

Capitol Region Council of Governments

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Route 195, Tolland, CT Review of Potential Future Conditions October 1, 2012

The maintenance of adequate traffic operations along Route 195 in Tolland is of prime importance to the Town, Region, and State. The route currently provides a main access between Interstate 84 (via interchange 68) and Tolland Center, Tolland's commercial area (just south of I-84), and the main campus of the University of Connecticut (UConn) in Storrs. The planning and/or approval of the following four developments along Route 195 has raised concerns about the route's ability to process future traffic:

1. Tolland Village
2. Tolland Technology Zone and adjacent Residential Development
3. UConn Technology Park
4. Storrs Center

The Town of Tolland has requested assistance from the Capitol Region Council of Government (CRCOG) in reviewing anticipated future Route 195 traffic volumes and operations resulting from these developments. Contained herein, are the results of this preliminary review. For this review, data acquisition efforts were limited to readily available information from previous collection efforts.

Existing Transportation Infrastructure

Route 195 is a State Route that travels north-south from Tolland Center to Willimantic. The area studied is limited to Route 195 from its interchange with I-84 to the Tolland/Coventry Town Line, a distance of approximately 3¼ miles. Approximately 4½ miles further to the southeast, the route leads to the UConn's main campus and Storrs Center in the Town of Mansfield. Just ¾ miles northeast of its interchange with I-84, Route 195 continues to Tolland's historic center and Town Green. For the purpose of this review, Route 195 will be considered a north-south roadway with intersecting side-streets denoted as east-west. Figure 1 shows the study area, and Figure 2 shows the four major planned developments.

Within the study area, Route 195 is functionally classified as a Principal Arterial (other) with adjacent land use transitioning from commercial to rural as one travels from north to south. The typical roadway section consists of one 12 foot wide lane in each direction with shoulders typically varying from 2 to 4 feet. Details regarding the five major study area intersections are shown in Table 1. The remainder of intersections are unsignalized with side-streets under stop-sign control and Route 195 being free-flow. The posted speed limit is 35 mph through all five major intersections with the exception of northbound through the Route 195/Baxter Street/Anthony Road intersection which is posted for 40 mph.

Table 1: Major Study Area Intersections

Route 195 at:	Traffic Control	Existing Approach Lanes and Configurations			
		NB	WB	SB	EB
I-84 Westbound Ramps	Signalized	2 (L, T)	1 (LTR)	2 (T, R)	-
I-84 Eastbound Ramps	Signalized	2 (T, TR)	-	2 (L, T)	2 (LT, R)
Fieldstone Commons Drive	Signalized	2 (L, TR)	1 (LTR)	2 (LT, R)	2 (LT, R)
Goose Lane/Rhodes Road	Signalized	2 (L, TR)	2 (LT, R)*	2 (L, TR)	1 (LTR)
Baxter Street/Anthony Road	Unsignalized**	1 (LTR)	1 (LTR)	1 (LTR)	1 (LTR)

* Pavement markings obliterated, at times operates as one lane approach
** Route 195 operating under free-flow and Stop Sign control provided on side-streets
L= left turn In; LT=shared left-thru In; T= thru In; TR=shared thru-right In; R= right turn In; LTR=shared left-thru-right In

