighborhoods within South Burlington that have been split apart by regional and national transportation corridors.

Purpose & Need Statement

Needs

1. Build an inviting travel corridor that reinforces the City's and Region's goals for pedestrian and bicycle mobility.
2. Build attractive public spaces and a distinctive identity for City Center and Chittenden County.
3. Facilitate use by all age groups, experience levels, and purposes of trips. Remove a barrier in the regional network.
4. Increase the regional transportation capacity.
5. Create a safe, comfortable, user-friendly, desirable year-round bicycle and pedestrian connection across Exit 14.
6. Maintain Interstate 89 safety and efficiency.

Purpose & Need Statement approved by the South Burlington Planning Commission Tuesday, January 10, 2017

Interstate 89 Exit 14 Alternative Transportation Crossing: Initial Alternative Evaluation

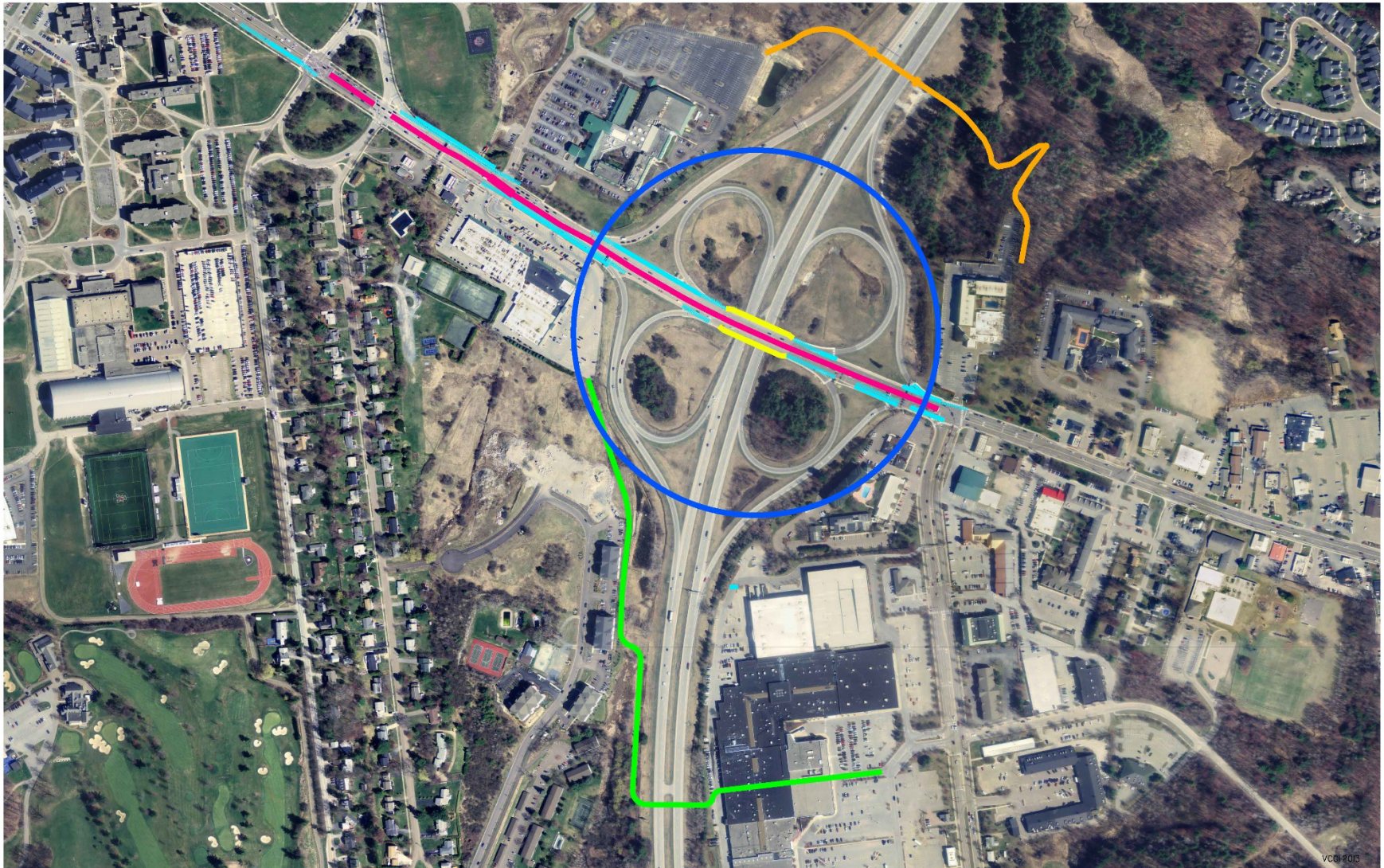
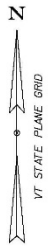
Alternative Need	S1	S2	S3	S4	L1	L2	L3	L4	L5	L6	L7	L8	L9
	Existing bike lane improvements	Center bike lane from <u>Jughandle</u> to Dorset Street	Interchange ramp realignment without signal control	Interchange ramp realignment with signal control	Bridge over cloverleaf south of US 2	Circular bridge structure	Bridge from Quarry Hill to north edge of <u>UMall</u> property	Bridge from Quarry Hill to middle of <u>UMall</u> property	Tunnel or bridge on north side of US 2	Two bridges/ crossings (north & south)	Tram or gondola	Cannoll bridge	Cantilever bridge
1. Build an inviting travel corridor that reinforces the City's and Region's goals for pedestrian and bicycle mobility.	Supports bicycle options; does not support <u>ped</u> options by itself	Supports bicycle options; does not support <u>ped</u> options by itself	Provides incremental support for this need	Provides incremental support for this need	Yes	Yes	Yes	Yes	Yes	Yes	Requires analysis to evaluate efficiency	Yes	Would help bridge segment, but not comfort of ramp crossings.
