

Colchester-Essex Network Transportation Study

Alternatives Assessment Meeting Susie Wilson Road/Kellogg Road Corridor *September 5, 2013*



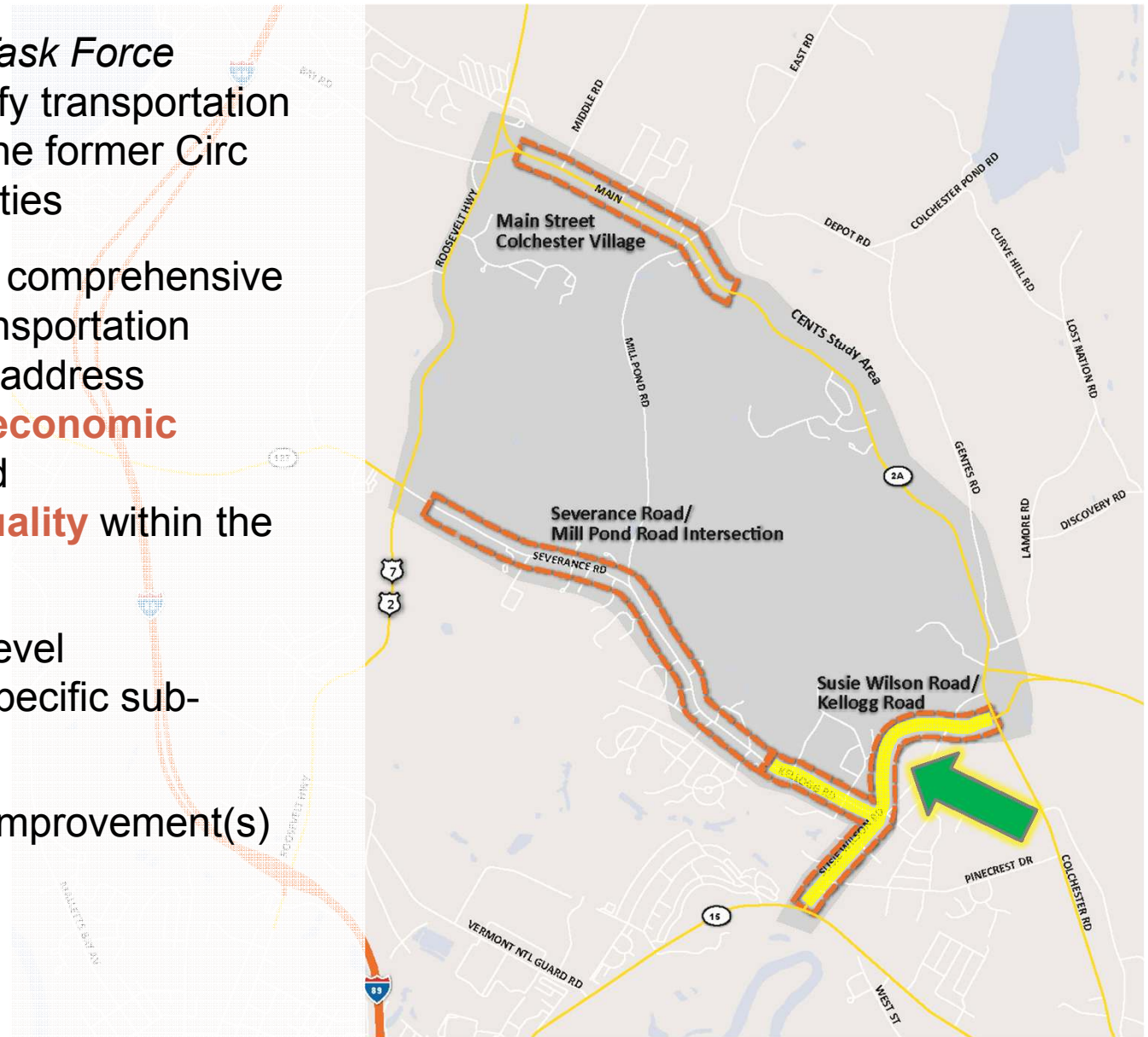
Tonight's Agenda

- Project Background
- Project Area Overview
- Discussion of Alternatives
- Next Steps