Figure 1: Study Area – Route 195, Tolland, CT

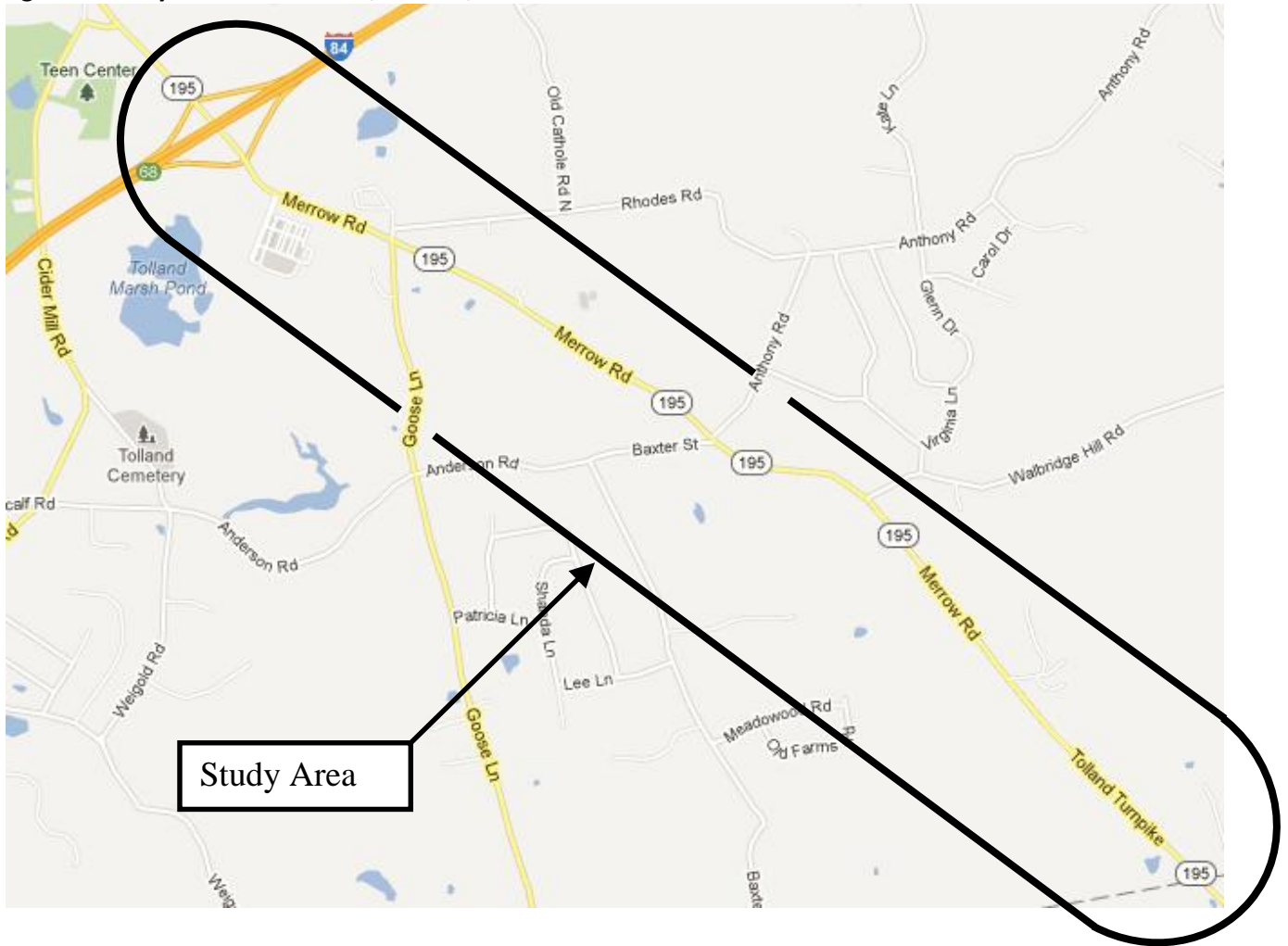
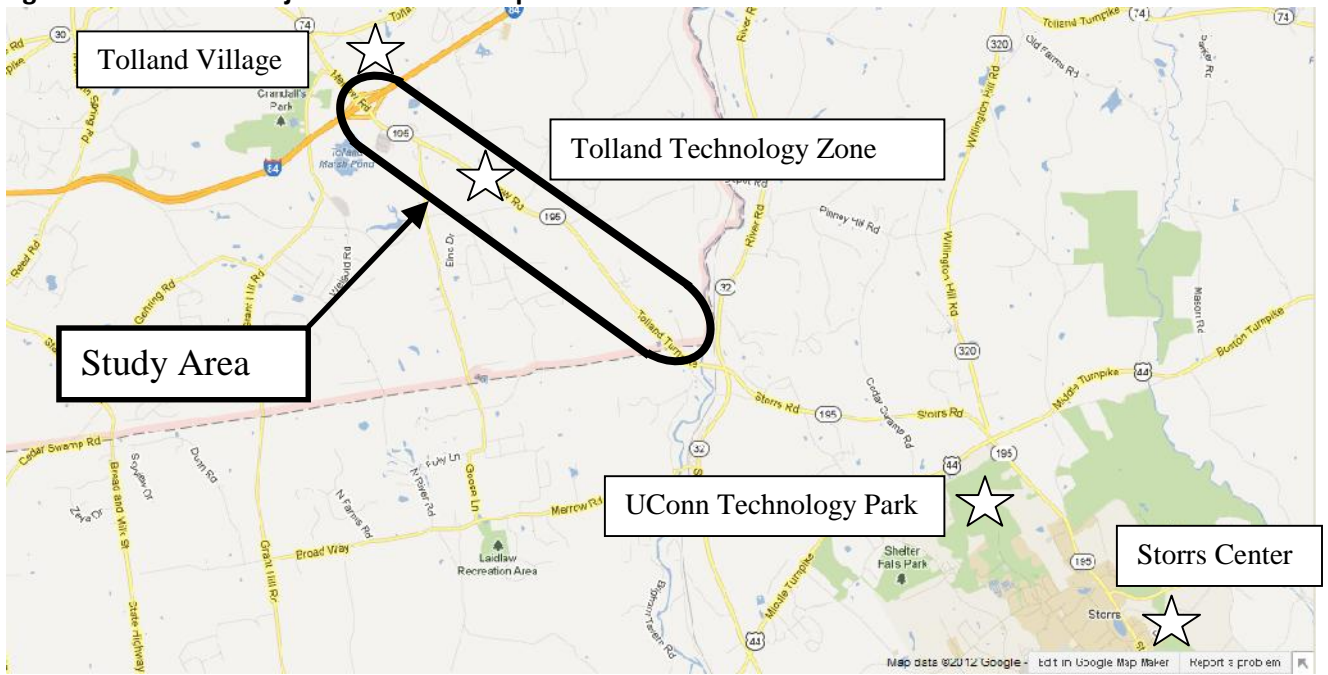