2. Build attractive public spaces and a distinctive identity for City Center and <u>Chittenden County</u> .	Could support this	Could support this; likely first facility of this type in VT	Might not do much to support this	Might not do much to support this	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Maybe
3. Facilitate use by all age groups, experience levels, and purposes of trips.	Might only help certain experience levels	Might only help certain experience levels	Maybe	Maybe	Yes	Yes	Yes	Yes	Yes	Yes	Partially: Might not help for all trip purposes	Yes	Might only help certain experience levels
4. Remove a barrier in the regional network.	Not for <u>ped</u> s & certain cyclists	Not for <u>ped</u> s & certain cyclists	Partially; remaining traffic exposure	Partially; remaining traffic exposure	Yes	Yes	Yes	Yes	Yes	Yes	Might not help for all trip purposes	Yes	Not for certain <u>ped</u> s & cyclists
5. Increase the regional transportation capacity.	Not for <u>ped</u> s & certain cyclists	Not for <u>ped</u> s & certain cyclists	Might not do much to support this	Might not do much to support this	Yes	Yes	Yes	Yes	Yes	Yes	Maybe	Yes	Not for certain <u>ped</u> s & cyclists
6. Create a safe, comfortable, user-friendly, desirable year-round bicycle and pedestrian connection across Exit 14.	Provides incremental support for this need	Provides incremental support for this need	Provides incremental support for this need	Provides incremental support for this need	Yes	Yes	Yes	Yes	Yes	Yes	Maybe	Yes	Yes
7. Maintain Interstate 89 safety and efficiency.	Yes	Yes	Requires analysis	Requires analysis	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Green – Best meets purpose and need. Carried forward for further input and consideration

Yellow – Does not fully meet purpose and need. Potentially recommended to be scoped separately or included with future project in this area.

Pink – Does not meet the project purpose & need or is similar to other alternatives. Not being considered for further evaluation.