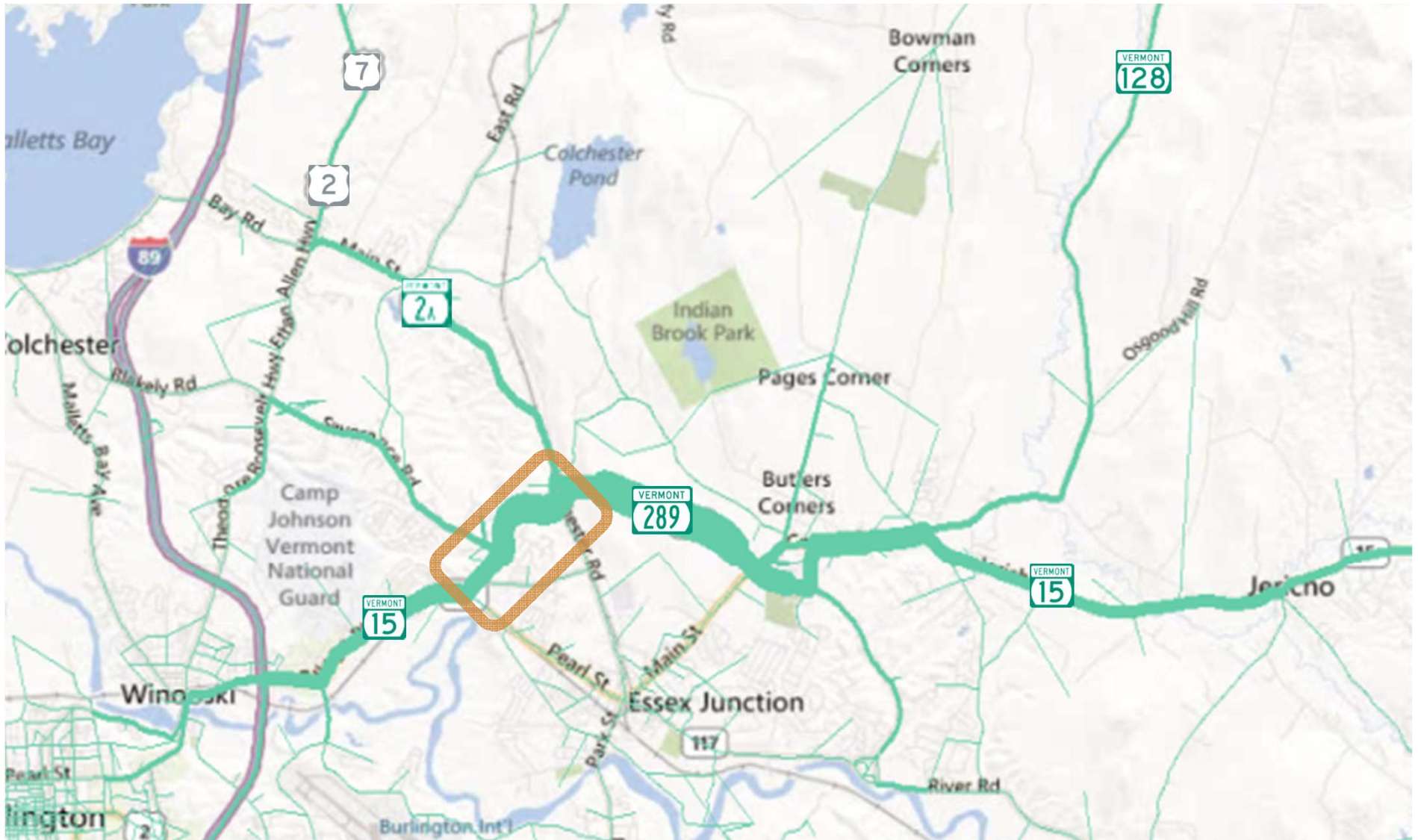


Background & CENTS Study Overview

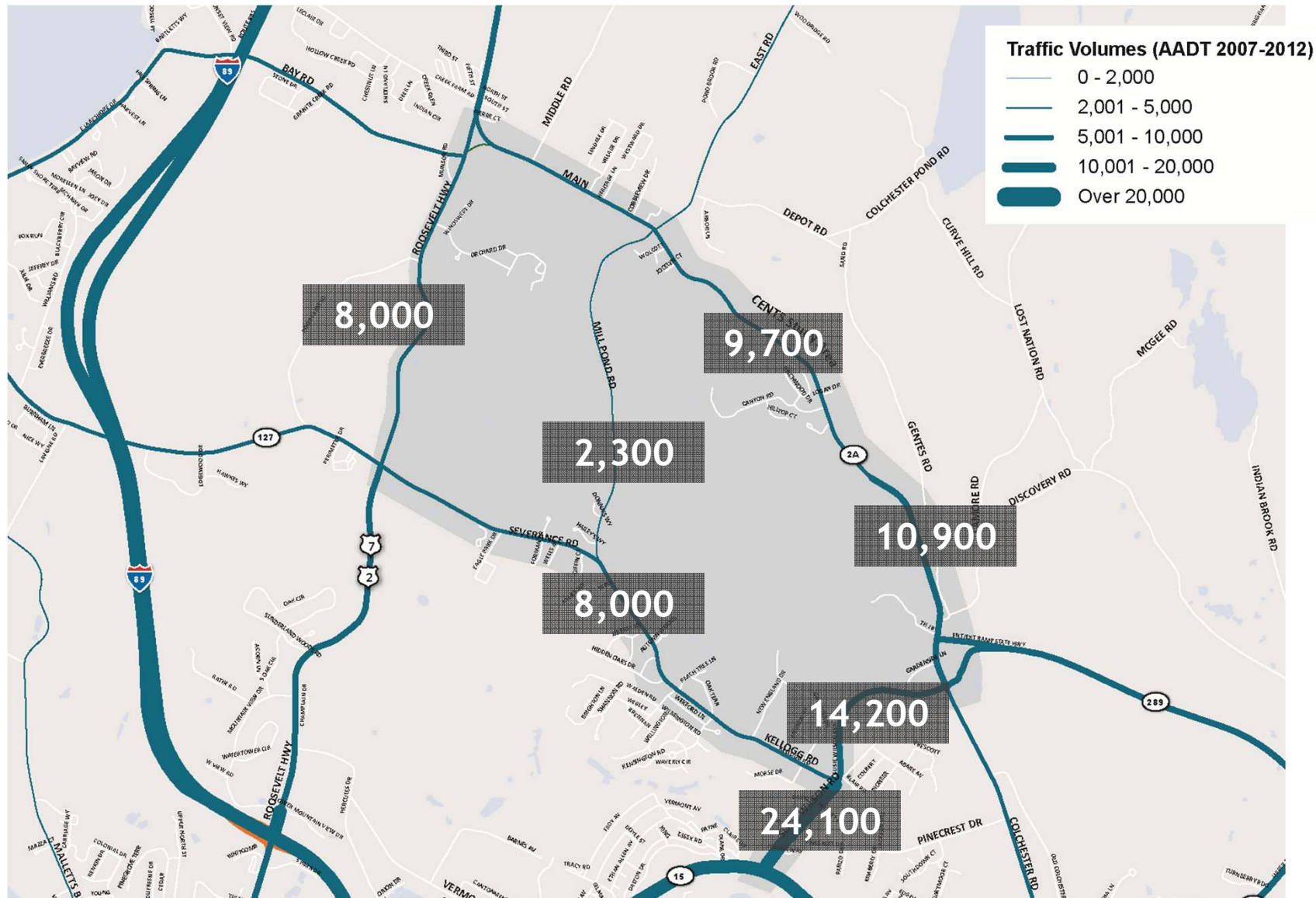
- *Circ Alternatives Task Force* convened to identify transportation improvements in the former Circ Highway communities
- CENTS Study is a comprehensive assessment of transportation issues & needs to address **mobility, safety, economic development**, and **environmental quality** within the study area
- Detailed scoping-level assessment in 3 specific sub-areas
- Identify preferred improvement(s) in each sub-area



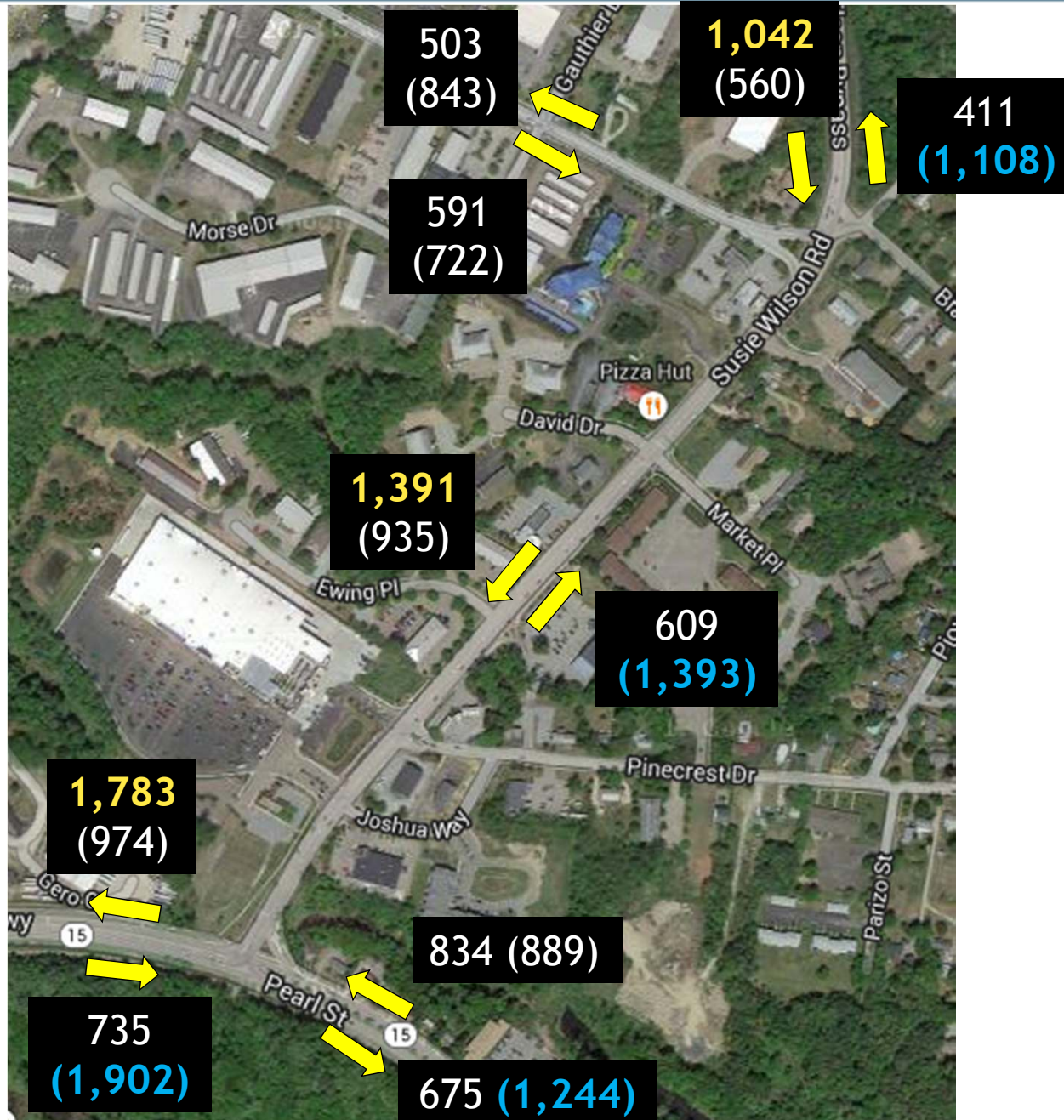
Existing Conditions: Travel Flows using VT 289