Figure 2: Route 195 Major Planned Developments



Planned Roadway Traffic Improvements

Within the study area, State Project 142-146 is being designed along Route 195 from its intersection with I-84's eastbound ramps through its intersection with Goose Lane/Rhodes Road. Operationally, the project originally was designed to address traffic flows from Interstate 84 towards UConn for campus events (basketball games, etc.), and involved implementation a second Route 195 southbound through lane within the project limits. Recently a decision has been made to modify the project to also include a second Route 195 northbound through lane throughout the project limits (previously a second northbound lane was only provided through the Route 195/I-84 Eastbound Ramps intersection). The current project results in the following intersection lane reconfigurations detailed below.

- ***Route 195/I-84 Eastbound Ramps*** – Provide an additional lane on the eastbound I-84 off-ramp approach and re-designate the lanes to include an exclusive left, a shared through-right and an exclusive right. Provide an additional lane on Route 195's northbound approach and re-designate the lanes to include two exclusive through lanes and an exclusive right.
- ***Route 195/Fieldstone Commons*** – Provide an additional lane on Route 195's southbound approach and re-designate the lanes to include an exclusive left, a through, and a shared through-right. Provide an additional northbound through lane resulting in a northbound approach consisting of an exclusive left, a through, and a shared through-right.
- ***Route 195/Goose Lane/Rhodes Road*** - Provide an additional lane on Route 195's southbound approach and re-designate the lanes to include an exclusive left, a through, and a shared through-right. Provide an additional northbound through lane resulting in a northbound approach consisting of an exclusive left, a through, and a shared through-right.

Planned Land Development

Below are details of four major planned and/or approved developments in proximity to the study area:

1. **Storrs Center** - Storrs Center is an estimated 1,100,000 square foot mixed use "downtown" development located along the northeast side of Route 195 adjacent the UConn's Storrs Campus. The first phases of development (1A and 1B) are scheduled to be completed in late summer 2012 and consist of 285 residential units and approximately 78,000 square feet of retail space. The remaining phases are anticipated to be completed within the next few years and result in total development (inclusive of phases 1A and 1B) of 690 residential units, 216,000 square feet of retail space, and 33,500 square feet of office space. A State Traffic Commission (STC) certificate has been secured for all phases of development.
2. **UConn Technology Park** - An Environmental Impact Statement (EIS) has been completed for the extension of North Hillside Road on the UConn Campus approximately $\frac{3}{4}$ miles to Route 44, approximately $\frac{1}{4}$ mile west of Route 195. The roadway extension is proposed to enable the full development of a UConn Technology Park that will support an estimated 1,000,000 square feet of office/research/laboratory development. In 2011, \$18 million was approved for design and construction of the approximately 125,000 square foot Innovation Partnership Building, the first envisioned phase of development in the Park. Completion of the building is estimated by the end of 2015. Completion of the remaining development phases are anticipated to extend beyond a 5 year time horizon.
3. **Tolland Technology Zone (and adjacent Residential Development)** – Planning efforts for a technology zone along both sides of Route 195 between Goose Lane/Rhodes Road and Baxter Street/Anthony Road revealed a potential for approximately 400,000 square feet of non-retail development. Additionally, the town has a vision for a residential development of approximately 90 units to be located off Anthony Road adjacent the planned Technology Zone. These developments are currently still in the planning stage.

4. ***Tolland Village*** - Tolland Village is a planned 330,000± to 570,000± square foot mixed use town village located on Route 195 immediately northwest of I-84 Interchange 68. Planning efforts have been vetted through the Town and new zoning regulations for the concept have been adopted. For purposes of this analysis it was assumed that the full village development would consist of a 110 room hotel, 150,000 square feet of retail space, 75,000 square feet of office space, and 115 residential units.

Existing Traffic Volumes

As collected in 2011 by the Connecticut Department of Transportation (ConnDOT), study area Average Daily Traffic (ADT) volumes range from a high of 17,600 just south of the I-84 eastbound ramps to a low of 9,500 at the Tolland/Coventry Town Line. This is a decrease from 2008 ConnDOT ADT volumes of 20,400 just south of the I-84 eastbound and 12,300 at the Town Line. Similar decreases in volumes have been observed both in the region and statewide over the last several years, reflecting the recent economic downturn.

The most recent available turning count data consists of 2007 morning and afternoon peak commuter hour counts at each of the five major study area intersections. These counts appear in the Appendix (Table A1) and were utilized in this review to represent existing volumes. However, similar to the ADT observations, current turning movement volumes are likely somewhat lower than those collected in 2007.