Options considered but not carried forward



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SCALE IN FEET

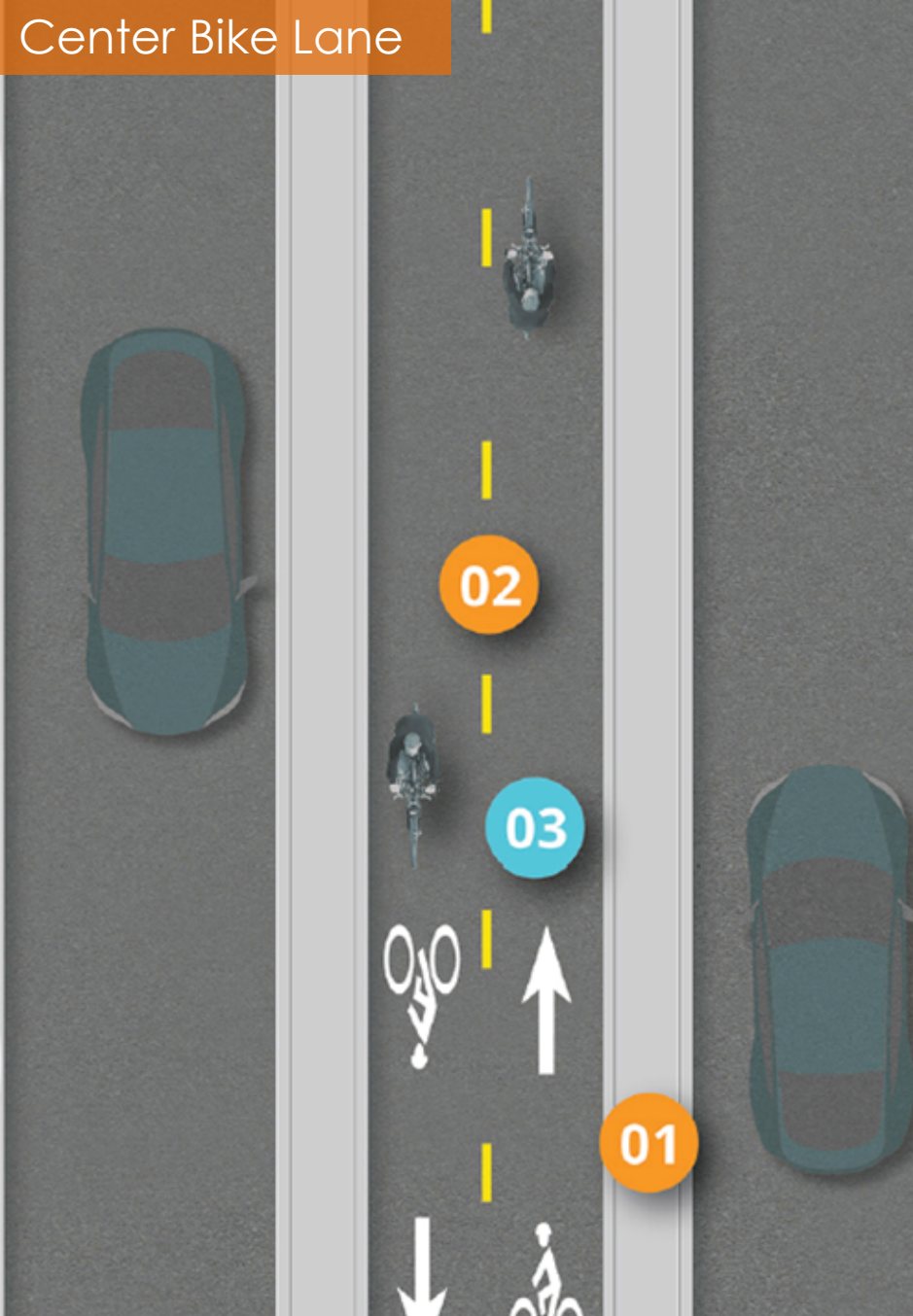


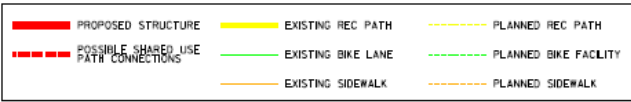
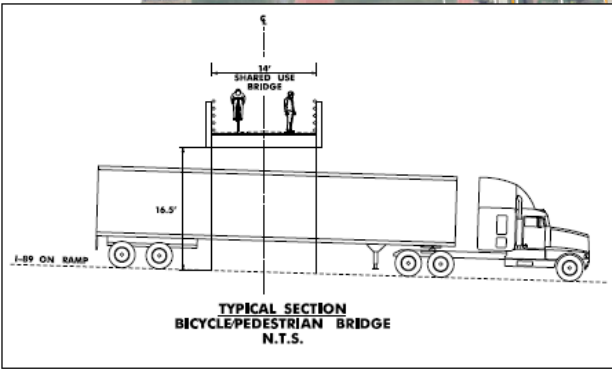
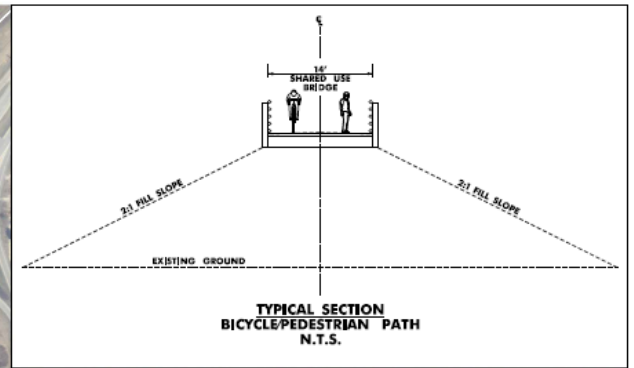
