

RSG

Howard Corners Intersection Scoping Study

Alternatives Presentation Meeting

June 27, 2017

Introductions

Consultant Team:

Corey Mack, PE

Consultant Project Manager

Roxanne Meuse, EIT

Consultant Planner and Designer

Public Works Team:

David Allerton, PE

Susan Molzan

Phillip Peterson

Steering Committee:

Scott Mapes

Resident

RJ Lalumiere

Walk-Bike Council

Nicole Losch

DPW Ped. and Bike Program Manager

Kara Yelinek

VTrans Supervisor



Why We're Here

Burlington was awarded a grant to study the intersection and evaluate alternative designs that can be implemented to **improve safety, meet accessibility standards, and foster an emerging neighborhood.**

An **Intersection Scoping Study** includes:

- Existing Conditions Review
- Local Concerns Meeting (November 11, 2016)
- Alternatives Development and Analysis
- **Alternatives Presentation Meeting (Today)**
- Final Scoping Report
- Final Presentation



Tonight's Discussion

1. **Introductions and Background** – 10 minutes
2. **Alternatives** – 20 minutes
3. **Table Breakout** – Until they turn the music up... (~60 minutes)
4. **Wrap Up**



Questions For You

Alternatives Presentation Meeting Feedback

6/27/17

Winooski Avenue – Howard Street – St. Paul Street Intersection Scoping Study

Email Address (if you would like to receive updates): WALK.BIKE.WITH.SP@gmail.com

	A1 – Demonstration Project: <i>Let's do it - I can help!</i>
	A2 – Upgraded Signals and Pedestrian Crossings: <i>I'd love to see this happen!</i>
	A3 – Upgraded Signals, Realigned South Winooski: <i>I love Potvin park! Don't touch it!</i>
	A4 – Dual Roundabout, Realigned South Winooski: <i>I feel this sacrifices people space for car space...</i>
	A5 – Modern Roundabout: <i>Don't you dare touch Neighborhood Market!</i>

Instructions with stickers: Place your **green** star on your preferred ultimate treatment (A2, A3, A4, A5, or Do Nothing). Place your remaining stars on your priority issues (what you would most like to see addressed).

Thank you!