Data was not readily available or acquired for UConn associated traffic events (such as sporting events, theatre events, and students leaving or returning on long weekends), which may represent a design control depending on their frequency and intensity. However, the four considered developments are anticipated to primarily influence weekday peak commuter hour traffic, and therefore operational analyses focused solely on these timeframes.

Future Traffic Volumes

As mentioned previously, the planning and/or approval of four major developments along Route 195 has raised concerns over the route's ability to efficiently process traffic in the future. For the purpose of this review, traffic was projected for each of the three (3) development scenarios shown below utilizing CRCOG's regional travel demand model.

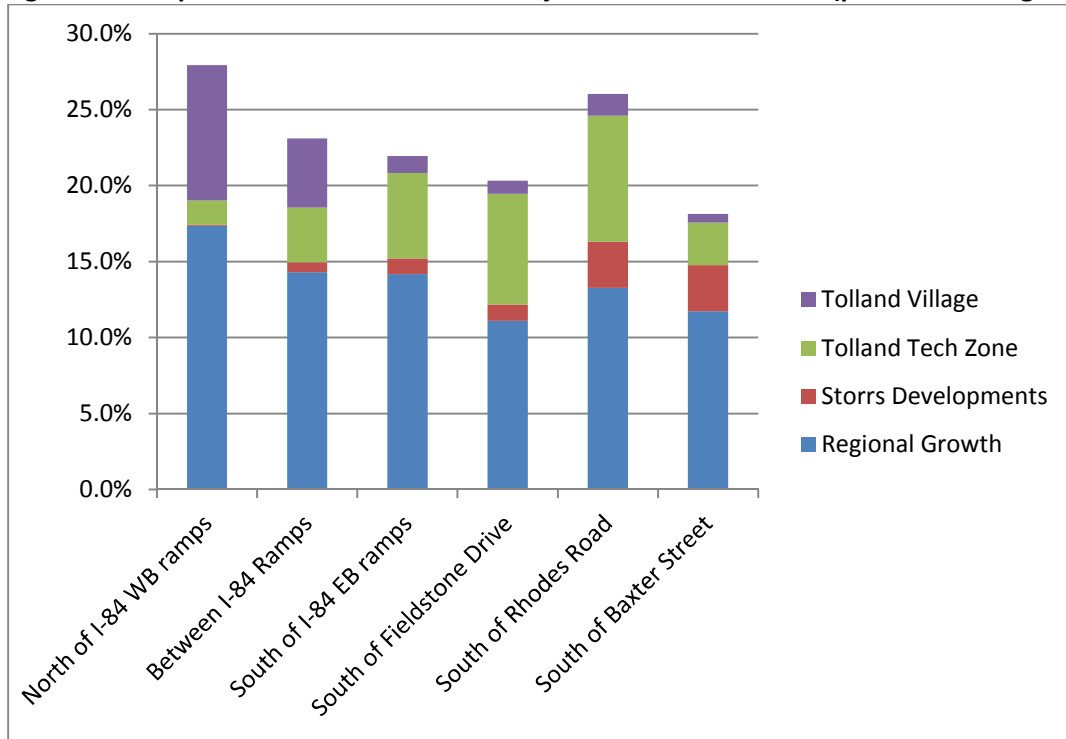
- ***Short-Range Projection*** – This consists of existing volumes plus estimated traffic generated from the two major developments that are likely to be operational within a 5-year time horizon (completion of Storrs Center and the Innovation Partnership Building)
- ***2040 Projection*** – This consists of regional traffic projected by the CRCOG travel demand model to 2040 plus estimated traffic generated from the two major developments that are likely to be operational within a 5-year time horizon (completion of Storrs Center and the Innovation Partnership Building)
- ***2040 Full-Build Projection***– This consists of regional traffic projected by the CRCOG travel demand model to 2040 plus estimated traffic generated from completion of all four planned or approved major developments (Storrs Center, UConn Technology Park, Tolland Technology Zone and Residential Area, and Tolland Village)

The traffic volumes for each scenario at major intersections appear in the Appendix (Tables A2 through A4). Changes to transit services were not considered in any of the traffic projections.

The Short-Range Projection and the 2040 Projection represent traffic volumes that are consistent with those that ConnDOT and CRCOG would consider for transportation analysis and recommendations. Because full-build scenarios usually contain traffic from developments that have not advanced beyond the planning stage, roadway improvements are not typically proposed to address their volumes. This is the case with the 2040 Full-Build scenario, however its analysis can still be beneficial. The Full-Build scenario analysis results demonstrate conditions similar to a worst case scenario, and also provide a more complete perspective of travel demand sources that could someday compete for roadway capacity.

Figure 3 breaks down the traffic growth that 2040 Full-Build scenario elements are estimated to add to existing volumes.

Figure 3: Components of 2040 Full-Build Projected Traffic Increases (percent traffic growth)



As shown in the Figure 3, regional traffic growth is anticipated to be the primary basis of 2040 traffic increases, playing a slightly more significant role than all envisioned developments combined. This traffic growth is estimated to vary between 1,500 and 3,900 vehicles per day depending on location within the study area (with the larger increases occurring along the north end of the study area, near the Interchange). Regional traffic growth includes trips made due to general growth within the region as estimated by the State Department of Labor.

