



Middlebury Court Street/Charles Ave/Monroe Street Intersection Scoping Study

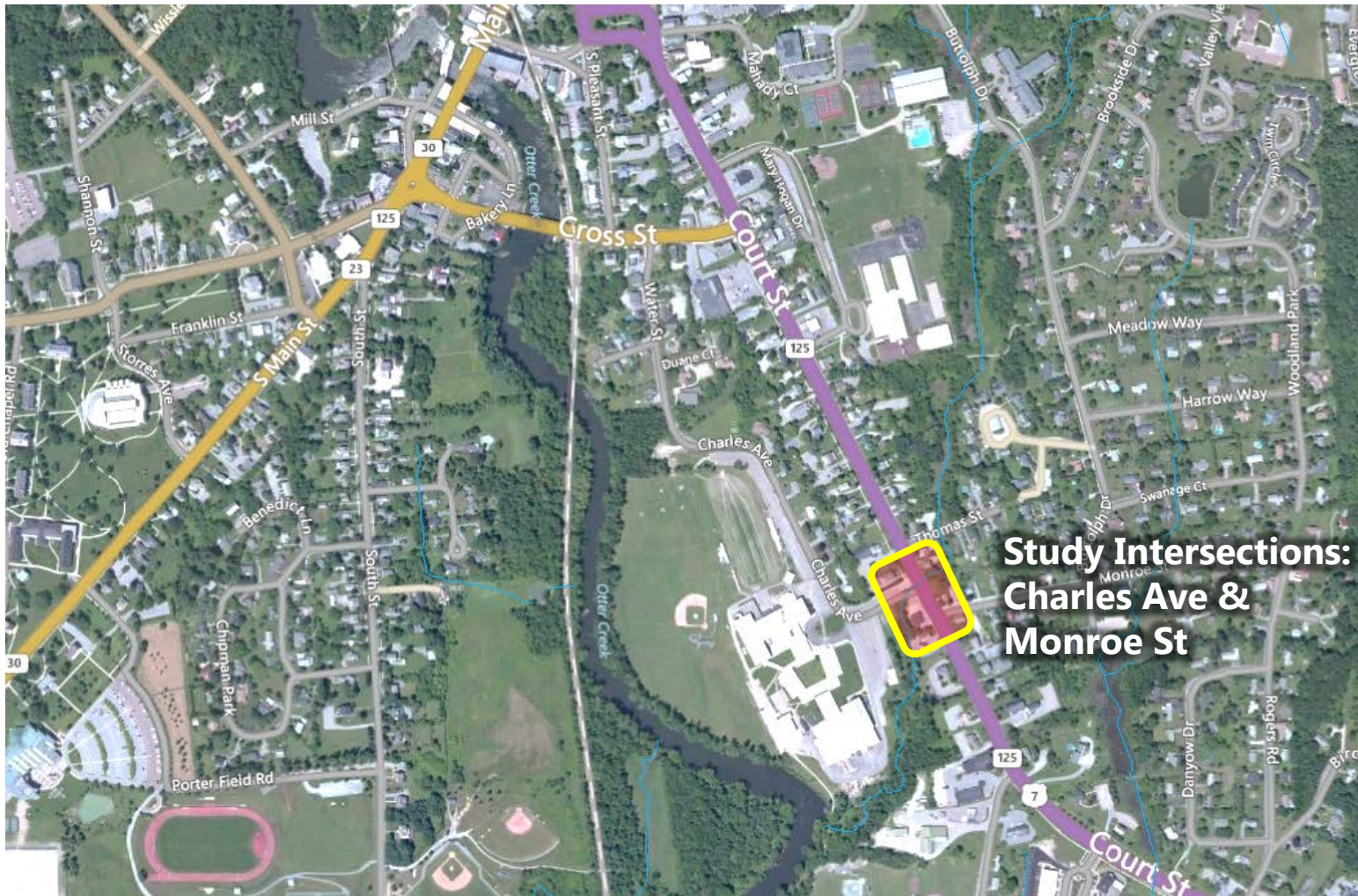
Town of Middlebury, Vermont



Presented by
David Saladino, PE, AICP

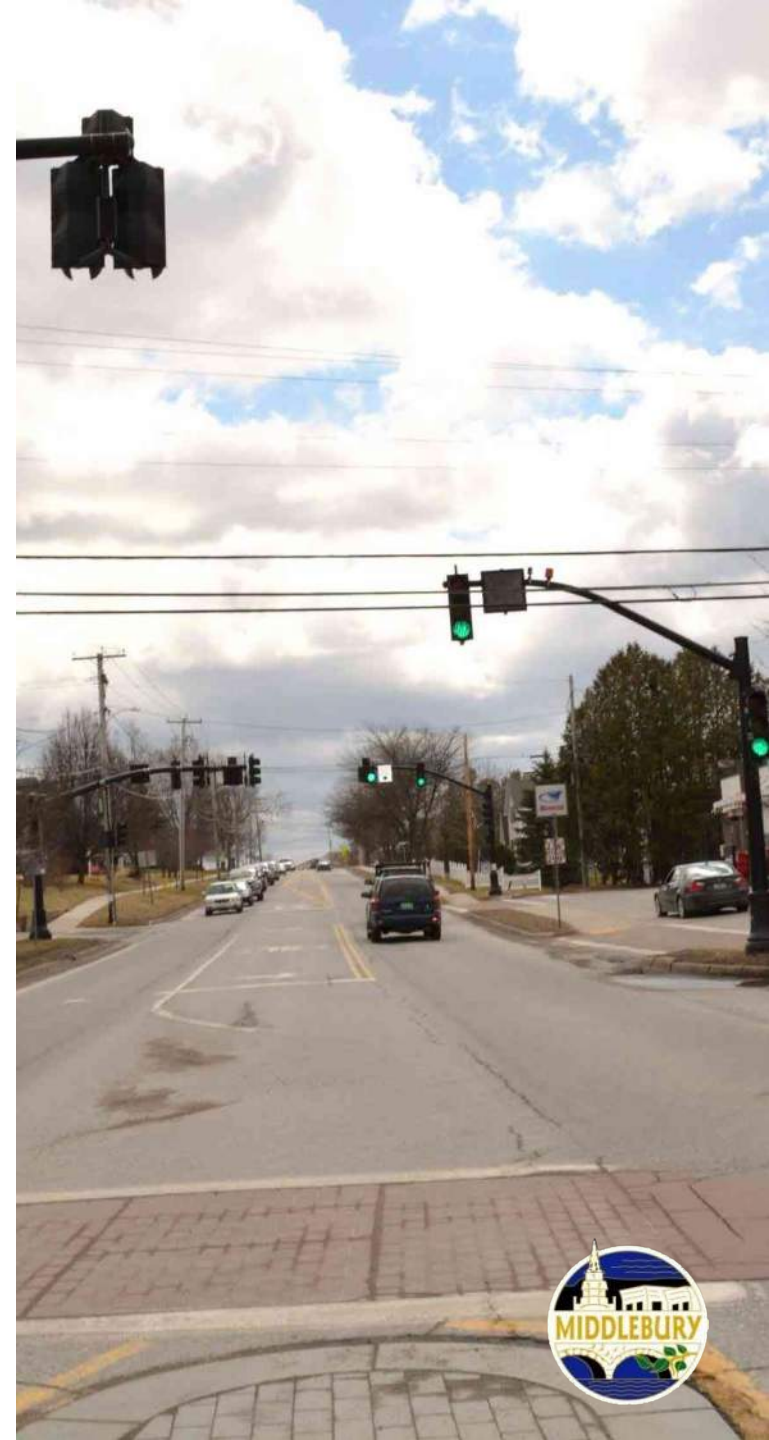
October 13, 2015

Project Area



Project Goals

- Improve **mobility** & **safety** for **all modes**
- Enhance **connectivity** between surrounding land uses (*e.g. school, neighborhoods, etc*)
- Balance the needs of **all stakeholders**
- Ensure that transportation infrastructure is **complementary** to community character.



How to Get There

- **SCOPING PHASE**

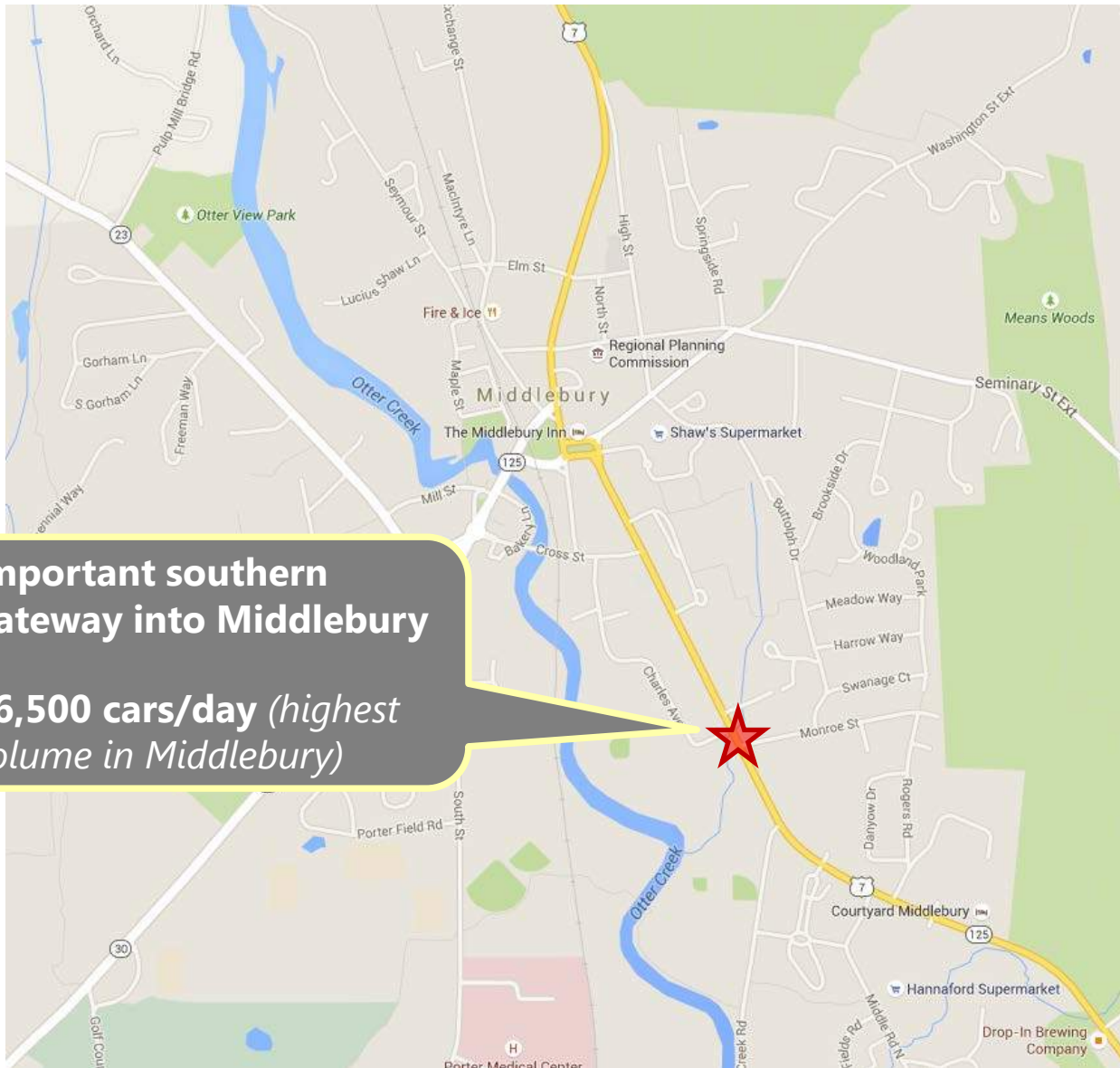
Listen > Investigate > Evaluate > Select