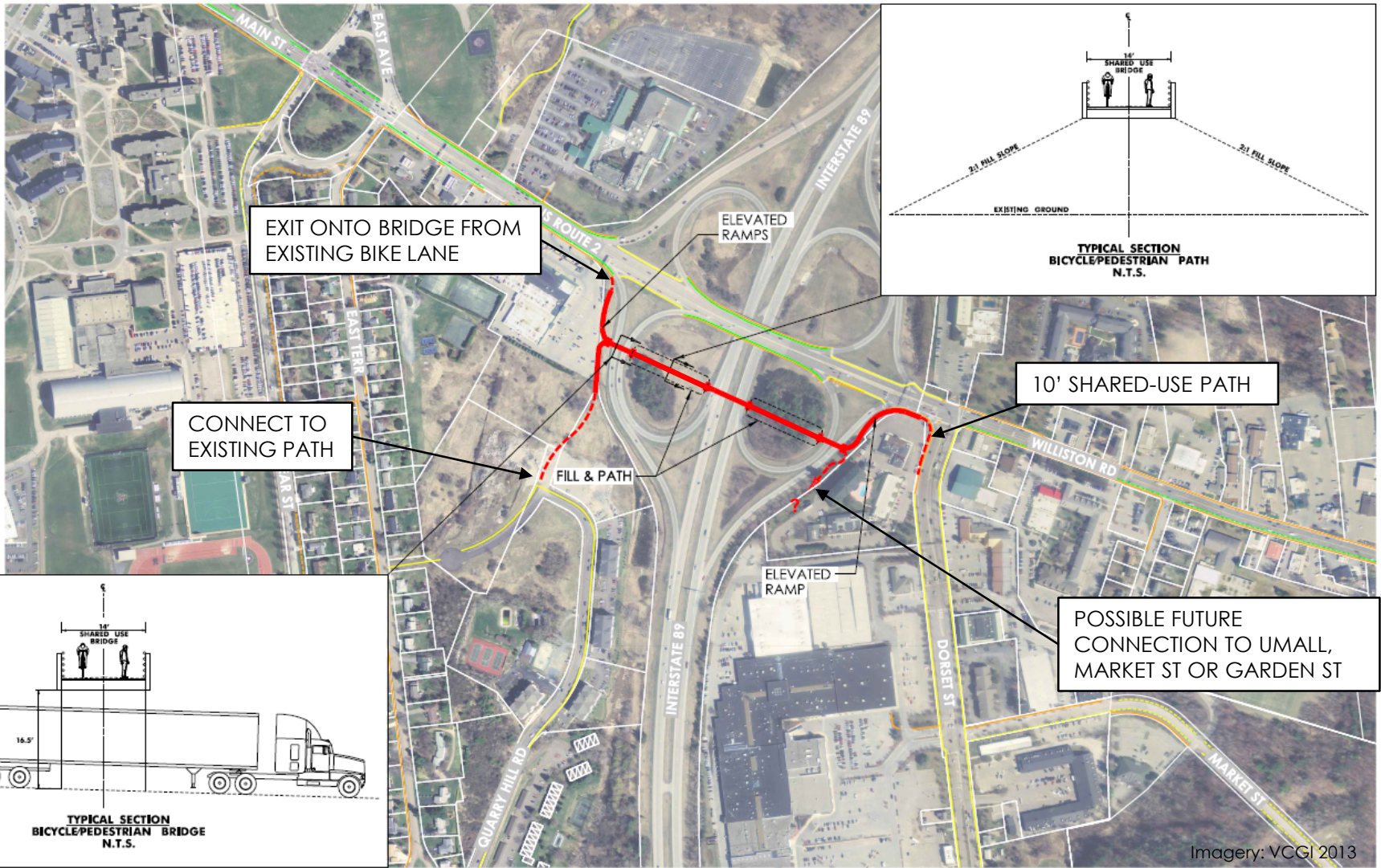
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PROJECT NUMBER: 195311328