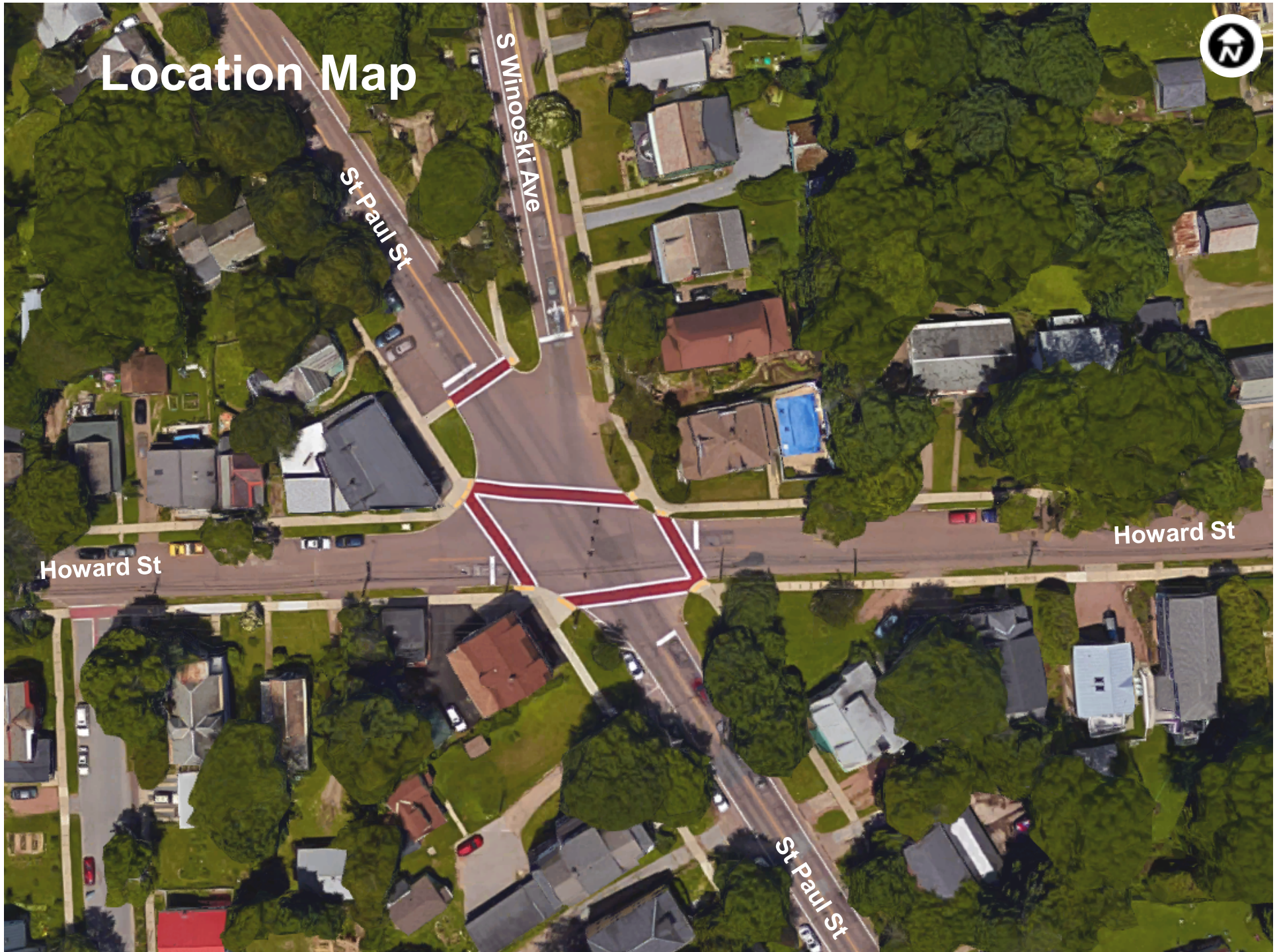
Please fill out comment form – let us know what you think!

Stars:

1. Use the **GREEN** star on your preference for your preferred ultimate intersection design
2. Use the remaining stars to vote on your priority issues



Location Map



Local Concerns Meeting – November 12, 2016



Local Concerns Meeting – November 12, 2016



What We Learned...

No bus shelter or transit amenities

Potvin Park underutilized

Trucks on S. Winooski Ave.
(trucks prohibited)

Underdeveloped pedestrian environment

Howard St

33 crashes in 5 years

Crosswalks and distance bikes have to travel too long for green time

Observed speeding

Bicycle facilities end abruptly

No crosswalk across S. Winooski Ave.