- Develop a **range of alternatives** from which a ***Preferred Alternative*** will be selected to progress towards final design and construction



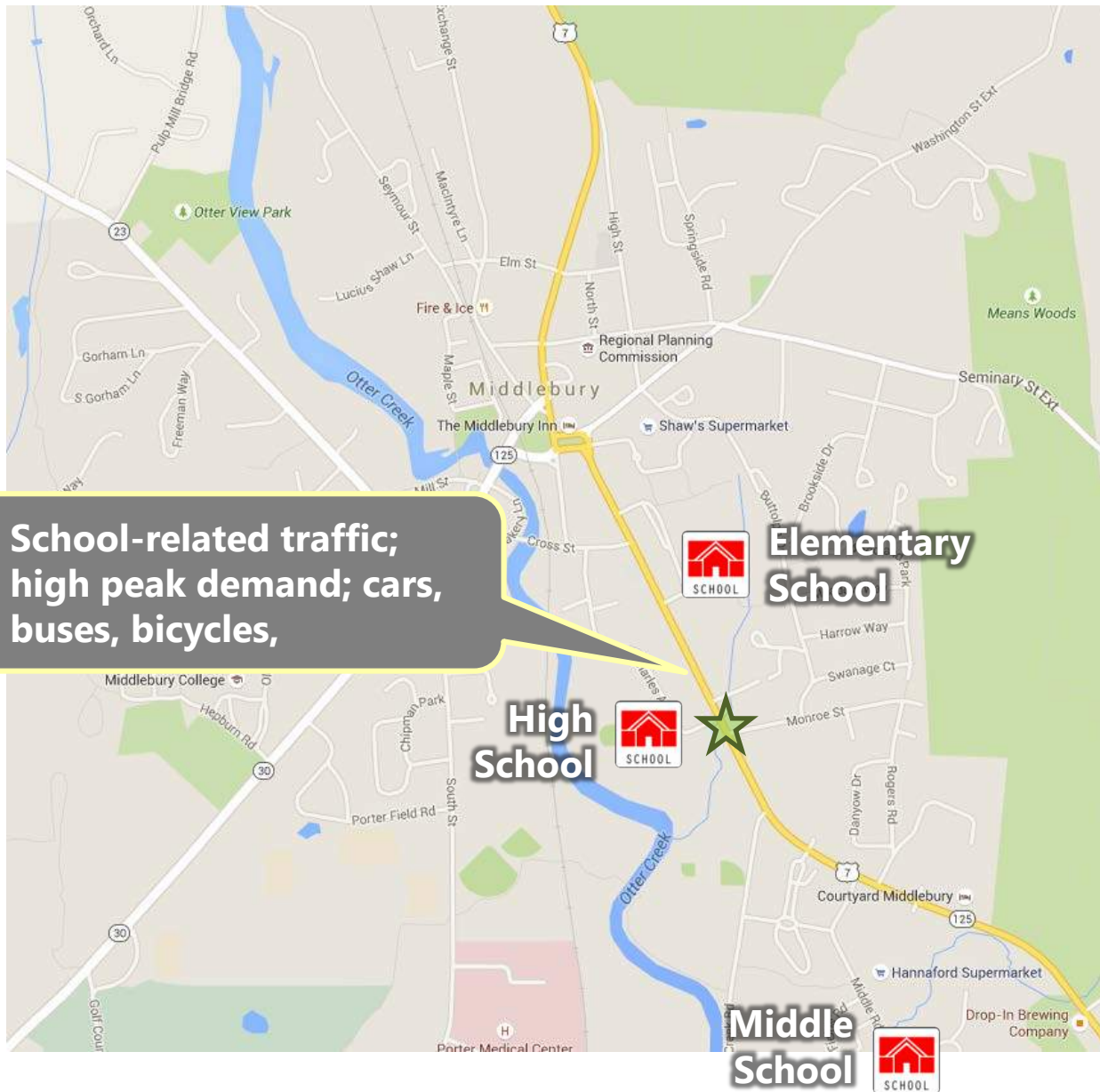
Existing Characteristics

- **Important southern gateway into Middlebury**
- **16,500 cars/day** (*highest volume in Middlebury*)

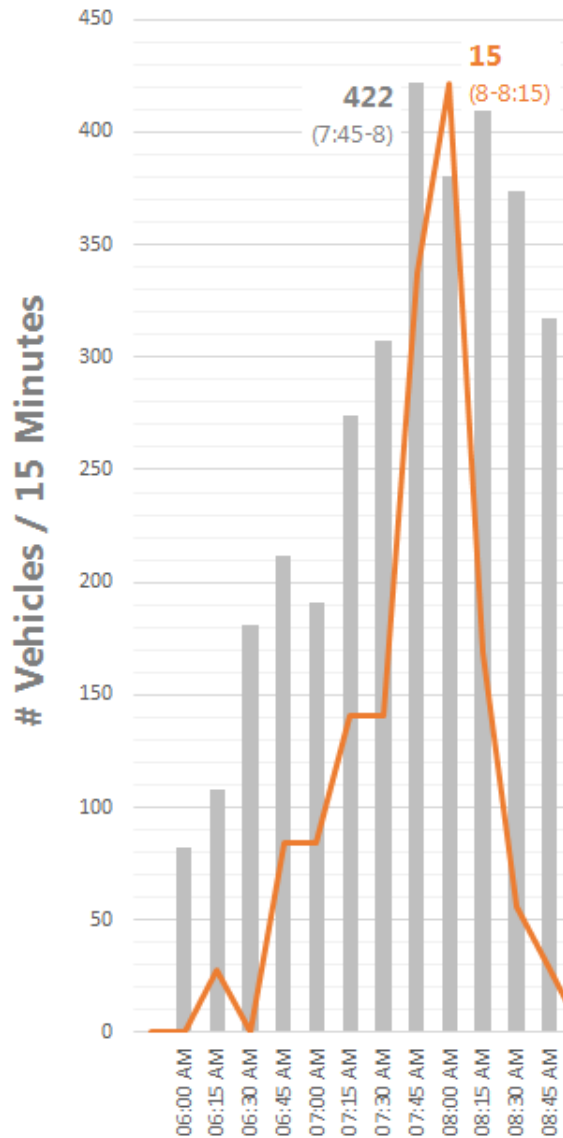


Existing Characteristics

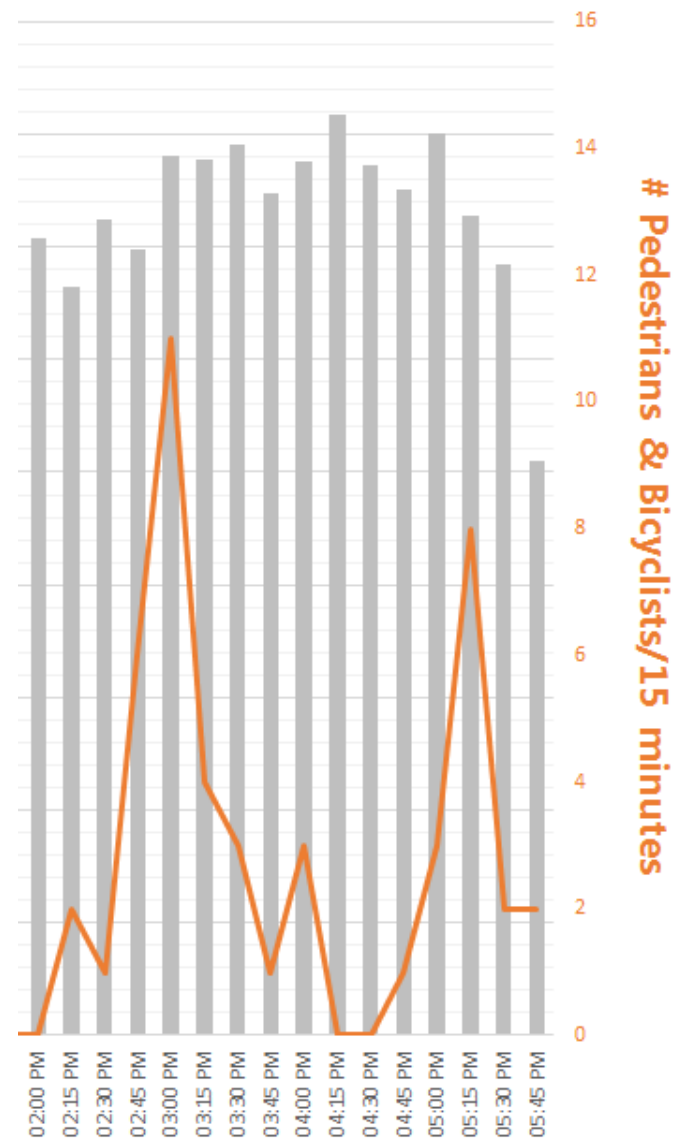
- School-related traffic; high peak demand; cars, buses, bicycles,