The two envisioned Tolland developments are also estimated to have significant impact on study area traffic. Tolland’s Technological Zone/Residential Development Area is estimated to add 1,500 daily trips to Route 195 from just north of Rhodes Road to the interchange. These volumes are anticipated to drop to 350 vehicle trips just north of the I-84 interchange, and to under 500 vehicles at the Tolland/Coventry Town line. Tolland Village is anticipated to add almost 2,000 daily trips to Route 195 just north of the interchange, with that number falling under 300 daily trips just south of the interchange and under 100 trips daily at the Town Line. Although estimated above, the actual number of additional Route 195 trips in the immediate vicinity of each of these developments will be heavily dependent on how access to each is configured.

The completion of the two Storrs developments is anticipated to have a measurable impact on traffic increases along Route 195 in the southern portion of the study area, however this traffic is dispersed as it travels north towards the I-84 interchange where the impacts are more minimal. It’s anticipated that the developments will add approximately 550 daily trips to Route 195 at the Tolland/Coventry Town line, with that number decreasing to approximately 270 just south of the I-84 interchange, and to a negligible amount (less than 20) north of the interchange. A component of this increase includes traffic from the anticipated upcoming completion of Storrs Center and the Innovation Partnership Building. Traffic from these developments is estimated to make up approximately half of the totals listed above, with the remainder generated by means of the build-out of remaining parcels at the UConn Technology Park.

Traffic Operations

Typically traffic flow along a corridor is limited by its intersections. To assess signalized intersection operations, the Critical Movement Analysis method was utilized (as included in Section 3.3 of the Federal Highway Administration’s 2008 Traffic Signal Timing Manual). This method allows an analyst to identify the critical movements at an intersection, and provide a planning level estimate of whether the intersection is operating below (<.85), near (.85 to .95), at (.95 to 1.00), or over (>1.00) capacity. In general, intersections operating below capacity represent “desirable” operations, near capacity represent “acceptable or tolerable” operations, at capacity represent “poor” operations, and over capacity represent “failing” operations. For the single major unsignalized intersection, SYNCHO Level of Service (LOS) analysis was utilized. In this analysis, letter grades A-F are assigned corresponding to the time vehicles are delayed at an intersection’s approach. In general, LOS A and B represent “desirable” operations, LOS C represents “acceptable” operations, LOS D represents “tolerable” operations, and LOS E and F represent “poor” and “failing” operations, respectively.

No Roadway Improvements

Table 2 shows traffic operation analysis results for each of the development scenarios on the existing transportation system (representing no roadway improvements). The table highlights operations for critical movements at signalized intersections and on critical approaches at unsignalized intersections. “Poor” or “failing” operations are highlighted in bold red.

Table 2: Weekday Peak Hour Operations (No roadway improvements)

	Existing Volumes	Short-Range Projected	2040 Projected	2040 Full-Build
Morning				
Route 195/I-84 Westbound Ramps	0.81	0.81	0.96	1.04
Route 195/I-84 Eastbound Ramps	0.71	0.71	0.83	0.91
Route 195/Fieldstone Commons Dr	0.64	0.64	0.72	0.80
Route 195/Rhodes Rd/Goose Ln	0.73	0.74	0.84	0.92*
Route 195/Baxter St/Anthony Rd	C	C	D	E*
Evening				
Route 195/I-84 Westbound Ramps	0.66	0.66	0.77	0.84
Route 195/I-84 Eastbound Ramps	1.05	1.06	1.23	1.34
Route 195/Fieldstone Commons Dr	0.89	0.90	1.02	1.12
Route 195/Rhodes Rd/Goose Ln	0.85	0.85	0.97	1.06*
Route 195/Baxter St/Anthony Rd	E	E	F	F*

* Dependent on how access is configured to adjacent Tolland Developments

Note: Signalized operations measured in volume to capacity ratio (v/c ratio) for critical movements, Unsignalized operations measured in LOS for critical side-street approach (Route 195 through traffic operates at LOS A).

Currently, all intersections experience “desirable” or “acceptable” operations with the exception of at the Route 195/I-84 Eastbound Ramps intersection (operations “failing” in the afternoon peak), and on side-street approaches at the Route 195/Baxter Street/Anthony Road intersection (operations are “poor” in the afternoon peak). Field observations confirmed the results, including observations of I-84 eastbound off-ramp queues not clearing under the green phase (resulting in some vehicles stopped for multiple red phases), and difficulty entering Route 195 traffic flow from stop sign controlled on side-streets, especially for left turning vehicles.