No pedestrian phase, signals, actuation

Signals can be difficult to see

Overtaking left turning vehicles on the right

Observed red light running

Howard St

St Paul St

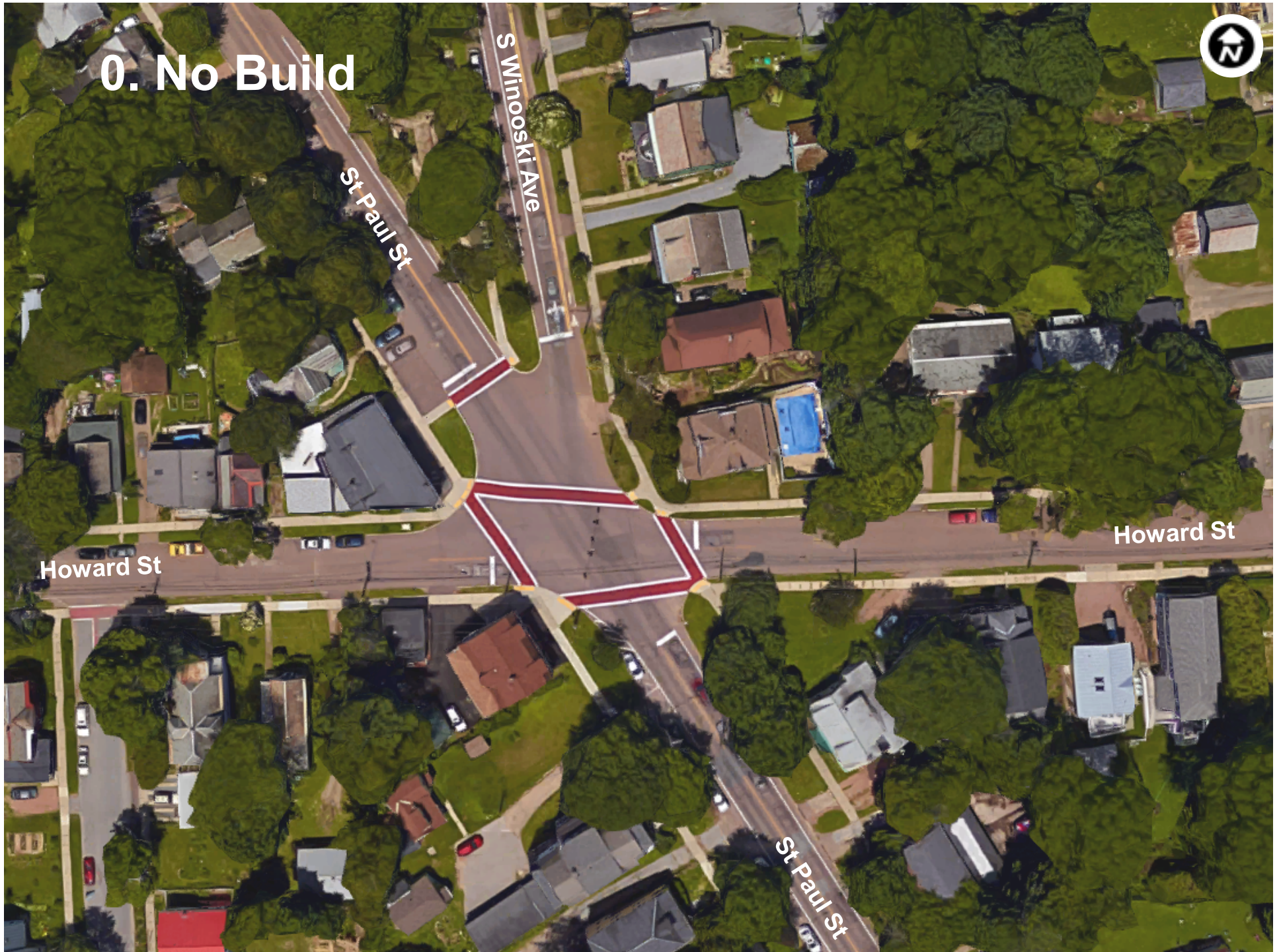


Alternatives

0. No Build
1. Demonstration Project
2. New Signal System – Existing Geometry
3. New Signal System – Realigned Roadway
4. Dual Roundabout – Realigned Roadway
5. Modern Roundabout