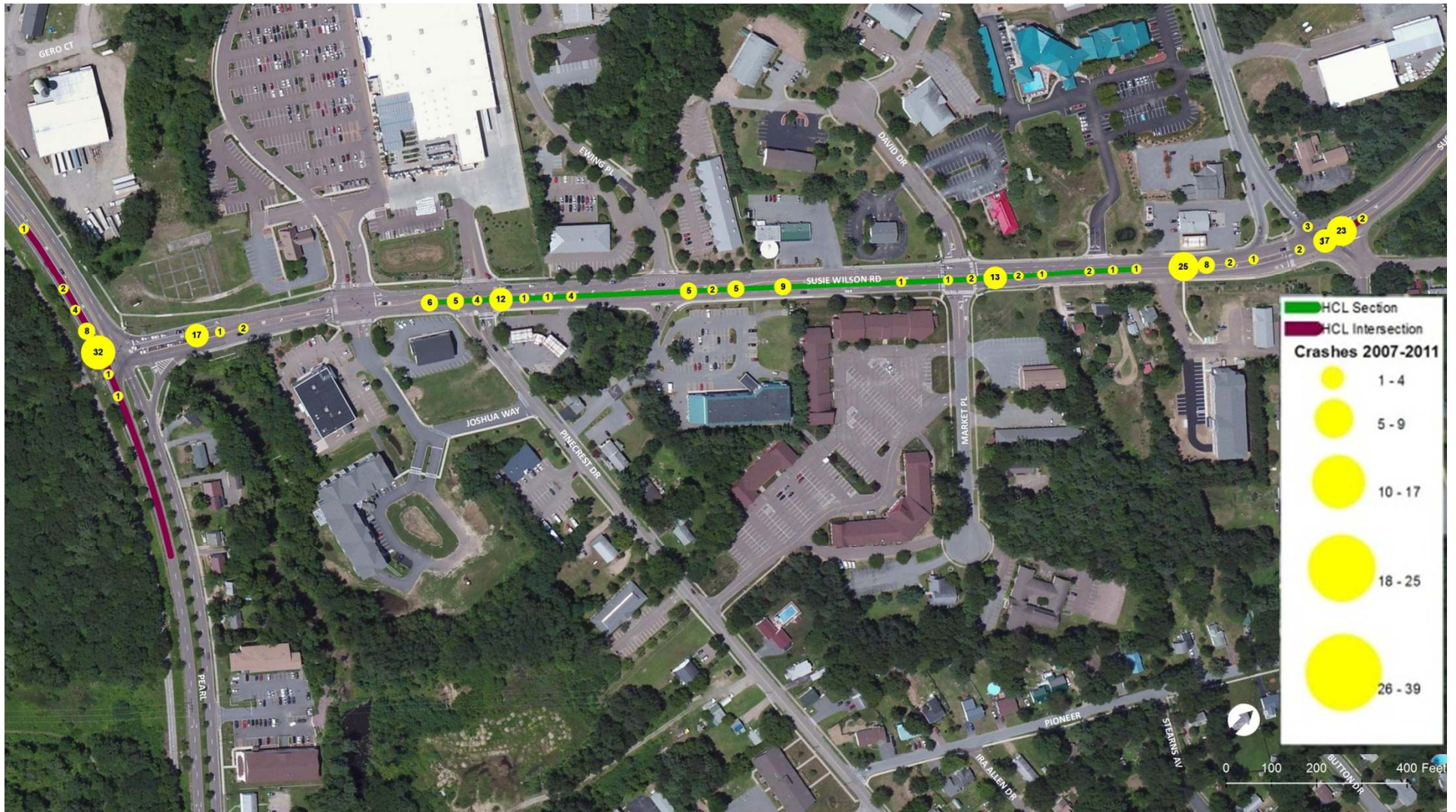
Existing Conditions: Daily Traffic Volumes



Peak Hour Traffic Volumes: AM (PM)



Crashes Along Susie Wilson Road (2007-2011)

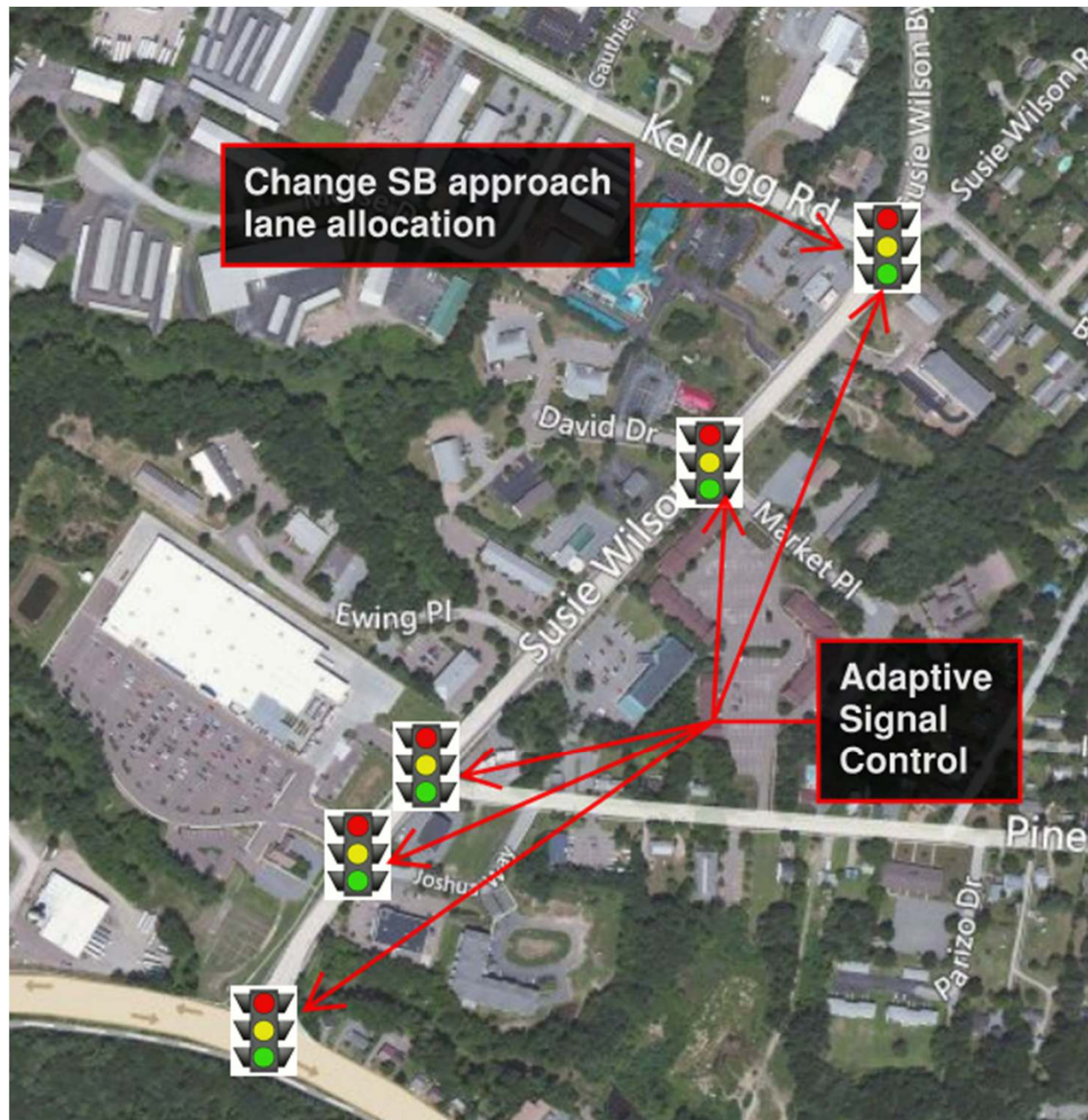


Review of Alternatives

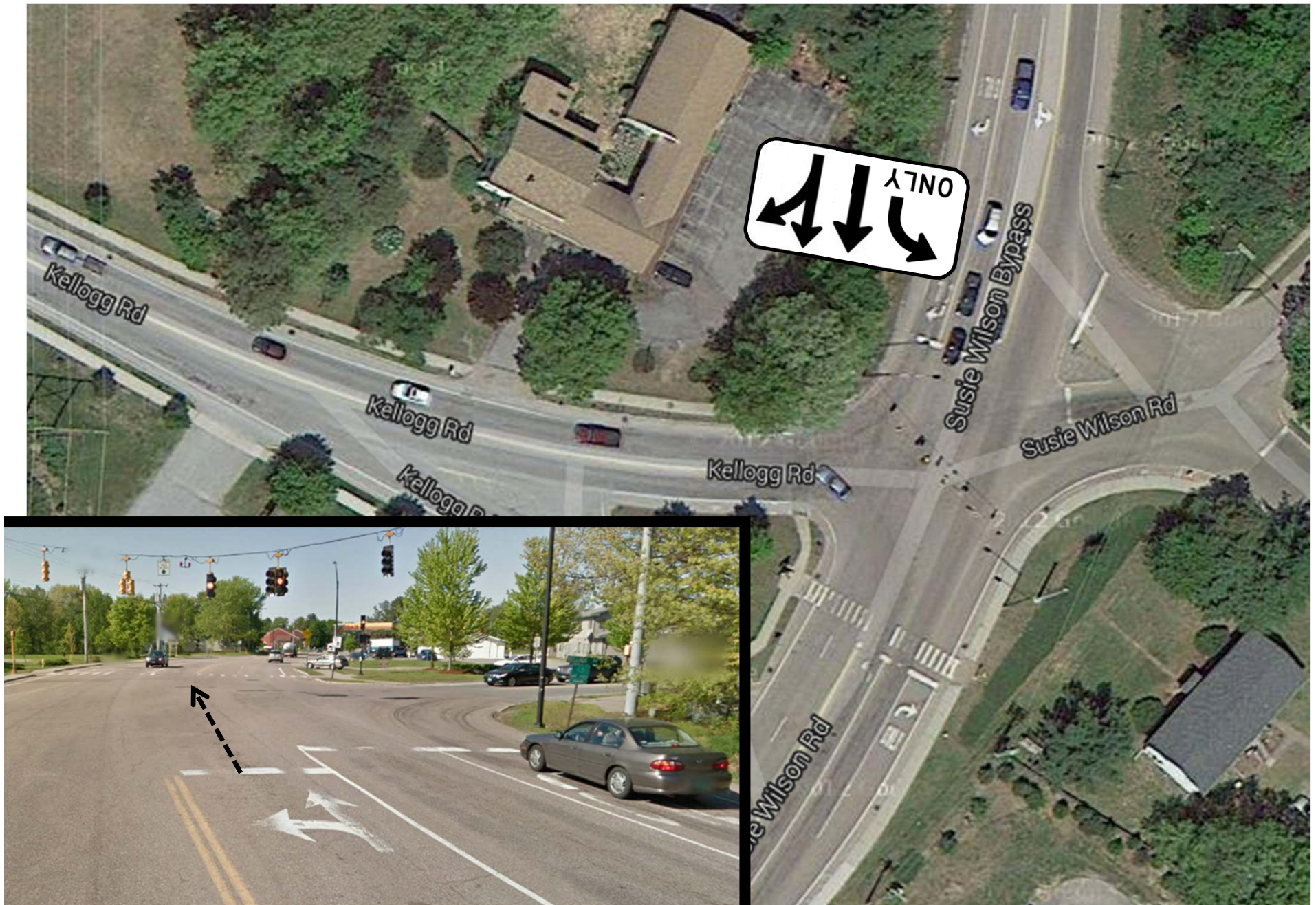
- **Alternative 1:** Short-Term Operational Improvements
- **Alternative 2:** Capacity Improvements – Signalized
- **Alternative 3:** Capacity Improvements – Signalized with reconfigured VT 15 intersection
- **Alternative 4:** Capacity Improvements – Roundabouts