Highly Peaked Traffic Volumes

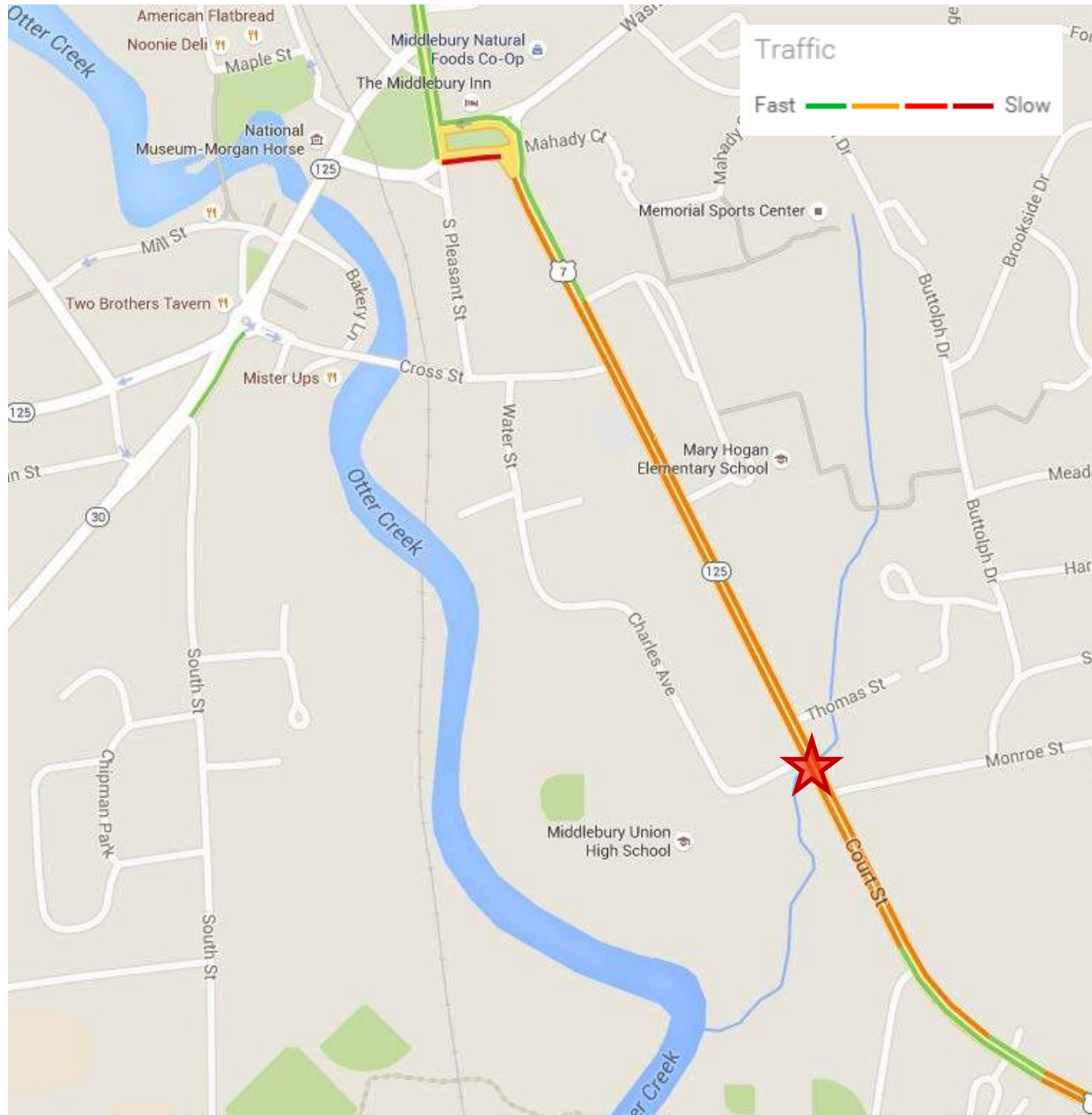


6 – 9 AM

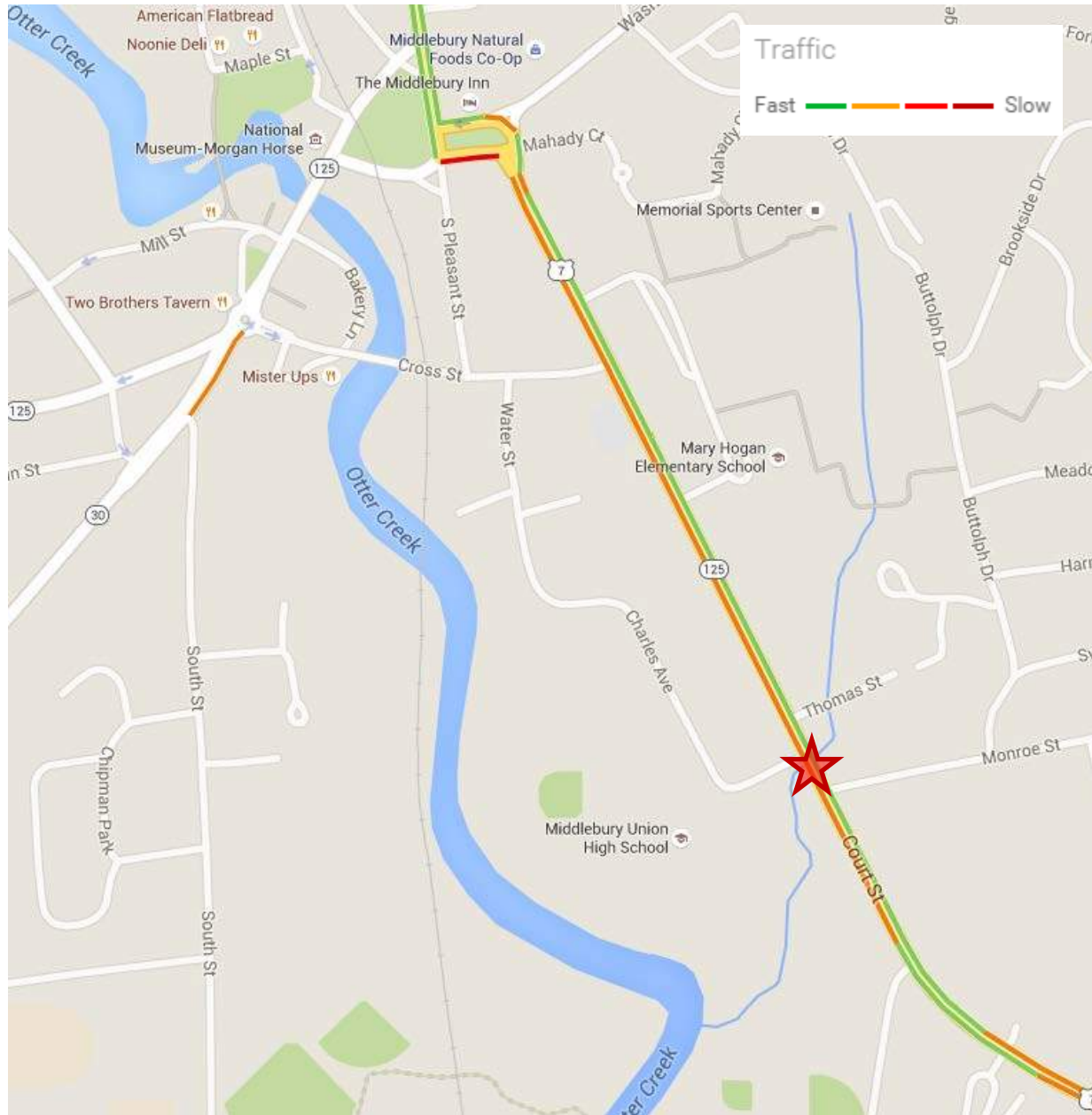


2 – 6 PM

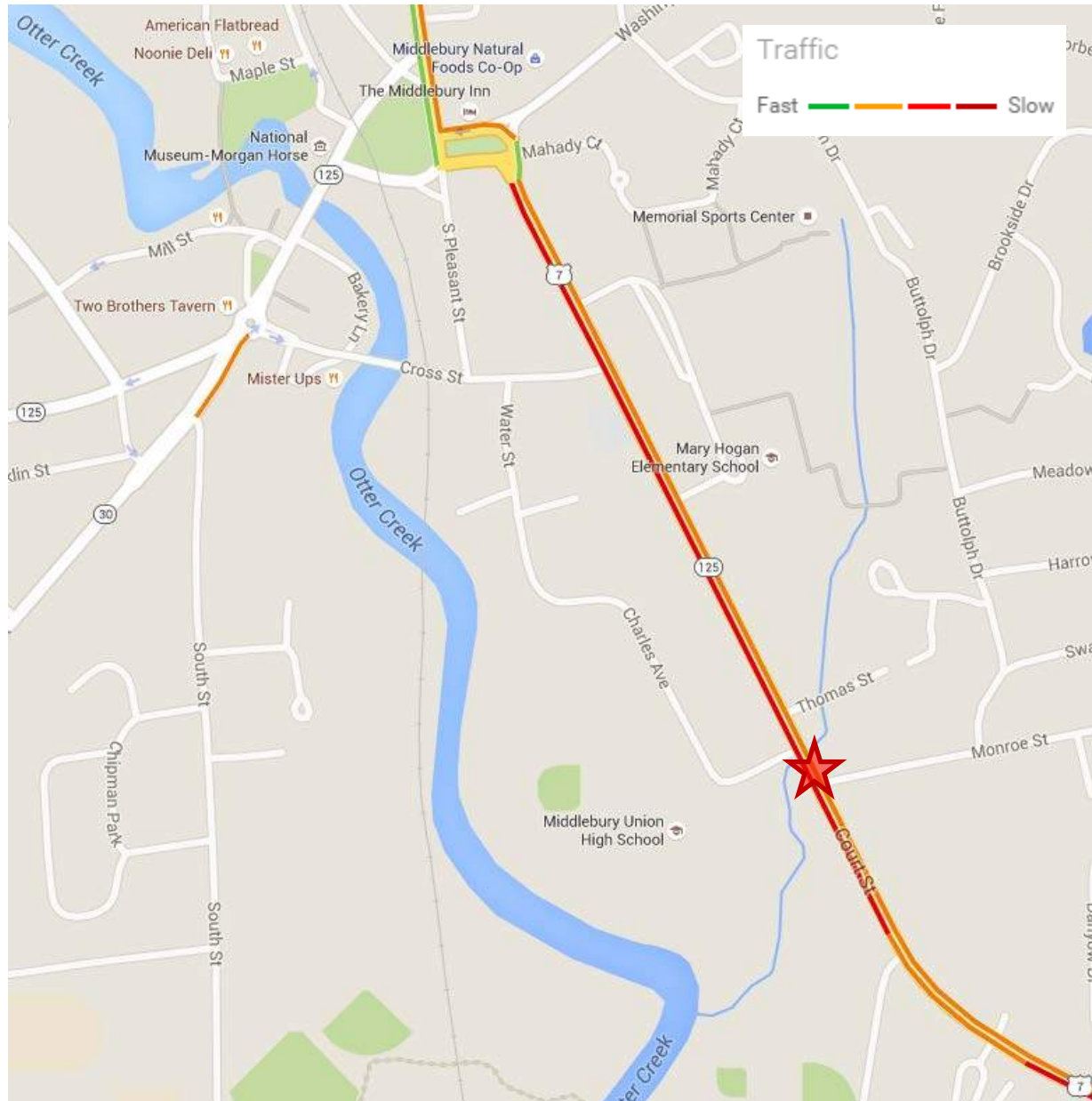
Average Traffic Speeds – 7:30 AM



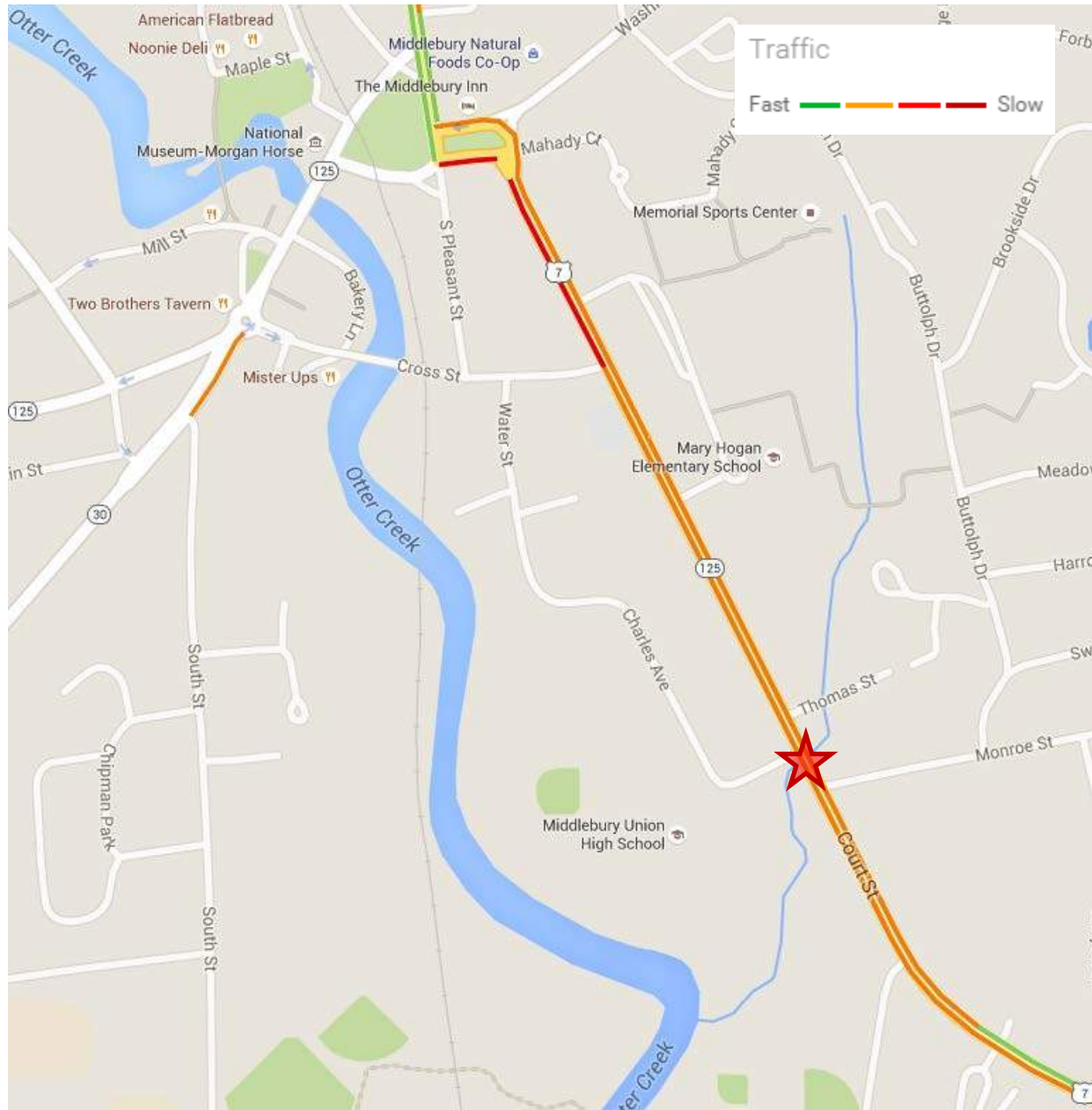
Average Traffic Speeds – 12:00 PM



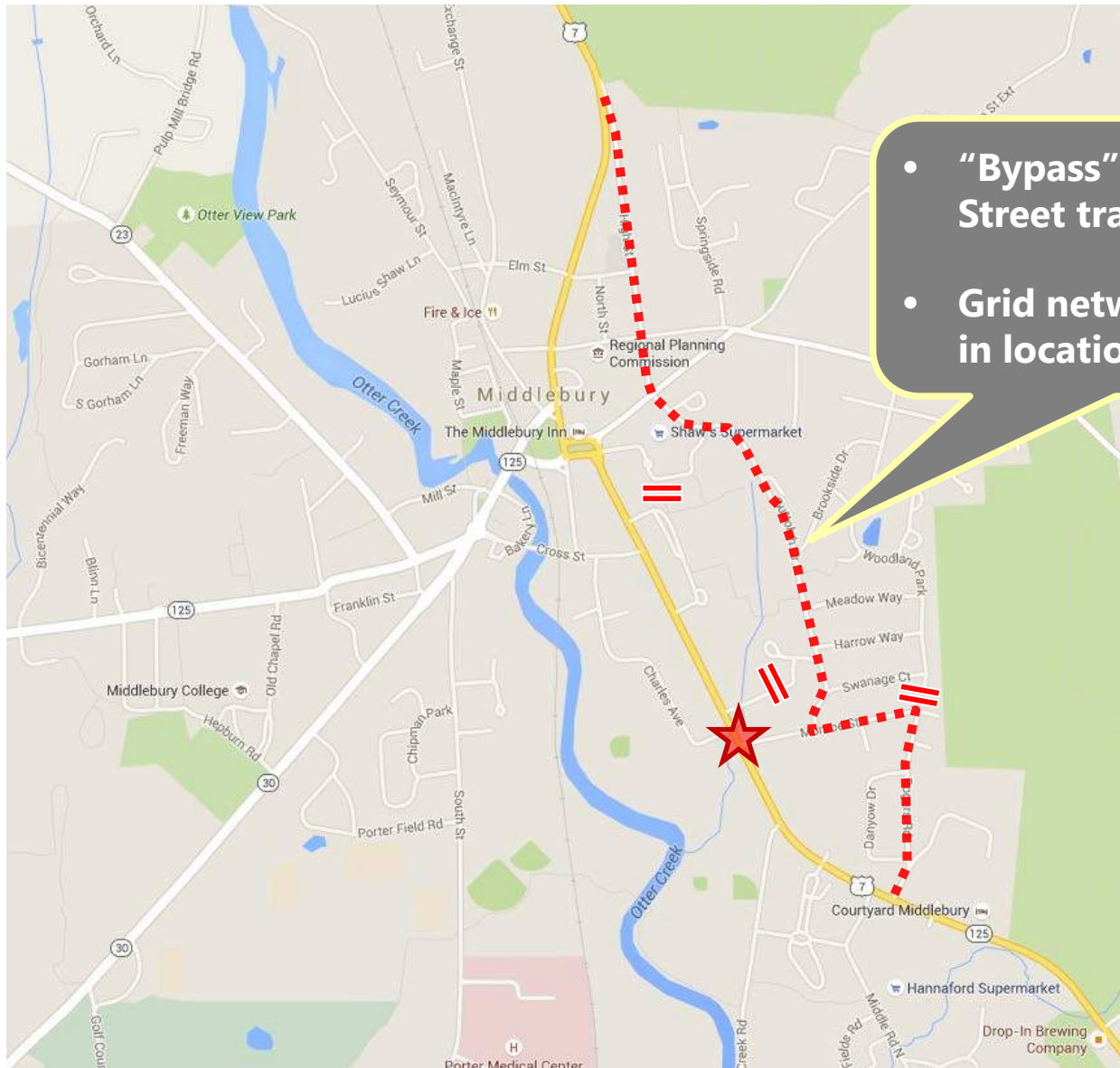
Average Traffic Speeds – 3:00 PM



Average Traffic Speeds – 5:00 PM



Bypass & Closed Connections

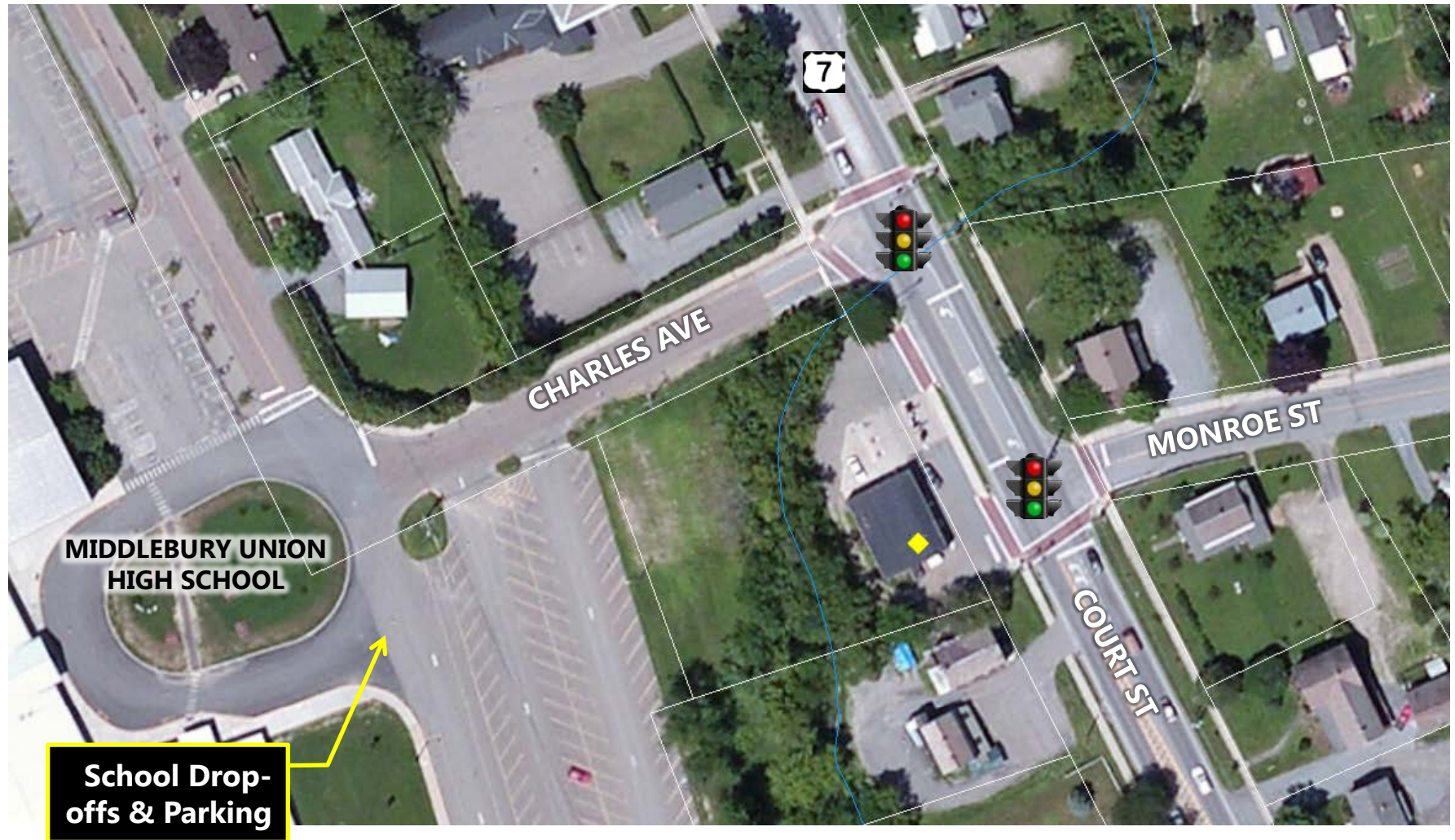


- “Bypass” to avoid Court Street traffic
- Grid network disrupted in locations

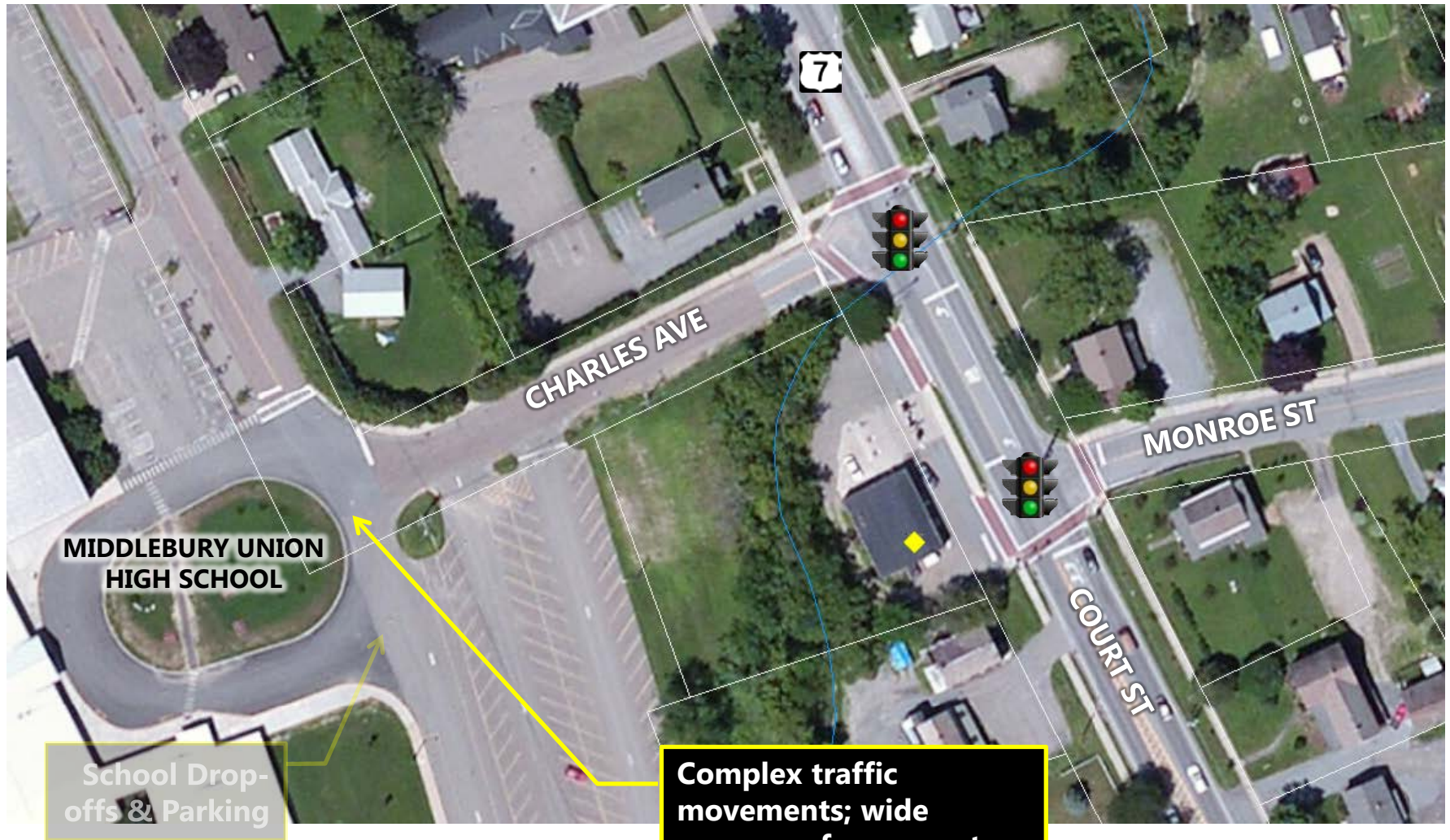
Intersection Area