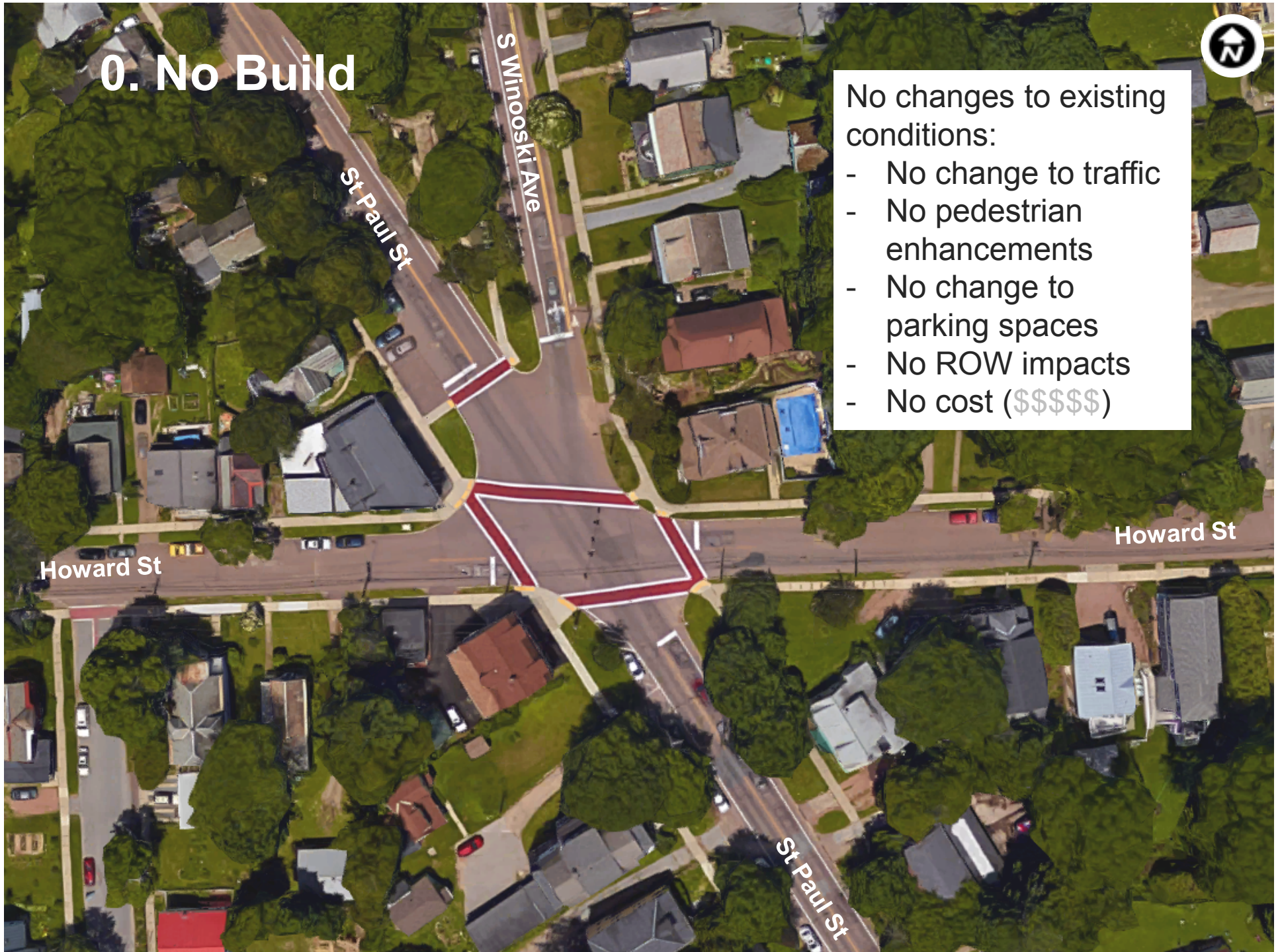
0. No Build



0. No Build

No changes to existing conditions:

- No change to traffic
- No pedestrian enhancements
- No change to parking spaces
- No ROW impacts
- No cost (\$\$\$\$\$)



1. Demonstration Project



1. Demonstration Project

"NO RIGHT ON RED"

Green bike markings
extending bike lane

Howard St

Cones / hay bales to extend
pedestrian space (blue area)

S Winooski Ave

St Paul St

Temporary installation
of "curb extensions"

- "No Right on Red" slows traffic
- Shorter pedestrian crossings
- Better defined bike features
- No change to parking spaces
- No ROW impacts
- \$\$\$\$\$