Alternative 1 – Short Term Operational Improvements



Alternative 1 – Short Term Operational Improvements

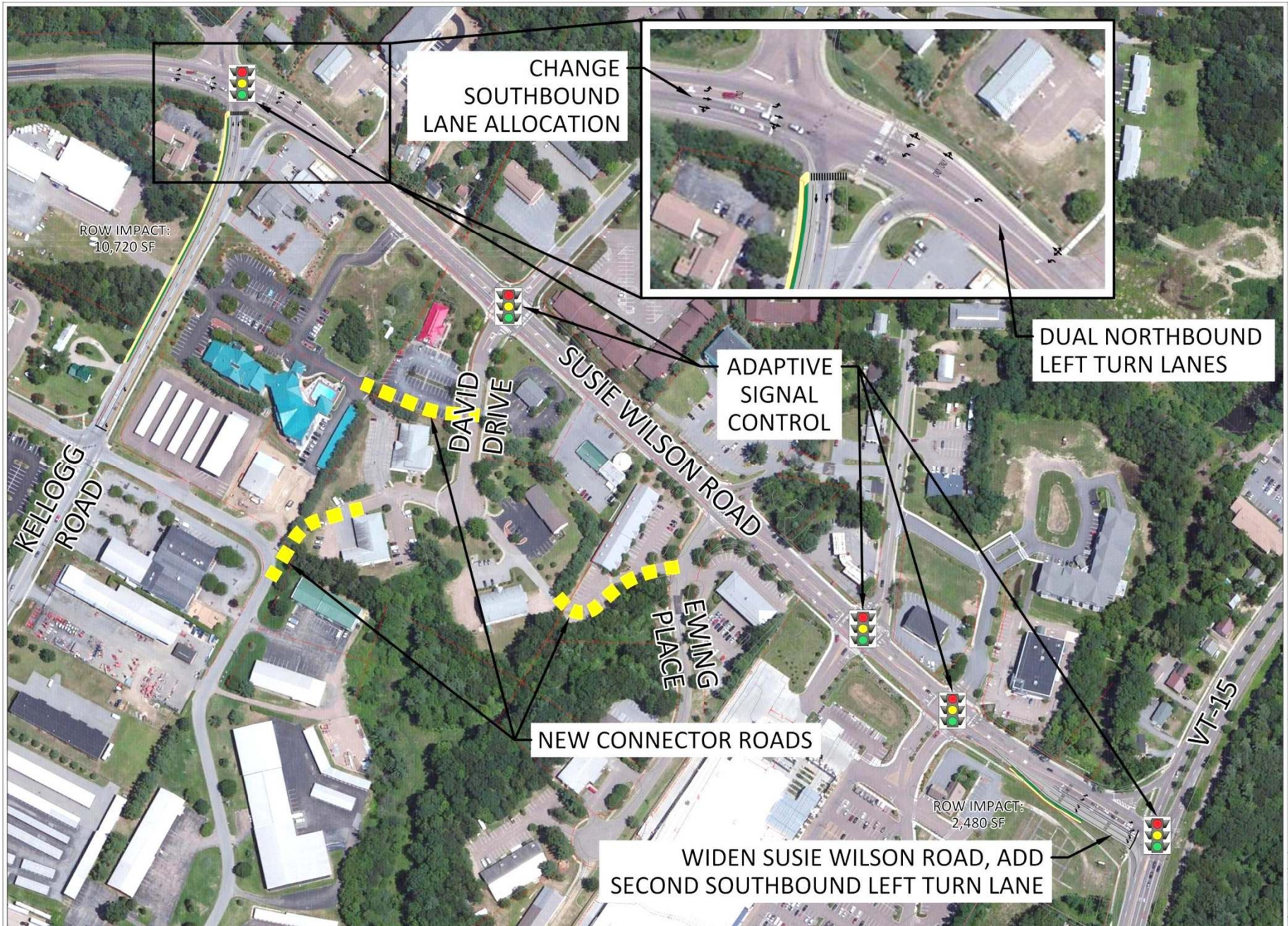


Alternatives Assessment – Level of Service/Congestion

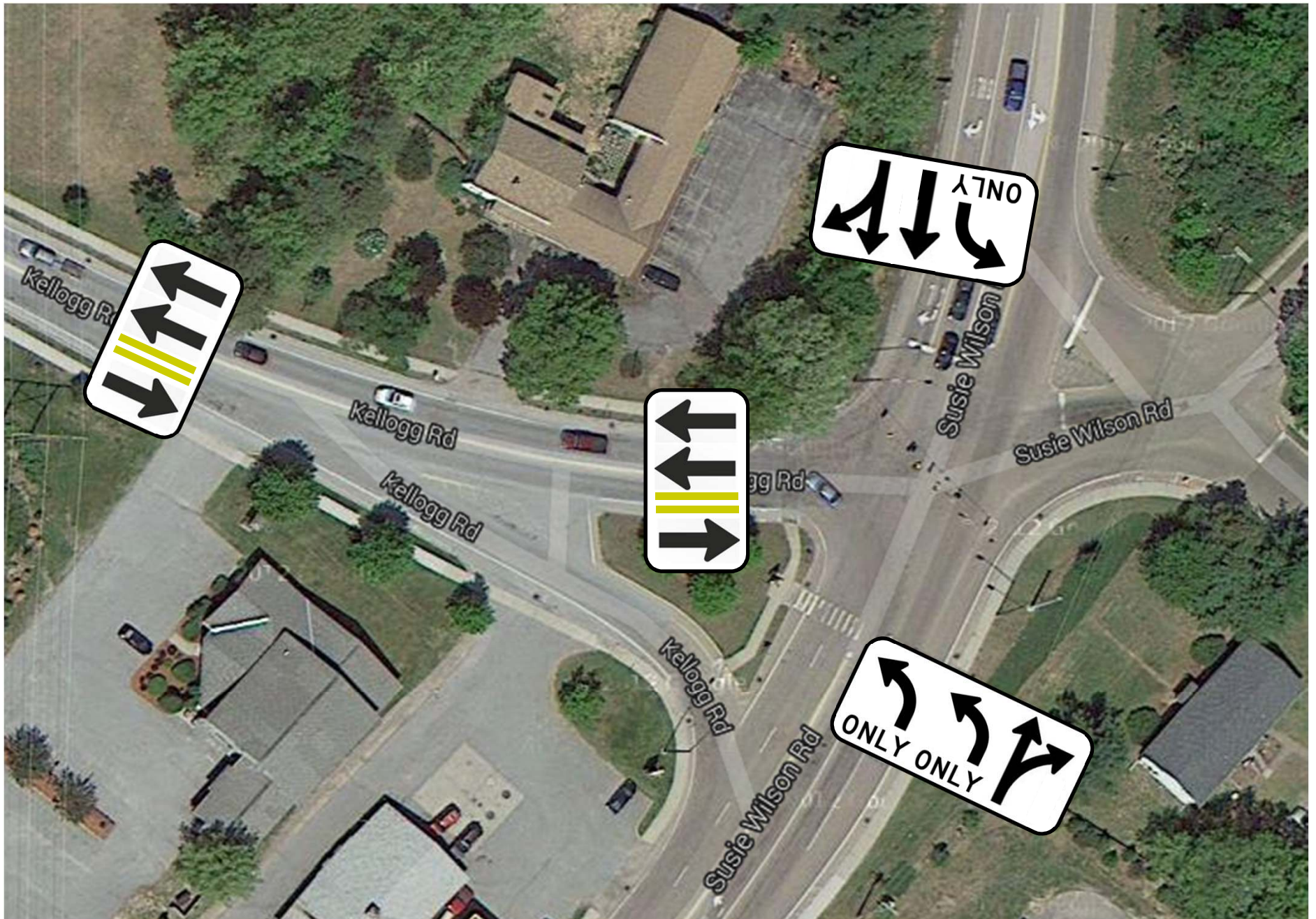
Signalized Intersections	2022 AM Peak Hour					
	No Build			Alternative 1 - Short Term		
	LOS	Delay	v/c	LOS	Delay	v/c
Susie Wilson Rd/Kellogg Rd	C	23	0.88	C	26	0.91
Susie Wilson Rd/David Dr	A	9	0.61	A	7	0.61
Susie Wilson Rd/Pinecrest Dr	A	10	0.67	A	7	0.67
Susie Wilson Rd/Joshua Way	B	15	0.72	B	14	0.72
Susie Wilson Rd/VT 15	C	26	0.88	C	23	0.88