Existing Conditions & Issues



Existing Conditions & Issues



Existing Conditions & Issues



Existing Conditions & Issues



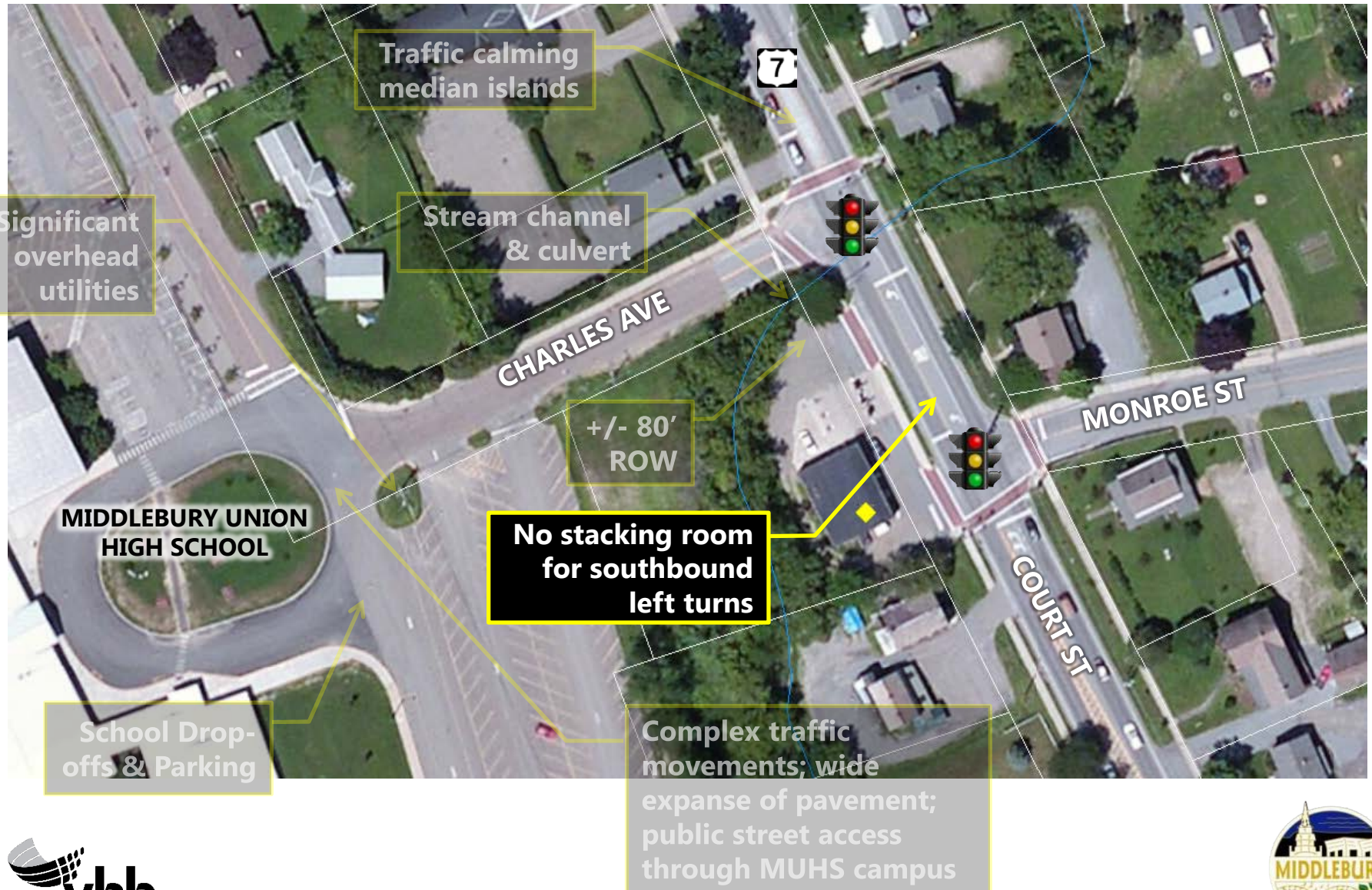
Existing Conditions & Issues



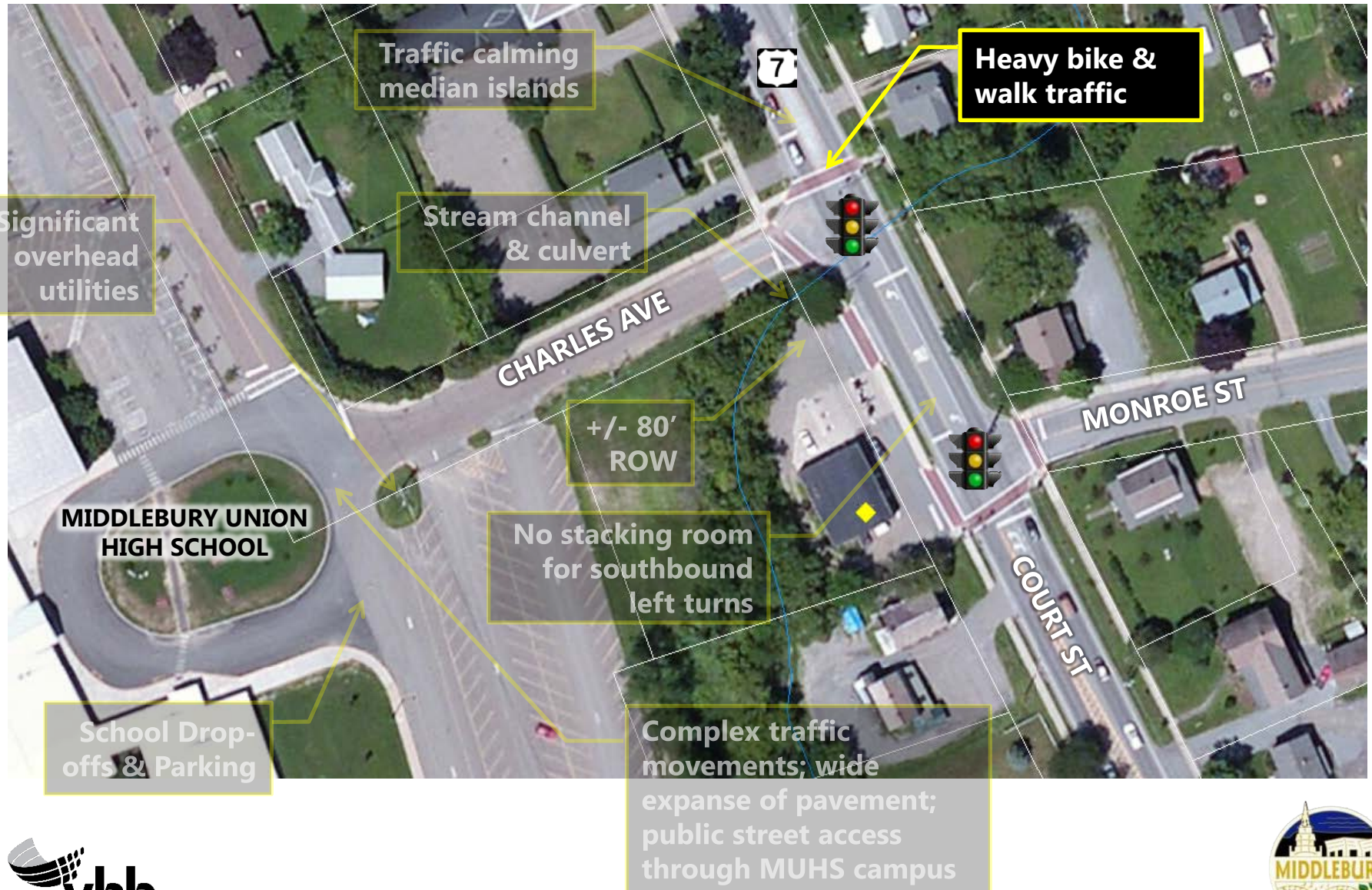
Existing Conditions & Issues



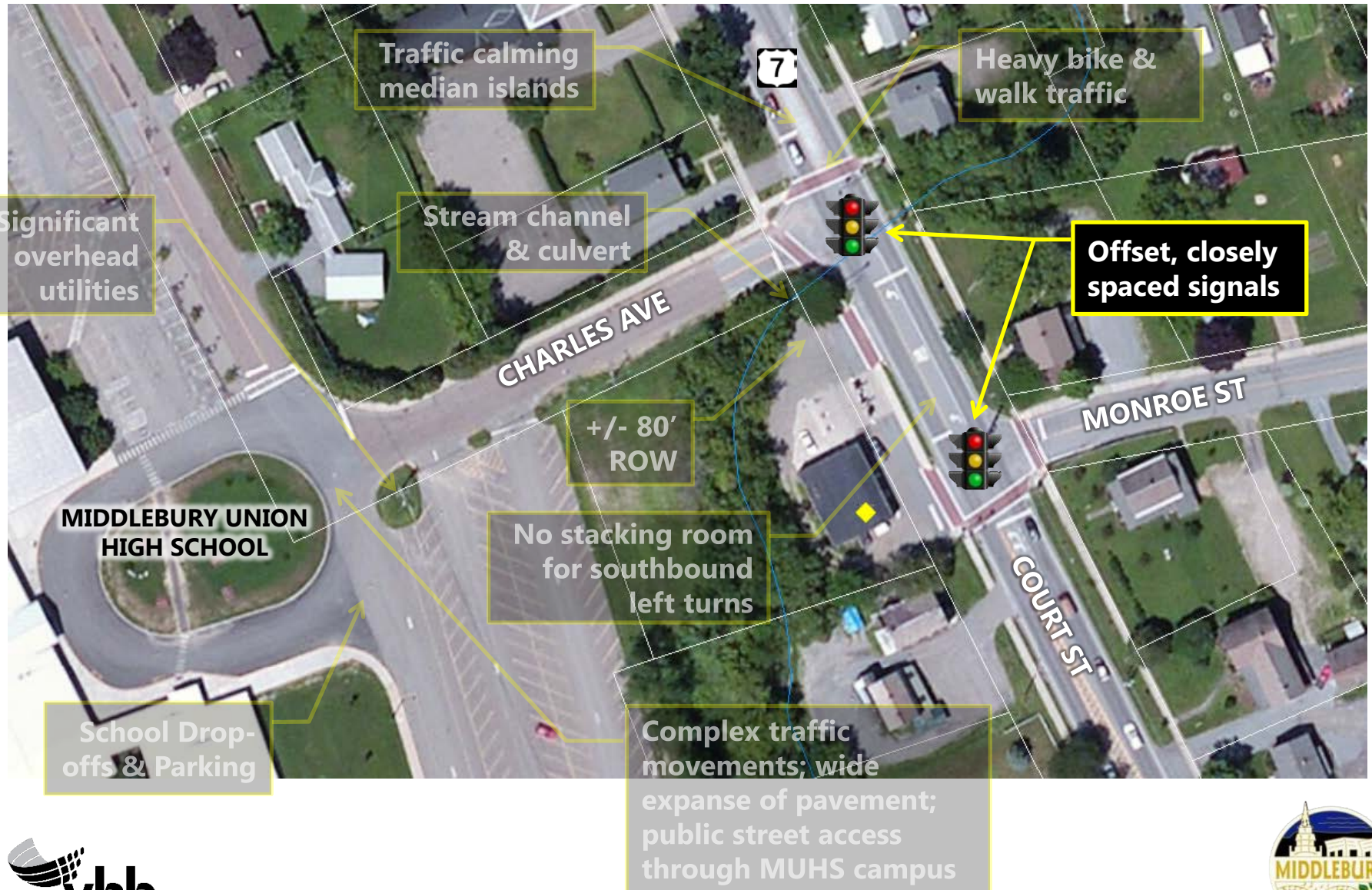
Existing Conditions & Issues



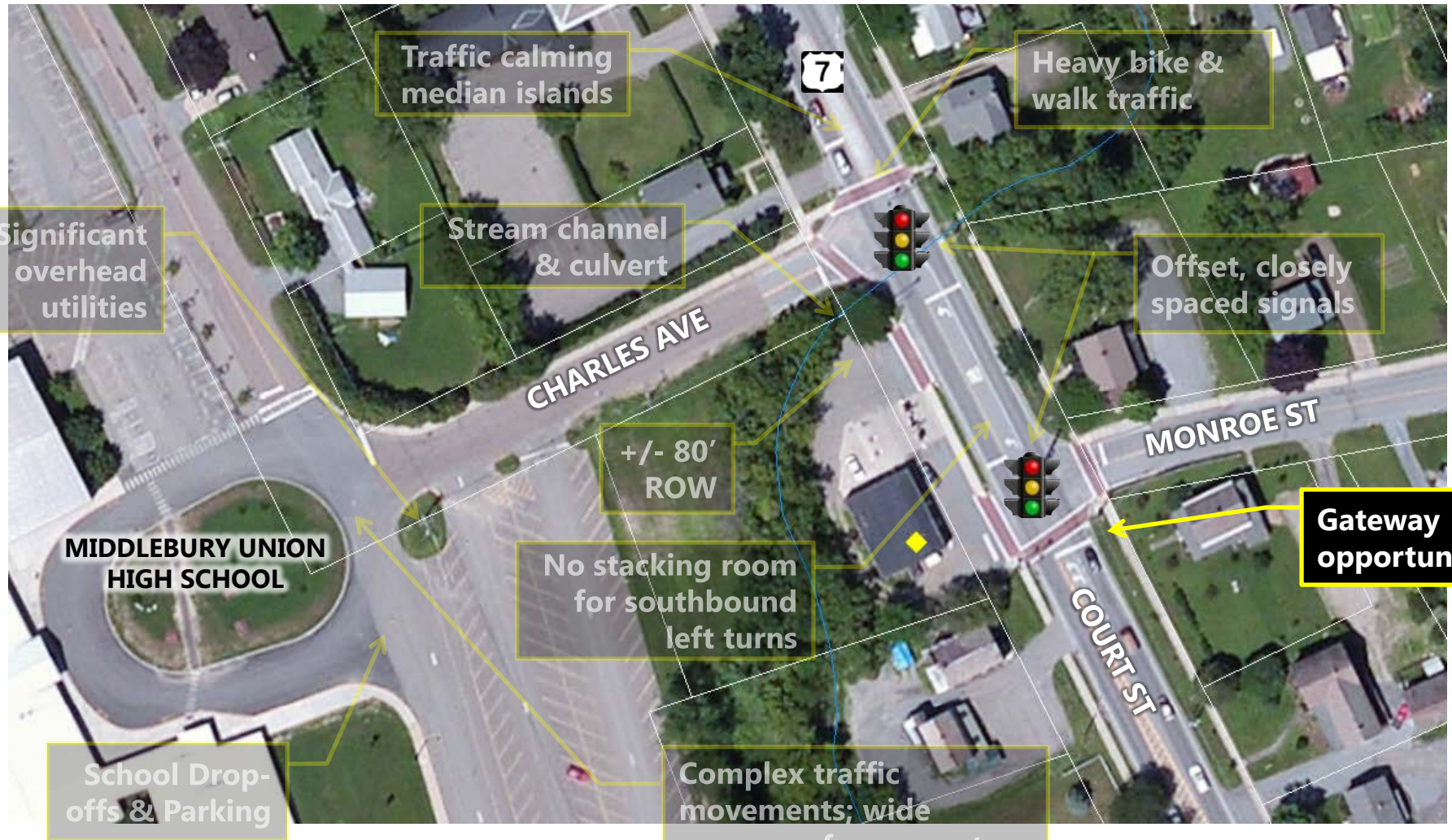
Existing Conditions & Issues



Existing Conditions & Issues



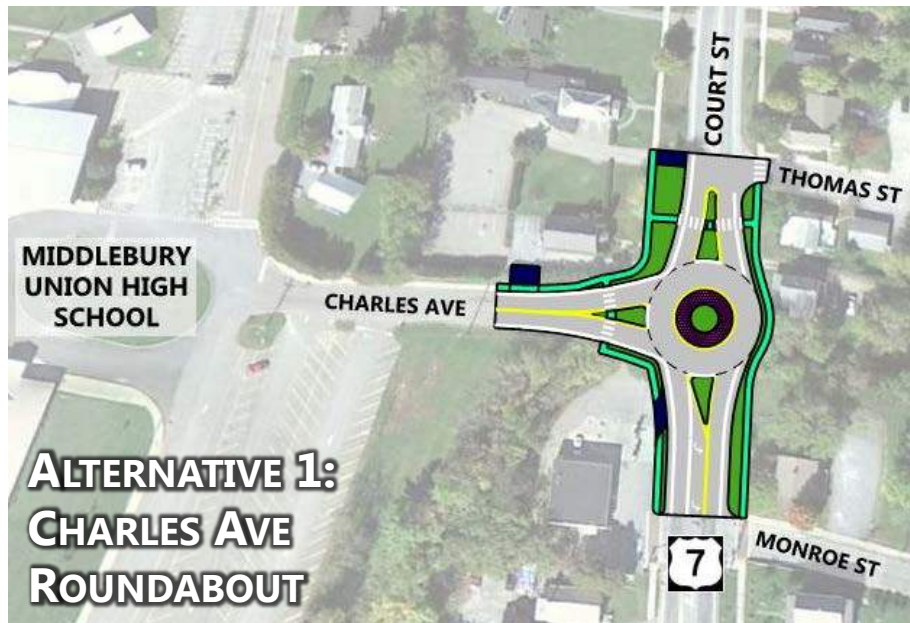
Existing Conditions & Issues



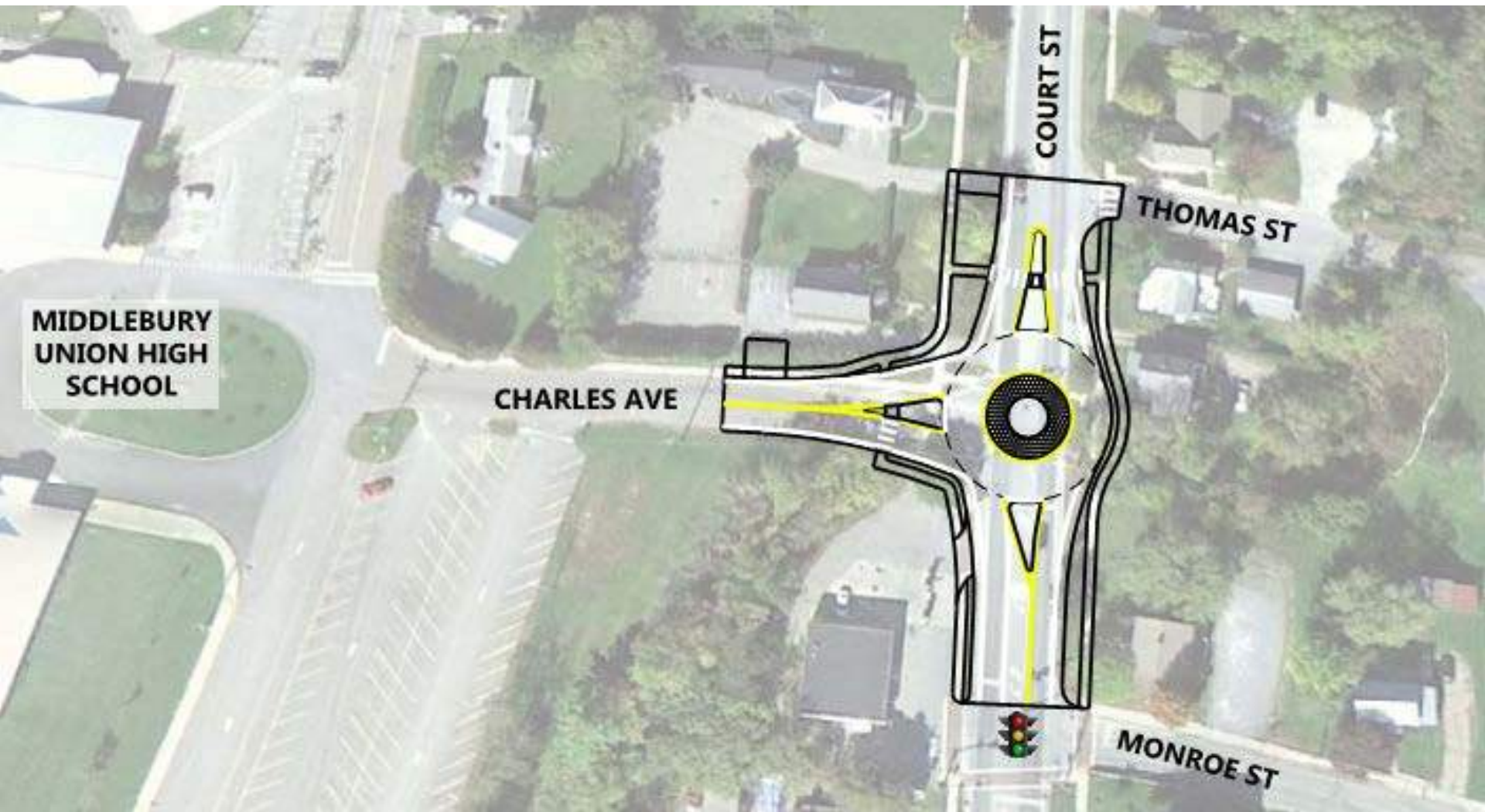
Alternatives



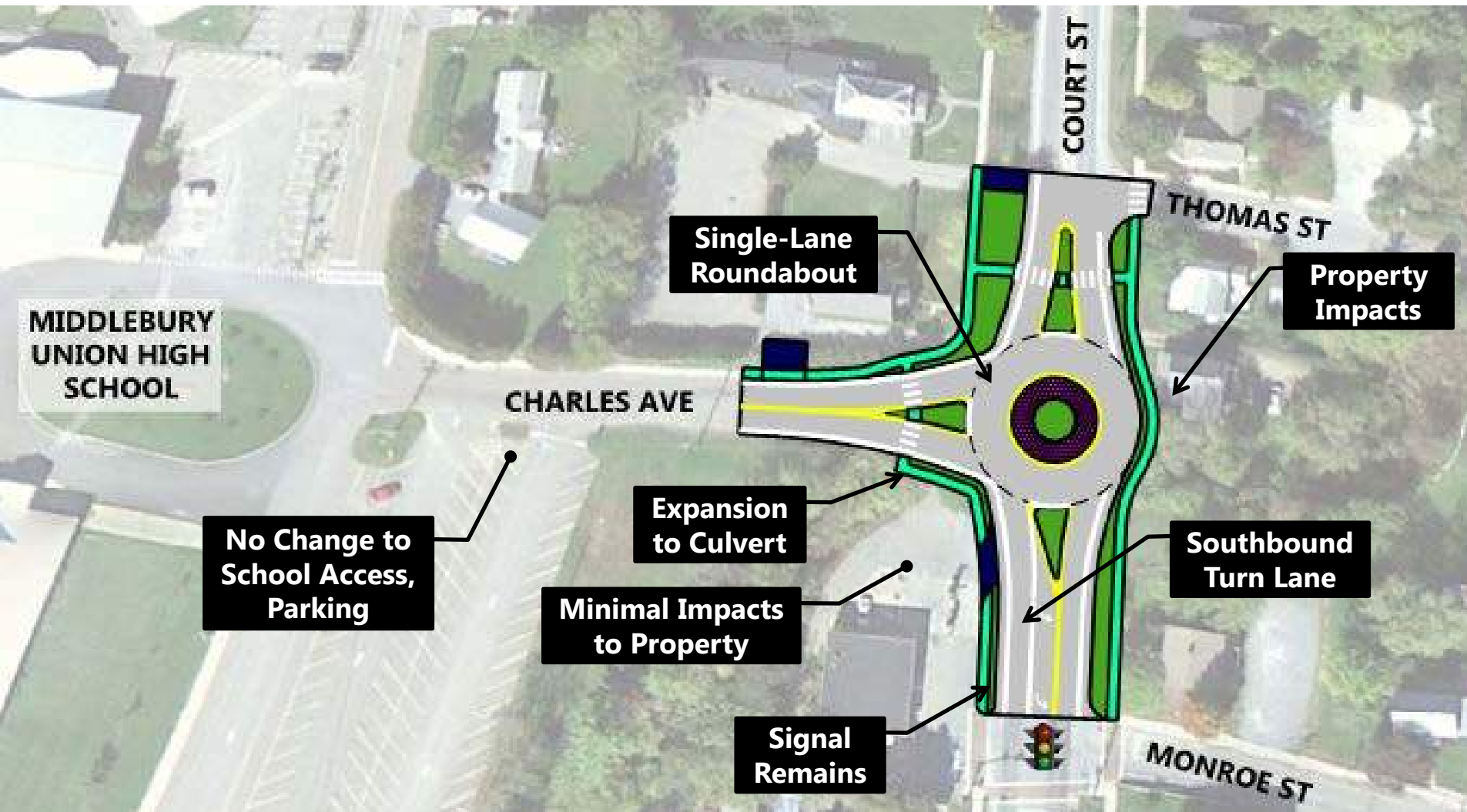
Alternatives