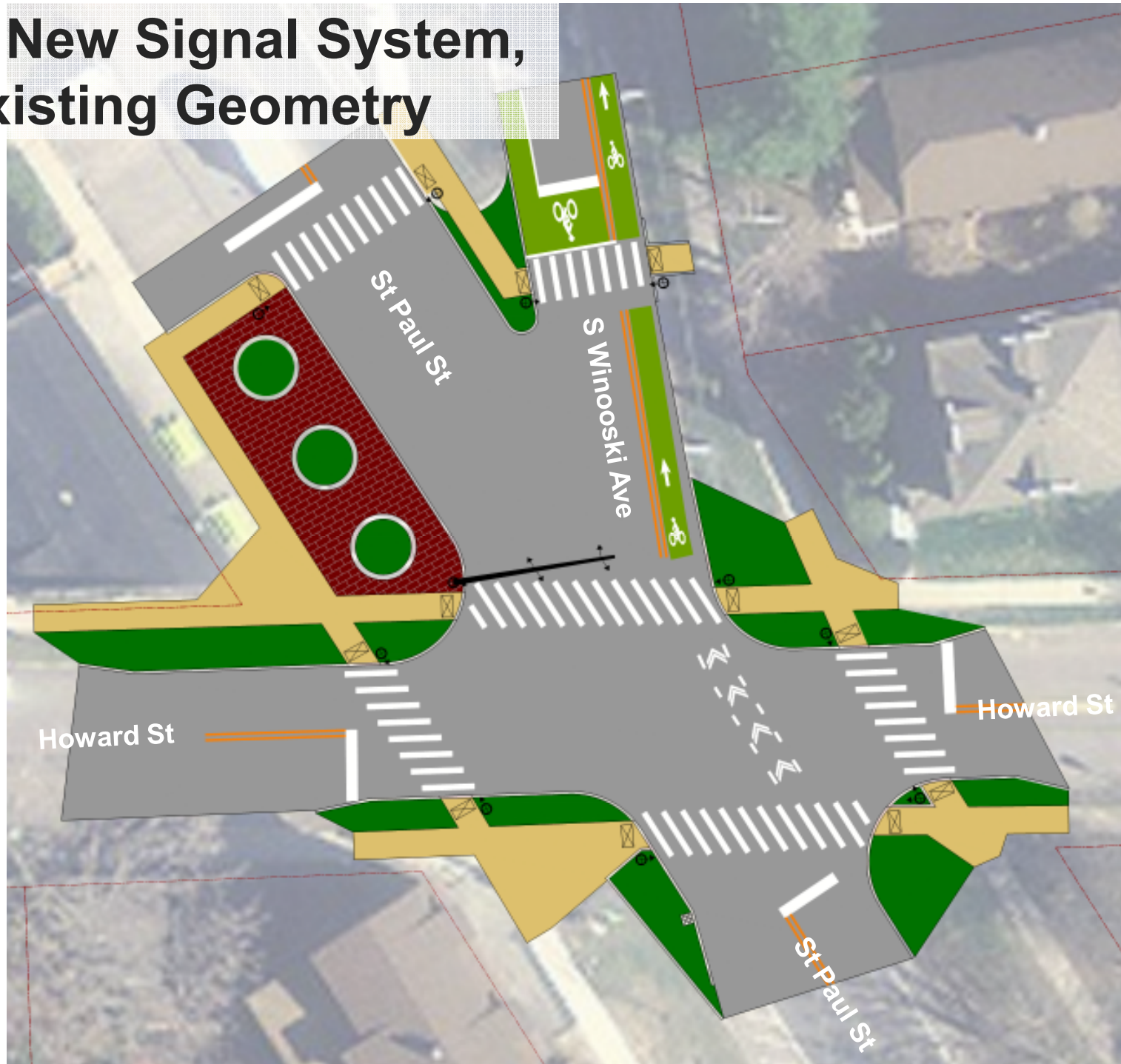


Howard St

Chevrons through
intersection

St Paul St

2. New Signal System, Existing Geometry



2. New Signal System, Existing Geometry

Permanent installation of curb extensions and pedestrian signals



- “No Right on Red”, pedestrian phase slows traffic
- Shorter pedestrian crossings
- Better defined bike features
- No change to parking spaces
- No ROW impacts
- \$\$\$\$\$