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PROJECT LEADER: G. GOYETTE
DESIGNED BY: S. NEELY
DISCARDED ALTERNATIVES

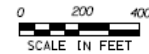
PLOT DATE: 4/24/2017
DRAWN BY: S. NEELY
CHECKED BY: -----
SHEET 1 OF 1

Center Bike Lane



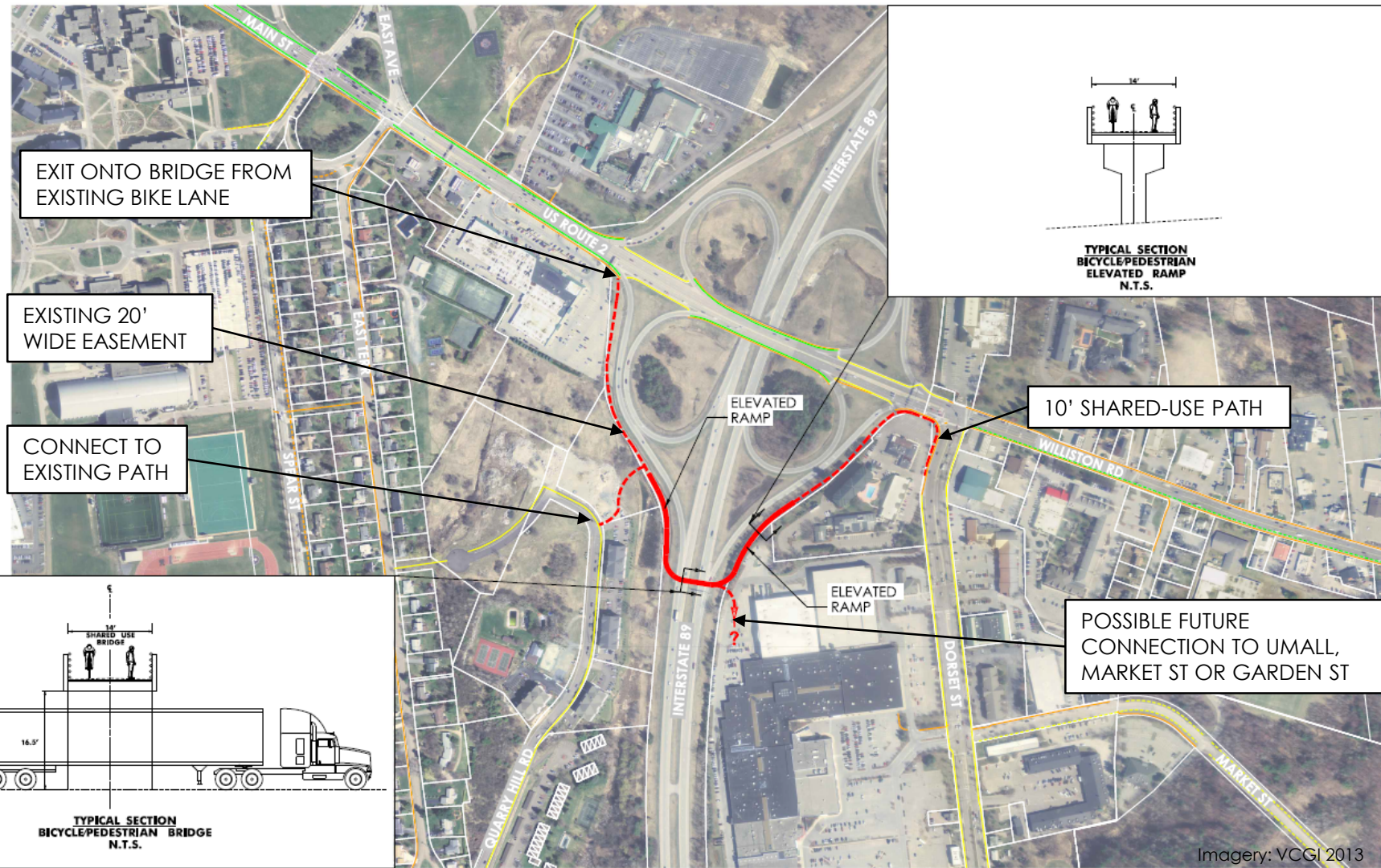


**ALTERNATIVE 2:
THREE SEPARATE BRIDGES OVER CLOVERLEAF**



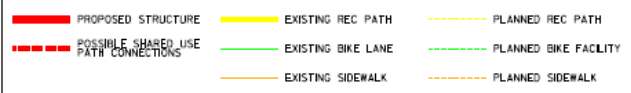
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PROJECT NUMBER:	195311328
FILE NAME:	layout1.dwg
PROJECT LEADER:	G. GOYETTE
DESIGNED BY:	S. NEELY
DRAFT ALTERNATIVE:	2
PLOT DATE:	4/17/2017
DRAWN BY:	S. NEELY
CHECKED BY:	
SHEET	1 OF 1





Imagery: VCGI 2013

ALTERNATIVE 3: BRIDGE FROM QUARRY HILL TO UMass



PROJECT NAME: I-89 EXIT 14 CROSSING
PROJECT NUMBER: 195311328

FILE NAME: layout_14bdr_Alt3_Short.dgn	PLOT DATE: 4/17/2017
PROJECT LEADER: G. GOVETTE	DRAWN BY: S. NEELY
DESIGNED BY: S. NEELY	CHECKED BY: -----
DRAFT ALTERNATIVE 3	SHEET 1 OF 1