Operational analysis shows that adding anticipated traffic associated with the completion of Storrs Center and the Innovation Partnership Building (Short-Range Projection volumes) results in operations that are slightly degraded over existing conditions. However for 2040 Projected volumes, traffic operations are significantly degraded. All four signalized intersections are expected to experience “poor” or “failing”

conditions in either the 2040 morning or afternoon peak, and access via side-streets at the unsignalized Route 195/Baxter Street/Anthony Road location is expected to “fail” in the afternoon peak. **Therefore, there appears to be a need for roadway improvements to address unacceptable existing and anticipated future traffic operations.**

Under the 2040 Full-Build scenario, operations are further degraded, with afternoon operations especially problematic. However, it is not typical to base roadway recommendations on scenarios that, like the 2040 Full-Build, include any traffic from developments that have not advanced past the planning phase.

State Project 142-146 Improvements

State Project 142-146 is currently in design and proposes operational improvements to Route 195 from its intersection with I-84’s eastbound ramps through the Route 195/Rhodes Road/Goose Lane intersection. Table 3 shows traffic operation analysis results for the roadway conditions following the completion of the project. “Poor” or “failing” operations for critical movements at signalized intersections, and side-street operations for unsignalized intersections are highlighted in bold red.

Table 3: Weekday Peak Hour Operations after completion of Project 142-146

	Existing Volumes	Short-Range Projected	2040 Projected	2040 Full-Build
Morning				
Route 195/I-84 Westbound Ramps	0.81	0.81	0.96	1.04
Route 195/I-84 Eastbound Ramps	0.50	0.50	0.58	0.64
Route 195/Fieldstone Commons Dr	0.36	0.36	0.41	0.45
Route 195/Rhodes Rd/Goose Ln	0.45	0.46	0.52	0.56*
Route 195/Baxter St/Anthony Rd	C	C	D	E*
Evening				
Route 195/I-84 Westbound Ramps	0.66	0.66	0.77	0.84
Route 195/I-84 Eastbound Ramps	0.71	0.72	0.84	0.91
Route 195/Fieldstone Commons Dr	0.65	0.65	0.78	0.83
Route 195/Rhodes Rd/Goose Ln	0.56	0.56	0.65	0.69*
Route 195/Baxter St/Anthony Rd	E	E	F	F*

* Dependent on how access is configured to adjacent Tolland Developments

Note: Signalized operations measured in volume to capacity ratio (v/c ratio) for critical movements, Unsignalized operations measured in LOS for critical side-street approach (Route 195 through traffic operates at LOS A).

Per Table 3, implementation of the improvements proposed under State Project 142-146 is expected to satisfactorily address traffic operations at each of the three intersections within the State Project’s limits for all traffic scenarios. The analysis reflects the recent decision to extend a second northbound through lane through the entire State Project 142-146 limits. Without the extension of the second northbound lane, by 2040 the Route 195/Rhodes Road/Goose Lane intersections would be expected to experience “poor” afternoon peak hour operations.

Potential Additional Roadway Improvements

Beyond State Project 142-146’s limits, “poor” and “failing” operations are expected to remain at the Route 195/I-84 Westbound Ramps and Route 195/Baxter Street/Anthony Road intersections (as detailed earlier). To address these issues, the following could be contemplated:

- **Route 195/I-84 Westbound Ramps** – Further study of operations with more recent traffic data, and potential incorporation of any necessary improvements into State Project Number 142-146. One solution to the observed operational issue involves the addition of a second northbound left turn lane, however further analysis would be needed regarding its feasibility given likely required

I-84 westbound on-ramp widening and existing width constraints at the Route 195 bridge over I-84.

- **Route 195/Baxter Street/Anthony Road** – Consideration of implementing improvements that address side-street operations. One solution to the observed operational issue could involve traffic signalization, however a review of Route 195/Baxter Street/Anthony Road intersection traffic volumes indicate that requirements for signal installation (MUTCD Traffic Signal Warrants) are currently not likely met. Traffic resulting from planned developments along Anthony Drive and Baxter Street may increase side-street volumes to levels that merit signalization, and therefore access to planned developments could be configured with signal warrants in mind. It should be noted that signalization of this location may also require the addition of left turn lanes on Route 195.

CRCOG also supports the incorporation of transit improvements where merited, however changes to transit services were considered outside the scope of this review. New or improved transit services could reduce future traffic volumes, improve roadway operations and potentially eliminate the need for some of the contemplated improvements. Conversely, reductions in transit services could degrade operations and increase the need for additional roadway improvements.

Table 4 shows the resulting “desirable” or “acceptable” traffic operations associated with completion of State Project 142-146, and the above contemplated additional improvements.