Extend sidewalk, add crosswalk

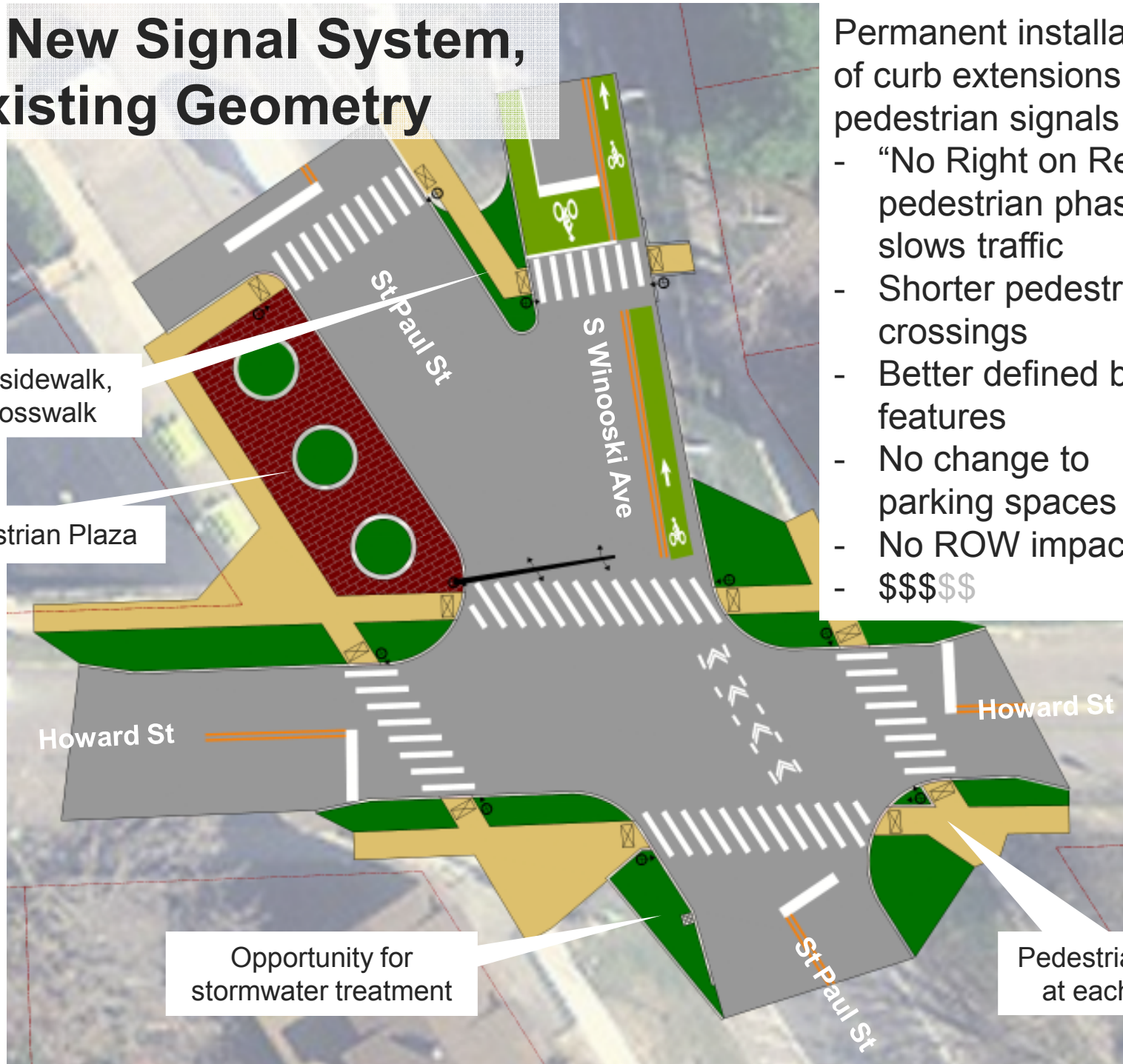
Pedestrian Plaza

Howard St

Opportunity for stormwater treatment

Howard St

Pedestrian signals at each corner



nal System, Roadway

The image shows an aerial view of a proposed urban roadway layout. The main road, St Paul St, runs diagonally from the top left to the bottom right. It features a multi-lane design with green medians and crosswalks. A red hatched area is located near the intersection with Howard St. Howard St runs horizontally across the middle of the image. The layout includes various street markings, including crosswalks and lane dividers. The surrounding area is residential, with houses and trees visible. The text 'St Paul St' is written vertically along the road, and 'Howard St' is written horizontally at the intersection. A red dashed line indicates a property boundary or a specific planning zone.



3. New Signal System, Realigned Roadway



Realigned S. Winooski Avenue, coordinated traffic signals



- Coordinated signal system improves traffic
- Shorter pedestrian crossings
- Better defined bike features
- Loss of street parking spaces
- No ROW impacts
- Significant impact to Potvin Park
- \$\$\$\$\$

4. Dual Roundabouts, Realigned Roadway



4. Dual Roundabouts, Realigned Roadway

Roadway cuts through Potvin Park, down hill and on corner

Bicycle slip lane

Driveways into roundabout

Loss of 457 St Paul off-street parking

Howard St

Bicycles in circulating lane, no path alternative without ROW impacts

Loss of street parking

Realigned S. Winooski Avenue, dual mini-roundabouts (70-foot dia.)



- Roundabouts improves traffic operations
- Short pedestrian crossings
- Few bicycle amenities
- Typically slowest speeds and safest
- Loss of street parking; off-street spaces
- No ROW impacts
- Significant impact to Potvin Park
- \$\$\$\$\$

5. Modern Roundabout



5. Modern Roundabout

100-foot Inscribed Diameter Roundabout



- Roundabout improves traffic operations
- Short pedestrian crossings
- Few bicycle amenities
- Typically slowest speeds and safest
- Loss of off-street parking spaces
- Large ROW impacts
- \$\$\$\$\$