Signalized Intersections	2022 PM Peak Hour					
	No Build			Alternative 1 - Short Term		
	LOS	Delay	v/c	LOS	Delay	v/c
Susie Wilson Rd/Kellogg Rd	F	96	1.06	F	>100	1.12
Susie Wilson Rd/David Dr	A	10	0.56	A	9	0.56
Susie Wilson Rd/Pinecrest Dr	B	12	0.71	B	11	0.71
Susie Wilson Rd/Joshua Way	A	10	0.68	A	9	0.68
Susie Wilson Rd/VT 15	F	>100	1.03	F	93	1.03

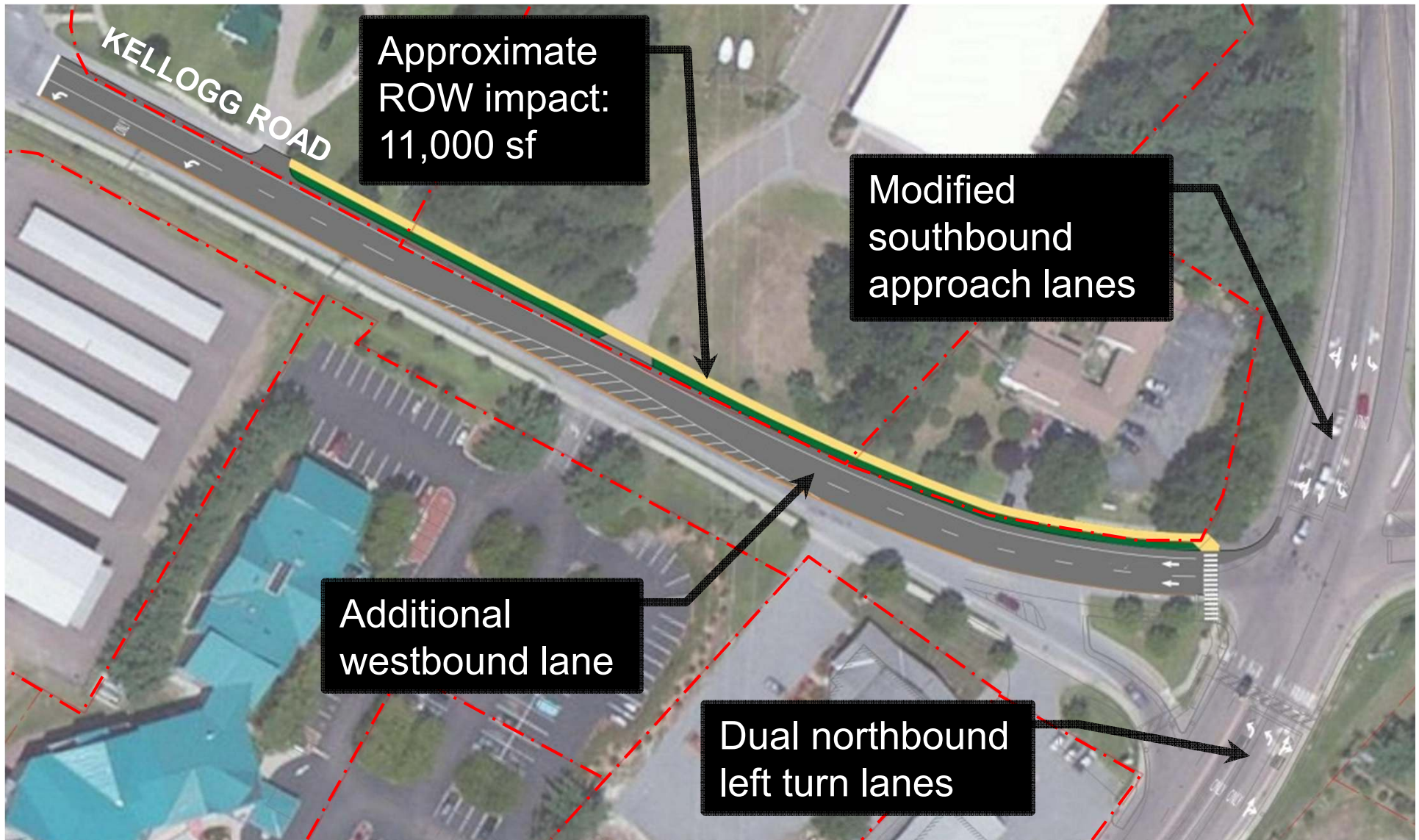
Alternative 2 – Signalized Improvements



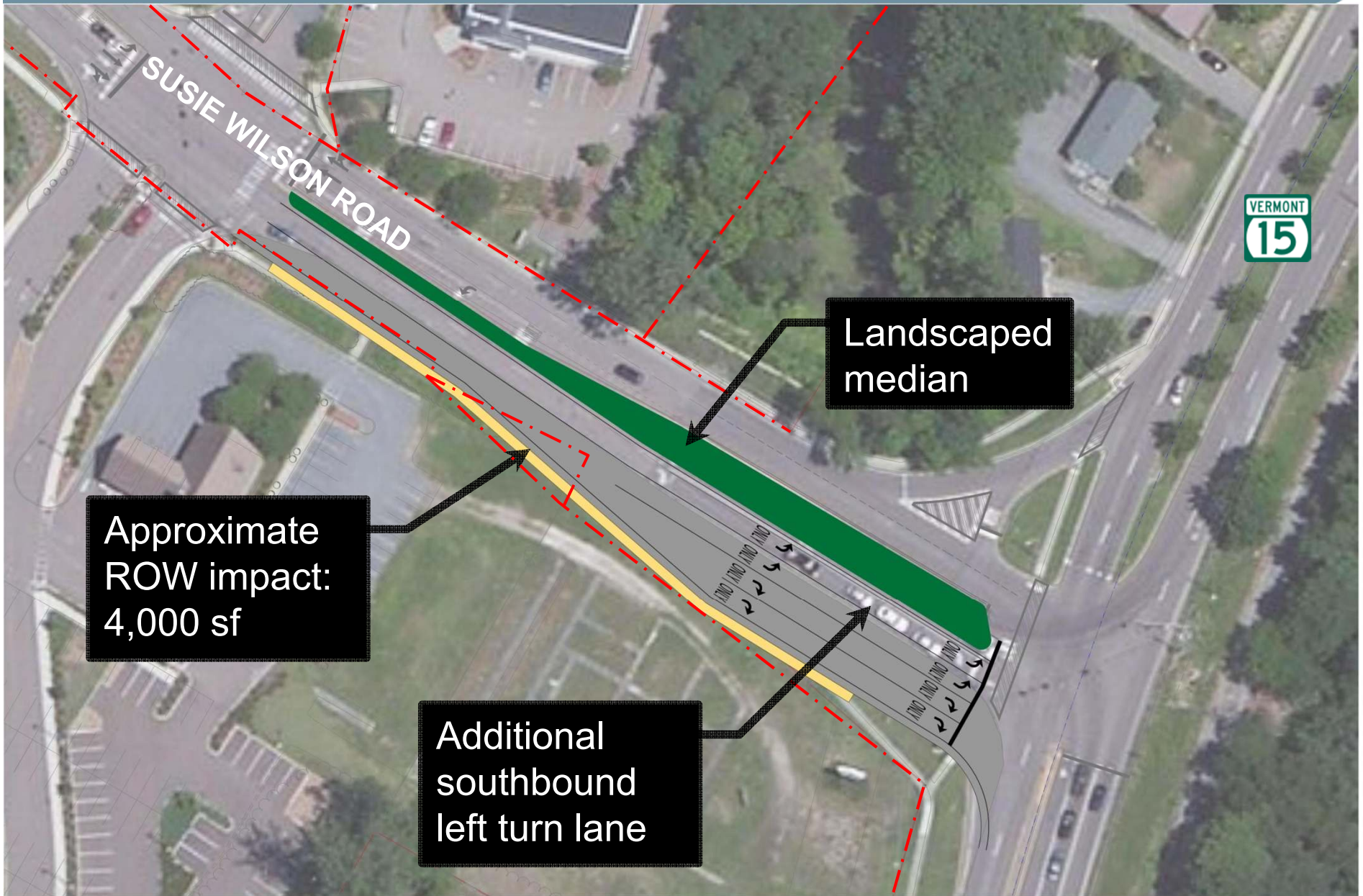
Alternative 2 – Signalized Improvements



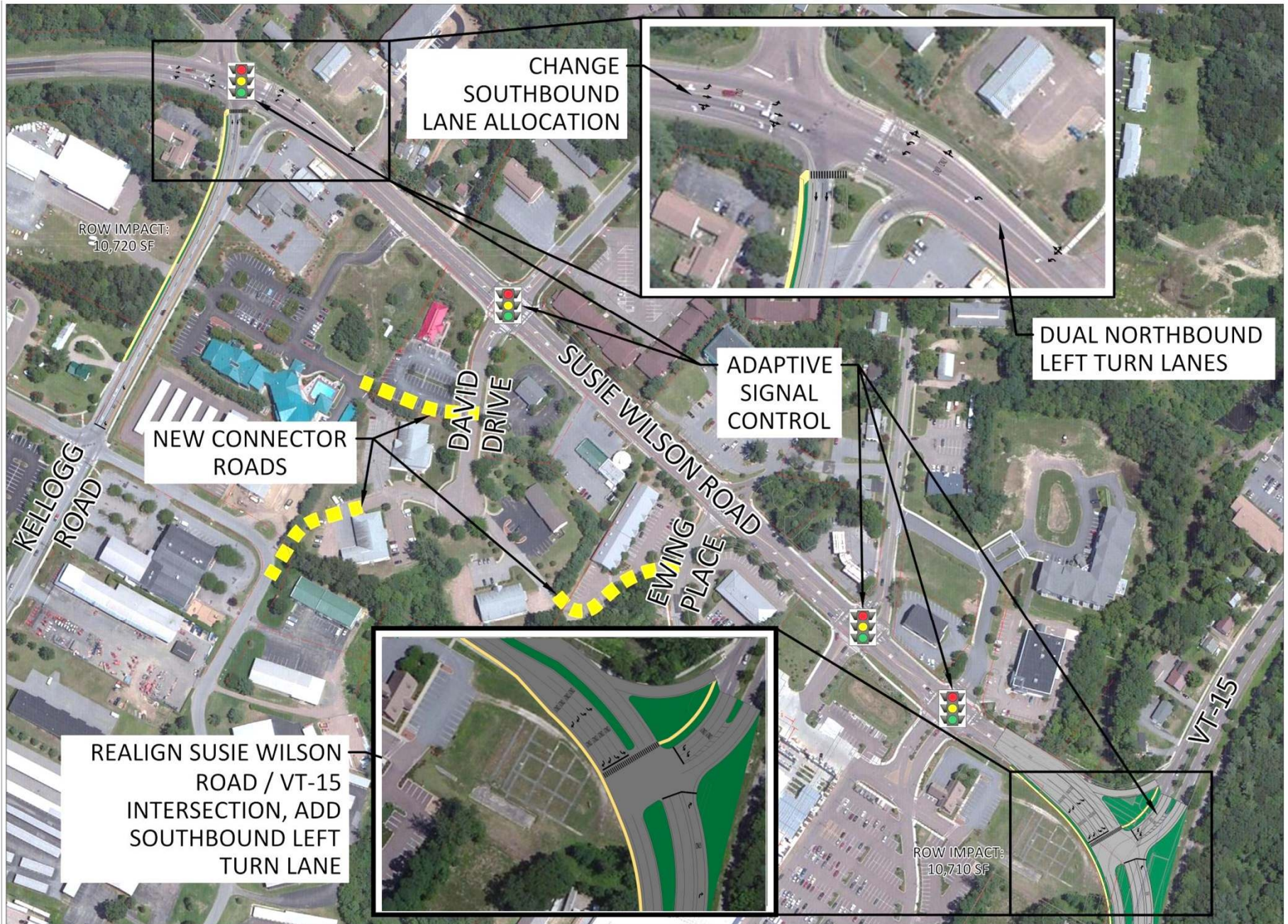
Alternative 2 – Signalized Improvements