Table 4: Weekday Peak Hour Operations with Project 142-146 and Additional Improvements

	Existing	Short-Range Projected	2040 Projected	2040 Full-Build
Morning				
Route 195/I-84 Westbound Ramps**	0.60	0.60	0.72	0.79
Route 195/I-84 Eastbound Ramps	0.50	0.50	0.58	0.64
Route 195/Fieldstone Commons Dr	0.36	0.36	0.41	0.45
Route 195/Rhodes Rd/Goose Ln	0.45	0.46	0.52	0.56*
Route 195/Baxter St/Anthony Rd***	0.53	0.54	0.63	0.66*
Evening				
Route 195/I-84 Westbound Ramps**	0.59	0.59	0.73	0.81
Route 195/I-84 Eastbound Ramps	0.71	0.72	0.84	0.91
Route 195/Fieldstone Commons Dr	0.65	0.65	0.78	0.83
Route 195/Rhodes Rd/Goose Ln	0.56	0.56	0.65	0.69*
Route 195/Baxter St/Anthony Rd***	0.61	0.62	0.72	0.77*

* Dependent on how access is configured to adjacent Tolland Developments

** With the addition of a second northbound left turn lane

*** With signalization with addition of Route 195 northbound and southbound left turn lanes

Note: Operations measured in volume to capacity ratio (v/c ratio) for critical movements

Conclusions

This is a preliminary analysis, and as such only currently available traffic data was utilized. A main source of data was 2007 intersection turning movement volumes, which are likely conservatively high, as recent trends indicate Route 195 volumes have decreased since that time. Therefore, operational analyses results likely portray slightly more congestion than would be expected from the use of more recent data. The review produced the following findings:

- Currently, most intersections experience “desirable” or “acceptable” operations during weekday peak hours. However, existing operational problems were identified at the Route 195/I-84 Eastbound Ramps intersection (“failing” in the afternoon peak), and on side-street approaches at the Route 195/Baxter Street/Anthony Road intersection (“poor” in the afternoon peak).
- The apparently imminent completion of Storrs Center and the planned Innovation Partnership Building in UConn’s Technology Park is anticipated to have a measurable, but relatively minor impact on weekday peak hour traffic operations within the study area.
- Under existing roadway conditions, traffic operations under 2040 Projected volumes (regional traffic projected to 2040 plus traffic generated by completion of Storrs Center and the Innovation Partnership building) are significantly degraded. All four signalized intersections are expected experience “poor” or “failing” conditions in either the morning or afternoon peak, and access via side-streets at the unsignalized Route 195/Baxter Street/Anthony Road location is expected to “fail” in the afternoon peak. Operations are further degraded under the 2040-Full Build scenario.
- State Project 142-146 is expected to address traffic operations for all traffic scenarios at each of the three intersections within its limits. Depending on how access is configured, additional improvements may be necessary at the Route 195/Rhodes Road/Goose Lane intersection to accommodate the Tolland Technology Zone and/or the planned adjacent residential development. The analysis reflects the recent decision to extend a second northbound through lane through the entire State Project 142-146 limits. Without the extension of the second northbound lane, by 2040 the Route 195/Rhodes Road/Goose Lane intersections would be expected to experience “poor” afternoon peak hour operations.
- The Route 195/I-84 Westbound Ramps intersection is beyond State Project 142-146’s limits and could to experience operational issues under the 2040 Projection and 2040 Full-Build scenarios. Further study of this location (with more recent traffic data) and potential incorporation of any necessary improvements into State Project 142-146 should be considered. One potential solution involves the addition of a second northbound left turn lane, however the design feasibility of this improvement needs to be further explored.
- The Route 195/Baxter Street/Anthony Road unsignalized intersection is beyond State Project 142-146’s limits and currently experiences side-street operational issues which will be exacerbated by future increases in traffic. Consideration should be given to implementation of operational improvements. One solution may be traffic signalization, however it is unlikely that requirements for signal installation (MUTCD Traffic Signal Warrants) are currently met. The traffic resulting from planned developments along Anthony Drive and Baxter Street may increase side-street volumes to levels that merit signalization, and therefore access to planned developments could be configured keeping signal warrants in mind. It should be noted that signalization of this location may also require the addition of left turn lanes on Route 195.
- CRCOG supports the incorporation of transit improvements where feasible, however changes or enhancements to transit services were not considered in this review. New or improved transit services could reduce future traffic volumes, improve roadway operations and potentially eliminate the need for some of the recommended improvements. Conversely, reductions in transit services could degrade operations and increase the need for additional roadway improvements.

APPENDIX

Table A1: Existing 2007 Weekday Peak Hour Volumes

Morning Route 195 at:	Route 195 NB			Sidestreet WB			Route 195 SB			Sidestreet EB		
	L	T	R	L	T	R	L	T	R	L	T	R
I-84 Westbound Ramps	546	228	0	52	4	79	0	347	388	0	0	0
I-84 Eastbound Ramps	0	686	36	0	0	0	43	357	0	89	9	537
Fieldstone Commons Dr	21	693	0	2	0	1	0	800	51	19	0	25
Rhodes Rd/Goose Ln	7	451	5	13	5	128	65	708	32	129	13	15
Baxter St/Anthony Rd	3	402	3	13	9	52	18	596	8	12	4	19
Evening Route 195 at:	Route 195 NB			Sidestreet WB			Route 195 SB			Sidestreet EB		
L	T	R	L	T	R	L	T	R	L	T	R	
I-84 Westbound Ramps	639	670	0	65	1	44	0	344	124	0	0	0
I-84 Eastbound Ramps	0	1006	140	0	0	0	66	346	0	301	4	753
Fieldstone Commons Dr	127	909	0	1	1	4	0	908	252	235	0	145
Rhodes Rd/Goose Ln	18	760	7	15	32	130	157	680	139	103	39	15
Baxter St/Anthony Rd	23	642	12	11	14	29	51	617	27	6	11	20