Imagery: VCGI 2013

ALTERNATIVE 4: GONDOLA OR TRAM

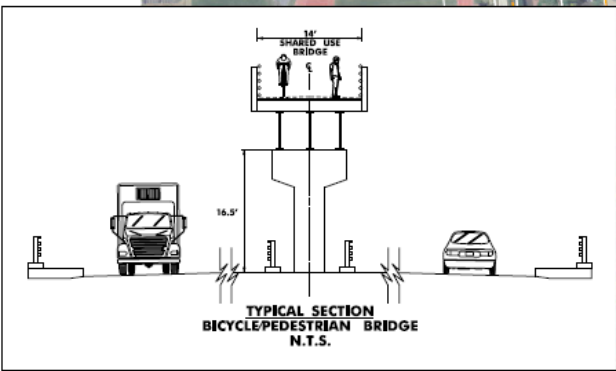
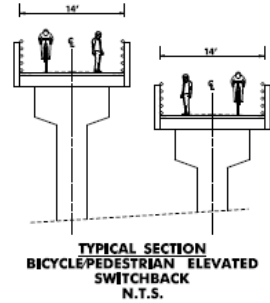
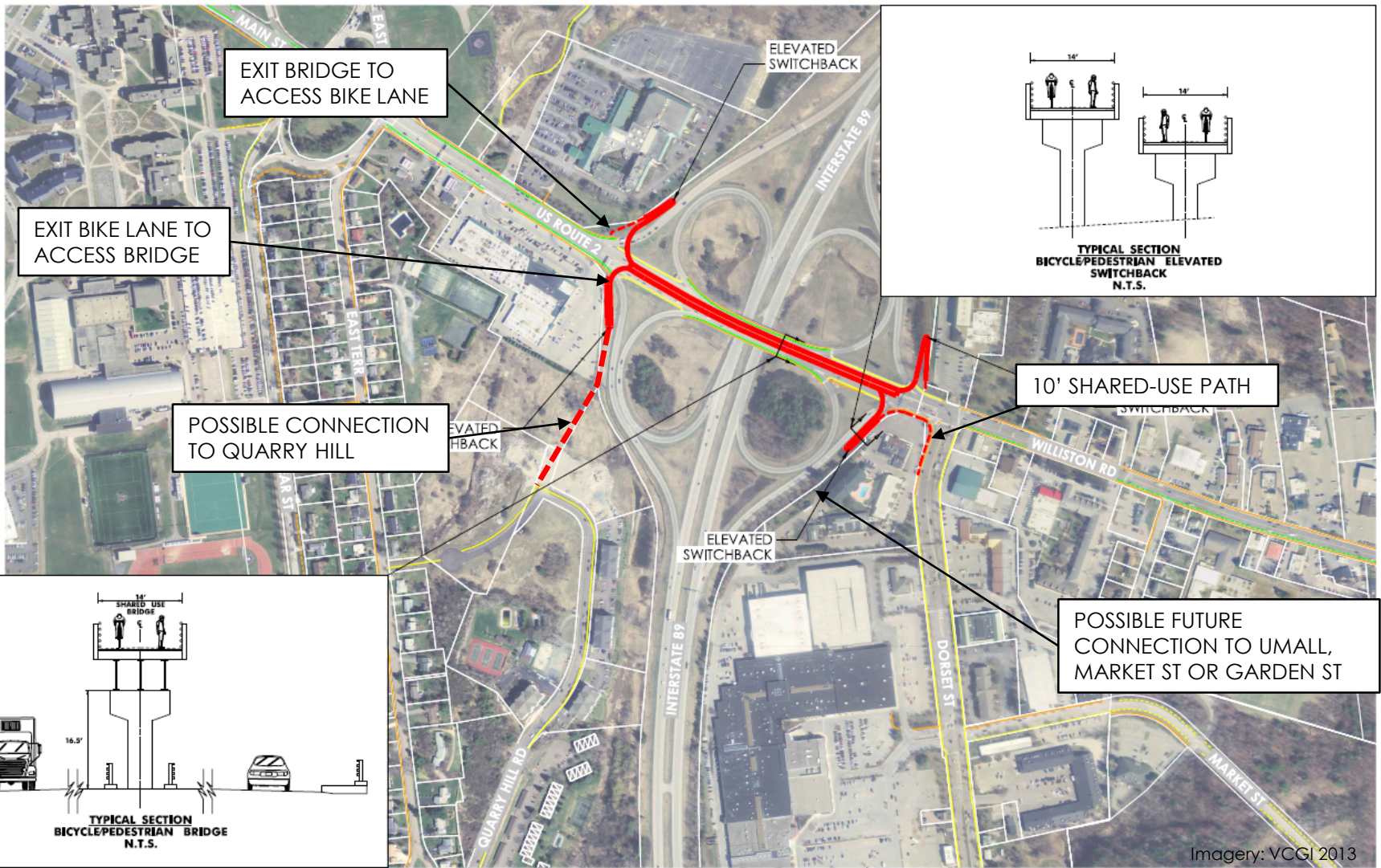
	PROPOSED STRUCTURE		EXISTING REC PATH		PLANNED REC PATH
	POSSIBLE SHARED USE PATH CONNECTIONS		EXISTING BIKE LANE		PLANNED BIKE FACILITY
			EXISTING SIDEWALK		PLANNED SIDEWALK