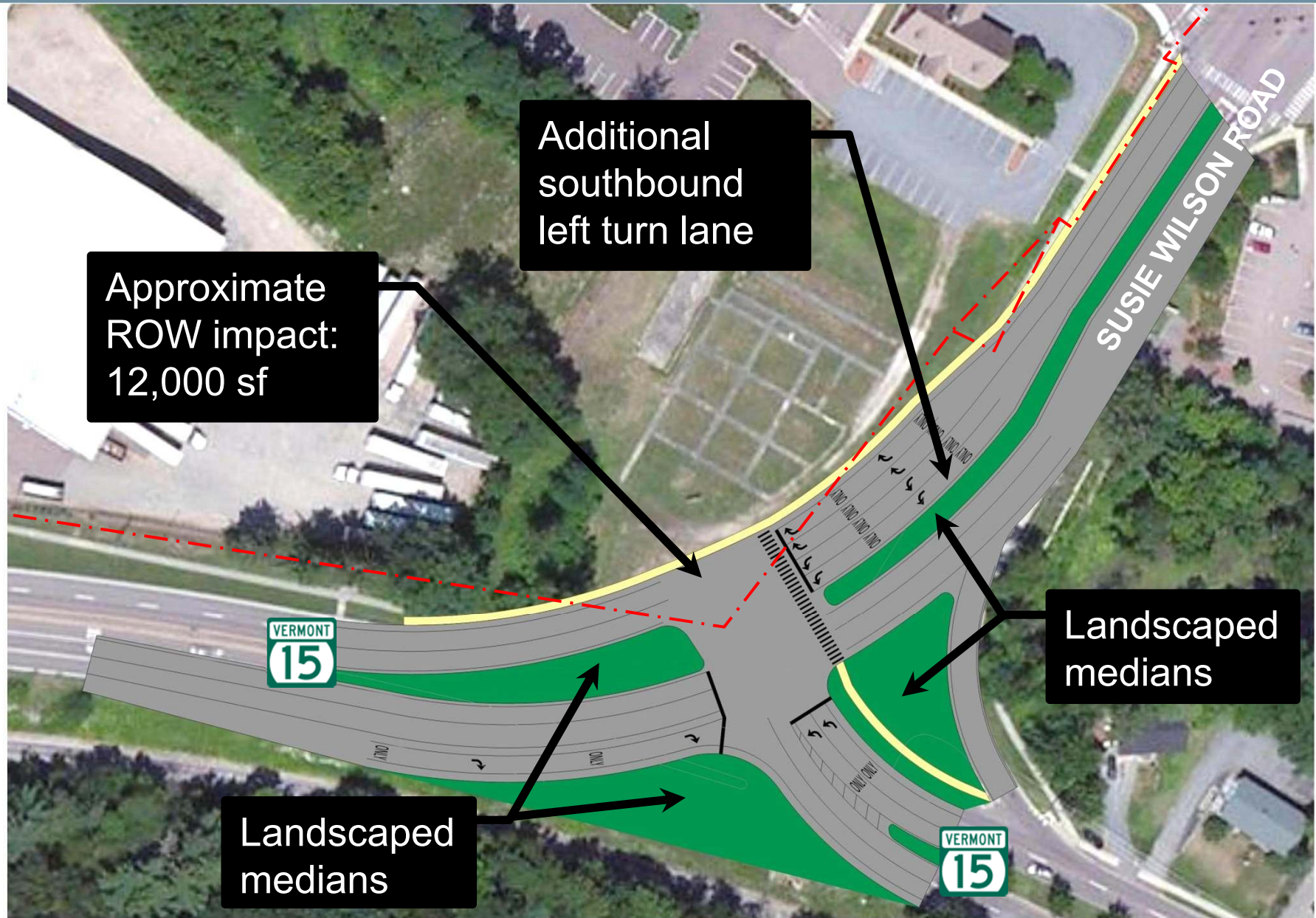
Alternative 2 – Signalized Improvements



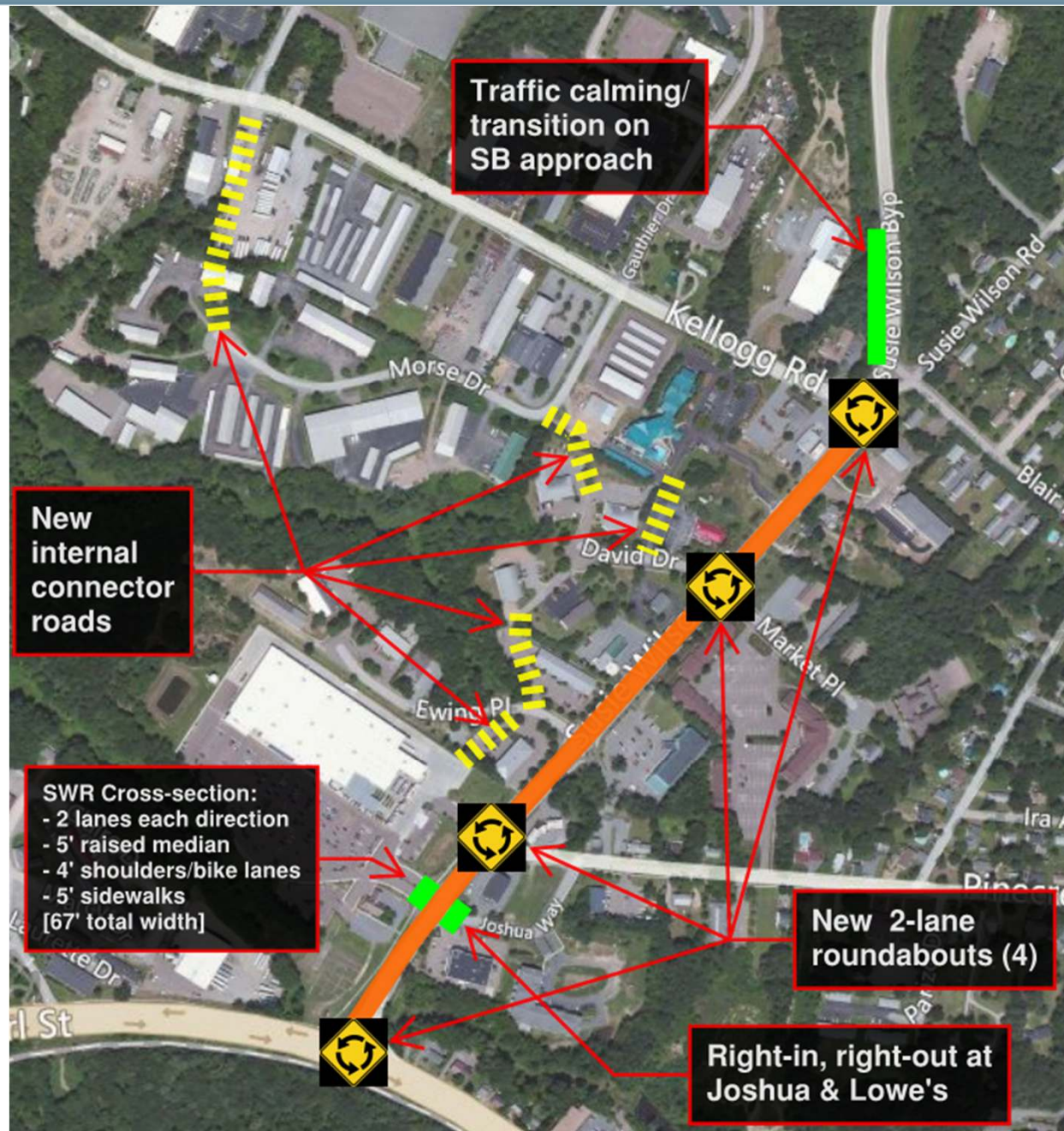
Alternative 3 – Signalized Improvements + Reconfiguration



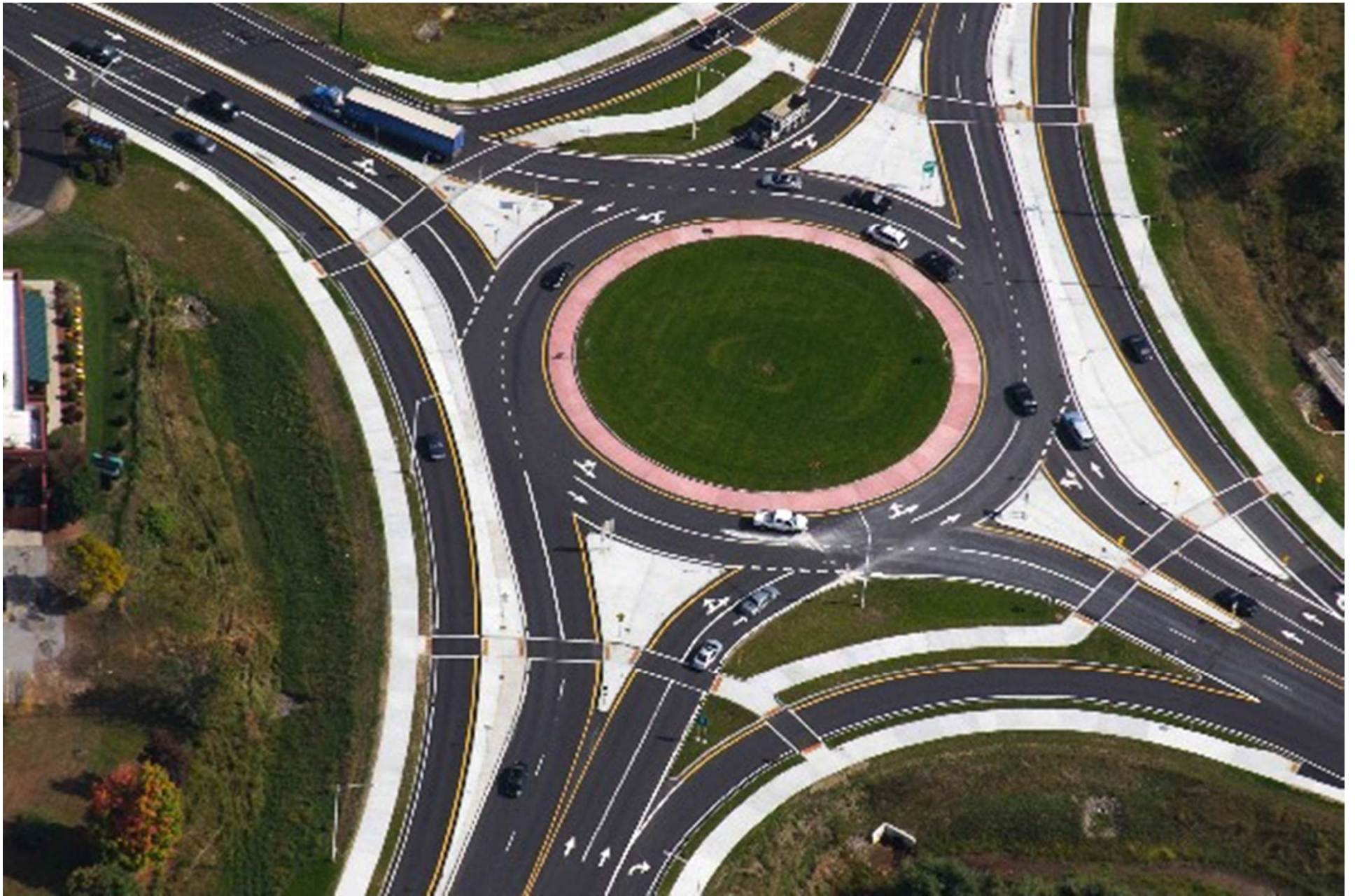
Alternative 3 – Signalized Improvements + Reconfiguration