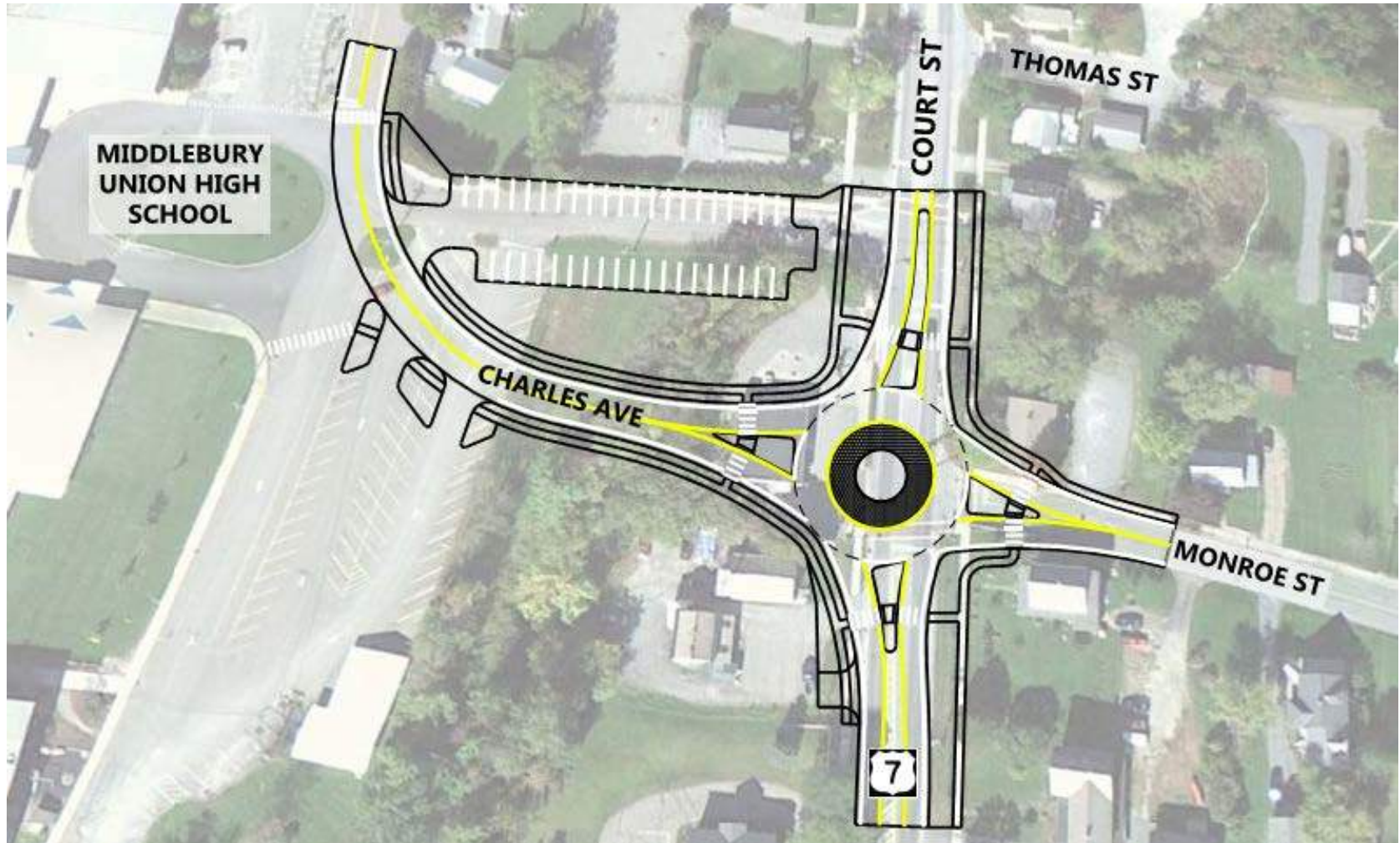
Alternative 1: Charles Avenue Roundabout



Alternative 1: Charles Avenue Roundabout



Alternative 2: Monroe Street Roundabout



Alternative 2: Monroe Street Roundabout



Alternative 3: Monroe Street Signal



Alternative Comparisons

	No Build	Alt 1 <i>Charles Roundabout</i>	Alt 2 <i>Monroe Roundabout</i>	Alt 3 <i>Monroe Signal</i>
COST: <i>Design & Construction</i>	\$0	\$350,000	\$980,000	\$870,000
COST: <i>Right-of-Way</i>	\$0	Lowest <i>(partial impacts to 1 property)</i>	Highest <i>(acquisition plus partial impacts to 1 property)</i>	Middle <i>(acquisition)</i>