Driveway into roundabout

Full take of 457 St Paul St

Howard St

Howard St

St Paul St

Bicycles in circulating lane, no path alternative without ROW impacts



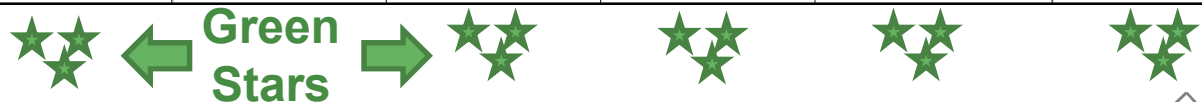
Comparison Matrix

Issues to Address	Alternatives					
	0 No Build	1 Demonstration Project Existing Geometry	2 New Signal System Existing Geometry	3 Dual Signal System Realigned Roadway	4 Dual Roundabout Realigned Roadway	5 Modern Roundabout Existing Geometry
1 Crossing length for all modes	no change	improvement	improvement	improvement	improvement	improvement
2 Pedestrian crossing guidance	no change	no change	improvement	improvement	improvement	improvement
3 Pedestrian crossing of S. Winooski Ave	no change	no change	improvement	improvement	improvement	improvement
4 Crash rate	no change	no change	improvement	improvement	improvement	improvement
5 Comfortable transit facilities	no change	no change	opportunity	opportunity	opportunity	opportunity
6 Visibility of traffic signals to motorists	no change	no change	improvement	improvement	improvement	improvement
7 Vehicle speeds	no change	improvement	no change	improvement	improvement	improvement
8 Running of red lights	no change	no change	no change	improvement	improvement	improvement
9 Wrong-way driving on S. Winooski Ave	no change	no change	improvement	improvement	improvement	improvement
10 Trucks on S. Winooski Ave	no change	no change	no change	no change	no change	no change
11 Right turns on red	no change	improvement	improvement	improvement	improvement	improvement
12 Use of Potvin Park	no change	no change	improvement	worse	worse	no change
13 Public gathering space	no change	improvement	improvement	improvement	no change	worse
14 Bicycle infrastructure	no change	improvement	improvement	improvement	opportunity	opportunity
15 Stormwater retention	no change	no change	opportunity	opportunity	opportunity	opportunity
16 Support relationship between residents and businesses	no change	improvement	improvement	improvement	no change	worse
Additional key study elements						
Traffic Operations: Level of Service	C	C	E (possible C)	C+C	B+B	B
Traffic Operations: Total Average Queue Length	730 ft	760 ft	1220 ft	1100 ft	690 ft	310 ft
Stormwater Management: Change in Permeable Area	n/a	0 sf	1270 sf	5300 sf	7720 sf	3760 sf
Parking Options: Change in Parking Spaces	n/a	0	0	-7 on-street spaces	-8 on-street, -5 off-street	-1 on-street
Cost: Relative Cost	\$\$\$\$\$	\$\$\$\$\$	\$\$\$\$\$	\$\$\$\$\$	\$\$\$\$\$	\$\$\$\$\$



Comparison Matrix

		Alternatives					
Issues to Address		0 No Build	1 Demonstration Project Existing Geometry	2 New Signal System Existing Geometry	3 Dual Signal System Realigned Roadway	4 Dual Roundabout Realigned Roadway	5 Modern Roundabout Existing Geometry
Remaining Stars							
1	Crossing length for all modes	no change	improvement	improvement	improvement	improvement	improvement
2	Pedestrian crossing guidance	no change	no change	improvement	improvement	improvement	improvement
3	Pedestrian crossing of S. Winooski Ave	no change	no change	improvement	improvement	improvement	improvement
4	Crash rate	no change	no change	improvement	improvement	improvement	improvement
5	Comfortable transit facilities	no change	no change	opportunity	opportunity	opportunity	opportunity
6	Visibility of traffic signals to motorists	no change	no change	improvement	improvement	improvement	improvement
7	Vehicle speeds	no change	improvement	no change	improvement	improvement	improvement
8	Running of red lights	no change	no change	no change	improvement	improvement	improvement
9	Wrong-way driving on S. Winooski Ave	no change	no change	improvement	improvement	improvement	improvement
10	Trucks on S. Winooski Ave	no change	no change	no change	no change	no change	no change
11	Right turns on red	no change	improvement	improvement	improvement	improvement	improvement
12	Use of Potvin Park	no change	no change	improvement	worse	worse	no change
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Traffic Operations: Level of Service		C	C	E (possible C)	C+C	B+B	B
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Cost: Relative Cost		\$\$\$\$\$	\$\$\$\$\$	\$\$\$\$\$	\$\$\$\$\$	\$\$\$\$\$	\$\$\$\$\$



Break Out Groups

Visit the tables and talk to Roxanne and Corey:

- Understand the Alternatives
- Comment on the drawings – feel free to write, draw, or otherwise markup any of the drawings!
- Vote on your preferred treatment

We'll give a 10 minute warning before wrap up



Wrap-Up

Final thoughts:

- Consensus on preferred treatment?
- Interim Improvements? (Such as build the sidewalk and South Winooski Crosswalk, now)
- Schedule
- Implementation of Preferred Alternative
- Funding Sources

THANK YOU!





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