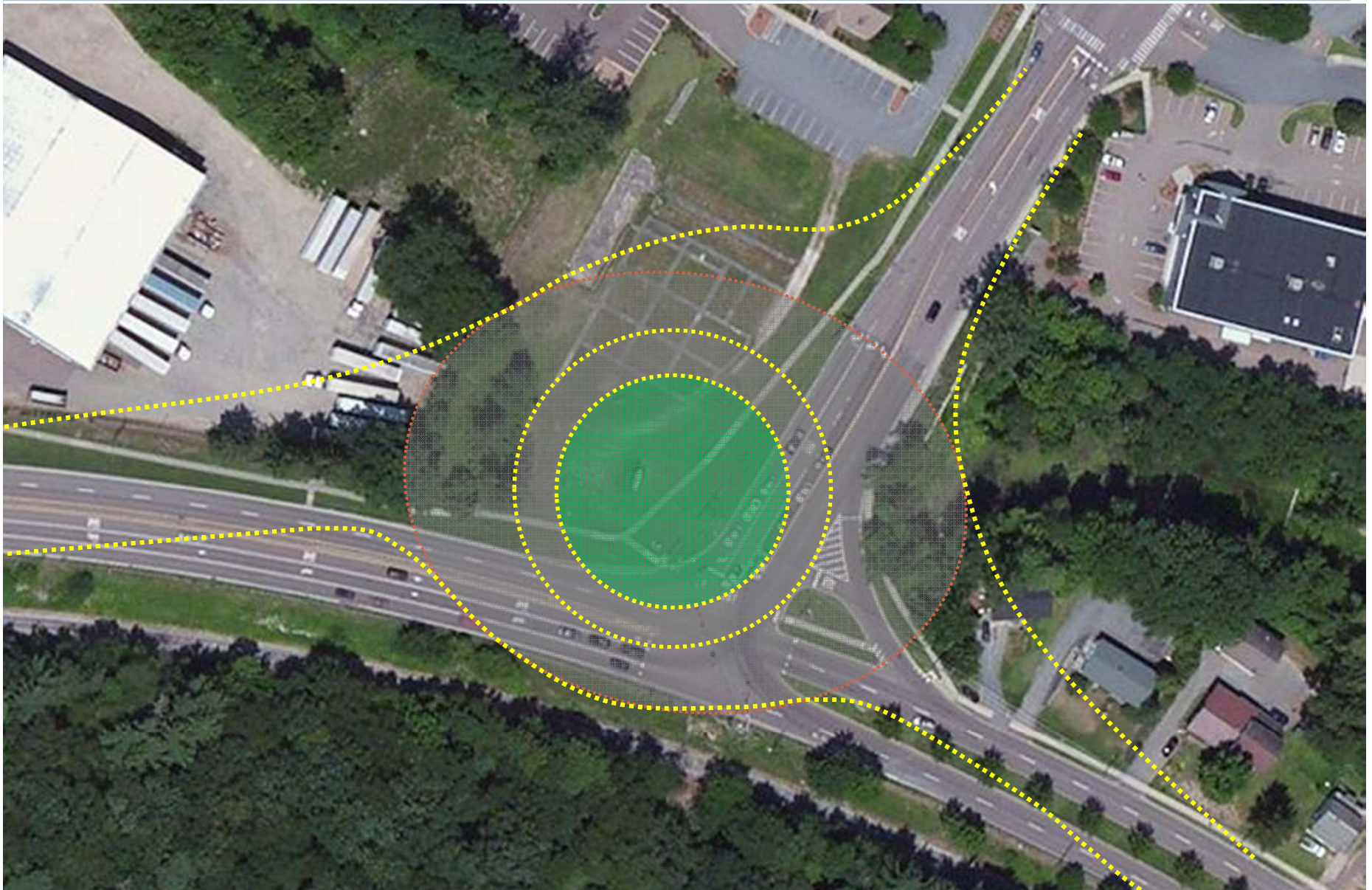
Alternative 4 – Roundabouts



Alternative 4 – Roundabouts



Alternative 4 – Roundabouts



Alternatives Assessment – Level of Service/Congestion

Signalized Intersections	2022 AM Peak Hour						2030 AM Peak Hour											
	No Build			Alternative 1 - Short Term			No Build			Alternative 2 - Signals			Alternative 3 - Signals + Realignment			Alternative 4 - Roundabouts		
	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c
Susie Wilson Rd/Kellogg Rd	C	23	0.88	C	26	0.91	C	31	0.98	C	25	0.86	C	25	0.86	C	18	0.92
Susie Wilson Rd/David Dr	A	9	0.61	A	7	0.61	A	9	0.65	A	8	0.65	A	8	0.65	A	6	0.64
Susie Wilson Rd/Pinecrest Dr	A	10	0.67	A	7	0.67	B	11	0.72	A	9	0.72	A	9	0.72	B	13	0.90
Susie Wilson Rd/Joshua Way	B	15	0.72	B	14	0.72	B	19	0.77	B	17	0.77	B	17	0.77	B	12	0.78
Susie Wilson Rd/VT 15	C	26	0.88	C	23	0.88	C	29	0.93	C	24	0.93	C	21	0.81	F	>100	1.55

Signalized Intersections	2022 PM Peak Hour						2030 PM Peak Hour											
	No Build			Alternative 1 - Short Term			No Build			Alternative 2 - Signals			Alternative 3 - Signals + Realignment			Alternative 4 - Roundabouts		
	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c
Susie Wilson Rd/Kellogg Rd	F	96	1.06	F	>100	1.12	F	>100	1.14	D	45	0.99	D	47	0.99	F	34	1.04
Susie Wilson Rd/David Dr	A	10	0.56	A	9	0.56	A	10	0.60	A	7	0.60	A	5	0.60	A	7	0.68
Susie Wilson Rd/Pinecrest Dr	B	12	0.71	B	11	0.71	B	13	0.76	B	16	0.76	B	13	0.76	C	22	0.98
Susie Wilson Rd/Joshua Way	A	10	0.68	A	9	0.68	B	11	0.73	B	12	0.73	B	10	0.73	B	12	0.78
Susie Wilson Rd/VT 15	F	>100	1.03	F	93	1.03	F	>100	1.10	C	29	0.91	C	29	0.89	F	>100	1.75

Alternatives Assessment – Evaluation Matrix

		No Build	Alternative 1 Short-Term Operational	Alternative 2 Signals	Alternative 3 Signals & Reconfiguration	Alternative 4 Roundabouts
COST	Preliminary Cost Estimate (final design, construction, inspection, contingency)	\$0	Signals: \$190,000	SWR/15: \$1,000,000	SWR/15: \$3,100,000	Corridor: \$1,500,000
			Kellogg SB: \$10,000	Kellogg NB: \$600,000	Kellogg NB: \$600,000	Connectors: \$250,000
			<u>Connectors: \$250,000</u>	<u>Connectors: \$250,000</u>	<u>Connectors: \$250,000</u>	<u>Roundabouts: \$7,000,000</u>
			TOTAL: \$200,000	TOTAL: \$1,850,000	TOTAL: \$3,950,000	TOTAL: \$8,750,000
PURPOSE & NEED	Congestion/Level of Service	No Change	Improve	Improve	Improve	Worsen
	Bicycle Mobility	No Change	No Change	Improve	Improve	Improve
	Safety	No Change	Improve	Improve	Improve	Improve
	Economic Vitality	No Change	Improve	Improve	Improve	Mixed
IMPACTS	Agricultural Lands	No	No	No	No	No
	Archaeological	No	No	Potential	Potential	Potential
	Historic Structures/Sites	No	No	Potential	Potential	Potential
	Floodplain	No	No	No	No	No
	Rare, Threatened & Endangered	No	No	Yes	Yes	Yes
	Right of Way	No	No	15,000 sf	23,000 sf	50,000+ sf
	Public Lands	No	No	No	No	No
	Wetlands	No	No	No	No	No
PERMITS	Act 250	No	No	No	No	No
	401 Water Quality	No	No	No	No	No
	404 Corps of Engineers Permit	No	No	No	No	No
	Stream Alteration	No	No	No	No	No
	Conditional Use Determination	No	No	No	No	No
	Storm Water Discharge	No	No	Potential	Potential	Potential
	Shoreland Encroachment	No	No	No	No	No
	Endangered & Threatened Species	No	No	Yes	Yes	Yes
	VTrans ROW Permit	No	No	Yes	Yes	Yes
	State Historic Preservation Office Clearance	No	No	No	No	No
	NEPA Category	No	Categorical Exclusion	Categorical Exclusion	Categorical Exclusion	Categorical Exclusion

Next Steps

Task	Date(s)
Project Kick-off Meeting	March 2013
Existing and Future Conditions Assessment	April - May 2013
Local Concerns Meeting 	June 27, 2013
Vision and Goals	July 2013
Improvement Strategies	July 2013
Scoping Level Assessment	July - November 2013
Public Meeting #2 	September 5 th 2013
Essex Selectboard Presentation 	November 4 th
Final CENTS Report	April 2014