CONGESTION: <i>Avg. Level of Service</i>	LOS F	LOS D/E	LOS D	LOS A
BIKE/PED: <i>Accessibility & Safety</i>	No Change	Slight Increase <i>(Two intersections)</i>	Increase <i>(Single intersection)</i>	Increase <i>(Single intersection)</i>
SAFETY: <i>Anticipated Effects</i>	No Change	Slight Decrease <i>(combine roundabout & signal)</i>	Improvement <i>(single intersection; roundabout)</i>	Improvement <i>(single intersection; signal)</i>
IMPACTS: <i>Historic Properties</i>	None	Significant <i>(Historic District)</i>	Significant <i>(Historic District)</i>	Moderate
IMPACTS: <i>Hazardous Materials</i>	None	None	Yes <i>(Fuel Tanks)</i>	Yes <i>(Fuel Tanks)</i>

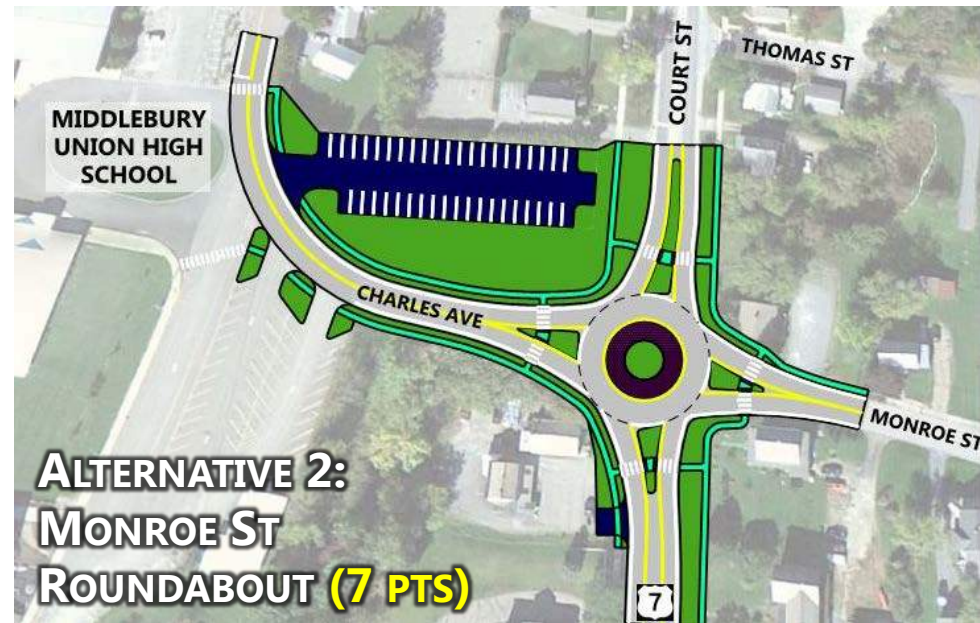
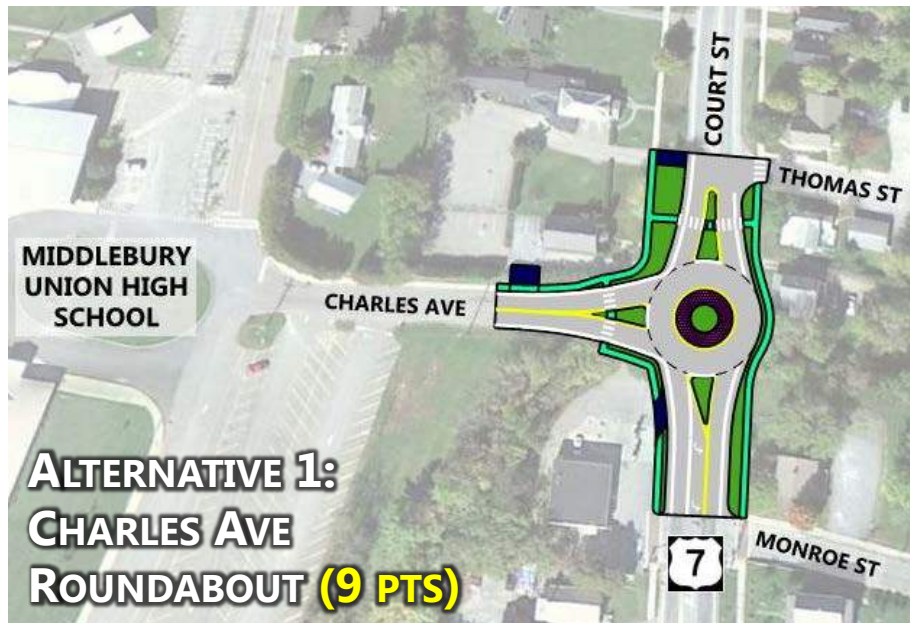
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Alternatives - Discussion





What Happens Next?

1. Selectboard to identify Preferred Alternative (Nov – Dec)
2. Final Report (December)
3. Seek funding for final design, permitting & construction



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Offices located throughout the east coast



SE GROUP



0 30' 60' 120'

COURT STREET AND CHARLES AVE REALIGNMENT
MIDDLEBURY, VT



+4 Parking Spaces



SE GROUP



0 30' 60' 120'

COURT STREET AND CHARLES AVE REALIGNMENT
MIDDLEBURY, VT



-20 Parking Spaces



SE GROUP



0 30' 60' 120'

COURT STREET AND CHARLES AVE REALIGNMENT
MIDDLEBURY, VT



-31 Parking Spaces

Alternative Comparisons

	No Build	Alt 1 <i>Charles Roundabout</i>	Alt 2 <i>Monroe Roundabout</i>	Alt 3 <i>Monroe Signal</i>
COST: <i>Design & Construction</i>	3	2	0	1
COST: <i>Right-of-Way</i>	3	2	0	1
CONGESTION: <i>Avg. Level of Service</i>	0	1	1	3
BIKE/PED: <i>Accessibility & Safety</i>	0	1	3	3
SAFETY: <i>Anticipated Effects</i>	1	0	3	3
IMPACTS: <i>Historic Properties</i>	3	0	0	2
IMPACTS: <i>Hazardous Materials</i>	3	3	0	0

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