Table A2: Short-Range Projected Weekday Peak Hour Volumes

Morning Route 195 at:	Route 195 NB			Sidestreet WB			Route 195 SB			Sidestreet EB		
	L	T	R	L	T	R	L	T	R	L	T	R
I-84 Westbound Ramps	546	230	0	52	4	79	0	349	389	0	0	0
I-84 Eastbound Ramps	0	689	36	0	0	0	43	358	0	89	9	541
Fieldstone Commons Dr	21	697	0	2	0	1	0	805	51	19	0	25
Rhodes Rd/Goose Ln	7	456	5	13	5	128	65	716	32	128	13	15
Baxter St/Anthony Rd	3	408	3	13	9	52	18	606	8	12	4	19
Evening Route 195 at:	Route 195 NB			Sidestreet WB			Route 195 SB			Sidestreet EB		
L	T	R	L	T	R	L	T	R	L	T	R	
I-84 Westbound Ramps	639	673	0	65	1	44	0	346	124	0	0	0
I-84 Eastbound Ramps	0	1010	141	0	0	0	66	347	0	301	4	758
Fieldstone Commons Dr	127	916	0	1	1	4	0	913	251	234	0	145
Rhodes Rd/Goose Ln	18	767	7	15	32	130	158	688	138	102	39	15
Baxter St/Anthony Rd	24	651	12	11	14	29	51	627	27	6	11	20

NOTE: All traffic volumes based on 2007 intersection turning movement counts collected as part of the Tolland Route 195 Corridor Study.

Table A3: 2040 Projected Weekday Peak Hour Volumes

Morning Route 195 at:	Route 195 NB			Sidestreet WB			Route 195 SB			Sidestreet EB		
	L	T	R	L	T	R	L	T	R	L	T	R
I-84 Westbound Ramps	616	277	0	66	5	109	0	414	472	0	0	0
I-84 Eastbound Ramps	0	806	43	0	0	0	52	419	0	106	11	629
Fieldstone Commons Dr	24	805	0	2	0	2	0	901	74	30	0	30
Rhodes Rd/Goose Ln	9	497	7	20	7	164	84	800	36	142	19	20
Baxter St/Anthony Rd	4	447	5	21	14	65	23	681	9	14	7	28
Evening Route 195 at:	Route 195 NB			Sidestreet WB			Route 195 SB			Sidestreet EB		
L	T	R	L	T	R	L	T	R	L	T	R	
I-84 Westbound Ramps	715	820	0	80	1	66	0	405	162	0	0	0
I-84 Eastbound Ramps	0	1180	166	0	0	0	79	406	0	356	5	882
Fieldstone Commons Dr	163	1010	0	1	1	5	0	1001	353	332	0	187
Rhodes Rd/Goose Ln	23	845	10	22	46	166	204	764	152	109	56	19
Baxter St/Anthony Rd	34	717	19	17	22	35	66	703	32	7	17	28

Table A4: 2040 Full-Build Projected Weekday Peak Hour Volumes

Morning Route 195 at:	Route 195 NB			Sidestreet WB			Route 195 SB			Sidestreet EB		
	L	T	R	L	T	R	L	T	R	L	T	R
I-84 Westbound Ramps	661	316	0	68	5	119	0	463	524	0	0	0
I-84 Eastbound Ramps	0	883	46	0	0	0	58	460	0	119	12	678
Fieldstone Commons Dr	26	881	0	2	0	1	0	999	72	28	0	32
Rhodes Rd/Goose Ln	9	584	8	21	6	156	80	926	33	137	17	21
Baxter St/Anthony Rd	4	483	5	20	14	74	26	725	10	15	6	26
Evening Route 195 at:	Route 195 NB			Sidestreet WB			Route 195 SB			Sidestreet EB		
L	T	R	L	T	R	L	T	R	L	T	R	
I-84 Westbound Ramps	768	922	0	84	1	73	0	451	183	0	0	0
I-84 Eastbound Ramps	0	1291	180	0	0	0	89	446	0	396	5	951
Fieldstone Commons Dr	167	1131	0	1	1	5	0	1123	351	329	0	191
Rhodes Rd/Goose Ln	25	980	11	24	41	157	197	899	148	106	50	20
Baxter St/Anthony Rd	30	777	18	16	22	41	74	747	35	8	17	26

NOTE: All traffic volumes based on 2007 intersection turning movement counts collected as part of the Tolland Route 195 Corridor Study.