0 200 400
SCALE IN FEET

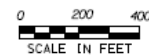


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PROJECT NUMBER: 195311328

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PROJECT LEADER: G. GOYETTE	DRAWN BY: S. NEELY
DESIGNED BY: S. NEELY	CHECKED BY: -----
DRAFT ALTERNATIVE 4	SHEET 1 OF 1



ALTERNATIVE 5:
CANNOLI BRIDGE



PROJECT NAME:	I-89 EXIT 14 CROSSING
PROJECT NUMBER:	195311328
FILE NAME:	layout1.dwg
PROJECT LEADER:	G. GOYETTE
DESIGNED BY:	S. NEELY
DRAFT ALTERNATIVE:	5
PLOT DATE:	4/17/2017
DRAWN BY:	S. NEELY
CHECKED BY:	
SHEET:	1 OF 1



Estimated Lengths and Travel Times

Estimated Travel Times – SW Ramp Crossing to SE Ramp Crossing on US Route 2

		Alternative				
		1	2	3	4	5
		Do Nothing	Cloverleaf Bridges	Bridge: Quarry Hill to Umall	Gondola or Tram	Cannoli Bridge
Distance (FT)		1345	1750	2725	-	2305
Difference (FT)		-	405	1380	-	960
Travel Times (Min)						
	Delays at X-Walks					
Bike	None	1.0	1.3	2.1	-	1.7
	10s	1.7				
	30s	3.0				
Ped	None	6.4	8.3	12.9	-	10.9
	10s	7.0				
	30s	8.4				

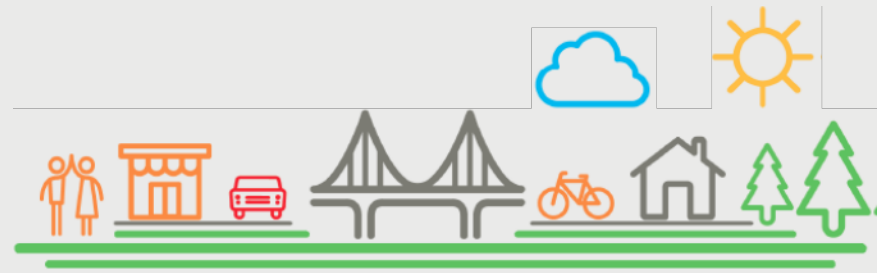
We need your input!

- Please visit each option
- Listen to what others have to say – please refrain from talking over people
- Fill out comment card for each option
- Place card in the correct bag!

Thoughts

- Would you walk or bike this route?
Why or why not?
- Where would you like to see connections made?
- Are there other options that you would like to see considered?
- Other suggestions?

Next steps



- Review feedback
- Meet with VTrans
- Prepare draft recommendations
- Develop concept plan
- Finalize recommendations
- Present to City Council
- Begin preliminary design and engineering

Thank you!



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Greg Goyette, Stantec:
greg.goyette@stantec.com

Project Website:
<http://www.ccrpcvt.org/i-89-exit-14>